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Confidential Draft No. 2 submitted to the Securities and Exchange Commission on April 16, 2019. This draft registration statement has not been filed publicly with the Securities and Exchange Commission and all information contained herein remains confidential.

Registration No. 333-

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM S-1
REGISTRATION STATEMENT

UNDER

THE SECURITIES ACT OF 1933

BRIDGEBIO PHARMA LLC

(to be succeeded by BridgeBio Pharma, Inc. (to be incorporated) in the reorganization)
(Exact name of Registrant as specified in its charter)

Delaware	2834	81-1790983
(State or Other Jurisdiction of Incorporation or Organization)	(Primary Standard Industrial Classification Code Number)	(I.R.S. Employer Identification Number)

421 Kipling Street
Palo Alto, CA 94301
(650) 391-9740
(Address, including zip code, and telephone number, including area code, of Registrant's principal executive offices)

Neil Kumar
Chief Executive Officer
BridgeBio Pharma LLC
421 Kipling Street
Palo Alto, CA 94301
(650) 391-9740
(Name, address, including zip code, and telephone number, including area code, of agent for service)

Please send copies of all communications to:

Mitchell S. Bloom **Maggie L. Wong** **Goodwin Procter LLP** **Three Embarcadero Center, 28th Floor** **San Francisco, CA 94111** **(415) 733-6000**	**Neil Kumar** **Chief Executive Officer** **BridgeBio Pharma LLC** **421 Kipling Street** **Palo Alto, CA 94301** **(650) 391-9740**	**Marc D. Jaffe** **Ian D. Schuman** **Joshua M. Dubofsky** **Brian J. Cuneo** **Latham & Watkins LLP** **140 Scott Dr.** **Menlo Park, CA 94025** **(650) 328-4600**

Approximate date of commencement of the proposed sale to the public:
As soon as practicable after the effective date of this Registration Statement.

If any of the securities being registered on this Form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act, check the following box. ☐

If this Form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

If this Form is a post-effective amendment filed pursuant to Rule 462(d) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. ☐

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, a smaller reporting company or an emerging growth company. See the definitions of "large accelerated filer," "accelerated filer," "smaller reporting company" and "emerging growth company" in Rule 12b-2 of the Exchange Act. (Check one):

Large accelerated filer	☐	Accelerated filer	☐
Non-accelerated filer	☒	Smaller reporting company	☐
		Emerging growth company	☒

If an emerging growth company, indicate by check mark if the registrant has elected not to use the extended transition period for complying with any new or revised financial accounting standards provided pursuant to Section 7(a)(2)(B) of the Securities Act. ☐

CALCULATION OF REGISTRATION FEE

Title of Each Class of Securities to be Registered	Proposed Maximum Aggregate Offering Price(1)(2)	Amount of Registration Fee
Common Stock, $0.001 par value per share	$	$

(1) Estimated solely for the purpose of calculating the registration fee pursuant to Rule 457(o) under the Securities Act. Includes the offering price of any additional shares that the underwriters have the option to purchase.
(2) Calculated pursuant to Rule 457(o) under the Securities Act based on an estimate of the proposed maximum aggregate offering price.

The Registrant hereby amends this Registration Statement on such date or dates as may be necessary to delay its effective date until the Registrant shall file a further amendment which specifically states that this Registration Statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933, as amended, or until the Registration Statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

EXPLANATORY NOTE

We currently operate as BridgeBio Pharma LLC, or the LLC entity, the registrant whose name appears on the cover of this registration statement. The LLC entity is a Delaware limited liability company. Prior to the completion of this offering, we will form BridgeBio Pharma, Inc., a Delaware corporation, or the Corporation, as a stand-alone entity. We then intend to complete a series of transactions pursuant to which we will form BridgeBio Pharma Merger Sub LLC, or Merger Sub LLC, an entity that will be a wholly owned subsidiary of the Corporation. Merger Sub LLC will be merged with and into the LLC entity prior to the completion of this offering with the LLC entity being the surviving entity. As part of this merger, the unitholders of the LLC entity will exchange their units in the LLC entity for shares of the Corporation.

We refer to these transactions throughout the prospectus included in this registration statement collectively as the “Reorganization.” See “Reorganization” for further detail regarding these transactions. On the effective date of the Reorganization, the members of the board of managers of the LLC entity will become the members of the board of directors of the Corporation and the officers of the LLC entity will become the officers of the Corporation.

Shares of the common stock of the Corporation are being offered by the prospectus included in this registration statement.

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The information in this preliminary prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This preliminary prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any jurisdiction where such offer or sale is not permitted.

Subject to Completion, dated , 2019.

Preliminary prospectus

shares

Common stock

This is an initial public offering of our shares of common stock. We are offering shares of our common stock to be sold in the offering. The initial public offering price is expected to be between $ and $ per share.

Prior to this offering, there has been no public market for our common stock. We intend to apply to list our common stock on the Nasdaq Global Market under the symbol "BBIO."

We are an "emerging growth company" as defined under the federal securities laws and, as such, have elected to comply with certain reduced public company reporting requirements.

	Per share	Total
Initial public offering price	$	$
Underwriting discounts and commissions(1)	$	$
Proceeds to us before expenses	$	$

(1) See "Underwriting" for a description of the compensation payable to the underwriters.

We have granted the underwriters an option for a period of 30 days to purchase up to additional shares of common stock.

Investing in our common stock involves a high degree of risk. See "Risk Factors" beginning on page 15.

Neither the Securities and Exchange Commission nor any other regulatory body has approved or disapproved of these securities or passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

The underwriters expect to deliver the shares to purchasers on or about , 2019.

J.P. Morgan **Goldman Sachs & Co. LLC** **Jefferies** **SVB Leerink** **KKR**

Piper Jaffray **Mizuho Securities** **BMO Capital Markets** **Raymond James**

, 2019

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We and the underwriters have not authorized anyone to provide any information other than that contained in this prospectus or in any free writing prospectus prepared by or on behalf of us or to which we have referred you. We take no responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We and the underwriters are not making an offer to sell these securities in any jurisdiction where the offer or sale is not permitted. You should assume that the information appearing in this prospectus is accurate only as of the date on the front cover of this prospectus. Our business, financial condition, results of operations and prospects may have changed since that date.

Through and including , 2019 (the 25th day after the date of this prospectus), all dealers that effect transactions in these securities, whether or not participating in this offering, may be required to deliver a prospectus. This is in addition to the dealers' obligation to deliver a prospectus when acting as underwriters and with respect to their unsold allotments or subscriptions.

For investors outside of the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than the United States. Persons outside of the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside of the United States.

Numerical figures included in this prospectus have been subject to rounding adjustments. Accordingly, numerical figures shown as totals in various tables may not be arithmetic aggregations of the figures that precede them.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere in this prospectus and does not contain all of the information that you should consider in making your investment decision. Before investing in our common stock, you should read the entire prospectus carefully, including the sections entitled "Risk Factors" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our combined and consolidated financial statements and the related notes.

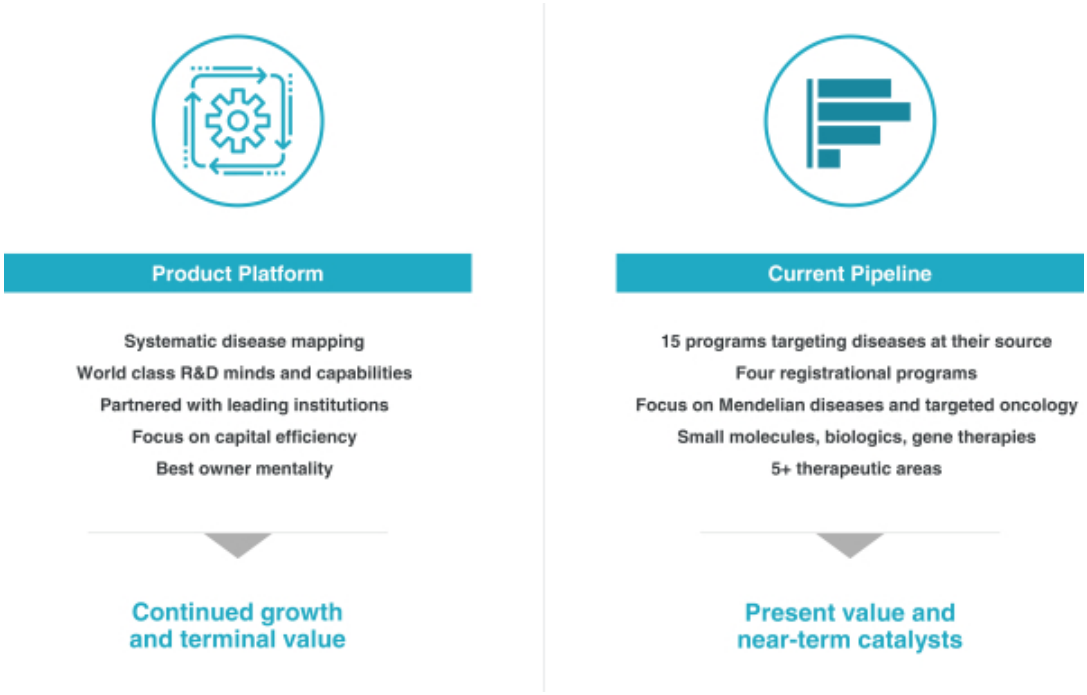
Prior to the completion of this offering, we will complete a series of transactions pursuant to which BridgeBio Pharma LLC will become a wholly owned subsidiary of BridgeBio Pharma, Inc., a newly formed Delaware corporation. See "Reorganization." Except where the context otherwise requires or where otherwise indicated, the terms "BridgeBio," "we," "us," "our," "our company," "the company," and "our business" refer, prior to the Reorganization discussed below, to BridgeBio Pharma LLC and its consolidated subsidiaries, including its controlled variable interest entities, or VIEs, and, after the Reorganization, to BridgeBio Pharma, Inc. and its consolidated subsidiaries, including its controlled VIEs.

Overview

We are a team of experienced drug discoverers, developers and innovators working to create life-altering medicines that target well-characterized genetic diseases at their source. We founded BridgeBio in 2015 to identify and advance transformative medicines to treat patients who suffer from Mendelian diseases, which are diseases that arise from defects in a single gene, and cancers with clear genetic drivers. Our pipeline of over 15 development programs includes product candidates ranging from early discovery to late-stage development. Several of our programs target indications that we believe present the potential for our product candidates, if approved, to target portions of market opportunities of at least $1.0 billion in annual sales, and we have four product candidates that are currently in registrational trials, which are trials we believe could support the filing of an application for marketing authorization.

We focus on genetic diseases because they exist at the intersection of high unmet patient need and tractable biology. Our approach is to translate research pioneered at academic laboratories and leading medical institutions into products that we hope will ultimately reach patients. We are able to realize this opportunity through a confluence of scientific advances, including: (i) identification of the genetic underpinnings of disease as more cost-efficient genome and exome sequencing becomes available; (ii) progress in molecular biology; and (iii) the development and maturation of longitudinal data and retrospective studies that enable the linkage of genes to diseases. We believe that this often-overlooked early-stage innovation represents one of the greatest practical sources for new drug creation.

We believe we have developed a sustainable and scalable product platform that supports the continued growth of our company and the advancement of our pipeline.



Our Platform

Our platform is distinguished by several key elements:

- **World class discovery and development talent**: Our team has previously submitted over 30 investigational new drug applications, or INDs, and 15 new drug applications, or NDAs, in aggregate. Our operations are overseen by a Management Committee that is comprised of renowned leaders in cancer and rare disease drug development.
- **Disciplined approach to target identification and prioritization**: We pair a systematic mapping of the genetic disease landscape with a proprietary set of over 10 criteria to narrow our focus on diseases with attractive attributes for drug development. We look for diseases with high unmet need and well-characterized mechanisms that present opportunities to address the root cause of disease.
- **Opportunistic approach to drug candidate selection**: We seek the best science and drug mechanisms of action, wherever they can be found. We accept programs that meet our standards at any stage of development, and we are agnostic to therapeutic area. However, we pursue programs only with validated treatment modalities, which we believe allows us to avoid the increased risk often associated with less tested approaches.
- **Focus at the level of each program**: We maintain a decentralized structure wherein each program is housed in its own subsidiary. This allows us to build a team of experts and specialists tailored to the needs of each program, and who are economically incentivized at the program level. We enable our subsidiary leaders to make certain operational decisions outside of a centralized management hierarchy, as we

fundamentally believe that those operators who have the most intimate program knowledge are best positioned to make key operational decisions.

- **Operational efficiency**: We aim to rapidly and decisively advance our product candidates to objective critical decision points. At each stage of research, discovery or development, we direct resources toward the opportunities that we believe are the most promising, and we discontinue programs that do not meet performance thresholds. We field a minimum viable team for each asset, ensuring that each program has sufficient personnel to fit its purpose while eliminating the excess overhead often seen in our industry. We accomplish this by hiring the best talent, centralizing and sharing certain support functions across various programs, and leveraging external providers where appropriate. This enables us to minimize traditionally fixed costs at the program level.
- **Portfolio breadth and diversification**: We have built a broad and diversified portfolio, with programs that vary across stage of development, therapeutic category and modality. We believe that our programs are biologically uncorrelated, covering different diseases, different targets and different modalities, such that the results of one program will not impact the development of others. Further, the breadth of our portfolio mitigates the impact of failure of any single program. As a result, we can be objective about each of our programs and allocate capital efficiently, delivering staged funding across our portfolio based on each program's scientific merits.
- **Optimized ownership for each program**: When we believe that we are best suited to continue a program's development, we will continue to fund it internally. If we believe a strategic partner is better suited to progress a program, we will consider externalizing development at economically attractive terms.

Our Pipeline

Our product platform supports the advancement of our current pipeline, which can be divided into three key categories:

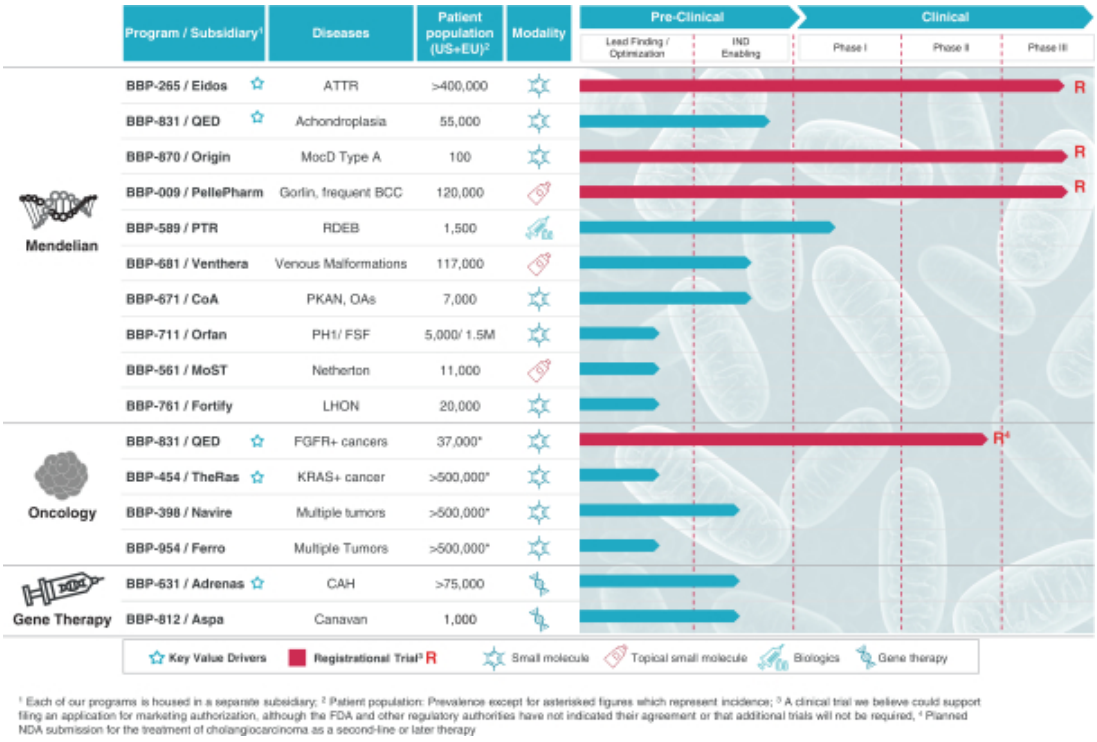
- **Mendelian**: Ten small molecule and protein replacement product candidates, of which three are currently in registrational trials, one is in Phase 1/2 development, three are currently in IND-enabling development and three are in lead optimization. Over the next 24 months, we expect to have at least six of these product candidates in clinical development. Several of our product candidates in this category target some of the most prevalent Mendelian diseases, including TTR amyloidosis, or ATTR, and achondroplasia. Two of our programs in this category have received breakthrough therapy designation from the FDA.
- **Oncology**: Four targeted oncology programs, including one in registrational development, of which one is in IND-enabling development and two are in lead optimization, that address key oncogenic pathways including FGFR, KRAS and SHP2. These programs have potentially broad applicability across a number of solid tumor types with high unmet patient need.
- **Gene therapy**: Focused on developing treatments for Mendelian diseases that are particularly suited to gene therapy. Our two programs are both in IND-enabling development, and we expect both of these programs to be in the clinic by 2020. Our gene therapy programs are led by executives who have substantial domain expertise and are recognized leaders in this field, and we are actively building our gene therapy capabilities.

Of our development programs, we believe the following, which we refer to as our key value drivers, have the greatest potential to drive significant value for our company due to a combination of factors, including their stage of development, potential availability of expedited development pathways, degree of unmet medical need and potential market size in the applicable target indication:

- BBP-265 (also known as AG10, under development at our subsidiary, Eidos Therapeutics, Inc.), a small molecule stabilizer of TTR that is in an ongoing Phase 3 clinical trial for the treatment of ATTR-CM.

- BBP-831 (under development at our subsidiary, QED Therapeutics, Inc.), a small molecule selective FGFR1-3 inhibitor being developed for the treatment of FGFR-driven cancers and achondroplasia, for which we intend to submit an NDA in 2020 for the treatment of cholangiocarcinoma as a second-line or later therapy.
- BBP-631 (under development at our subsidiary, Adrenas Therapeutics, Inc.), an AAV5 gene transfer product candidate in preclinical development for the treatment of congenital adrenal hyperplasia, or CAH, driven by 21-hydroxylase deficiency, or 21OHD.
- BBP-454 (under development at our subsidiary TheRas, Inc.), a preclinical development program for small molecule inhibitors of KRAS for the treatment of pan-mutant KRAS-driven cancers, which act via two novel binding pockets.

The following table summarizes our material development programs, their estimated patient populations, their therapeutic modalities and their development status:



[1] Each of our programs is housed in a separate subsidiary; [2] Patient population: Prevalence except for asterisked figures which represent incidence; [3] A clinical trial we believe could support filing an application for marketing authorization, although the FDA and other regulatory authorities have not indicated their agreement or that additional trials will not be required, [4] Planned NDA submission for the treatment of cholangiocarcinoma as a second-line or later therapy

Our Investment Thesis

At BridgeBio, we believe that the healthcare industry stands at the beginning of a new era of genetic medicine. We think that what is needed at this juncture is not simply a new company, but a new type of company, one conceived and designed specifically as an engine for efficiently translating the vast and rapidly growing pool of scientific innovation around genetic disorders into life-changing medicines for patients. We have created a model that we believe has a favorable long-term outlook, thanks to people and a process that we feel will drive success over time. As such, we manage our business with an eye to making the best long-term decision for each asset, rather than prioritizing how our decisions will impact our immediate financial results. We employ this long-term

approach because we accept that our model is subject to short-term variance, and we understand that the successes and failures of individual programs are decoupled from the outcomes and value of the rest of our pipeline and our model. Additionally, the time-intensive nature of drug development means that correct operational or investment decisions may not demonstrate revenue results for a period of several years. We believe that taking as many repetitions as possible at pairing well-understood diseases with the best scientific innovation in a highly cost-efficient manner is an effective way to drive long-term value in the face of quarter-to-quarter or year-to-year variance, and we operate our business with that longer timescale in mind.

Overview of Pipeline Key Value Drivers

Of our development programs, we believe the following are our key value drivers. Accordingly, we currently expect that we will prioritize these programs in our near-term use of cash and cash equivalents. See "Use of Proceeds."

BBP-265/AG10 (Eidos): TTR Amyloidosis

Summary	• We are developing BBP-265, an oral small molecule transthyretin, or TTR, stabilizer, for the treatment of ATTR, including both cardiomyopathy and polyneuropathy manifestations, or ATTR-CM and ATTR-PN, respectively
Development Status and Catalysts	• Ongoing – Phase 3 clinical trial in ATTR-CM • 2019 – Planned initiation of Phase 3 clinical trial in ATTR-PN • 2019 – Anticipated reporting of data from ATTR-CM Phase 2 open label extension on safety and key cardiac biomarkers
Disease Overview	• The dissociation of TTR tetramers into monomers and subsequent aggregation as amyloid proteins, or amyloid deposition, can cause ATTR-CM (wild-type and mutant) and ATTR-PN. Both manifestations of disease are progressive, have a significant negative impact on quality of life and are eventually fatal • Prevalence greater than 400,000 worldwide for ATTR-CM, and greater than 10,000 worldwide for ATTR-PN
Our Product Concept	• TTR stabilizer, designed to bind TTR and mimic the conformation of the naturally occurring T119M rescue mutation, which "super-stabilizes" TTR tetramers • Phase 2 clinical trial completed in ATTR-CM patients demonstrated tolerability, near-complete TTR stabilization and normalization of serum TTR levels. We believe that higher levels of TTR stabilization will result in improved clinical outcomes

BBP-831/Infigratinib (QED): FGFR-Driven Cancers

Summary	• We are developing infigratinib, an oral FGFR1-3 selective tyrosine kinase inhibitor, or TKI, for the treatment of FGFR-driven cancers
Development Status and Catalysts	• Ongoing – Preparation for NDA submission in advanced cholangiocarcinoma, or CCA, as a second-line or later therapy • Ongoing – Investigator-initiated trial in certain cancers involving FGFR translocations • 2019 – Anticipated first patient enrollment in Phase 3 clinical trial in advanced CCA as a first-line therapy • 2020 – Planned initiation of Phase 3 clinical trial in adjuvant urothelial carcinoma, or UC

	• 2020 – Anticipated NDA filing for treatment of advanced CCA as a second-line or later therapy

Disease Overview	• CCA is a rare, aggressive cancer of the bile ducts of the liver where the majority of newly diagnosed cases are non-resectable
	  • Incidence is approximately 37,000 in the United States and European Union. Approximately 15% to 20% of patients have FGFR2 fusions or translocations
	• UC is a cancer of the lining of the urinary tract. Patients undergoing first-line tumor excision for muscle invasive bladder cancer, or MIBC, and invasive upper tract urothelial cancer, or invasive UTUC, subtypes are most likely to be candidates for adjuvant therapy
	  • Incidence is approximately 41,000 for MIBC and approximately 19,500 for invasive UTUC patients in the United States and European Union, which comprise our initial targeted indications. Approximately 15% to 20% of all patients with MIBC and approximately 50% to 60% of patients with invasive UTUC have FGFR3 genomic alterations
	• Approximately 0.5% of all solid tumor cancers have fusions or translocations in the FGFR gene

Our Product Concept	• Designed to abrogate signaling via the FGFR1-3 pathways and inhibit cancer growth in FGFR-driven cancers, including CCA and UC • In Phase 1 and Phase 2 clinical trials, infigratinib has shown activity that we believe to be meaningful in clinical measures such as overall response rate, in advanced CCA with FGFR2 fusions or translocations and in UC with FGFR3 genomic alterations

BBP-831/Infigratinib (QED): Achondroplasia

Summary	• We are developing infigratinib, an oral FGFR1-3 selective TKI in preclinical development for the treatment of achondroplasia
Development Status and Catalysts	• 2020 – Planned initiation of Phase 1/2 clinical trial
Disease Overview	• Achondroplasia is the most common form of disproportionate short stature. All cases are driven by autosomal dominant FGFR3 gain of function mutations • Prevalence of greater than 55,000 in the United States and European Union, incidence of one in 10,000 to 30,000 live births worldwide
Our Product Concept	• Designed to inhibit overactive FGFR3 signaling, the underlying source of the disease • Anticipated dosing levels significantly below those studied in our oncology clinical trials

BBP-631 (Adrenas): Congenital Adrenal Hyperplasia

Summary	• We are developing BBP-631, a preclinical adeno-associated virus, or AAV, gene transfer product candidate, for the treatment of CAH caused by 21OHD

Development Status and Catalysts	• Ongoing – Nonhuman primate studies, preparation for good laboratory practice, or GLP, toxicity studies • 2020 – IND submission anticipated
Disease Overview	• CAH is a debilitating, life-threatening disease defined by an inability to produce the steroids cortisol and aldosterone, and an excess production of testosterone. Complications include adrenal crises, dehydration and virilization in females • Over 90% of cases are caused by inactivating mutations in 21-hydroxylase, or 21OH • Prevalence estimated to be more than 75,000 in the United States and European Union. Newborn screening for 21OHD is conducted in every U.S. state and most European countries
Our Product Concept	• Intravenously-administered AAV5 gene transfer therapy intended to replace the 21OH enzyme in the adrenal cortex, potentially normalizing steroid levels (e.g., cortisol, aldosterone and androgens) • A study in nonhuman primates demonstrated significant transfection in the adrenals, where 21OH is synthesized, with sustained vector genome counts and mRNA expression through three months

BBP-454 (TheRas): KRAS-Driven Cancers

Summary	• We are advancing BBP-454, a preclinical development program for small molecule inhibitors of KRAS for the treatment of pan-mutant KRAS-driven cancers
Development Status and Catalysts	• Ongoing – Lead optimization • 2020 – Development candidate nomination anticipated
Pathway Overview	• KRAS is a key driver of a number of large cancer indications with high unmet need including non-small cell lung cancers, pancreatic adenocarcinomas and colorectal adenocarcinomas. Historically, KRAS has been thought to be an undruggable target, due to its lack of clear binding pockets • Incidence of over 500,000 patients diagnosed with a KRAS-driven cancer in the United States and European Union
Our Product Concept	• We are developing small molecule, pan-mutant KRAS inhibitors, which act through binding to two novel sites on KRAS • Our first approach involves compounds that bind KRAS at a novel pocket on the hypervariable region, characterized by Frank McCormick, one of our co-founders and leader of the NCI RAS initiative, which prevents KRAS from binding to the cell membrane, thereby preventing signaling via the KRAS pathway • The second approach involves targeting a unique residue on KRAS which promotes its degradation and thus down-regulates signaling

Risks Associated with Our Business

Our ability to execute on our business strategy is subject to a number of risks, which are discussed more fully in the section of this prospectus entitled “Risk Factors.” You should carefully consider these risks before making an investment in our common stock. These risks include, among others, the following:

- We have incurred significant operating losses since our inception and have not generated any revenue from product sales. We expect to incur continued losses for the foreseeable future and may never achieve or maintain profitability.
- We will require substantial additional funding. If we are unable to raise capital when needed, or on attractive terms, we could be forced to delay, reduce or eliminate our research or product development programs or any future commercialization efforts.
- We have a limited operating history, have not successfully completed late-stage clinical trials for any product candidate, have not generated revenue from product sales or profits and do not expect to generate revenue or profits for the foreseeable future. We may never obtain approval for any of our product candidates or achieve or sustain profitability.
- Clinical drug development involves a lengthy and expensive process. We may incur additional costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of BBP-265, BBP-831, BBP-631, BBP-454 and our other product candidates.
- Certain of our product candidates are based on novel gene therapy technology with which there is limited clinical or regulatory experience to date, and therefore face heightened challenges for obtaining and maintaining regulatory approval, negative perception among the public and the medical community and additional manufacturing challenges.
- If we experience delays or difficulties in the enrollment of patients in clinical trials, including in our Phase 3 clinical trials of BBP-265 and registrational or Phase 3 clinical trials of BBP-831, our receipt of necessary marketing approvals could be delayed or prevented.
- The incidence and prevalence for target patient populations of our product candidates have not been established with precision. If the market opportunities for our product candidates are smaller than we estimate or if any approval that we obtain is based on a narrower definition of the patient population, our revenue potential and ability to achieve profitability will be adversely affected.
- We face substantial competition, including competition from large pharmaceutical and biotechnology companies that are currently pursuing the development and commercialization of products for the treatment of the indications that our four key value drivers are pursuing, which may result in others discovering, developing or commercializing products before or more successfully than we do.
- We may enter into collaborations with third parties for the development and commercialization of our product candidates. If those collaborations are not successful, we may not be able to capitalize on the market potential of these drug candidates.
- Manufacturing pharmaceutical products is complex and subject to production delays and product loss for a variety of reasons. We contract with third parties for the manufacture of our product candidates for preclinical testing and clinical trials and expect to continue to do so for commercialization. This reliance on third parties increases the risk that we will not have sufficient quantities of our drug candidates or products or such quantities at an acceptable cost or quality, which could delay, prevent or impair our development or commercialization efforts.
- If we are unable to obtain and maintain sufficient patent protection for our product candidates, or if the scope of the patent protection is not sufficiently broad, third parties, including our competitors, could develop and commercialize products similar or identical to ours, and our ability to commercialize our

product candidates successfully may be adversely affected. Additionally, if we are subject to or fail to prevail against claims that we have infringed the intellectual property rights of third parties, including in an ongoing patent litigation suit filed against our investee PellePharm, Inc., our ability to commercialize our product candidates will be harmed.

- Because our principal stockholders and certain members of our management own a significant percentage of our stock, they will be able to exert significant control over matters subject to stockholder approval, and may therefore be able to influence us through their ownership positions and determine matters that are subject to approval by our stockholders in a manner that may not be in your best interests as a stockholder.
- We have limited resources, and we may expend our resources to pursue a particular product candidate and fail to capitalize on development opportunities or product candidates that may be more profitable or for which there is a greater likelihood of success.
- We have identified material weaknesses in our internal control over financial reporting. If our remediation of these material weaknesses is not effective, or if we experience additional material weaknesses in the future, we may not be able to accurately or in a timely manner report our financial condition or results of operations, which may adversely affect the value of our common stock.

Corporate Information

BridgeBio LLC was formed in April 2015. BridgeBio Pharma LLC was formed in March 2016. In June 2017, BridgeBio Pharma LLC merged with BridgeBio LLC, with BridgeBio Pharma LLC being the surviving entity. Our principal executive offices are located at 421 Kipling Street, Palo Alto, CA 94301, and our telephone number is (650) 391-0740. Our corporate website address is https://bridgebio.com. Information contained on or accessible through our website is not a part of this prospectus, and the inclusion of our website address in this prospectus is an inactive textual reference only.

Prior to the completion of this offering, we will form BridgeBio Pharma, Inc., a Delaware corporation, or the Corporation, as a stand-alone entity. We then intend to complete a series of transactions pursuant to which we will form BridgeBio Pharma Merger Sub LLC, or Merger Sub LLC, an entity that will be a wholly-owned subsidiary of the Corporation. Merger Sub LLC will be merged with and into the LLC entity prior to the completion of this offering, with the LLC entity being the surviving entity. As part of this merger, the unitholders of the LLC entity will exchange their units in the LLC entity for shares of the Corporation. See “Reorganization” and “Description of Capital Stock” for additional information, including a description of the terms of our capital stock following the Reorganization and the terms of our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect immediately prior to completion of this offering.

We use various trademarks and trade names in our business, including, without limitation, our corporate name and logo. All other trademarks or trade names referred to in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus may be referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

Implications of Being an Emerging Growth Company

We are an “emerging growth company,” as defined in the Jumpstart Our Business Startups Act, or the JOBS Act, enacted in April 2012, as amended. For so long as we remain an emerging growth company, we are permitted and intend to rely on certain exemptions from various public company reporting requirements, including not being required to have our internal control over financial reporting audited by our independent registered public accounting firm pursuant to Section 404(b) of the Sarbanes-Oxley Act of 2002; as amended, or the Sarbanes-

Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements, exemptions from the requirements of holding a nonbinding advisory vote on executive compensation and any golden parachute payments not previously approved. In particular, in this prospectus, we provide only two years of audited financial statements and have not included all of the executive compensation related information that would be required if we were not an emerging growth company. Accordingly, the information contained herein may be different than the information you receive from other public companies in which you hold stock.

We will remain an emerging growth company until the earlier to occur of (i) December 31, 2024, (ii) the last day of the fiscal year in which we have total annual gross revenues of at least $1.07 billion, (iii) the last day of the fiscal year in which we are deemed to be a “large accelerated filer,” under the rules of the U.S. Securities and Exchange Commission, which means the market value of our equity securities that is held by non-affiliates exceeds $700 million as of the prior June 30th, and (iv) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of some accounting standards until those standards would otherwise apply to private companies. We have elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date we (i) are no longer an emerging growth company or (ii) affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our combined and consolidated financial statements may not be comparable to companies that comply with new or revised accounting pronouncements as of public company effective dates.

THE OFFERING

Common stock offered by us
shares

Common stock to be outstanding immediately after this offering
shares (or shares if the underwriters exercise their option to purchase additional shares in full)

Option to purchase additional shares
We have granted the underwriters an option to purchase up to additional shares of common stock from us. The underwriters can exercise this option at any time within 30 days from the date of this prospectus.

Use of proceeds
We estimate that we will receive net proceeds from the sale of our common stock in this offering of approximately $ million, or $ million if the underwriters fully exercise their option to purchase additional shares, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and offering expenses payable by us. We intend to use the net proceeds from this offering for working capital and general corporate purposes. See "Use of Proceeds" for additional information.

Risk factors
You should read carefully "Risk Factors" beginning on page 14 and other information included in this prospectus for a discussion of factors that you should consider before deciding to invest in our common stock.

Conflicts of interest
Affiliates of KKR Capital Markets LLC own more than 10% of our common stock. Because KKR Capital Markets LLC is an underwriter for this offering, it is deemed to have a "conflict of interest" within the meaning of FINRA Rule 5121(f)(5)(B). Accordingly, this offering is being made in compliance with the requirements of FINRA Rule 5121. Since KKR Capital Markets LLC is not primarily responsible for managing this offering, pursuant to FINRA Rule 5121, the appointment of a qualified independent underwriter is not necessary. KKR Capital Markets LLC will not confirm sales to discretionary accounts without the prior written approval of the account holder. See "Underwriting—Conflicts of Interest."

Proposed Nasdaq Global Market symbol
"BBIO"

The number of shares of our common stock to be outstanding after this offering assumes the Reorganization takes place prior to the completion of this offering and is based on shares of our common stock (which includes shares of restricted common stock, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus) outstanding as of December 31, 2018, which assumes the exchange of all outstanding units of BridgeBio Pharma LLC as of December 31, 2018 for an aggregate of shares of common stock of BridgeBio Pharma, Inc. prior to the completion of this offering, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus. See the section of the prospectus titled "Reorganization."

The number of shares of our common stock to be outstanding immediately following the completion of this offering excludes:

- shares of our common stock reserved for issuance under our 2019 Stock Option and Incentive Plan, which will become effective in connection with this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under our 2019 Stock Option and Incentive Plan; and
- shares of our common stock reserved for issuance under our 2019 Employee Stock Purchase Plan, which will become effective in connection with this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under our 2019 Employee Stock Purchase Plan.

In this prospectus, unless otherwise indicated or the context otherwise requires, the number of shares of common stock outstanding and the other information based thereon reflects and assumes:

- no exercise by the underwriters of their option to purchase up to an additional shares of our common stock from us;
- the completion of the Reorganization, including the exchange of all outstanding units of BridgeBio Pharma LLC as of December 31, 2018 for an aggregate of shares of common stock of BridgeBio Pharma, Inc. (which includes shares of restricted common stock), prior to the completion of this offering, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus (see “Reorganization”); and
- the filing of our amended and restated certificate of incorporation and the adoption of our amended and restated bylaws, which will occur immediately prior to the completion of this offering.

SUMMARY COMBINED AND CONSOLIDATED FINANCIAL DATA

The following information is presented for BridgeBio Pharma LLC, which will become a wholly owned subsidiary of BridgeBio Pharma, Inc., the entity whose shares are being offered hereby. You should read the following summary combined and consolidated financial data together with our combined and consolidated financial statements and the related notes appearing at the end of this prospectus and the "Selected Combined and Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations" sections of this prospectus. We have derived the combined and consolidated statements of operations and comprehensive loss data for the years ended December 31, 2017 and 2018 and our combined and consolidated balance sheet data for the year ended December 31, 2018 from our audited combined and consolidated financial statements appearing at the end of this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future.

	Year Ended December 31,	
	2017	2018
	(in thousands, except share, unit, per share and per unit data)	
Combined and Consolidated Statements of Operations and Comprehensive Loss:		
Operating expenses:		
Research and development	$ 30,556	$ 140,073
General and administrative	13,302	43,587
Total operating expenses	43,858	183,660
Loss from operations	(43,858)	(183,660)
Other income (expense), net:		
Interest income	39	2,004
Interest expense	(13)	(2,547)
Gain on deconsolidation of PellePharm	—	19,327
Loss from PellePharm	—	(275)
LEO call option expense	—	(3,009)
Other expense	—	(1,291)
Total other income (expense), net	26	14,209
Net loss and comprehensive loss	(43,832)	(169,451)
Net loss attributable to redeemable convertible noncontrolling interests and noncontrolling interests	13,267	38,702
Net loss and comprehensive loss attributable to BridgeBio	$ (30,565)	$ (130,749)
Cumulative returns on redeemable convertible preferred units (Series A, Series B and Series C)	(5,672)	(13,287)
Net loss attributable to redeemable founder units and redeemable common units	$ (36,237)	$ (144,036)
Net loss per unit attributable to redeemable founder unitholders and redeemable common unitholders, basic and diluted	$ (2.18)	$ (8.01)
Total weighted-average redeemable founder units and redeemable common units used in computing net loss per unit, basic and diluted	16,650,073	17,991,781
Pro forma net loss per share, basic and diluted (unaudited)(1)		$
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)(1)		

(1) Prior to the completion of this offering, we will form the Corporation as a stand-alone entity. We then intend to complete a series of transactions pursuant to which we will form Merger Sub LLC, an entity that will be a wholly owned subsidiary of the Corporation. Merger Sub LLC will be merged with and into the LLC entity prior to the completion of this offering, with the LLC entity being the surviving entity. As part of this merger, the unitholders of the LLC entity will exchange their units in the LLC entity for shares of the Corporation. These transactions are collectively referred to as the Reorganization. See the section of this prospectus titled "Reorganization."

	As of December 31, 2018		
	Actual	Pro Forma(1)	Pro Forma As Adjusted(2)
	(in thousands)		
Combined and Consolidated Balance Sheet Data:			
Cash and cash equivalents	$ 436,086	$	$
Working capital(3)	412,646		
Total assets	464,941		
Total long-term debt obligations	54,507		
Redeemable convertible preferred units	478,865		
Redeemable founder units	1,754		
Redeemable common units	1,619		
Common stock	—		
Accumulated deficit	(170,580)		
Noncontrolling interests	62,361		
Total members' deficit and members' equity	(108,219)		

(1) The combined and consolidated pro forma balance sheet data gives effect to the Reorganization.

(2) The pro forma as adjusted combined and consolidated balance sheet data gives further effect to our issuance and sale of shares of our common stock offered in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

(3) We define working capital as current assets less current liabilities.

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, working capital, total assets and total stockholders' equity by $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should consider carefully the following risks, together with all the other information in this prospectus, including our combined and consolidated financial statements and notes thereto, as well as the risks, uncertainties and other information set forth in the reports and other materials filed or furnished by our majority-controlled subsidiary Eidos Therapeutics, Inc., or Eidos, with the U.S. Securities and Exchange Commission, or the SEC, before you invest in our common stock. If any of the following risks or the risks included in the public filings of Eidos actually materializes, our operating results, financial condition and liquidity could be materially adversely affected. As a result, the trading price of our common stock could decline and you could lose part or all of your investment.

Risks Related to our Financial Position, Need for Additional Capital and Growth Strategy

Drug development is a highly uncertain undertaking and involves a substantial degree of risk. We have incurred significant losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future. We have not generated any revenue since inception, which, together with our limited operating history, may make it difficult for you to assess our future viability.

Pharmaceutical and biopharmaceutical product development is a highly speculative undertaking and involves a substantial degree of risk. We are a clinical-stage biopharmaceutical company with a limited operating history upon which you can evaluate our business and prospects. Our subsidiaries, on whose success we largely rely, are also early-stage biopharmaceutical companies. To date, we have focused principally on identifying, acquiring or in-licensing and developing our product candidates at the subsidiary level, all of which are in discovery, lead optimization, preclinical or clinical development. Our product candidates will require substantial additional development time, including extensive clinical research, and resources before we would be able to apply for or receive regulatory approvals and begin generating revenue from product sales.

We are not profitable and have incurred losses in each year since our inception in April 2015. Our net losses for the years ended December 31, 2017 and 2018 were $43.8 million and $169.5 million, respectively. As of December 31, 2018, we had an accumulated deficit of $170.6 million. We have no products approved for commercial sale and have not generated any revenues from product sales, and have financed operations solely through the sale of equity securities and debt financings. We continue to incur significant research and development, or R&D, and other expenses related to ongoing operations and expect to incur losses for the foreseeable future. We anticipate these losses will increase significantly following the completion of this offering and we will not generate any revenue from product sales until after we have successfully completed clinical development and received regulatory approval for the commercial sale of one or more product candidates.

Because of the numerous risks and uncertainties associated with drug development, we are unable to predict the timing or amount of our expenses, or when we will be able to generate any meaningful revenue or achieve or maintain profitability, if ever. In addition, our expenses could increase beyond our current expectations if we are required by the U.S. Food and Drug Administration, or FDA, or comparable foreign regulatory authorities, to perform nonclinical or preclinical studies or clinical trials in addition to those that we currently anticipate, or if there are any delays in any of our or our future collaborators' clinical trials or the development of our product candidates that we may identify. Even if our future product candidates that we may identify are approved for commercial sale, we anticipate incurring significant costs associated with commercializing any approved product candidate and ongoing compliance efforts.

We may never be able to develop or commercialize a marketable drug or achieve profitability. Revenue from the sale of any product candidate for which regulatory approval is obtained will be dependent, in part, upon the size of the markets in the territories for which we gain regulatory approval, the accepted price for the product, the ability to obtain reimbursement at any price and whether we own the commercial rights for that territory. Our growth strategy depends on our ability to generate revenue. In addition, if the number of addressable patients is

not as anticipated, the indication approved by regulatory authorities is narrower than expected, or the reasonably accepted population for treatment is narrowed by competition, physician choice or treatment guidelines, we may not generate significant revenue from sales of such products, even if approved. Even if we are able to generate revenue from the sale of any approved products, we may not become profitable and may need to obtain additional funding to continue operations. Even if we achieve profitability in the future, we may not be able to sustain profitability in subsequent periods. Our failure to achieve sustained profitability would depress the value of our company and could impair our ability to raise capital, expand our business, diversify our research and development pipeline, market our product candidates, if approved, that we may identify and pursue or continue our operations. Our prior losses, combined with expected future losses, have had and will continue to have an adverse effect on our stockholders' equity and working capital.

We will require substantial additional funding to achieve our business goals. If we are unable to obtain this funding when needed and on acceptable terms, we could be forced to delay, limit or terminate our product development efforts.

Developing biopharmaceutical products is expensive and time-consuming, and we expect to require substantial additional capital to conduct research, preclinical testing and human studies, may establish pilot scale and commercial scale manufacturing processes and facilities, and establish and develop quality control, regulatory, marketing, sales and administrative capabilities to support our existing programs and pursue potential additional programs. We are also responsible for the payments to third parties of expenses that may include milestone payments, license maintenance fees and royalties, including in the case of certain of our agreements with academic institutions or other companies from whom intellectual property rights underlying their respective programs have been in-licensed or acquired. Because the outcome of any preclinical or clinical development and regulatory approval process is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development, regulatory approval process and commercialization of any future product candidates we may identify.

As of December 31, 2018, we had working capital of $412.6 million and cash and cash equivalents of $436.1 million. We estimate that the net proceeds from this offering will be approximately $ million (or approximately $ million if the underwriters exercise in full their option to purchase additional shares), after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. We expect that the net proceeds from this offering, together with our existing cash will be sufficient to fund our operations for at least . However, our operating plan may change as a result of many factors currently unknown to us, and we may need to seek additional funds sooner than planned, through public or private equity or debt financings or other sources, such as strategic collaborations or license and development agreements. Any additional fundraising efforts for us may divert our management from their day-to-day activities, which may adversely affect our ability to develop and commercialize product candidates that we may identify and pursue. Moreover, such financing may result in dilution to stockholders, imposition of debt covenants and repayment obligations, or other restrictions that may affect our business. In addition, we may seek additional capital due to favorable market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans.

Our future funding requirements will depend on many factors, including, but not limited to:

- the time and cost necessary to complete ongoing and planned clinical trials, including Eidos' ongoing and planned Phase 3 clinical trials of BBP-265; our Phase 2 clinical trial of infigratinib in CCA as a second-line therapy, Phase 3 clinical trial of infigratinib in CCA as a first-line therapy and Phase 3 clinical trial of infigratinib in adjuvant UC; our Phase 3 clinical trial of BBP-009 in Gorlin syndrome and Phase 2b clinical trial in high frequency basal cell carcinoma; and our Phase 1/2 clinical trial of BBP-589 in dystrophic epidermolysis bullosa;
- the time and cost necessary to pursue regulatory approvals for our product candidates, and the costs of post-marketing studies that could be required by regulatory authorities;

- the progress, timing, scope and costs of our nonclinical studies, preclinical studies, clinical trials and other related activities, including the ability to enroll patients in a timely manner, for the ongoing and planned clinical trials set forth above, and potential future clinical trials;
- the costs of obtaining clinical and commercial supplies of raw materials and drug products for our product candidates, including protein or gene therapies such as BBP-589, BBP-631, and BBP-812 and any other product candidates we may identify and develop;
- our ability to successfully identify and negotiate acceptable terms for third-party supply and contract manufacturing agreements with contract manufacturing organizations, or CMOs;
- our ability to successfully commercialize product candidates;
- the manufacturing, selling and marketing costs associated with our product candidates, including the cost and timing of expanding our internal sales and marketing capabilities or entering into strategic collaborations with third parties to leverage or access these capabilities;
- the amount and timing of sales and other revenues from our product candidates, if any are approved, including the sales price and the availability of adequate third-party reimbursement;
- the cash requirements of any future acquisitions or discovery of product candidates;
- the time and cost necessary to respond to technological and market developments;
- the costs of acquiring, licensing or investing in intellectual property rights, products, product candidates and businesses;
- our ability to attract, hire and retain qualified personnel; and
- the costs of maintaining, expanding and protecting our intellectual property portfolio.

Additional funds may not be available when we need them, on terms that are acceptable, or at all. If adequate funds are not available to us on a timely basis, we may be required to delay, limit or terminate one or more research or development programs or the commercialization of any product candidates or be unable to expand operations or otherwise capitalize on business opportunities, as desired, which could materially affect our business, prospects, financial condition and results of operations.

Raising additional capital may cause dilution to our existing stockholders, restrict our operations or require us to relinquish rights to current product candidates or to any future product candidates on unfavorable terms.

We may seek additional capital through a combination of public and private equity offerings, debt financings, strategic partnerships and alliances and licensing arrangements. We, and indirectly, our stockholders, will bear the cost of issuing and servicing any such securities and of entering into and maintaining any such strategic partnerships or other arrangements. Because any decision by us to issue debt or equity securities in the future will depend on market conditions and other factors beyond our control, we cannot predict or estimate the amount, timing or nature of any future financing transactions. To the extent that we raise additional capital through the sale of equity or debt securities, your ownership interest will be diluted, and the terms may include liquidation or other preferences that adversely affect your rights as a stockholder. The incurrence of additional indebtedness would result in increased fixed payment obligations and could involve additional restrictive covenants, such as limitations on our ability to incur additional debt, limitations on our ability to acquire, sell or license intellectual property rights and other operating restrictions that could adversely impact our ability to conduct our business. Additionally, any future collaborations we enter into with third parties may provide capital in the near term, but limit our potential cash flow and revenue in the future. If we raise additional funds through strategic partnerships and alliances and licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies or product candidates, or grant licenses or other rights on unfavorable terms.

In addition, if one of our subsidiaries raises funds through the issuance of equity securities, and our stockholders' equity interest in such subsidiary could be substantially diminished. If one of our subsidiaries raises additional

funds through collaboration and licensing arrangements, it may be necessary to relinquish some rights to our technologies or our product candidates or grant licenses on terms that are not favorable to us.

If we engage in acquisitions or strategic partnerships, this may increase our capital requirements, dilute our stockholders, cause us to incur debt or assume contingent liabilities, and subject us to other risks.

We may engage in various acquisitions and strategic partnerships in the future, including licensing or acquiring complementary products, intellectual property rights, technologies, or businesses. Any acquisition or strategic partnership may entail numerous risks, including:

- increased operating expenses and cash requirements;
- the assumption of indebtedness or contingent liabilities;
- the issuance of our equity securities which would result in dilution to our stockholders;
- assimilation of operations, intellectual property, products and product candidates of an acquired company, including difficulties associated with integrating new personnel;
- the diversion of our management's attention from our existing product programs and initiatives in pursuing such an acquisition or strategic partnership;
- retention of key employees, the loss of key personnel, and uncertainties in our ability to maintain key business relationships;
- risks and uncertainties associated with the other party to such a transaction, including the prospects of that party and their existing products or product candidates and regulatory approvals; and
- our inability to generate revenue from acquired intellectual property, technology and/or products sufficient to meet our objectives or even to offset the associated transaction and maintenance costs.

In addition, if we undertake such a transaction, we may issue dilutive securities, assume or incur debt obligations, incur large one-time expenses and acquire intangible assets that could result in significant future amortization expense.

If we obtain a controlling interest in additional companies in the future, it could adversely affect our operating results and the value of our common stock, thereby disrupting our business.

As part of our strategy, we expect to form and invest in additional wholly-owned subsidiaries and variable interest entities, or VIEs. Investments in our existing and any future subsidiaries involve numerous risks, including, but not necessarily limited to:

- risk of conducting research and development activities in new therapeutic areas or treatment modalities in which we have little to no experience;
- diversion of financial and managerial resources from existing operations;
- successfully negotiating a proposed acquisition, in-license or investment in a timely manner and at a price or on terms and conditions favorable to us;
- successfully combining and integrating a potential acquisition into our existing business to fully realize the benefits of such acquisition;
- the impact of regulatory reviews on a proposed acquisition, in-license or investment; and
- the outcome of any legal proceedings that may be instituted with respect to the proposed acquisition, in-license or investment.

If we fail to properly evaluate potential acquisitions, in-licenses, investments or other transactions associated with the creation of new research and development programs or the maintenance of existing ones, we might not achieve the anticipated benefits of any such transaction, we might incur costs in excess of what we anticipate, and management resources and attention might be diverted from other necessary or valuable activities.

Risks Related to our Business and the Clinical Development, Regulatory Review and Approval of our Product Candidates

Our product candidates are in preclinical or clinical development, which is a lengthy and expensive process with uncertain outcomes and the potential for substantial delays. We cannot give any assurance that any of our product candidates will receive regulatory approval, which is necessary before they can be commercialized.

Before obtaining marketing approval from regulatory authorities for the sale of our product candidates, we must conduct extensive clinical trials to demonstrate the safety and efficacy of the product candidates in humans. To date, we have focused substantially all of our efforts and financial resources on identifying, acquiring, and developing our product candidates, including conducting lead optimization, nonclinical studies, preclinical studies and clinical trials, and providing general and administrative support for these operations. We cannot be certain that any clinical trials will be conducted as planned or completed on schedule, if at all. Our inability to successfully complete preclinical and clinical development could result in additional costs to us and negatively impact our ability to generate revenue. Our future success is dependent on our ability to successfully develop, obtain regulatory approval for, and then successfully commercialize product candidates. We currently have no products approved for sale and have not generated any revenue from sales of drugs, and we may never be able to develop or successfully commercialize a marketable drug.

All of our product candidates require additional development; management of preclinical, clinical, and manufacturing activities; and regulatory approval. In addition, we will need to obtain adequate manufacturing supply; build a commercial organization; commence marketing efforts; and obtain reimbursement before we generate any significant revenue from commercial product sales, if ever. Many of our product candidates are in early-stage research or translational phases of development, and the risk of failure for these programs is high. We cannot be certain that any of our product candidates will be successful in clinical trials or receive regulatory approval. Further, our product candidates may not receive regulatory approval even if they are successful in clinical trials. If we do not receive regulatory approvals for our product candidates, we and our subsidiaries may not be able to continue operations, which may result in us dissolving the subsidiary, out-licensing the technology or pursuing an alternative strategy.

If we are unable to obtain regulatory approval in one or more jurisdictions for any product candidates that we may identify and develop, our business will be substantially harmed.

We cannot commercialize a product until the appropriate regulatory authorities have reviewed and approved the product candidate. Approval by the FDA and comparable foreign regulatory authorities is lengthy and unpredictable, and depends upon numerous factors, including substantial discretion of the regulatory authorities. Approval policies, regulations, or the type and amount of nonclinical or clinical data necessary to gain approval may change during the course of a product candidate’s development and may vary among jurisdictions, which may cause delays in the approval or the decision not to approve an application. We have not obtained regulatory approval for any product candidates, and it is possible that our current product candidates and any other product candidates which we may seek to develop in the future will not ever obtain regulatory approval. We cannot be certain that any of our product candidates will receive regulatory approval or be successfully commercialized even if we receive regulatory approval.

Obtaining marketing approval is an extensive, lengthy, expensive and inherently uncertain process, and regulatory authorities may delay, limit or deny approval of our product candidates for many reasons, including but not limited to:

- the inability to demonstrate to the satisfaction of the FDA or comparable foreign regulatory authorities that the applicable product candidate is safe and effective as a treatment for our targeted indications;
- the FDA or comparable foreign regulatory authorities may disagree with the design, endpoints or implementation of our clinical trials;
- the population studied in the clinical program may not be sufficiently broad or representative to assure safety or efficacy in the full population for which we seek approval;
- the FDA or comparable foreign regulatory authorities may require additional preclinical studies or clinical trials beyond those that we currently anticipate;
- the FDA or comparable foreign regulatory authorities may disagree with our interpretation of data from nonclinical studies or clinical trials;
- the data collected from clinical trials of product candidates that we may identify and pursue may not be sufficient to support the submission of an NDA, biologics license application, or BLA, or other submission for regulatory approval in the United States or elsewhere;
- we may be unable to demonstrate to the FDA or comparable foreign regulatory authorities that a product candidate's risk-benefit ratio for its proposed indication is acceptable;
- the FDA or comparable foreign regulatory authorities may identify deficiencies in the manufacturing processes, test procedures and specifications, or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA or comparable foreign regulatory authorities may change in a manner that renders the clinical trial design or data insufficient for approval.

The lengthy approval process, as well as the unpredictability of the results of clinical trials and evolving regulatory requirements, may result in our failure to obtain regulatory approval to market product candidates that we may pursue in the United States or elsewhere, which would significantly harm our business, prospects, financial condition and results of operations.

We may encounter substantial delays in clinical trials, or may not be able to conduct or complete clinical trials on the expected timelines, if at all.

Clinical testing is expensive, time consuming, and subject to uncertainty. We cannot guarantee that any of our ongoing and planned clinical trials will be conducted as planned or completed on schedule, if at all. Moreover, even if these trials are initiated or conducted on a timely basis, issues may arise that could result in the suspension or termination of such clinical trials. A failure of one or more clinical trials can occur at any stage of testing, and our ongoing and future clinical trials may not be successful. Events that may prevent successful or timely initiation or completion of clinical trials include:

- inability to generate sufficient preclinical, toxicology, or other *in vivo* or *in vitro* data to support the initiation or continuation of clinical trials;
- delays in confirming target engagement, patient selection or other relevant biomarkers to be utilized in preclinical and clinical product candidate development;
- delays in reaching a consensus with regulatory agencies as to the design or implementation of our clinical studies;
- delays in reaching agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and clinical trial sites;

- delays in identifying, recruiting and training suitable clinical investigators;
- delays in obtaining required Institutional Review Board, or IRB, approval at each clinical trial site;
- imposition of a temporary or permanent clinical hold by regulatory agencies for a number of reasons, including after review of an IND or amendment, clinical trial application, or CTA, or amendment, or equivalent application or amendment; as a result of a new safety finding that presents unreasonable risk to clinical trial participants; a negative finding from an inspection of our clinical trial operations or study sites;
- developments in trials for other product candidates with the same targets or related modalities as our product candidates conducted by competitors that raise regulatory or safety concerns about risk to patients of the treatment; or if the FDA finds that the investigational protocol or plan is clearly deficient to meet its stated objectives;
- difficulties in securing access to materials for the comparator arm of certain of our clinical trials;
- delays in identifying, recruiting and enrolling suitable patients to participate in clinical trials, and delays caused by patients withdrawing from clinical trials or failing to return for post-treatment follow-up;
- difficulty collaborating with patient groups and investigators;
- failure by CROs, other third parties, or us to adhere to clinical trial requirements;
- failure to perform in accordance with the FDA's or any other regulatory authority's current good clinical practices, or GCP, requirements, or regulatory guidelines in other countries;
- occurrence of adverse events, or AEs, associated with the product candidate that are viewed to outweigh its potential benefits;
- changes in regulatory requirements and guidance that require amending or submitting new clinical protocols;
- changes in the standard of care on which a clinical development plan was based, which may require new or additional trials;
- the cost of clinical trials of any product candidates that we may identify and pursue being greater than we anticipate;
- clinical trials of any product candidates that we may identify and pursue producing negative or inconclusive results, which may result in our deciding, or regulators requiring us, to conduct additional clinical trials or abandon product development programs;
- transfer of manufacturing processes to larger-scale facilities operated by a CMO, or by us, and delays or failure by our CMOs or us to make any necessary changes to such manufacturing process; and
- delays in manufacturing, testing, releasing, validating, or importing/exporting sufficient stable quantities of product candidates that we may identify for use in clinical trials or the inability to do any of the foregoing.

Any inability to successfully initiate or complete clinical trials could result in additional costs to us or impair our ability to generate revenue. For example, on October 30, 2018, the FDA notified our subsidiary Phoenix Tissue Repair Inc. of a partial clinical hold for the Phase 1/2 clinical trial for BBP-589 and requested additional development of the analytical test method to quantitate relative potency of the product we intend to use for our planned Phase 2 clinical trial. Although we believe the existing product lot for BBP-589 identified in the IND, which is not subject to the partial clinical hold, is sufficient to complete our proposed Phase 1/2 clinical trial, we will need to reconcile the identified deficiency in the potency assay and provide the FDA with the requested information before we can release additional lots of BBP-589 for clinical use. We cannot assure you that the FDA will deem our response satisfactory to address its request and we may never be able to secure a release of the partial clinical hold. In addition, if we make manufacturing or formulation changes to our product candidates, we may be required to or we may elect to conduct additional nonclinical studies or clinical trials to bridge data

obtained from our modified product candidates to data obtained from nonclinical and clinical research conducted using earlier versions. Clinical trial delays could also shorten any periods during which our products have patent protection and may allow our competitors to bring products to market before we do, which could impair our ability to successfully commercialize product candidates and may harm our business and results of operations.

We could also encounter delays if a clinical trial is suspended or terminated by us, by the data safety monitoring board, or DSMB, including for our ongoing and planned Phase 3 clinical trials of BBP-265, our ongoing and planned registrational and Phase 3 clinical trials of BBP-831 and our ongoing Phase 3 registrational trial of BBP-009, or by the FDA or other regulatory authority, or if the IRBs of the institutions in which such trials are being conducted suspend or terminate the participation of their clinical investigators and sites subject to their review. Such authorities may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a product candidate, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Moreover, principal investigators for our clinical trials may serve as scientific advisors or consultants to us from time to time and receive compensation in connection with such services. Under certain circumstances, we may be required to report some of these relationships to the FDA or comparable foreign regulatory authorities. The FDA or comparable foreign regulatory authority may conclude that a financial relationship between us and a principal investigator has created a conflict of interest or otherwise affected interpretation of the study. The FDA or comparable foreign regulatory authority may therefore question the integrity of the data generated at the applicable clinical trial site and the utility of the clinical trial itself may be jeopardized. This could result in a delay in approval, or rejection, of our marketing applications by the FDA or comparable foreign regulatory authority, as the case may be, and may ultimately lead to the denial of marketing approval of one or more of our product candidates.

Delays in the initiation, conduct or completion of any clinical trial of our product candidates will increase our costs, slow down the product candidate development and approval process and delay or potentially jeopardize our ability to commence product sales and generate revenue. In addition, many of the factors that cause, or lead to, a delay in the commencement or completion of clinical trials may also ultimately lead to the denial of regulatory approval of our product candidates. In the event we identify any additional product candidates to pursue, we cannot be sure that submission of an IND or a CTA will result in the FDA or comparable foreign regulatory authority allowing clinical trials to begin in a timely manner, if at all. Any of these events could have a material adverse effect on our business, prospects, financial condition and results of operations.

Our clinical trials may fail to demonstrate substantial evidence of the safety and effectiveness of product candidates that we may identify and pursue for their intended uses, which would prevent, delay or limit the scope of regulatory approval and commercialization.

Before obtaining regulatory approvals for the commercial sale of any of our product candidates, we must demonstrate through lengthy, complex and expensive nonclinical studies, preclinical studies and clinical trials that the applicable product candidate is both safe and effective for use in each target indication, and in the case of our product candidates regulated as biological products, that the product candidate is safe, pure, and potent for use in its targeted indication. Each product candidate must demonstrate an adequate risk versus benefit profile in its intended patient population and for its intended use.

Clinical testing is expensive and can take many years to complete, and its outcome is inherently uncertain. Failure can occur at any time during the clinical development process. Most product candidates that begin clinical trials are never approved by regulatory authorities for commercialization. We have limited experience in designing clinical trials and may be unable to design and execute a clinical trial to support marketing approval.

We cannot be certain that our current clinical trials or any other future clinical trials will be successful. Additionally, any safety concerns observed in any one of our clinical trials in our targeted indications could limit the prospects for regulatory approval of our product candidates in those and other indications, which could have a material adverse effect on our business, financial condition and results of operations. In addition, even if such clinical trials are successfully completed, we cannot guarantee that the FDA or comparable foreign regulatory authorities will interpret the results as we do, and more trials could be required before we submit our product candidates for approval. This is particularly true for clinical trials in very rare diseases, such as with BBP-870 for MoCD Type A, where the very small patient population makes it difficult or impossible to conduct two traditional, adequate and well-controlled studies, and therefore the FDA or comparable foreign regulatory authorities are often required to exercise flexibility in approving therapies for such diseases. Moreover, results acceptable to support approval in one jurisdiction may be deemed inadequate by another regulatory authority to support regulatory approval in that other jurisdiction. To the extent that the results of the trials are not satisfactory to the FDA or comparable foreign regulatory authorities for support of a marketing application, we may be required to expend significant resources, which may not be available to us, to conduct additional trials in support of potential approval of our product candidates. Even if regulatory approval is secured for a product candidate, the terms of such approval may limit the scope and use of the specific product candidate, which may also limit its commercial potential.

Results of earlier studies or clinical trials may not be predictive of future clinical trial results, and initial studies or clinical trials may not establish an adequate safety or efficacy profile for our product candidates to justify proceeding to advanced clinical trials or an application for regulatory approval.

The results of nonclinical and preclinical studies and clinical trials may not be predictive of the results of later-stage clinical trials, and interim results of a clinical trial do not necessarily predict final results. In addition, for certain of our product candidates that we acquired, we did not undertake the preclinical studies and clinical trials. The results of preclinical studies and clinical trials in one set of patients or disease indications, or from preclinical studies or clinical trials that we did not lead, may not be predictive of those obtained in another. In some instances, there can be significant variability in safety or efficacy results between different clinical trials of the same product candidate due to numerous factors, including changes in trial procedures set forth in protocols, differences in the size and type of the patient populations, changes in and adherence to the dosing regimen and other clinical trial protocols and the rate of dropout among clinical trial participants. In addition, preclinical and clinical data are often susceptible to various interpretations and analyses, and many companies that have believed their product candidates performed satisfactorily in preclinical studies and clinical trials have nonetheless failed to obtain marketing approval. Product candidates in later stages of clinical trials may fail to show the desired safety and efficacy profile despite having progressed through nonclinical studies and initial clinical trials. A number of companies in the pharmaceutical and biopharmaceutical industry have suffered significant setbacks in advanced clinical trials due to lack of efficacy or adverse safety profiles, notwithstanding promising results in earlier studies, and we cannot be certain that we will not face similar setbacks. Even if early-stage clinical trials are successful, we may need to conduct additional clinical trials of our product candidates in additional patient populations or under different treatment conditions before we are able to seek approvals from the FDA and regulatory authorities outside the United States to market and sell these product candidates. Our failure to obtain marketing approval for our product candidates would substantially harm our business, prospects, financial condition and results of operations. For example, in the event another therapy in the same class as BBP-265 is approved with one or more claims with respect to efficacy endpoints that are demonstrated with greater statistical significance than the same or similar claim(s) in our clinical trials for BBP-265, the scope of the approval for BBP-265 could be limited to a second-line claim for patients who cannot tolerate the first-line product. Any of these events could limit the commercial potential of BBP-265 and have a material adverse effect on our business, prospects, financial condition and results of operations.

Additionally, some of the clinical trials performed to date were generated from open-label studies and were conducted at a limited number of clinical sites on a limited number of patients. An “open-label” clinical trial is one where both the patient and investigator know whether the patient is receiving the investigational product

candidate or either an existing approved drug or placebo. Most typically, open-label clinical trials test only the investigational product candidate and sometimes may do so at different dose levels. Open-label clinical trials are subject to various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are receiving treatment. Open-label clinical trials may be subject to a "patient bias" where patients perceive their symptoms to have improved merely due to their awareness of receiving an experimental treatment. Moreover, patients selected for early clinical studies often include the most severe sufferers and their symptoms may have been bound to improve notwithstanding the new treatment. In addition, open-label clinical trials may be subject to an "investigator bias" where those assessing and reviewing the physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. Given that our Phase 2 clinical trial of BBP-265 includes an open-label clinical trial extension, the results from this clinical trial may not be predictive of future clinical trial results with this or other product candidates for which we include an open-label clinical trial when studied in a controlled environment with a placebo or active control.

We may encounter difficulties enrolling patients in clinical trials, and clinical development activities could thereby be delayed or otherwise adversely affected.

The timely completion of clinical trials in accordance with their protocols depends, among other things, on our ability to enroll a sufficient number of patients who remain in the trial until its conclusion. The indications for which we plan to evaluate our current product candidates represent a rare disease or condition with limited patient populations from which to draw participants in clinical trials. Due to our focus on the development of product candidates for the treatment of Mendelian diseases and genetically driven cancers, many of which are rare conditions, we may not be able to identify and enroll a sufficient number of patients, or those with required or desired characteristics and criteria, in a timely manner.

We may experience difficulties in patient enrollment in our clinical trials for a variety of reasons, including:

- the size and nature of a patient population;
- the patient eligibility criteria defined in the applicable clinical trial protocols, which may limit the patient populations eligible for clinical trials to a greater extent than competing clinical trials for the same indication;
- the size of the study population required for analysis of the trial's primary endpoints;
- the severity of the disease under investigation;
- the proximity of patients to a trial site;
- the design of the trial;
- the ability to recruit clinical trial investigators with the appropriate competencies and experience;
- the approval or concurrent enrollment of clinical trials involving competing product candidates currently under development for Mendelian diseases or genetically driven cancers, including Vyndaqel (tafamidis), for which Pfizer Inc. has submitted two NDAs for the treatment of ATTR-CM and is approved in certain countries outside the United States for the treatment of ATTR-PN, or competing clinical trials for similar therapies or targeting patient populations meeting our patient eligibility criteria;
- clinicians' and patients' perceptions as to the potential advantages and side effects of the product candidate being studied in relation to other available therapies and product candidates;
- the ability to obtain and maintain patient consents; and
- the risk that patients enrolled in clinical trials will not complete such trials, for any reason.

If we have difficulty enrolling sufficient numbers of patients to conduct clinical trials as planned, we may need to delay or terminate ongoing or planned clinical trials, either of which would have an adverse effect on our business.

Use of our product candidates could be associated with side effects, adverse events or other properties or safety risks, which could delay or halt their clinical development, prevent their regulatory approval, cause us to suspend or discontinue clinical trials, abandon a product candidate, limit their commercial potential, if approved, or result in other significant negative consequences that could severely harm our business, prospects, operating results and financial condition.

As is the case with pharmaceuticals generally, it is likely that there may be side effects and AEs associated with our product candidates' use. Results of our clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. Undesirable side effects caused by our product candidates could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay or denial of regulatory approval by the FDA or comparable foreign regulatory authorities. The drug-related side effects could affect patient recruitment or the ability of enrolled patients to complete the trial or result in potential product liability claims. Any of these occurrences may harm our business, financial condition and prospects significantly.

Moreover, if our product candidates are associated with undesirable side effects in preclinical studies or clinical trials or have characteristics that are unexpected, we may elect to abandon their development or limit their development to more narrow uses or subpopulations in which the undesirable side effects or other characteristics are less prevalent, less severe or more acceptable from a risk-benefit perspective, which may limit the commercial expectations for the product candidate if approved. We may also be required to modify or terminate our study plans based on findings in our preclinical studies or clinical trials. For instance, in our registrational clinical trial of BPP-831 for the treatment of FGFR-driven cancers, the most commonly reported treatment emergent adverse event of any grade was hyperphosphatemia, which is an electrolyte disorder in which there is an elevated level of phosphate in the blood. Many product candidates that initially show promise in early-stage testing may later be found to cause side effects that prevent further development. In addition, in ongoing IND-enabling toxicology studies, we have observed toxicity in a non-rodent species for BBP-671. We expect to receive data reports in 2019 that will define what preclinical studies may be required to determine potential species-specificity and mechanism underlying the observed toxicity. As we work to advance existing product candidates and to identify new product candidates, we cannot be certain that later testing or trials of product candidates that initially showed promise in early testing will not be found to cause similar or different unacceptable side effects that prevent their further development.

It is possible that as we test our product candidates in larger, longer and more extensive clinical trials, or as the use of these product candidates becomes more widespread if they receive regulatory approval, illnesses, injuries, discomforts and other AEs that were observed in earlier trials, as well as conditions that did not occur or went undetected in previous trials, will be reported by subjects. If such side effects become known later in development or upon approval, if any, such findings may harm our business, financial condition and prospects significantly.

Additionally, adverse developments in clinical trials of pharmaceutical and biopharmaceutical products conducted by others may cause the FDA or other regulatory oversight bodies to suspend or terminate our clinical trials or to change the requirements for approval of any of our product candidates.

In addition to side effects caused by the product candidate, the administration process or related procedures also can cause adverse side effects. If any such AEs occur, our clinical trials could be suspended or terminated. If we are unable to demonstrate that any AEs were caused by the administration process or related procedures, the FDA, the European Commission, the European Medicines Agency, or the EMA, or other regulatory authorities could order us to cease further development of, or deny approval of, a product candidate for any or all targeted indications. Even if can demonstrate that all future serious adverse events, or SAEs, are not product-related, such occurrences could affect patient recruitment or the ability of enrolled patients to complete the trial. Moreover, if we elect, or are required, to not initiate, delay, suspend or terminate any future clinical trial of any of our product candidates, the commercial prospects of such product candidates may be harmed and our ability to generate

product revenues from any of these product candidates may be delayed or eliminated. Any of these occurrences may harm our ability to develop other product candidates, and may harm our business, financial condition and prospects significantly.

Additionally, if any of our product candidates receives marketing approval, the FDA could impose a boxed warning in the labeling of our product and could require us to adopt a risk evaluation and mitigation strategy, or REMS, and could apply elements to assure safe use to ensure that the benefits of the product outweigh its risks, which may include, among other things, a Medication Guide outlining the risks of the product for distribution to patients and a communication plan to health care practitioners. Furthermore, if we or others later identify undesirable side effects caused by our product candidates once approved, several potentially significant negative consequences could result, including:

- regulatory authorities may suspend or withdraw approvals of such product candidate;
- regulatory authorities may require additional warnings on the label;
- we may be required by the FDA to implement a REMS;
- we may be required to change the way a product candidate is administered or conduct additional clinical trials;
- we could be sued and held liable for harm caused to patients; and
- our reputation may suffer.

Any of these occurrences could prevent us from achieving or maintaining market acceptance of the particular product candidate, if approved, and may harm our business, financial condition and prospects significantly.

Certain of our product candidates under development for the treatment of patient populations with significant comorbidities that may result in deaths or serious adverse or unacceptable side effects and require us to abandon or limit our clinical development activities.

Patients in certain of our ongoing and planned clinical trials of product candidates in genetically driven cancers, including clinical trials of BBP-831 of FGFR-driven cancers, as well as patients who may undergo treatment with other product candidates that we may develop, may also receive chemotherapy, radiation, and/or other high dose or myeloablative treatments in the course of treatment of their disease, and may therefore experience side effects or AEs, including death, that are unrelated to our product candidates. While these side effects or AEs may be unrelated to our product candidates, they may still affect the success of our clinical trials. The inclusion of critically ill patients in our clinical trials may also result in deaths or other adverse medical events due to underlying disease or to other therapies or medications that such patients may receive. Any of these events could prevent us from advancing our product candidates through clinical development, and from obtaining regulatory approval, and would impair our ability to commercialize our product candidates. Any inability to advance our product candidates through clinical development would have a material adverse effect on our business, and the value of our common stock would decline.

We may in the future conduct clinical trials for product candidates outside the United States, and the FDA and comparable foreign regulatory authorities may not accept data from such trials.

We may in the future choose to conduct one or more clinical trials outside the United States, including in Europe. For instance, our clinical trials of BBP-831 and BBP-870 each included patients outside of the United States and our Phase 3 clinical trials of BBP-265 will include patients outside of the United States. The acceptance of study data from clinical trials conducted outside the United States or another jurisdiction by the FDA or comparable foreign regulatory authority may be subject to certain conditions or may not be accepted at all. In cases where data from foreign clinical trials are intended to serve as the basis for marketing approval in the United States, the FDA will generally not approve the application on the basis of foreign data alone unless (i) the data are

applicable to the U.S. population and U.S. medical practice; and (ii) the trials were performed by clinical investigators of recognized competence and pursuant to GCP regulations. Additionally, the FDA's clinical trial requirements, including sufficient size of patient populations and statistical powering, must be met. Many foreign regulatory authorities have similar approval requirements. In addition, such foreign trials would be subject to the applicable local laws of the foreign jurisdictions where the trials are conducted. There can be no assurance that the FDA or any comparable foreign regulatory authority will accept data from trials conducted outside of the United States or the applicable jurisdiction, including from our ongoing and planned Phase 3 clinical trials of BBP-265, for which we plan to enroll cohorts outside the United States. If the FDA or any comparable foreign regulatory authority does not accept such data, it would result in the need for additional trials, which would be costly and time-consuming and delay aspects of our business plan, and which may result in product candidates that we may develop not receiving approval or clearance for commercialization in the applicable jurisdiction.

Even if we obtain FDA approval for product candidates that we may identify and pursue in the United States, we may never obtain approval to commercialize any product candidates outside of the United States, which would limit our ability to realize their full market potential.

In order to market any products outside of the United States, we must establish and comply with numerous and varying regulatory requirements of other countries regarding safety and effectiveness. Clinical trials conducted in one country may not be accepted by regulatory authorities in other countries, and regulatory approval in one country does not mean that regulatory approval will be obtained in any other country. Approval processes vary among countries and can involve additional product testing and validation and additional or different administrative review periods from those in the United States, including additional preclinical studies or clinical trials, as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

Seeking foreign regulatory approval could result in difficulties and costs and require additional nonclinical studies or clinical trials which could be costly and time-consuming. Regulatory requirements can vary widely from country to country and could delay or prevent the introduction of our product candidates in those countries. The foreign regulatory approval process may include all of the risks associated with obtaining FDA approval. We do not have any product candidates approved for sale in any jurisdiction, including international markets, and we do not have experience in obtaining regulatory approval in international markets. If we fail to comply with regulatory requirements in international markets or to obtain and maintain required approvals, or if regulatory approval in international markets is delayed, our target market will be reduced and our ability to realize the full market potential of our products will be harmed.

Interim, "top-line," and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available or as additional analyses are conducted, and as the data are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publish interim, "top-line," or preliminary data from our clinical studies. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or "top-line" data also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are available. Material adverse changes between preliminary, "top-line," or interim data and final data could significantly harm our business prospects.

Even though we may apply for orphan drug designation for our product candidates, we may not be able to obtain orphan drug marketing exclusivity.

Our business strategy focuses on the development of product candidates for the treatment of genetic diseases, which may be eligible for FDA or EMA orphan drug designation. Regulatory authorities in some jurisdictions, including the United States and European Union, may designate drugs or biologics for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 individuals annually in the United States, or a patient population greater than 200,000 in the United States where there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In order to obtain orphan drug designation, the request must be made before submitting an NDA or BLA. In the United States, orphan drug designation entitles a party to financial incentives such as opportunities for grant funding towards clinical trial costs, tax advantages, and user-fee waivers. After the FDA grants orphan drug designation, the generic identity of the drug and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval of that particular product for the disease for which it has such designation, the product is entitled to orphan product exclusivity, which means that the FDA may not approve any other applications, including an NDA or BLA, to market the same drug or biologic for the same indication for seven years, except in limited circumstances such as a showing of clinical superiority to the product with orphan drug exclusivity or if FDA finds that the holder of the orphan drug exclusivity has not shown that it can assure the availability of sufficient quantities of the orphan drug to meet the needs of patients with the disease or condition for which the drug was designated. As a result, even if one of our product candidates receives orphan exclusivity, the FDA can still approve other drugs or biologics for use in treating the same indication or disease or the same biologic for a different indication or disease during the exclusivity period. Furthermore, the FDA can waive orphan exclusivity if we are unable to manufacture sufficient supply of our product or if a subsequent applicant demonstrates clinical superiority over our product.

In the European Union, the Committee for Orphan Medicinal Products of the EMA grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 persons in the European Union (or where it is unlikely that the development of the medicine would generate sufficient return to justify the investment) and for which no satisfactory method of diagnosis, prevention, or treatment is authorized or, if a method exists, the product would be of significant benefit to those affected by the condition.

We have obtained from the FDA orphan drug designation for BBP-009 for treatment of nevoid basal cell carcinoma syndrome, or Gorlin syndrome, BBP-265 for the treatment of transthyretin amyloidosis, BBP-589 for the treatment of dystrophic epidermolysis bullosa, BBP-631 for the treatment of CAH 21OHD, BBP-587 for the treatment of dystrophic epidemolysis bullosa and BBP-870 for treatment of molybdenum cofactor deficiency type A. We have obtained from the EMA orphan drug designation for BBP-009 for treatment of nevoid basal cell carcinoma syndrome (Gorlin syndrome), BBP-265 for the treatment of ATTR amyloidosis, BBP-589 for the treatment of epidermolysis bullosa and BBP-870 for treatment of molybdenum cofactor deficiency type A. We may seek orphan drug designation for certain other of our product candidates. Even if we obtain orphan drug designation, exclusive marketing rights in the United States may be limited if we seek approval for an indication broader than the orphan designated indication and may be lost if the FDA later determines that the request for designation was materially defective or if we are unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition, or if a subsequent applicant demonstrates clinical superiority over our products, if approved. In addition, although we may seek orphan drug designation for other product candidates, we may never receive such designations.

Certain of our product candidates, including our protein therapeutic and gene therapy product candidates are novel, complex and difficult to manufacture. We could experience manufacturing problems that result in delays in our development or commercialization programs or otherwise harm our business.

The manufacturing processes our CMOs use to produce our product candidates, including our protein therapeutic and gene therapy product candidates, are complex, novel and have not been validated for commercial use. Several factors could cause production interruptions, including equipment malfunctions, facility contamination, raw material shortages or contamination, natural disasters, disruption in utility services, human error or disruptions in the operations of our suppliers.

Several of our small molecule product candidates are particularly complex and difficult to manufacture, in some cases due to the number of steps required, the process complexity and the toxicity of end or intermediate-stage products.

Our protein therapeutic and gene therapy product candidates require processing steps that are more complex than those required for most small molecule drugs. Moreover, unlike small molecules, the physical and chemical properties of biologics such as ours generally cannot be fully characterized. As a result, assays of the finished product may not be sufficient to ensure that the product is consistent from lot-to-lot or will perform in the intended manner. Accordingly, our CMOs must employ multiple steps to control the manufacturing process to assure that the process is reproducible and the product candidate is made strictly and consistently in compliance with the process. Problems with the manufacturing process, even minor deviations from the normal process, could result in product defects or manufacturing failures that result in lot failures, product recalls, product liability claims or insufficient inventory to conduct clinical trials or supply commercial markets. We may encounter problems achieving adequate quantities and quality of clinical-grade materials that meet the FDA, the EMA or other applicable standards or specifications with consistent and acceptable production yields and costs.

In addition, the FDA, the EMA and other foreign regulatory authorities may require us to submit samples of any lot of any approved product together with the protocols showing the results of applicable tests at any time. Under some circumstances, the FDA, the EMA or other foreign regulatory authorities may require that we not distribute a lot until the agency authorizes its release. Slight deviations in the manufacturing process, including those affecting quality attributes and stability, may result in unacceptable changes in the product that could result in lot failures or product recalls. Lot failures or product recalls could cause us to delay product launches or clinical trials, which could be costly to us and otherwise harm our business, financial condition, results of operations and prospects.

Our CMOs also may encounter problems hiring and retaining the experienced scientific, quality assurance, quality-control and manufacturing personnel needed to operate our manufacturing processes, which could result in delays in production or difficulties in maintaining compliance with applicable regulatory requirements.

Any problems in our CMOs' manufacturing process or facilities could result in delays in planned clinical trials and increased costs, and could make us a less attractive collaborator for potential partners, including larger biotechnology companies and academic research institutions, which could limit access to additional attractive development programs. Problems in our manufacturing process could restrict our ability to meet potential future market demand for products.

Certain of our product candidates are based on a novel AAV, gene therapy technology with which there is limited clinical or regulatory experience to date, which makes it difficult to predict the time and cost of product candidate development and subsequently obtaining regulatory approval.

Certain of our product candidates are based on gene therapy technology and our future success depends on the successful development of this novel therapeutic approach. We cannot assure you that any development problems we or other gene therapy companies experience in the future related to gene therapy technology will not cause

significant delays or unanticipated costs in the development of our product candidates, or that such development problems can be solved. In addition, the clinical study requirements of the FDA, EMA and other regulatory agencies and the criteria these regulators use to determine the safety and efficacy of a product candidate vary substantially according to the type, complexity, novelty and intended use and market of the potential products. The regulatory approval process for novel product candidates such as ours can be more expensive and take longer than for other, better known or extensively studied therapeutic modalities. Further, as we are developing novel treatments for diseases in which there is limited clinical experience with new endpoints and methodologies, there is heightened risk that the FDA, EMA or comparable foreign regulatory bodies may not consider the clinical trial endpoints to provide clinically meaningful results, and the resulting clinical data and results may be more difficult to analyze. To date, few gene therapy products have been approved by the FDA or comparable foreign regulatory authorities, which makes it difficult to determine how long it will take or how much it will cost to obtain regulatory approvals for our product candidates in the United States, the European Union or other jurisdictions. Further, approvals by one regulatory agency may not be indicative of what other regulatory agencies may require for approval.

Regulatory requirements governing gene therapy products have evolved and may continue to change in the future. For example, the FDA established the Office of Tissues and Advanced Therapies within its Center for Biologics Evaluation and Research, or CBER, to consolidate the review of gene therapy and related products, and the Cellular, Tissue and Gene Therapies Advisory Committee to advise CBER on its review. These and other regulatory review agencies, committees and advisory groups and the requirements and guidelines they promulgate may lengthen the regulatory review process, require us to perform additional preclinical studies or clinical trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of these treatment candidates or lead to significant post-approval limitations or restrictions.

The FDA, National Institutes of Health, or NIH, other regulatory agencies at both the federal and state level in the United States, U.S. congressional committees, and the EMA and other foreign governments, have expressed interest in further regulating the biotechnology industry, including gene therapy and genetic testing. For example, the EMA advocates a risk-based approach to the development of a gene therapy product. Any such further regulation may delay or prevent commercialization of some or all of our product candidates. For example, in 1999, a patient died during a gene therapy clinical trial that utilized an adenovirus vector and it was later discovered that adenoviruses could generate an extreme immune system reaction that can be life-threatening. In January 2000, the FDA halted that trial and began investigating 69 other gene therapy trials underway in the United States, 13 of which required remedial action. In 2003, the FDA suspended 27 additional gene therapy trials involving several hundred patients after learning that some patients treated in a clinical trial in France had subsequently developed leukemia. While the new AAV vectors that we use across our portfolio of gene therapy product candidates have been designed and developed to help reduce these side effects, gene therapy is still a relatively new approach to disease treatment and past as well as different adverse side effects could develop.

Regulatory requirements in the United States and abroad governing gene therapy products have changed frequently and may continue to change in the future. For example, in addition to the submission of an IND, to the FDA, before initiation of a clinical trial in the United States, certain human clinical trials for cell therapy products and gene therapy had historically been subject to review by the NIH Office of Biotechnology Activities' Recombinant DNA Advisory Committee, or the RAC, pursuant to the NIH Guidelines for Research Involving Recombinant DNA Molecules, or NIH Guidelines. Following an initial review, RAC members would make a recommendation as to whether the protocol raises important scientific, safety, medical, ethical or social issues that warrant in-depth discussion at the RAC's quarterly meetings. Although the FDA decides whether individual gene therapy protocols may proceed under an IND, the RAC's recommendations were shared with the FDA and, the RAC public review process, if undertaken, could have impeded or delayed the initiation of a clinical trial, even if the FDA has reviewed the trial and approved its initiation or has notified the sponsor that the study may begin. Conversely, the FDA can put an IND on clinical hold even if the RAC provided a favorable review or has recommended against an in-depth, public review.

On August 17, 2018, the NIH issued a notice in the Federal Register and issued a public statement proposing changes to the oversight framework for gene therapy trials, including changes to the applicable NIH Guidelines to modify the roles and responsibilities of the RAC with respect to human clinical trials of gene therapy products, and requesting public comment on its proposed modifications. During the public comment period, which closed on October 16, 2018, the NIH had announced that it would no longer accept new human gene transfer protocols for review as part of the protocol registration process under the existing NIH Guidelines or convene the RAC to review individual clinical protocols. These trials will remain subject to the FDA's oversight and other clinical trial regulations, and oversight at the local level will continue as otherwise set forth in the NIH Guidelines. Specifically, under the NIH Guidelines, supervision of human gene transfer trials includes evaluation and assessment by an IBC, a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. The IBC assesses the safety of the research and identifies any potential risk to the public health or the environment, and such review may result in some delay before initiation of a clinical trial. While the NIH Guidelines are not mandatory unless the research in question is being conducted at or sponsored by institutions receiving NIH funding of recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them. Even though we may not be required to submit a protocol for our gene therapy product candidates through the NIH for RAC review, we will still be subject to significant regulatory oversight by the FDA, and in addition to the government regulators, the applicable IBC and IRB, of each institution at which we or our collaborators conduct clinical trials of our product candidates, or a central IRB if appropriate, would need to review and approve the proposed clinical trial.

Similarly, the EMA governs the development of gene therapies in the European Union and may issue new guidelines concerning the development and marketing authorization for gene therapy products and require that we comply with these new guidelines.

These regulatory review committees and advisory groups and the new guidelines they promulgate may lengthen the regulatory review process, require us to perform additional studies or trials, increase our development costs, lead to changes in regulatory positions and interpretations, delay or prevent approval and commercialization of our product candidates or lead to significant post-approval limitations or restrictions. As we advance our product candidates, we will be required to consult with these regulatory and advisory groups and comply with applicable guidelines. If we fail to do so, we may be required to delay or discontinue development of such product candidates. These additional processes may result in a review and approval process that is longer than we otherwise would have expected. Delays as a result of an increased or lengthier regulatory approval process or further restrictions on the development of our product candidates can be costly and could negatively impact our ability to complete clinical trials and commercialize our current and future product candidates in a timely manner, if at all.

Our product candidates based on gene therapy technology may cause undesirable and unforeseen side effects or be perceived by the public as unsafe, which could delay or prevent their advancement into clinical trials or regulatory approval, limit the commercial potential or result in significant negative consequences.

Public attitudes may be influenced by claims that gene therapy technology is unsafe, unethical, or immoral, and, consequently, our product candidates may not gain the acceptance of the public or the medical community. Adverse public attitudes may adversely impact our ability to enroll clinical trials. Moreover, our success will depend upon physicians prescribing, and their patients being willing to receive, treatments that involve the use of product candidates we may develop in lieu of, or in addition to, existing treatments with which they are already familiar and for which greater clinical data may be available. For example, there have been several significant adverse side effects in prior clinical trials of gene therapy product candidates, including reported cases of leukemia and death seen in other trials using other vectors. While new AAV vectors have been developed to reduce these side effects, gene therapy is still a relatively new approach to disease treatment and additional adverse side effects could develop. There also is the potential risk of delayed AEs following exposure to gene therapy products due to persistent biologic activity of the genetic material or other components of products used to carry the genetic material.

Possible adverse side effects that could occur with treatment with gene therapy products include an immunologic reaction early after administration which could be detrimental to the patient's health or substantially limit the effectiveness and durability of the treatment. For example, an increasingly anticipated side effect of AAV gene therapy is the development of a T-cell immunological response, most often seen affecting the liver.

The FDA has granted rare pediatric disease designation to BBP-870 for the treatment of molybdenum cofactor deficiency type A. However, a marketing application for BBP-870, if approved, may not meet the eligibility criteria for a priority review voucher.

The FDA has granted rare pediatric disease designation to BBP-870 for the treatment of molybdenum cofactor deficiency type A, or MoCD Type A. Designation of a drug as a drug for a rare pediatric disease does not guarantee that an NDA for such drug will meet the eligibility criteria for a rare pediatric disease priority review voucher at the time the application is approved. Under the Federal Food, Drugs, and Cosmetic Act, or FDCA, we will need to request a rare pediatric disease priority review voucher in our original NDA for BBP-870. The FDA may determine that an NDA for BBP-870, if approved, does not meet the eligibility criteria for a priority review voucher, including for the following reasons:

- MoCD Type A no longer meets the definition of a rare pediatric disease;
- the NDA contains an active ingredient (including any ester or salt of the active ingredient) that has been previously approved in an NDA;
- the NDA is not deemed eligible for priority review;
- the NDA does not rely on clinical data derived from studies examining a pediatric population and dosages of the drug intended for that population (that is, if the NDA does not contain sufficient clinical data to allow for adequate labeling for use by the full range of affected pediatric patients); or
- the NDA is approved for a different adult indication than the rare pediatric disease for which BBP-870 is designated (for example, if BBP-870 is approved for an indication based on specific genetic alterations that would be inclusive of, but not limited to, BBP-870).

The authority for the FDA to award rare pediatric disease priority review vouchers for drugs that have received rare pediatric disease designation prior to September 30, 2020 currently expires on September 30, 2022. If the NDA for BBP-870 is not approved prior to September 30, 2022 for any reason, regardless of whether it meets the criteria for a rare pediatric disease priority review voucher, it will not be eligible for a priority review voucher. However, it is also possible the authority for FDA to award rare pediatric disease priority review vouchers will be further extended through Federal lawmaking.

We may not elect or be able to take advantage of any expedited development or regulatory review and approval processes available to product candidates granted breakthrough therapy or fast track designation by the FDA.

We intend to evaluate and continue ongoing discussions with the FDA on regulatory strategies that could enable us to take advantage of expedited development pathways for certain of our product candidates, although we cannot be certain that our product candidates will qualify for any expedited development pathways or that regulatory authorities will grant, or allow us to maintain, the relevant qualifying designations. Potential expedited development pathways that we could pursue include breakthrough therapy and fast track designation.

Breakthrough therapy designation is intended to expedite the development and review of product candidates that are designed to treat serious or life-threatening diseases when "preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over existing therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development." The designation of a product candidate as a breakthrough therapy provides potential benefits that include more frequent meetings with FDA to discuss the development plan for the product candidate and ensure collection of appropriate data needed

to support approval; more frequent written correspondence from FDA about such things as the design of the proposed clinical trials and use of biomarkers; intensive guidance on an efficient drug development program, beginning as early as Phase 1; organizational commitment involving senior managers; and eligibility for rolling review and priority review.

Fast track designation is designed for product candidates intended for the treatment of a serious or life-threatening disease or condition, where nonclinical or clinical data demonstrate the potential to address an unmet medical need for this disease or condition.

Although BBP-870 has received breakthrough therapy designation for MoCD and BBP-009 has received breakthrough therapy designation for the reduction of life-long, serious clinical morbidity and disease burden of persistently developing BCCs in patients with basal cell nevus syndrome, or BCNS, which is also known as Gorlin Syndrome, we may elect not to pursue either of breakthrough therapy or fast track designation for our other product candidates, and the FDA has broad discretion whether or not to grant these designations.

Accordingly, even if we believe a particular product candidate is eligible for breakthrough therapy or fast track designation, we cannot assure you that the FDA would decide to grant it. Breakthrough therapy designation and fast track designation do not change the standards for product approval, and there is no assurance that such designation or eligibility will result in expedited review or approval or that the approved indication will not be narrower than the indication covered by the breakthrough therapy designation or fast track designation. Thus, even if we do receive breakthrough therapy or fast track designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may withdraw breakthrough therapy or fast track designation if it believes that the product no longer meets the qualifying criteria. Our business may be harmed if we are unable to avail ourselves of these or any other expedited development and regulatory pathways.

If we are unable to successfully validate, develop and obtain regulatory approval for companion diagnostic tests for our drug candidates that require or would commercially benefit from such tests, or experience significant delays in doing so, we may not realize the full commercial potential of these drug candidates.

In connection with the clinical development of our drug candidates for certain indications, we may work with collaborators to develop or obtain access to *in vitro* companion diagnostic tests to identify patient subsets within a disease category who may derive selective and meaningful benefit from our drug candidates. For example, we are currently developing a companion diagnostic for BBP-831 in patients with CCA in collaboration with Foundation Medicine, or FMI. Such companion diagnostics would be used during our clinical trials as well as in connection with the commercialization of our product candidates. To be successful, we or our collaborators will need to address a number of scientific, technical, regulatory and logistical challenges. The FDA and comparable foreign regulatory authorities regulate *in vitro* companion diagnostics as medical devices and, under that regulatory framework, will likely require the conduct of clinical trials to demonstrate the safety and effectiveness of any diagnostics we may develop, which we expect will require separate regulatory clearance or approval prior to commercialization.

We may rely on third parties for the design, development and manufacture of companion diagnostic tests for our therapeutic drug candidates that may require such tests. If we enter into such collaborative agreements, we will be dependent on the sustained cooperation and effort of our future collaborators in developing and obtaining approval for these companion diagnostics. It may be necessary to resolve issues such as selectivity/specificity, analytical validation, reproducibility, or clinical validation of companion diagnostics during the development and regulatory approval processes. Moreover, even if data from preclinical studies and early clinical trials appear to support development of a companion diagnostic for a product candidate, data generated in later clinical trials may fail to support the analytical and clinical validation of the companion diagnostic. We and our future collaborators may encounter difficulties in developing, obtaining regulatory approval for, manufacturing and commercializing companion diagnostics similar to those we face with respect to our therapeutic candidates themselves, including issues with achieving regulatory clearance or approval, production of sufficient quantities at commercial scale and with appropriate quality standards, and in gaining market acceptance. If we are unable to

successfully develop companion diagnostics for these therapeutic drug candidates, or experience delays in doing so, the development of these therapeutic drug candidates may be adversely affected, these therapeutic drug candidates may not obtain marketing approval, and we may not realize the full commercial potential of any of these therapeutics that obtain marketing approval. As a result, our business, results of operations and financial condition could be materially harmed. In addition, a diagnostic company with whom we contract may decide to discontinue selling or manufacturing the companion diagnostic test that we anticipate using in connection with development and commercialization of our product candidates or our relationship with such diagnostic company may otherwise terminate. We may not be able to enter into arrangements with another diagnostic company to obtain supplies of an alternative diagnostic test for use in connection with the development and commercialization of our product candidates or do so on commercially reasonable terms, which could adversely affect and/or delay the development or commercialization of our therapeutic candidates.

If approved, our investigational products regulated as biologics may face competition from biosimilars approved through an abbreviated regulatory pathway.

The Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively the ACA, includes a subtitle called the Biologics Price Competition and Innovation Act of 2009, or BPCIA, which created an abbreviated approval pathway for biological products that are biosimilar to or interchangeable with an FDA-licensed reference biological product. Under the BPCIA, an application for a biosimilar product may not be submitted to the FDA until four years following the date that the reference product was first licensed by the FDA. In addition, the approval of a biosimilar product may not be made effective by the FDA until 12 years from the date on which the reference product was first licensed. During this 12-year period of exclusivity, another company may still market a competing version of the reference product if the FDA approves a BLA for the competing product containing the sponsor's own preclinical data and data from adequate and well-controlled clinical trials to demonstrate the safety, purity, and potency of the other company's product. The law is complex and is still being interpreted and implemented by the FDA. As a result, its ultimate impact, implementation, and meaning are subject to uncertainty.

We believe that any of our product candidates approved as a biological product under a BLA should qualify for the 12-year period of exclusivity. However, there is a risk that this exclusivity could be shortened due to congressional action or otherwise, or that the FDA will not consider our investigational medicines to be reference products for competing products, potentially creating the opportunity for generic competition sooner than anticipated. Other aspects of the BPCIA, some of which may impact the BPCIA exclusivity provisions, have also been the subject of recent litigation. Moreover, the extent to which a biosimilar, once licensed, will be substituted for any one of our reference products in a way that is similar to traditional generic substitution for non-biological products is not yet clear, and will depend on a number of marketplace and regulatory factors that are still developing.

If competitors are able to obtain marketing approval for biosimilars referencing our products, our products may become subject to competition from such biosimilars, with the attendant competitive pressure and consequences.

Even if we obtain regulatory approval for a product candidate, we will be subject to ongoing regulatory obligations and continued regulatory review, which may result in significant additional expense and we may be subject to penalties if we fail to comply with regulatory requirements or experience unanticipated problems with our product candidates.

If any of our product candidates are approved, they will be subject to ongoing regulatory requirements for manufacturing, labeling, packaging, storage, advertising, promotion, sampling, record-keeping, conduct of post-marketing studies, and submission of safety, efficacy, and other post-market information, including both federal and state requirements in the United States and requirements of comparable foreign regulatory authorities.

Manufacturers and manufacturers' facilities are required to comply with extensive requirements imposed by the FDA and comparable foreign regulatory authorities, including ensuring that quality control and manufacturing

procedures conform to current good manufacturing practices, or cGMP, regulations. As such, we and our CMOs will be subject to continual review and inspections to assess compliance with cGMP and adherence to commitments made in any NDA, BLA or marketing authorization application, or MAA. Accordingly, we and others with whom we work must continue to expend time, money, and effort in all areas of regulatory compliance, including manufacturing, production and quality control.

Any regulatory approvals that we may receive for our product candidates will be subject to limitations on the approved indicated uses for which the product may be marketed and promoted or to the conditions of approval, or contain requirements for potentially costly post-marketing testing, including Phase 4 clinical trials and surveillance to monitor the safety and efficacy of the product candidate. We will be required to report certain adverse reactions and production problems, if any, to the FDA and comparable foreign regulatory authorities. Any new legislation addressing drug safety issues could result in delays in product development or commercialization, or increased costs to assure compliance.

The FDA and other agencies, including the Department of Justice, closely regulate and monitor the post-approval marketing, labeling, advertising and promotion of products to ensure that they are manufactured, marketed and distributed only for the approved indications and in accordance with the provisions of the approved label. We will have to comply with requirements concerning advertising and promotion for our products. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved label. As such, we may not promote our products for indications or uses for which they do not have approval.

The holder of an approved NDA, BLA or MAA must submit new or supplemental applications and obtain approval for certain changes to the approved product, product labeling, or manufacturing process. We could also be asked to conduct post-marketing clinical trials to verify the safety and efficacy of our products in general or in specific patient subsets. If original marketing approval was obtained via the accelerated approval pathway, we could be required to conduct a successful post-marketing clinical trial to confirm clinical benefit for our products. An unsuccessful post-marketing study or failure to complete such a study could result in the withdrawal of marketing approval.

If a regulatory agency discovers previously unknown problems with a product, such as AEs of unanticipated severity or frequency, or problems with the facility where the product is manufactured, or disagrees with the promotion, marketing or labeling of a product, such regulatory agency may impose restrictions on that product or us, including requiring withdrawal of the product from the market. If we fail to comply with applicable regulatory requirements, a regulatory agency or enforcement authority may, among other things:

- issue warning letters that would result in adverse publicity;
- impose civil or criminal penalties;
- suspend or withdraw regulatory approvals;
- suspend any of our ongoing clinical trials;
- refuse to approve pending applications or supplements to approved applications submitted by us;
- impose restrictions on our operations, including closing our CMOs' facilities;
- seize or detain products; or
- require a product recall.

Any government investigation of alleged violations of law could require us to expend significant time and resources in response, and could generate negative publicity. Any failure to comply with ongoing regulatory requirements may significantly and adversely affect our ability to commercialize and generate revenue from our products. If regulatory sanctions are applied or if regulatory approval is withdrawn, the value of our company and our operating results will be adversely affected.

The FDA's and other regulatory authorities' policies may change and additional government regulations may be enacted that could prevent, limit or delay regulatory approval of our product candidates.

We also cannot predict the likelihood, nature or extent of government regulation that may arise from future legislation or administrative action, either in the United States or abroad. For example, certain policies of the Trump administration may impact our business and industry. Namely, the Trump administration has taken several executive actions, including the issuance of a number of Executive Orders, that could impose significant burdens on, or otherwise materially delay, the FDA's ability to engage in routine regulatory and oversight activities such as implementing statutes through rulemaking, issuance of guidance, and review and approval of marketing applications. If these executive actions impose constraints on FDA's ability to engage in oversight and implementation activities in the normal course, our business may be negatively impacted.

The FDA and other regulatory agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses.

If any of our product candidates are approved and we are found to have improperly promoted off-label uses of those products, we may become subject to significant liability. The FDA and other regulatory agencies strictly regulate the promotional claims that may be made about prescription products, if approved. In particular, while FDA permits the dissemination of truthful and non-misleading information about an approved product, a manufacturer may not promote a product for uses that are not approved by the FDA or such other regulatory agencies as reflected in the product's approved labeling. If we are found to have promoted such off-label uses, we may become subject to significant liability. The federal government has levied large civil and criminal fines against companies for alleged improper promotion of off-label use and has enjoined several companies from engaging in off-label promotion. The FDA has also requested that companies enter into consent decrees, corporate integrity agreements or permanent injunctions under which specified promotional conduct must be changed or curtailed. If we cannot successfully manage the promotion of our product candidates, if approved, we could become subject to significant liability, which would materially adversely affect our business and financial condition.

Risks Related to Reliance on Third Parties

We expect to rely on third parties to conduct our clinical trials and some aspects of our research and preclinical testing, and those third parties may not perform satisfactorily, including failing to meet deadlines for the completion of such trials, research, or testing.

We currently rely and expect to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions, and clinical investigators, to conduct some aspects of research and preclinical testing and clinical trials. Any of these third parties may terminate their engagements with us or be unable to fulfill their contractual obligations. If any of our relationships with these third parties terminate, we may not be able to enter into arrangements with alternative third parties on commercially reasonable terms, or at all. If we need to enter into alternative arrangements, it would delay product development activities.

Our reliance on these third parties for research and development activities reduces control over these activities but does not relieve us of our responsibilities. For example, we remain responsible for ensuring that each of our respective clinical trials is conducted in accordance with the general investigational plan and protocols for the trial and applicable legal, regulatory, and scientific standards, and our reliance on third parties does not relieve us of our regulatory responsibilities. In addition, the FDA and comparable foreign regulatory authorities require compliance with GCPs for conducting, recording, and reporting the results of clinical trials to assure that data and reported results are credible, reproducible and accurate and that the rights, integrity, and confidentiality of trial participants are protected. Regulatory authorities enforce these GCPs through periodic inspections of trial sponsors, principal investigators, and trial sites. If we or any of these third parties fail to comply with applicable GCP regulations, some or all of the clinical data generated in our clinical trials may be deemed unreliable and the

FDA or comparable foreign regulatory authorities may require us to perform additional nonclinical or clinical trials or to enroll additional patients before approving our marketing applications. We cannot be certain that, upon inspection, such regulatory authorities will determine that any of our clinical trials complies with the GCP regulations. For any violations of laws and regulations during the conduct of clinical trials, we could be subject to untitled and warning letters or enforcement action that may include civil penalties up to and including criminal prosecution. We also are required to register ongoing clinical trials and post the results of completed clinical trials on a government-sponsored database within certain timeframes. Failure to do so can result in fines, adverse publicity, and civil and criminal sanctions.

If these third parties do not successfully carry out their contractual duties, meet expected deadlines, or conduct clinical trials in accordance with regulatory requirements or our stated protocols, we will not be able to obtain, or may be delayed in obtaining, marketing approvals for any product candidates we may develop and will not be able to, or may be delayed in our efforts to, successfully commercialize our medicines. Our failure or the failure of these third parties to comply applicable regulatory requirements or our stated protocols could also subject us to enforcement action.

We also expect to rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or marketing approval of any product candidates we may develop or commercialization of our medicines, producing additional losses and depriving us of potential product revenue.

We rely entirely on third parties for the manufacturing of our product candidates or other product candidates that we may develop for preclinical studies and clinical trials and expect to continue to do so for commercialization. Our business could be harmed if those third parties fail to provide us with sufficient quantities of drug product, or fail to do so at acceptable quality levels or prices.

We do not currently have, nor do we plan to acquire, the infrastructure or capability internally to manufacture drug supplies for our ongoing clinical trials or any future clinical trials that we may conduct, and we lack the resources to manufacture any product candidates on a commercial scale. We rely, and expect to continue to rely, on third-party manufacturers to produce our current product candidates or other product candidates that we may identify for clinical trials, as well as for commercial manufacture if any product candidates that receive marketing approval. Although we generally do not begin a clinical trial unless we believe we have a sufficient supply of a product candidate to complete the trial, any significant delay or discontinuity in the supply of a product candidate, or the raw material components thereof, for an ongoing clinical trial due to the need to replace a third-party manufacturer could considerably delay the clinical development and potential regulatory approval of our product candidates, which could harm our business and results of operations. We also expect to rely primarily on third parties for the manufacturing of commercial supply of our product candidates, if approved.

We may be unable to identify and appropriately qualify third-party manufacturers or establish agreements with third-party manufacturers or do so on acceptable terms. Even if we are able to establish agreements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- reliance on the third party for sourcing of raw materials, components, and such other goods as may be required for execution of its manufacturing processes and the oversight by the third party of its suppliers;
- reliance on the third party for regulatory compliance and quality assurance for the manufacturing activities each performs;
- the possible breach of the manufacturing agreement by the third party;
- the possible misappropriation of proprietary information, including trade secrets and know-how; and
- the possible termination or non-renewal of the agreement by the third party at a time that is costly or inconvenient for us.

Furthermore, all of our CMOs are engaged with other companies to supply and/or manufacture materials or products for such companies, which exposes our manufacturers to regulatory risks for the production of such materials and products. The facilities used by our contract manufacturers to manufacture our product candidates are subject to review by the FDA pursuant to inspections that will be conducted after we submit an NDA or BLA to the FDA. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with the regulatory requirements, known as current good manufacturing practice, or cGMP, requirements for manufacture of drug and biologic products. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA or others, we will not be able to secure or maintain regulatory approval for our product candidates manufactured at these manufacturing facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA or a comparable foreign regulatory agency does not approve these facilities for the manufacture of our product candidates or if any agency withdraws its approval in the future, we may need to find alternative manufacturing facilities, which would negatively impact the ability to develop, obtain regulatory approval for or market our product candidates, if approved.

Our product candidates may compete with other product candidates and marketed drugs for access to manufacturing facilities. Any performance failure on the part of our existing or future manufacturers could delay clinical development, marketing approval or commercialization. Our current and anticipated future dependence upon others for the manufacturing of our product candidates may adversely affect our future profit margins and our ability to commercialize any product candidates that receive marketing approval on a timely and competitive basis.

The drug substance and drug product for certain of our product candidates are currently acquired from single-source suppliers. The loss of these suppliers, or their failure to supply us with the drug substance or drug product, could materially and adversely affect our business.

The drug substance and drug product for certain of our product candidates, including Veratrum californicum, or corn lily, from which we obtain cyclopamine for BBP-009, are grown or manufactured by single-source suppliers or CMOs under development and manufacturing contracts and services and quality agreements and purchase orders. We do not currently have any other suppliers for the drug substance or drug product of these product candidates and, although we believe that there are alternate sources of supply that could satisfy our clinical and commercial requirements, we cannot assure you that identifying alternate sources and establishing relationships with such sources would not result in significant delay in the development of our product candidates.

Our dependence on single-source suppliers exposes us to certain risks, including the following:

- our suppliers may cease or reduce production or deliveries, raise prices or renegotiate terms;
- delays caused by supply issues may harm our reputation; and
- our ability to progress our business could be materially and adversely impacted if our single-source suppliers upon which we rely were to experience a significant business challenges, disruption or failures due to issues such as financial difficulties or bankruptcy, issues relating regulatory or quality compliance issues, or other legal or reputational issues.

Additionally, we may not be able to enter into supply arrangements with alternative suppliers on commercially reasonable terms, or at all. A delay in the development of our product candidates or having to enter into a new agreement with a different third party on less favorable terms than we have with our current suppliers could have a material adverse impact upon on our business.

If the contract manufacturing facilities on which we rely do not continue to meet regulatory requirements or are unable to meet our supply demands, our business will be harmed.

All entities involved in the preparation of product candidates for clinical trials or commercial sale, including our existing CMOs for all of our product candidates, are subject to extensive regulation. Components of a finished therapeutic product approved for commercial sale or used in late-stage clinical trials must be manufactured in accordance with cGMP, or similar regulatory requirements outside the United States. These regulations govern manufacturing processes and procedures, including recordkeeping, and the implementation and operation of quality systems to control and assure the quality of investigational products and products approved for sale. Poor control of production processes can lead to the introduction of contaminants or to inadvertent changes in the properties or stability of our product candidates. Our failure, or the failure of third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, license revocation, suspension of production, seizures or recalls of product candidates or marketed drugs, operating restrictions and criminal prosecutions, any of which could significantly and adversely affect clinical or commercial supplies of our product candidates.

We or our CMOs must supply all necessary documentation in support of an NDA, BLA or MAA on a timely basis and must adhere to regulations enforced by the FDA and other regulatory agencies through their facilities inspection program. Some of our CMOs have never produced a commercially approved pharmaceutical product and therefore have not obtained the requisite regulatory authority approvals to do so. The facilities and quality systems of some or all of our third-party contractors must pass a pre-approval inspection for compliance with the applicable regulations as a condition of regulatory approval of our product candidates or any of our other potential products. In addition, the regulatory authorities may, at any time, audit or inspect a manufacturing facility involved with the preparation of our product candidates or our other potential products or the associated quality systems for compliance with the regulations applicable to the activities being conducted. Although we oversee the CMOs, we cannot control the manufacturing process of, and are completely dependent on, our CMO partners for compliance with the regulatory requirements. If these facilities do not pass a pre-approval plant inspection, regulatory approval of the products may not be granted or may be substantially delayed until any violations are corrected to the satisfaction of the regulatory authority, if ever.

The regulatory authorities also may, at any time following approval of a product for sale, audit the manufacturing facilities of our third-party contractors. If any such inspection or audit identifies a failure to comply with applicable regulations or if a violation of our product specifications or applicable regulations occurs independent of such an inspection or audit, we or the relevant regulatory authority may require remedial measures that may be costly and/or time consuming for us or a third party to implement, and that may include the temporary or permanent suspension of a clinical study or commercial sales or the temporary or permanent closure of a facility. Any such remedial measures imposed upon us or third parties with whom we contract could materially harm our business.

Additionally, if supply from one approved manufacturer is interrupted, an alternative manufacturer would need to be qualified through an NDA, BLA supplement or MAA variation, or equivalent foreign regulatory filing, which could result in further delay. The regulatory agencies may also require additional studies if a new manufacturer is relied upon for commercial production. Switching manufacturers may involve substantial costs and is likely to result in a delay in our desired clinical and commercial timelines.

These factors could cause us to incur higher costs and could cause the delay or termination of clinical trials, regulatory submissions, required approvals, or commercialization of our product candidates. Furthermore, if our suppliers fail to meet contractual requirements and we are unable to secure one or more replacement suppliers capable of production at a substantially equivalent cost, our clinical trials may be delayed or we could lose potential revenue.

Collaborative relationships with third parties could cause us to expend significant resources and incur substantial business risk with no assurance of financial return.

We anticipate relying upon strategic collaborations for marketing and commercializing our existing product candidates, and we may rely even more on strategic collaborations for R&D of other product candidates. We may sell product offerings through strategic partnerships with pharmaceutical and biotechnology companies. If we are unable to establish or manage such strategic collaborations on terms favorable to us in the future, our R&D efforts and potential to generate revenue may be limited.

If we enter into R&D collaborations during the early phases of product development, success will in part depend on the performance of research collaborators. We will not directly control the amount or timing of resources devoted by research collaborators to activities related to product candidates. Research collaborators may not commit sufficient resources to our R&D programs. If any research collaborator fails to commit sufficient resources, the preclinical or clinical development programs related to the collaboration could be delayed or terminated. Also, collaborators may pursue existing or other development-stage products or alternative technologies in preference to those being developed in collaboration with us. Finally, if we fail to make required milestone or royalty payments to collaborators or to observe other obligations in agreements with them, the collaborators may have the right to terminate or stop performance of those agreements.

Establishing strategic collaborations is difficult and time-consuming. Our discussions with potential collaborators may not lead to the establishment of collaborations on favorable terms, if at all. Potential collaborators may reject collaborations based upon their assessment of our financial, regulatory or intellectual property position. In addition, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. Even if we successfully establish new collaborations, these relationships may never result in the successful development or commercialization of product candidates or the generation of sales revenue. To the extent that we enter into collaborative arrangements, the related product revenues are likely to be lower than if we directly marketed and sold products. Such collaborators may also consider alternative product candidates or technologies for similar indications that may be available to collaborate on and whether such a collaboration could be more attractive than the one with us for any future product candidate.

Management of our relationships with collaborators will require:

- significant time and effort from our management team;
- coordination of our marketing and R&D programs with the marketing and R&D priorities of our collaborators; and
- effective allocation of our resources to multiple projects.

We are parties to and may seek to enter into additional collaborations, licenses and other similar arrangements and may not be successful in maintaining existing arrangements or entering into new ones, and even if we are, we may not realize the benefits of such relationships.

The success of our collaboration arrangements will depend heavily on the efforts and activities of our collaborators. Collaborations are subject to numerous risks, which may include risks that:

- collaborators may have significant discretion in determining the efforts and resources that they will apply to collaborations;
- collaborators may not pursue development and commercialization of our product candidates or may elect not to continue or renew development or commercialization programs based on clinical trial results, changes in their strategic focus due to their acquisition of competitive products or their internal development of competitive products, availability of funding or other external factors, such as a business combination that diverts resources or creates competing priorities;

- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial, abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with our products or product candidates;
- a collaborator with marketing, manufacturing and distribution rights to one or more products may not commit sufficient resources to or otherwise not perform satisfactorily in carrying out these activities;
- we could grant exclusive rights to our collaborators that would prevent us from collaborating with others;
- collaborators may not properly maintain or defend our intellectual property rights or may use our intellectual property or proprietary information in a way that gives rise to actual or threatened litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential liability;
- disputes may arise between us and a collaborator that cause the delay or termination of the research, development or commercialization of our current or future product candidates or that results in costly litigation or arbitration that diverts management attention and resources;
- collaborations may be terminated, which may result in a need for additional capital to pursue further development or commercialization of the applicable current or future product candidates;
- collaborators may own or co-own intellectual property covering products that result from our collaboration with them, and in such cases, we would not have the exclusive right to develop or commercialize such intellectual property;
- disputes may arise with respect to the ownership of any intellectual property developed pursuant to our collaborations; and
- a collaborator's sales and marketing activities or other operations may not be in compliance with applicable laws resulting in civil or criminal proceedings.

Additionally, we may seek to enter into additional collaborations, joint ventures, licenses and other similar arrangements for the development or commercialization of our product candidates, due to capital costs required to develop or commercialize the product candidate or manufacturing constraints. We may not be successful in our efforts to establish such collaborations for our product candidates because our research and development pipeline may be insufficient, our product candidates may be deemed to be at too early of a stage of development for collaborative effort or third parties may not view our product candidates as having the requisite potential to demonstrate safety and efficacy or significant commercial opportunity. In addition, we face significant competition in seeking appropriate strategic partners, and the negotiation process can be time consuming and complex. Further, any future collaboration agreements may restrict us from entering into additional agreements with potential collaborators. We cannot be certain that, following a strategic transaction or license, we will achieve an economic benefit that justifies such transaction.

Even if we are successful in our efforts to establish such collaborations, the terms that we agree upon may not be favorable to us, and we may not be able to maintain such collaborations if, for example, development or approval of a product candidate is delayed, the safety of a product candidate is questioned or sales of an approved product candidate are unsatisfactory.

In addition, any potential future collaborations may be terminable by our strategic partners, and we may not be able to adequately protect our rights under these agreements. Furthermore, strategic partners may negotiate for certain rights to control decisions regarding the development and commercialization of our product candidates, if approved, and may not conduct those activities in the same manner as we do. Any termination of collaborations we enter into in the future, or any delay in entering into collaborations related to our product candidates, could

delay the development and commercialization of our product candidates and reduce their competitiveness if they reach the market, which could have a material adverse effect on our business, financial condition and results of operations.

Risks Related to our Intellectual Property

If we are unable to obtain and maintain sufficient intellectual property protection for BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify, or if the scope of the intellectual property protection obtained is not sufficiently broad, our competitors could develop and commercialize product candidates similar or identical to ours, and our ability to successfully commercialize BBP-265, BBP-831, BBP-454, BBP-631 and other product candidates that we may pursue may be impaired.

As is the case with other pharmaceutical and biopharmaceutical companies, our success depends in large part on our ability to obtain and maintain protection of the intellectual property we may own solely and jointly with others, particularly patents, in the United States and other countries with respect to our product candidates and technology. We seek to protect our proprietary position by filing patent applications in the United States and abroad related to BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify.

Obtaining and enforcing pharmaceutical and biopharmaceutical patents is costly, time consuming and complex, and we may not be able to file and prosecute all necessary or desirable patent applications, or maintain, enforce and license any patents that may issue from such patent applications, at a reasonable cost or in a timely manner. It is also possible that we will fail to identify patentable aspects of our research and development output before it is too late to obtain patent protection. We may not have the right to control the preparation, filing and prosecution of patent applications, or to maintain the rights to patents licensed to third parties. Therefore, these patents and applications may not be prosecuted and enforced in a manner consistent with the best interests of our business.

The patent position of biotechnology and pharmaceutical companies generally is highly uncertain, involves complex legal, technological and factual questions and has in recent years been the subject of much litigation. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States, or vice versa. Further, we may not be aware of all third-party intellectual property rights potentially relating to our product candidates. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing or, in some cases, not at all. Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. Furthermore, the scope of a patent claim is determined by an interpretation of the law, the written disclosure in a patent and the patent's prosecution history and can involve other factors such as expert opinion. Our analysis of these issues, including interpreting the relevance or the scope of claims in a patent or a pending application, determining applicability of such claims to our proprietary technologies or product candidates, predicting whether a third party's pending patent application will issue with claims of relevant scope, and determining the expiration date of any patent in the United States or abroad that we consider relevant may be incorrect, which may negatively impact our ability to develop and market our product candidates. We do not always conduct independent reviews of pending patent applications of and patents issued to third parties. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are highly uncertain. Our pending and future patent applications may not result in patents being issued that protect our product candidates, in whole or in part, or which effectively prevent others from commercializing competitive product candidates. Even if our patent applications issue as patents, they may not issue in a form that will provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative product candidates in a non-infringing manner.

Our ability to enforce patent rights also depends on our ability to detect infringement. It may be difficult to detect infringers who do not advertise the components or methods that are used in connection with their products and

services. Moreover, it may be difficult or impossible to obtain evidence of infringement in a competitor's or potential competitor's product or service. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded if we were to prevail may not be commercially meaningful. If we initiate lawsuits to protect or enforce our patents, or litigate against third-party claims, such proceedings would be expensive and would divert the attention of our management and technical personnel. Such proceedings could also provoke third parties to assert claims against us, including that some or all of the claims in one or more of our patents are invalid or otherwise unenforceable.

Moreover, we may be subject to a third-party preissuance submission of prior art to the United States Patent and Trademark Office, or the USPTO, or become involved in opposition, derivation, reexamination, inter partes review, post-grant review or interference proceedings challenging our patent rights or the patent rights of others. An adverse determination in any such submission, proceeding or litigation could reduce the scope of, or invalidate, our patent rights, allow third parties to commercialize our product candidates and compete directly with us, without payment to us, or result in our inability to manufacture or commercialize drugs without infringing third-party patent rights. In addition, if the breadth or strength of protection provided by our patents and patent applications is threatened, regardless of the outcome, it could dissuade companies from collaborating with us to license, develop or commercialize current or future product candidates.

In addition, the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, and our patents may be challenged in the courts or patent offices in the United States and abroad. Such challenges may result in loss of exclusivity or freedom to operate or in patent claims being narrowed, invalidated or held unenforceable, in whole or in part, which could limit our ability to stop others from using or commercializing similar or identical product candidates to ours, or limit the duration of the patent protection of our product candidates. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with sufficient rights to exclude others from commercializing drugs similar or identical to ours.

Furthermore, our intellectual property rights may be subject to a reservation of rights by one or more third parties. For example, the research resulting in certain of our patent rights and technology was funded in part by the U.S. government. As a result, the government has certain rights, including march-in rights, to such patent rights and technology. When new technologies are developed with government funding, the government generally obtains certain rights in any resulting patents, including a non-exclusive license authorizing the government to use the invention or to have others use the invention on its behalf. These rights may permit the government to disclose our information to third parties and to exercise march-in rights to use or allow third parties to use our technology. The government can exercise its march-in rights if it determines that action is necessary because we fail to achieve practical application of the government-funded technology, because action is necessary to alleviate health or safety needs, to meet requirements of federal regulations, or to give preference to U.S. industry. In addition, our rights in such inventions may be subject to certain requirements to manufacture products embodying such inventions in the United States. Any exercise by the government of such rights or by any third party of its reserved rights could harm our competitive position, business, financial condition, results of operations, and prospects.

Our rights to develop and commercialize our product candidates are subject in part to the terms and conditions of licenses granted to us by others, and the patent protection, prosecution and enforcement for some of our product candidates may be dependent on our licensors.

We currently are reliant upon licenses of certain intellectual property rights and proprietary technology from third parties that are important or necessary to the development of our proprietary technology, including technology related to our product candidates. These licenses, and other licenses we may enter into in the future, may not provide adequate rights to use such intellectual property rights and proprietary technology in all relevant fields of use or in all territories in which we may wish to develop or commercialize technology and product

candidates in the future. Licenses to additional third-party proprietary technology or intellectual property rights that may be required for our development programs may not be available in the future or may not be available on commercially reasonable terms. In that event, we may be required to expend significant time and resources to redesign our proprietary technology or product candidates or to develop or license replacement technology, which may not be feasible on a technical or commercial basis. If we are unable to do so, we may not be able to develop and commercialize technology and product candidates in fields of use and territories for which we are not granted rights pursuant to such licenses, which could harm our competitive position, business, financial condition, results of operations and prospects significantly.

In some circumstances, we may not have the right to control the preparation, filing, prosecution and enforcement of patent applications, or to maintain the patents, covering technology that we license from third parties. In addition, some of our agreements with our licensors require us to obtain consent from the licensor before we can enforce patent rights, and our licensor may withhold such consent or may not provide it on a timely basis. Therefore, we cannot be certain that our licensors or collaborators will prosecute, maintain, enforce and defend such intellectual property rights in a manner consistent with the best interests of our business, including by taking reasonable measures to protect the confidentiality of know-how and trade secrets, or by paying all applicable prosecution and maintenance fees related to intellectual property registrations for any of our product candidates. We also cannot be certain that our licensors have drafted or prosecuted the patents and patent applications licensed to us in compliance with applicable laws and regulations, which may affect the validity and enforceability of such patents or any patents that may issue from such applications. This could cause us to lose rights in any applicable intellectual property that we in-license, and as a result our ability to develop and commercialize product candidates may be adversely affected and we may be unable to prevent competitors from making, using and selling competing products.

In addition, our licensors may own or control intellectual property that has not been licensed to us and, as a result, we may be subject to claims, regardless of their merit, that we are infringing or otherwise violating the licensor's rights. In addition, while we cannot currently determine the amount of the royalty obligations we would be required to pay on sales of future products, if any, the amounts may be significant. The amount of our future royalty obligations will depend on the technology and intellectual property we use in product candidates that we successfully develop and commercialize, if any. Therefore, even if we successfully develop and commercialize product candidates, we may be unable to achieve or maintain profitability. In addition, we may seek to obtain additional licenses from our licensors and, in connection with obtaining such licenses, we may agree to amend our existing licenses in a manner that may be more favorable to the licensors, including by agreeing to terms that could enable third parties (potentially including our competitors) to receive licenses to a portion of the intellectual property rights that are subject to our existing licenses. Any of these events could have a material adverse effect on our competitive position, business, financial conditions, results of operations, and prospects.

If we fail to comply with our obligations in the agreements under which we license intellectual property rights from third parties or these agreements are terminated or we otherwise experience disruptions to our business relationships with our licensors, we could lose intellectual property rights that are important to our business.

We are party to various agreements that we depend on to operate our business, and our rights to use currently licensed intellectual property, or intellectual property to be licensed in the future, are or will be subject to the continuation of and our compliance with the terms of these agreements. For example, we are a party to an exclusive license agreement with the Board of Trustees of the Leland Stanford Junior University, or Stanford, and may need to obtain additional licenses from others to advance our research and development activities to allow the commercialization of BBP-265 or any other product candidates we may identify and pursue. Our license agreement with Stanford imposes, and we expect that future license agreements will impose, various development, diligence, commercialization, and other obligations on us. For example, under our license agreement with Stanford, we are required to use commercially reasonable efforts to engage in various development and commercialization activities with respect to licensed products, and must satisfy specified

milestone and royalty payment obligations. We are also a party to a license agreement with Novartis International Pharmaceutical Ltd. for BBP-831 under which we are required to use commercially reasonable efforts to develop BBP-831, and to obtain regulatory approval for and commercialize at least one therapeutic product incorporating BBP-831 in the United States and the European Union.

In spite of our efforts, our licensors might conclude that we have materially breached our obligations under such license agreements and might therefore terminate the license agreements, thereby removing or limiting our ability to develop and commercialize products and technology covered by these license agreements. For example, if our license agreement with Stanford is terminated, competitors or other third parties would have the freedom to seek regulatory approval of, and to market, products identical to BBP-265 and we may be required to cease our development and commercialization of BBP-265. Any of the foregoing could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Moreover, disputes may arise regarding intellectual property subject to a licensing agreement, including:

- the scope of rights granted under the license agreement and other interpretation-related issues;
- the extent to which our product candidates, technology and processes infringe on intellectual property of the licensor that is not subject to the licensing agreement;
- the sublicensing of patent and other rights under our collaborative development relationships;
- our diligence obligations under the license agreement and what activities satisfy those diligence obligations;
- the inventorship and ownership of inventions and know-how resulting from the joint creation or use of intellectual property by our licensors and us and our partners; and
- the priority of invention of patented technology.

In addition, certain provisions in our license agreements may be susceptible to multiple interpretations. The resolution of any contract interpretation disagreement that may arise could narrow what we believe to be the scope of our rights to the relevant intellectual property or technology, or increase what we believe to be our financial or other obligations under the agreement, either of which could have a material adverse effect on our business, financial condition, results of operations and prospects. Moreover, if disputes over intellectual property that we have licensed prevent or impair our ability to maintain our current licensing arrangements on commercially acceptable terms, we may be unable to successfully develop and commercialize the affected product candidates, which could have a material adverse effect on our competitive position, business, financial conditions, results of operations and prospects.

Third-party claims of intellectual property infringement may prevent or delay our development and commercialization efforts.

Our commercial success depends in part on our avoiding infringement of the patents and proprietary rights of third parties. However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. There is a substantial amount of litigation, both within and outside the United States, involving patent and other intellectual property rights in the biotechnology and pharmaceutical industries, including patent infringement lawsuits, interferences, oppositions and inter partes reexamination proceedings before the USPTO, and corresponding foreign patent offices. Numerous U.S. and foreign issued patents and pending patent applications, which are owned by third parties, exist in the fields in which we are pursuing development candidates. As the biotechnology and pharmaceutical industries expand and more patents are issued, the risk increases that BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify may be subject to claims of infringement of the patent rights of third parties.

For example, in December 2018, the Children’s Hospital and Research Center at Oakland d/b/a UC Benioff Children’s Hospital-Oakland, or CHRCO, filed a complaint in the U.S. District Court of the Northern District of

California alleging, among other things, that PellePharm infringed certain patent rights of CHRCO.

Other third parties may assert that we are employing their proprietary technology without authorization. There may be other third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the use or manufacture of BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify may infringe. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. If any third-party patents were held by a court of competent jurisdiction to cover the manufacturing process of BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify, any molecules formed during the manufacturing process or any final product itself, the holders of any such patents may be able to block our ability to commercialize such product candidate unless we obtained a license under the applicable patents, or until such patents expire.

Similarly, if any third-party patents, including any patents that may issue from the ‘257 application, were held by a court of competent jurisdiction to cover aspects of our formulations, processes for manufacture or methods of use, including combination therapy, the holders of any such patents may be able to block our ability to develop and commercialize the applicable product candidate unless we obtained a license or until such patent expires. In either case, such a license may not be available on commercially reasonable terms or at all, or it may be non-exclusive, which could result in our competitors gaining access to the same intellectual property.

Parties making claims against us may obtain injunctive or other equitable relief, which could effectively block our ability to further develop and commercialize BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify. Defense of these claims, regardless of their merit, would involve substantial litigation expense and would be a substantial diversion of employee resources from our business. In the event of a successful claim of infringement against us, we may have to pay substantial damages, including treble damages and attorneys’ fees for willful infringement, pay royalties, redesign our infringing products or obtain one or more licenses from third parties, which may be impossible or require substantial time and monetary expenditure.

Parties making claims against us, including CHRCO, may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have material adverse effect on ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

Patent terms may be inadequate to protect our competitive position on product candidates for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional or international patent application filing date. Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Even if patents covering our product candidates are obtained, once the patent life has expired, we may be open to competition from competitive products, including generics or biosimilars. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our owned and licensed patent portfolio may not provide us with sufficient rights to exclude others from commercializing products similar or identical to ours.

If we are not able to obtain patent term extension or non-patent exclusivity in the United States under the Hatch-Waxman Act and in foreign countries under similar legislation, thereby potentially extending the marketing exclusivity term of our product candidates, our business may be materially harmed.

Depending upon the timing, duration and specifics of FDA marketing approval of our product candidates, one of the U.S. patents covering each of such product candidates or the use thereof may be eligible for up to five years of patent term extension under the Hatch-Waxman Act. The Hatch-Waxman Act allows a maximum of one patent to be extended per FDA approved product as compensation for the patent term lost during the FDA regulatory review process. A patent term extension cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. Patent term extension also may be available in certain foreign countries upon regulatory approval of our product candidates. Nevertheless, we may not be granted patent term extension either in the United States or in any foreign country because of, for example, failing to exercise due diligence during the testing phase or regulatory review process, failing to apply within applicable deadlines, failing to apply prior to expiration of relevant patents or otherwise failing to satisfy applicable requirements. Moreover, the term of extension, as well as the scope of patent protection during any such extension, afforded by the governmental authority could be less than we request.

If we are unable to obtain patent term extension or restoration, or the term of any such extension is less than we request, the period during which we will have the right to exclusively market our product may be shortened and our competitors may obtain approval of competing products following our patent expiration sooner, and our revenue could be reduced, possibly materially.

It is possible that we will not obtain patent term extension under the Hatch-Waxman Act for a U.S. patent covering a product candidate even where that patent is eligible for patent term extension, or if we obtain such an extension, it may be for a shorter period than we had sought. Further, for certain of our licensed patents, we do not have the right to control prosecution, including filing with the USPTO, a petition for patent term extension under the Hatch-Waxman Act. Thus, if one of our licensed patents is eligible for patent term extension under the Hatch-Waxman Act, we may not be able to control whether a petition to obtain a patent term extension is filed, or obtained, from the USPTO.

Also, there are detailed rules and requirements regarding the patents that may be submitted to the FDA for listing in the Approved Drug Products with Therapeutic Equivalence Evaluations, or the Orange Book. We may be unable to obtain patents covering our product candidates that contain one or more claims that satisfy the requirements for listing in the Orange Book. Even if we submit a patent for listing in the Orange Book, the FDA may decline to list the patent, or a manufacturer of generic drugs may challenge the listing. If one of product candidates is approved and a patent covering that product candidate is not listed in the Orange Book, a manufacturer of generic drugs would not have to provide advance notice to us of any abbreviated new drug application, or ANDA, filed with the FDA to obtain permission to sell a generic version of such product candidate.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

We seek to protect our confidential proprietary information, in part, by confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and collaborators. These agreements are designed to protect our proprietary information. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, any of these parties may breach the agreements and disclose proprietary information, including trade secrets, and we may not be able to obtain adequate remedies for such breaches. We also seek to preserve the integrity and

confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

Unauthorized parties may also attempt to copy or reverse engineer certain aspects of our products that we consider proprietary. We may not be able to obtain adequate remedies in the event of such unauthorized use. Enforcing a claim that a party illegally disclosed or misappropriated a trade secret can be difficult, expensive and time-consuming, and the outcome is unpredictable. In addition, some courts inside and outside the United States are less willing or unwilling to protect trade secrets. Trade secrets will also over time be disseminated within the industry through independent development, the publication of journal articles and the movement of personnel skilled in the art from company to company or academic to industry scientific positions. Though our agreements with third parties typically restrict the ability of our advisors, employees, collaborators, licensors, suppliers, third-party contractors and consultants to publish data potentially relating to our trade secrets, our agreements may contain certain limited publication rights. In addition, if any of our trade secrets were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position. Despite employing the contractual and other security precautions described above, the need to share trade secrets increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. If any of these events occurs or if we otherwise lose protection for our trade secrets, the value of this information may be greatly reduced and our competitive position, business, financial condition, results of operations, and prospects would be harmed.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our markets of interest and our business may be adversely affected.

Our registered or unregistered trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We may not be able to protect our rights to these trademarks and trade names, which we need to build name recognition among potential collaborators or customers in our markets of interest. At times, competitors may adopt trade names or trademarks similar to ours, thereby impeding our ability to build brand identity and possibly leading to market confusion. In addition, there could be potential trade name or trademark infringement claims brought by owners of other trademarks or trademarks that incorporate variations of our registered or unregistered trademarks or trade names. Over the long term, if we are unable to establish name recognition based on our trademarks and trade names, then we may not be able to compete effectively and our business may be adversely affected. We may license our trademarks and trade names to third parties, such as distributors. Though these license agreements may provide guidelines for how our trademarks and trade names may be used, a breach of these agreements or misuse of our trademarks and tradenames by our licensees may jeopardize our rights in or diminish the goodwill associated with our trademarks and trade names. Our efforts to enforce or protect our proprietary rights related to trademarks, trade names, trade secrets, domain names, copyrights or other intellectual property may be ineffective and could result in substantial costs and diversion of resources and could adversely affect our competitive position, business, financial condition, results of operations and prospects.

We may become involved in lawsuits to protect or enforce our patents or other intellectual property, which could be expensive, time consuming and unsuccessful.

Competitors may infringe our patents or other intellectual property. If we were to initiate legal proceedings against a third party to enforce a patent covering one or more of our product candidates, the defendant could counterclaim that the patent covering our product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements,

including novelty, nonobviousness, written description or enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. The outcome following legal assertions of invalidity and unenforceability is unpredictable. Interference or derivation proceedings provoked by third parties or brought by us or declared by the USPTO may be necessary to determine the priority of inventions with respect to our patents or patent applications. An unfavorable outcome could require us to cease using the related technology or to attempt to license rights to it from the prevailing party. Our business could be harmed if the prevailing party does not offer us a license on commercially reasonable terms or at all, or if a non-exclusive license is offered and our competitors gain access to the same technology. Our defense of litigation or interference or derivation proceedings may fail and, even if successful, may result in substantial costs and distract our management and other employees. In addition, the uncertainties associated with litigation could have a material adverse effect on our ability to raise the funds necessary to continue clinical trials, continue research programs, license necessary technology from third parties, or enter into development partnerships that would help us bring product candidates to market. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. There could also be public announcements of the results of hearings, motions, or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a material adverse effect on the price of our common stock.

We may be subject to claims challenging the inventorship of our patents and other intellectual property.

Our agreements with employees and our personnel policies provide that any inventions conceived by an individual in the course of rendering services to us shall be our exclusive property. Although our policy is to have all such individuals complete these agreements, we may not obtain these agreements in all circumstances, and individuals with whom we have these agreements may not comply with their terms. The assignment of intellectual property may not be automatic upon the creation of an invention and despite such agreement, such inventions may become assigned to third parties. In the event of unauthorized use or disclosure of our trade secrets or proprietary information, these agreements, even if obtained, may not provide meaningful protection, particularly for our trade secrets or other confidential information.

We or our licensors may be subject to claims that former employees, collaborators or other third parties have an interest in our owned or in-licensed patents, trade secrets, or other intellectual property as an inventor or co-inventor. For example, we or our licensors may have inventorship disputes arise from conflicting obligations of employees, consultants or others who are involved in developing our product candidates. Litigation may be necessary to defend against these and other claims challenging inventorship or our or our licensors' ownership of our owned or in-licensed patents, trade secrets or other intellectual property. If we or our licensors fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to our product candidates. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Any of the foregoing could have a material adverse effect on our competitive position, business, financial condition, results of operations and prospects.

Issued patents covering our product candidates could be found invalid or unenforceable if challenged in court.

If we or one of our licensing partners initiated legal proceedings against a third party to enforce a patent covering one or more of our product candidates, the defendant could counterclaim that the patent covering the relevant product candidate is invalid and/or unenforceable. In patent litigation in the United States, defendant counterclaims alleging invalidity and/or unenforceability are commonplace. Grounds for a validity challenge could be an alleged failure to meet any of several statutory requirements, including novelty, nonobviousness,

written description or enablement. Grounds for an unenforceability assertion could be an allegation that someone connected with prosecution of the patent withheld relevant information from the USPTO, or made a misleading statement, during prosecution. Third parties may also raise similar claims before administrative bodies in the United States or abroad, even outside the context of litigation. Such mechanisms include re-examination, post grant review, and equivalent proceedings in foreign jurisdictions (e.g., opposition proceedings). Such proceedings could result in revocation or amendment to our patents in such a way that they no longer cover our product candidates. The outcome following legal assertions of invalidity and unenforceability is unpredictable. With respect to the validity question, for example, we cannot be certain that there is no invalidating prior art, of which we and the patent examiner were unaware during prosecution. If a defendant were to prevail on a legal assertion of invalidity and/or unenforceability, we would lose at least part, and perhaps all, of the patent protection on our product candidates. Such a loss of patent protection would have a material adverse impact on our business.

We may be subject to claims that our employees, consultants or independent contractors have wrongfully used or disclosed confidential information of third parties or that our employees have wrongfully used or disclosed alleged trade secrets of their former employers.

As is common in the biotechnology and pharmaceutical industry, we employ individuals who were previously employed at universities or other biotechnology or pharmaceutical companies, including our competitors or potential competitors. Although we try to ensure that our employees, consultants and independent contractors do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or our employees, consultants or independent contractors have inadvertently or otherwise used or disclosed intellectual property, including trade secrets or other proprietary information, of any of our employee's former employer or other third parties. Litigation may be necessary to defend against these claims. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights or personnel, which could adversely impact our business. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management and other employees.

Obtaining and maintaining our patent protection depends on compliance with various procedural, document submission, fee payment and other requirements imposed by governmental patent agencies, and our patent protection could be reduced or eliminated for non-compliance with these requirements.

Periodic maintenance fees, renewal fees, annuity fees and various other governmental fees on patents and/or applications will be due to be paid to the USPTO and various governmental patent agencies outside of the United States in several stages over the lifetime of the patents and/or applications. We have systems in place to remind us to pay these fees, and we employ an outside firm and rely on outside counsel to pay these fees due to non-U.S. patent agencies. However, we cannot guarantee that our licensors have similar systems and procedures in place to pay such fees. The USPTO and various non-U.S. governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other similar provisions during the patent application process. We employ reputable law firms and other professionals to help us comply, and in many cases, an inadvertent lapse can be cured by payment of a late fee or by other means in accordance with the applicable rules. However, there are situations in which non-compliance can result in abandonment or lapse of the patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, our competitors might be able to enter the market and this circumstance would have a material adverse effect on our business.

We may not be able to protect our intellectual property rights throughout the world.

Filing, prosecuting and defending patents on our product candidates in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some countries outside the United States can be less extensive than those in the United States. In addition, the laws of some foreign countries do not protect intellectual property rights to the same extent as federal and state laws in the United States. Consequently, we

may not be able to prevent third parties from practicing our inventions in all countries outside the United States, or from selling or importing products made using our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own products and may also export infringing products to territories where we have patent protection, but enforcement is not as strong as that in the United States. These products may compete with our products and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Many companies have encountered significant problems in protecting and defending intellectual property rights in foreign jurisdictions. The legal systems of certain countries, particularly certain developing countries, do not favor the enforcement of patents, trade secrets, and other intellectual property protection, particularly those relating to biotechnology and pharmaceutical products, which could make it difficult for us to stop the infringement of our patents or marketing of competing products in violation of our proprietary rights generally. Proceedings to enforce our patent rights in foreign jurisdictions, whether or not successful, could result in substantial costs and divert our efforts and attention from other aspects of our business, could put our patents at risk of being invalidated or interpreted narrowly and our patent applications at risk of not issuing and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Accordingly, our efforts to enforce our intellectual property rights around the world may be inadequate to obtain a significant commercial advantage from the intellectual property that we develop or license.

Changes in U.S. patent law could diminish the value of patents in general, thereby impairing our ability to protect our products.

Changes in either the patent laws or interpretation of the patent laws in the United States could increase the uncertainties and costs surrounding the prosecution of patent applications and the enforcement or defense of issued patents. Assuming that other requirements for patentability are met, prior to March 2013, in the United States, the first to invent the claimed invention was entitled to a patent, while outside the United States, the first to file a patent application was entitled to the patent. After March 2013, under the Leahy-Smith America Invents Act, or the America Invents Act, enacted in September 2011, the United States transitioned to a first inventor to file system in which, assuming that other requirements for patentability are met, the first inventor to file a patent application will be entitled to the patent on an invention regardless of whether a third party was the first to invent the claimed invention. A third party that files a patent application in the USPTO after March 2013, but before us could therefore be awarded a patent covering an invention of ours even if we had made the invention before it was made by such third party. This will require us to be cognizant of the time from invention to filing of a patent application. Since patent applications in the United States and most other countries are confidential for a period of time after filing or until issuance, we cannot be certain that we or our licensors were the first to either (i) file any patent application related to our product candidates or (ii) invent any of the inventions claimed in our or our licensor’s patents or patent applications.

The America Invents Act also includes a number of significant changes that affect the way patent applications are prosecuted and also may affect patent litigation. These include allowing third party submission of prior art to the USPTO during patent prosecution and additional procedures to attack the validity of a patent by USPTO administered post-grant proceedings, including post-grant review, inter partes review, and derivation proceedings. Because of a lower evidentiary standard in USPTO proceedings compared to the evidentiary standard in United States federal courts necessary to invalidate a patent claim, a third party could potentially provide evidence in a USPTO proceeding sufficient for the USPTO to hold a claim invalid even though the same evidence would be insufficient to invalidate the claim if first presented in a district court action. Accordingly, a third party may attempt to use the USPTO procedures to invalidate our patent claims that would not have been invalidated if first challenged by the third party as a defendant in a district court action. Therefore, the America Invents Act and its implementation could increase the uncertainties and costs surrounding the prosecution of our owned or in-licensed patent applications and the enforcement or defense of our owned or in-licensed issued

patents, all of which could have a material adverse effect on our competitive position, business, financial condition, results of operations, and prospects.

In addition, the patent positions of companies in the development and commercialization of pharmaceuticals are particularly uncertain. Recent U.S. Supreme Court rulings have narrowed the scope of patent protection available in certain circumstances and weakened the rights of patent owners in certain situations. This combination of events has created uncertainty with respect to the validity and enforceability of patents, once obtained. Depending on future actions by the U.S. Congress, the federal courts, and the USPTO, the laws and regulations governing patents could change in unpredictable ways that could have a material adverse effect on our existing patent portfolio and our ability to protect and enforce our intellectual property in the future.

Risks Related to Commercialization

Even if any product candidates we develop receive marketing approval, they may fail to achieve the degree of market acceptance by physicians, patients, healthcare payors, and others in the medical community necessary for commercial success.

The commercial success of our product candidates will depend upon their degree of market acceptance by physicians, patients, third-party payors, and others in the medical community. Even if any product candidates we may develop receive marketing approval, they may nonetheless fail to gain sufficient market acceptance by physicians, patients, healthcare payors, and others in the medical community. The degree of market acceptance of any product candidates we may develop, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of such product candidates as demonstrated in pivotal clinical trials and published in peer-reviewed journals;
- the potential and perceived advantages compared to alternative treatments, including any similar generic treatments;
- the ability to offer these products for sale at competitive prices;
- the ability to offer appropriate patient access programs, such as co-pay assistance;
- convenience and ease of dosing and administration compared to alternative treatments;
- the clinical indications for which the product candidate is approved by FDA or comparable regulatory agencies;
- product labeling or product insert requirements of the FDA or other comparable foreign regulatory authorities, including any limitations, contraindications or warnings contained in a product's approved labeling;
- restrictions on how the product is distributed;
- the timing of market introduction of competitive products;
- publicity concerning these products or competing products and treatments;
- the strength of marketing and distribution support;
- favorable third-party coverage and sufficient reimbursement; and
- the prevalence and severity of any side effects or AEs.

Sales of medical products also depend on the willingness of physicians to prescribe the treatment, which is likely to be based on a determination by these physicians that the products are safe, therapeutically effective and cost effective. In addition, the inclusion or exclusion of products from treatment guidelines established by various physician groups and the viewpoints of influential physicians can affect the willingness of other physicians to

prescribe the treatment. We cannot predict whether physicians, physicians' organizations, hospitals, other healthcare providers, government agencies or private insurers will determine that our product is safe, therapeutically effective and cost effective as compared with competing treatments. If any product candidates we develop do not achieve an adequate level of acceptance, we may not generate significant product revenue, and we may not become profitable.

If, in the future, we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any product candidates we may develop, we may not be successful in commercializing those product candidates if and when they are approved.

We do not have a sales or marketing infrastructure and have little experience in the sale, marketing, or distribution of pharmaceutical products. To achieve commercial success for any approved product for which we retain sales and marketing responsibilities, we must either develop a sales and marketing organization or outsource these functions to third parties. In the future, we may choose to build a focused sales, marketing, and commercial support infrastructure to market and sell our product candidates, if and when they are approved. We may also elect to enter into collaborations or strategic partnerships with third parties to engage in commercialization activities, although there is no guarantee we will be able to enter into these arrangements even if the intent is to do so.

There are risks involved with both establishing our own commercial capabilities and entering into arrangements with third parties to perform these services. For example, recruiting and training a sales force or reimbursement specialists is expensive and time consuming and could delay any product launch. If the commercial launch of a product candidate for which we recruit a sales force and establish marketing and other commercialization capabilities is delayed or does not occur for any reason, we would have prematurely or unnecessarily incurred these commercialization expenses. This may be costly, and our investment would be lost if we cannot retain or reposition commercialization personnel.

Factors that may inhibit our efforts to commercialize any approved product on our own include:

- the inability to recruit and retain adequate numbers of effective sales, marketing, reimbursement, customer service, medical affairs, and other support personnel;
- the inability of sales personnel to obtain access to physicians or persuade adequate numbers of physicians to prescribe any future approved products;
- the inability of reimbursement professionals to negotiate arrangements for formulary access, reimbursement, and other acceptance by payors;
- the inability to price products at a sufficient price point to ensure an adequate and attractive level of profitability;
- restricted or closed distribution channels that make it difficult to distribute our products to segments of the patient population;
- the lack of complementary products to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines; and
- unforeseen costs and expenses associated with creating an independent commercialization organization.

If we enter into arrangements with third parties to perform sales, marketing, commercial support, and distribution services, our product revenue or the profitability of product revenue may be lower than if we were to market and sell any products we may develop internally. In addition, we may not be successful in entering into arrangements with third parties to commercialize our product candidates or may be unable to do so on terms that are favorable to us or them. We may have little control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market our products effectively or may expose us to legal and

regulatory risk by not adhering to regulatory requirements and restrictions governing the sale and promotion of prescription drug products, including those restricting off-label promotion. If we do not establish commercialization capabilities successfully, either on our own or in collaboration with third parties, we will not be successful in commercializing our product candidates, if approved.

The insurance coverage and reimbursement status of newly-approved products is uncertain. Our product candidates may become subject to unfavorable pricing regulations, third-party coverage and reimbursement practices, or healthcare reform initiatives, which would harm our business. Failure to obtain or maintain adequate coverage and reimbursement for new or current products could limit our ability to market those products and decrease our ability to generate revenue.

The regulations that govern marketing approvals, pricing, coverage, and reimbursement for new drugs vary widely from country to country. In the United States, recently enacted legislation may significantly change the approval requirements in ways that could involve additional costs and cause delays in obtaining approvals. Some countries require approval of the sale price of a drug before it can be marketed. In many countries, the pricing review period begins after marketing or product licensing approval is granted. In some foreign markets, prescription pharmaceutical pricing remains subject to continuing governmental control even after initial approval is granted. As a result, we might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay our commercial launch of the product, possibly for lengthy time periods, and negatively impact the revenue we are able to generate from the sale of the product in that country. Adverse pricing limitations may hinder our ability to recoup our investment in one or more product candidates, even if any product candidates we may develop obtain marketing approval.

Our ability to successfully commercialize our product candidates also will depend in part on the extent to which coverage and adequate reimbursement for these products and related treatments will be available from government health administration authorities, private health insurers, and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which medications they will pay for and establish reimbursement levels. The availability of coverage and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford treatments such as gene therapy products. Sales of these or other product candidates that we may identify will depend substantially, both domestically and abroad, on the extent to which the costs of our product candidates will be paid by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors. If coverage and adequate reimbursement is not available, or is available only to limited levels, we may not be able to successfully commercialize our product candidates. Even if coverage is provided, the approved reimbursement amount may not be high enough to allow us to establish or maintain pricing sufficient to realize a sufficient return on our investment.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular medications. In many countries, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In general, the prices of medicines under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for medicines, but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for our product candidates. Accordingly, in markets outside the United States, the reimbursement for products may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenues and profits.

There is also significant uncertainty related to the insurance coverage and reimbursement of newly approved products and coverage may be more limited than the purposes for which the medicine is approved by the FDA or comparable foreign regulatory authorities. In the United States, the principal decisions about reimbursement for new medicines are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within

the U.S. Department of Health and Human Services. CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare and private payors tend to follow CMS to a substantial degree. No uniform policy of coverage and reimbursement for products exists among third-party payors and coverage and reimbursement levels for products can differ significantly from payor to payor. As a result, the coverage determination process is often a time consuming and costly process that may require us to provide scientific and clinical support for the use of our products to each payor separately, with no assurance that coverage and adequate reimbursement will be applied consistently or obtained in the first instance. It is difficult to predict what CMS will decide with respect to reimbursement for fundamentally novel products such as ours, as there is no body of established practices and precedents for these new products. Reimbursement agencies in Europe may be more conservative than CMS. For example, a number of cancer drugs have been approved for reimbursement in the United States and have not been approved for reimbursement in certain European countries. Moreover, eligibility for reimbursement does not imply that any drug will be paid for in all cases or at a rate that covers our costs, including research, development, manufacture, sale, and distribution. Interim reimbursement levels for new drugs, if applicable, may also not be sufficient to cover our costs and may not be made permanent. Reimbursement rates may vary according to the use of the drug and the clinical setting in which it is used, may be based on reimbursement levels already set for lower cost drugs and may be incorporated into existing payments for other services. Our inability to promptly obtain coverage and profitable payment rates from both government-funded and private payors for any approved products we may develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize product candidates, and our overall financial condition.

Net prices for drugs may be reduced by mandatory discounts or rebates required by government healthcare programs or private payors and by any future relaxation of laws that presently restrict imports of drugs from countries where they may be sold at lower prices than in the United States. Our inability to promptly obtain coverage and profitable reimbursement rates third-party payors for any approved products that we develop could have a material adverse effect on our operating results, our ability to raise capital needed to commercialize products and our overall financial condition.

Increasingly, third-party payors are requiring that drug companies provide them with predetermined discounts from list prices and are challenging the prices charged for medical products. We cannot be sure that reimbursement will be available for any product candidate that we commercialize and, if reimbursement is available, the level of reimbursement. Reimbursement may impact the demand for, or the price of, any product candidate for which we obtain marketing approval. In order to obtain reimbursement, physicians may need to show that patients have superior treatment outcomes with our products compared to standard of care drugs, including lower-priced generic versions of standard of care drugs. We expect to experience pricing pressures in connection with the sale of any of our product candidates, due to the trend toward managed healthcare, the increasing influence of health maintenance organizations and additional legislative changes. The downward pressure on healthcare costs in general, particularly prescription drugs and surgical procedures and other treatments, has become very intense. As a result, increasingly high barriers are being erected to the entry of new products.

Additionally, we may develop companion diagnostic tests for use with our product candidates. For instance, we are partnered with FMI to develop a companion diagnostic for use in our planned NDA submission for BBP-831 for second-line CCA. We, or our collaborators, may be required to obtain coverage and reimbursement for these tests separate and apart from the coverage and reimbursement we seek for our product candidates, once approved. Even if we obtain regulatory approval or clearance for such companion diagnostics, there is significant uncertainty regarding our ability to obtain coverage and adequate reimbursement for the same reasons applicable to our product candidates. Medicare reimbursement methodologies, whether under Part A, Part B, or clinical laboratory fee schedule may be amended from time to time, and we cannot predict what effect any change to these methodologies would have on any product candidate or companion diagnostic for which we receive approval. Our inability to promptly obtain coverage and adequate reimbursement from both third-party payors

for the companion diagnostic tests that we develop and for which we obtain regulatory approval could have a material and adverse effect on our business, financial condition, results of operations and prospects.

If we fail to comply with healthcare laws, we could face substantial penalties and our business, operations and financial conditions could be adversely affected.

Healthcare providers, physicians and third-party payors in the United States and elsewhere play a primary role in the recommendation and prescription of pharmaceutical products. Arrangements with third-party payors and customers can expose pharmaceutical manufacturers to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, which may constrain the business or financial arrangements and relationships through which such companies sell, market and distribute pharmaceutical products. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of ownership, pricing, discounting, marketing and promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials. The applicable federal and state healthcare laws and regulations laws that may affect our ability to operate include, but are not limited to:

- the federal Anti-Kickback Statute, which prohibits, among other things, persons from knowingly and willfully soliciting, receiving, offering or paying any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, to induce, or in return for, either the referral of an individual, or the purchase, lease, order or recommendation of any good, facility, item or service for which payment may be made, in whole or in part, under a federal healthcare program, such as the Medicare and Medicaid programs. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Violations are subject to civil and criminal fines and penalties up to $100,000 for each violation, plus up to three times the remuneration involved, imprisonment of up to ten years, and exclusion from government healthcare programs. In addition, the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act. There are a number of statutory exceptions and regulatory safe harbors protecting some common activities from prosecution;
- federal civil and criminal false claims laws and civil monetary penalty laws, including the False Claims Act, which impose criminal and civil penalties, including through civil “qui tam” or “whistleblower” actions, against individuals or entities for, among other things, knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal health care programs that are false or fraudulent; knowingly making or causing a false statement material to a false or fraudulent claim or an obligation to pay money to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing such an obligation. Manufacturers can be held liable under the FCA even when they do not submit claims directly to government payors if they are deemed to “cause” the submission of false or fraudulent claims. The FCA also permits a private individual acting as a “whistleblower” to bring actions on behalf of the federal government alleging violations of the FCA and to share in any monetary recovery. When an entity is determined to have violated the federal civil False Claims Act, the government may impose civil fines and penalties ranging from $11,181 to $22,363 for each false claim, plus treble damages, and exclude the entity from participation in Medicare, Medicaid and other federal healthcare programs;
- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or

control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Similar to the federal Anti-Kickback Statute, a person or entity can be found guilty of violating HIPAA without actual knowledge of the statute or specific intent to violate it;

- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the use, or disclosure of, individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information without appropriate authorization. HITECH also created new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys' fees and costs associated with pursuing federal civil actions;
- the federal Physician Payments Sunshine Act, created under the ACA, and its implementing regulations, which require manufacturers of drugs, devices, biologicals and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program to report annually to the U.S. Department of Health and Human Services under the Open Payments Program, information related to payments or other transfers of value made to physicians, certain other healthcare professionals, and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members;
- federal consumer protection and unfair competition laws, which broadly regulate marketplace activities and activities that potentially harm consumers; and
- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third-party payer, including commercial insurers; state laws that require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of our business activities, including compensation of physicians with stock or stock options, could, despite efforts to comply, be subject to challenge under one or more of such laws. Additionally, FDA or foreign regulators may not agree that we have mitigated any risk of bias in our clinical trials due to payments or equity interests provided to investigators or institutions which could limit a regulator's acceptance of those clinical trial data in support of a marketing application. Moreover, efforts to ensure that our business arrangements will comply with applicable healthcare laws may involve substantial costs. It is possible that governmental and enforcement authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant civil, criminal and administrative penalties, damages, disgorgement, monetary fines, exclusion from

participation in Medicare, Medicaid and other federal healthcare programs, integrity and oversight agreements to resolve allegations of non-compliance, contractual damages, reputational harm, diminished profits and future earnings, and curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our results of operations. In addition, the approval and commercialization of any of our product candidates outside the United States will also likely subject us to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

Failure to comply with health and data protection laws and regulations could lead to government enforcement actions (which could include civil or criminal penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business.

We and any potential collaborators may be subject to federal, state, and foreign data protection laws and regulations (i.e., laws and regulations that address privacy and data security). In the United States, numerous federal and state laws and regulations, including federal health information privacy laws, state data breach notification laws, state health information privacy laws, and federal and state consumer protection laws (e.g., Section 5 of the Federal Trade Commission Act), that govern the collection, use, disclosure and protection of health-related and other personal information could apply to our operations or the operations of our collaborators. In addition, we may obtain health information from third parties (including research institutions from which we obtain clinical trial data) that are subject to privacy and security requirements under HIPAA, as amended by HITECH. Depending on the facts and circumstances, we could be subject to civil, criminal, and administrative penalties if we knowingly obtain, use, or disclose individually identifiable health information maintained by a HIPAA-covered entity in a manner that is not authorized or permitted by HIPAA.

Compliance with U.S. and international data protection laws and regulations could require us to take on more onerous obligations in our contracts, restrict our ability to collect, use and disclose data, or in some cases, impact our ability to operate in certain jurisdictions. Failure to comply with these laws and regulations could result in government enforcement actions (which could include civil, criminal and administrative penalties), private litigation, and/or adverse publicity and could negatively affect our operating results and business. Moreover, clinical trial subjects, employees and other individuals about whom we or our potential collaborators obtain personal information, as well as the providers who share this information with us, may limit our ability to collect, use and disclose the information. Claims that we have violated individuals' privacy rights, failed to comply with data protection laws, or breached our contractual obligations, even if we are not found liable, could be expensive and time-consuming to defend and could result in adverse publicity that could harm our business.

European data collection is governed by restrictive regulations governing the use, processing and cross-border transfer of personal information.

In the event we decide to conduct clinical trials or continue to enroll subjects in our ongoing or future clinical trials in the European Union, we may be subject to additional privacy restrictions. The collection and use of personal health data in the European Union is governed by the provisions of the General Data Protection Regulation 2016/679, or GDPR. This directive imposes several requirements relating to the consent of the individuals to whom the personal data relates, the information provided to the individuals, notification of data processing obligations to the competent national data protection authorities and the security and confidentiality of the personal data. The GDPR also imposes strict rules on the transfer of personal data out of the European Union to the United States. Failure to comply with the requirements of the Data Protection Directive, which governs the collection and use of personal health data in the European Union, the GDPR, and the related national data protection laws of the European Union Member States may result in fines and other administrative penalties. The GDPR introduced new data protection requirements in the European Union and substantial fines for breaches of the data protection rules. The GDPR regulations may impose additional responsibility and liability in relation to personal data that we process and we may be required to put in place additional mechanisms ensuring compliance with these and/or new data protection rules. This may be onerous and adversely affect our business, financial condition, prospects and results of operations.

Healthcare legislative measures aimed at reducing healthcare costs may have a material adverse effect on our business and results of operations.

The United States and many foreign jurisdictions have enacted or proposed legislative and regulatory changes affecting the healthcare system that could prevent or delay marketing approval of our product candidates or any future product candidates, restrict or regulate post-approval activities and affect our ability to profitably sell any product for which we obtain marketing approval. Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs. For example, in March 2010, the ACA was passed, which substantially changed the way healthcare is financed by both governmental and private insurers, and significantly impacted the U.S. pharmaceutical industry. The ACA, among other things, subjects biological products to potential competition by lower-cost biosimilars, addresses a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected, increases the minimum Medicaid rebates owed by manufacturers under the Medicaid Drug Rebate Program and extends the rebate program to individuals enrolled in Medicaid managed care organizations, establishes annual fees and taxes on manufacturers of certain branded prescription drugs, and creates a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 70% (as of 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D.

There have been a number of significant changes to the ACA and its implementation. The Tax Cuts and Jobs Act of 2017, or Tax Act, includes a provision that repealed effective January 1, 2019 the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas, or the Texas District Court Judge, ruled that the individual mandate is a critical and inseverable feature of the ACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the ACA are invalid as well. While the Trump Administration and CMS have both stated that the ruling will have no immediate effect, and on December 30, 2018 the Texas District Court Judge issued an order staying the judgment pending appeal, it is unclear how this decision, subsequent appeals and other efforts to repeal and replace the ACA will impact the ACA and our business.

On January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the ACA to waive, defer, grant exemptions from, or delay the implementation of any provision of the ACA that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. On October 13, 2017, President Trump signed an Executive Order terminating the cost-sharing subsidies that reimburse insurers under the ACA. Several state Attorneys General filed suit to stop the administration from terminating the subsidies, but their request for a restraining order was denied by a federal judge in California on October 25, 2017. On June 14, 2018, U.S. Court of Appeals for the Federal Circuit ruled that the federal government was not required to pay more than $12 billion in ACA risk corridor payments to third-party payors who argued were owed to them. The effects of this gap in reimbursement on third-party payors, the viability of the ACA marketplace, providers, and potentially our business, are not yet known.

Moreover, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal year 2018 that delayed the implementation of certain ACA-mandated fees, including the so called "Cadillac" tax on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device excise tax on non-exempt medical devices. The

Bipartisan Budget Act of 2018, also amended the ACA, effective January 1, 2019, by increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and closing the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole." In July 2018, CMS published a final rule permitting further collections and payments to and from certain ACA qualified health plans and health insurance issuers under the ACA risk adjustment program in response to the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. In addition, CMS has recently published a final rule that would give states greater flexibility, starting in 2020, in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year, which went into effect in 2013, and, due to subsequent legislative amendments, will remain in effect through 2027 unless additional Congressional action is taken. The American Taxpayer Relief Act of 2012 further reduced Medicare payments to several providers, including hospitals and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years.

There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. At the federal level, the Trump administration's budget proposal for fiscal year 2019 contains further drug price control measures that could be enacted during the 2019 budget process or in other future legislation, including, for example, measures to permit Medicare Part D plans to negotiate the price of certain drugs under Medicare Part B, to allow some states to negotiate drug prices under Medicaid, and to eliminate cost sharing for generic drugs for low-income patients. Additionally, the Trump administration released a "Blueprint" to lower drug prices and reduce out of pocket costs of drugs that contains additional proposals to increase manufacturer competition, increase the negotiating power of certain federal healthcare programs, incentivize manufacturers to lower the list price of their products and reduce the out of pocket costs of drug products paid by consumers. The U.S. Department of HHS, has already started the process of soliciting feedback on some of these measures and, at the same time, is immediately implementing others under its existing authority. For example, in September 2018, CMS announced that it will allow Medicare Advantage Plans the option to use step therapy for Part B drugs beginning January 1, 2019, and in October 2018, CMS proposed a new rule that would require direct-to-consumer television advertisements of prescription drugs and biological products, for which payment is available through or under Medicare or Medicaid, to include in the advertisement the Wholesale Acquisition Cost, or list price, of that drug or biological product. Although a number of these, and other proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs. At the state level, legislatures have increasingly passed legislation and implemented regulations designed to control pharmaceutical and biological product pricing, including price or patient reimbursement constraints, discounts, restrictions on certain product access and marketing cost disclosure and transparency measures, and, in some cases, designed to encourage importation from other countries and bulk purchasing.

There have been, and likely will continue to be, legislative and regulatory proposals at the foreign, federal and state levels directed at containing or lowering the cost of healthcare. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability, or commercialize our product. Such reforms could have an adverse effect on anticipated revenue from product

candidates that we may successfully develop and for which we may obtain regulatory approval and may affect our overall financial condition and ability to develop product candidates. We cannot predict the initiatives that may be adopted in the future. The continuing efforts of the government, insurance companies, managed care organizations and other payors of healthcare services to contain or reduce costs of healthcare and/or impose price controls may adversely affect:

- the demand for our product candidates, if approved;
- our ability to receive or set a price that we believe is fair for our products;
- our ability to generate revenue and achieve or maintain profitability;
- the amount of taxes that we are required to pay; and
- the availability of capital.

We expect that the ACA, as well as other healthcare reform measures that may be adopted in the future, may result in additional reductions in Medicare and other healthcare funding, more rigorous coverage criteria, lower reimbursement, and new payment methodologies. This could lower the price that we receive for any approved product. Any denial in coverage or reduction in reimbursement from Medicare or other government-funded programs may result in a similar denial or reduction in payments from private payors, which may prevent us from being able to generate sufficient revenue, attain profitability or commercialize our product candidates, if approved.

We face significant competition in an environment of rapid technological and scientific change, and there is a possibility that our competitors may achieve regulatory approval before us or develop therapies that are safer, more advanced or more effective than ours, which may negatively impact our ability to successfully market or commercialize any product candidates we may develop and ultimately harm our financial condition.

The development and commercialization of new drug products is highly competitive. We may face competition with respect to any product candidates that we seek to develop or commercialize in the future from major pharmaceutical companies, specialty pharmaceutical companies, and biotechnology companies worldwide. Potential competitors also include academic institutions, government agencies, and other public and private research organizations that conduct research, seek patent protection, and establish collaborative arrangements for research, development, manufacturing, and commercialization.

There are a number of large pharmaceutical and biotechnology companies that are currently pursuing the development and commercialization of products for the treatment of the indications that our four key drivers are pursuing, including: tafamidis, a TTR tetramer stabilizer, a competitor to BBP-265; pemigatinib, a small molecule FGFR inhibitor, a competitor to BBP-831; NBI-74788, a corticotropin releasing factor receptor antagonist, a competitor to BBP-631; and MRTX849, a KRAS G12C inhibitor, a competitor to BBP-454. If any of these competitors or competitors for our other product candidates receive FDA approval before we do, our product candidates would not be the first treatment on the market, and our market share may be limited. In addition to competition from other companies targeting our target indications, any products we may develop may also face competition from other types of therapies.

Many of our current or potential competitors, either alone or with their strategic partners, have significantly greater financial resources and expertise in research and development, manufacturing, preclinical testing, conducting clinical trials, obtaining regulatory approvals, and marketing approved products than we do.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller or early-stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These competitors also compete with us in recruiting and retaining qualified scientific and

management personnel and establishing clinical trial sites and patient registration for clinical trials, as well as in acquiring technologies complementary to, or necessary for, our programs. Our commercial opportunity could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient, or are less expensive than any products that we may develop. Furthermore, currently approved products could be discovered to have application for treatment of our targeted disease indications or similar indications, which could give such products significant regulatory and market timing advantages over our product candidates. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours and may obtain orphan product exclusivity from the FDA for indications that we are targeting, which could result in our competitors establishing a strong market position before we are able to enter the market. Additionally, products or technologies developed by our competitors may render our potential product candidates uneconomical or obsolete and we may not be successful in marketing any product candidates we may develop against competitors.

In addition, we could face litigation or other proceedings with respect to the scope, ownership, validity and/or enforceability of our patents relating to our competitors' products and our competitors may allege that our products infringe, misappropriate or otherwise violate their intellectual property. The availability of our competitors' products could limit the demand, and the price we are able to charge, for any products that we may develop and commercialize. See "Risks related to our intellectual property."

If the market opportunities for our product candidates are smaller than we believe they are, our revenue may be adversely affected, and our business may suffer. Our ability to successfully identify patients and acquire a significant market share will be necessary for us to achieve profitability and growth.

We focus research and product development on treatments for Mendelian diseases and genetically driven cancers, many of which are rare or orphan indications. Our projections of both the number of individuals who are affected by our target disease indications and have the potential to benefit from treatment with our product candidates, are based on our beliefs and estimates. These estimates have been derived from a variety of sources, including the scientific literature, and may prove to be incorrect. Further, new studies may change the estimated incidence or prevalence of these diseases. The number of patients may turn out to be lower than expected. The effort to identify patients with diseases we seek to treat is in early stages, and we cannot accurately predict the number of patients for whom treatment might be possible. Additionally, the potentially addressable patient population for BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify may be limited or may not be amenable to treatment with BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify, and new patients may become increasingly difficult to identify or gain access to, which would adversely affect our results of operations and our business. Further, even if we obtain significant market share for BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify, because the potential target populations are small, we may never achieve profitability despite obtaining such significant market share. In addition, market share could be limited by the availability of other treatments including Vyndaqel (tafamidis), for which Pfizer Inc. has submitted two NDAs for the treatment of ATTR-CM. If tafamidis receives FDA approval for one or both forms of ATTR-CM, BBP-265 would not be the first treatment on the market for ATTR-CM.

Risks related to our business and industry

Our future success depends on our ability to retain key employees, directors, consultants and advisors and to attract, retain and motivate qualified personnel.

We are highly dependent on the management, research and development, clinical, financial and business development expertise of our executive officers, our directors, our Management Committee as well as the other members of our scientific and clinical teams. However, some of these executive officers, directors and other personnel split their time between BridgeBio and certain of our other subsidiaries. For instance, Neil Kumar serves as chief executive officer and a director both to us and Eidos; Uma Sinha serves as chief scientific officer

to us and Eidos; Ali Satvat serves as a director both to us and Eidos; Eric David serves as chief executive officer of both Adrenas Therapeutics, Inc. and Aspa Therapeutics, Inc.; Neil Kirby serves as chief operating officer of Origin Biosciences, Inc. and chief executive officer of Phoenix Tissue Repair, Inc.; and both James Momtazee and Ali Satvat serve as members of our board of directors and as executive officers of Kohlberg Kravis Roberts & Co. L.P. (together with its affiliates, KKR). As a result, these executive officers, directors and members of our Management Committee may not be able to devote their full attention to us, which could impede the achievement of our research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy.

While we believe that we have put in place policies and procedures to identify such conflicts and any such policies and procedures were negotiated at arm's length in conformity with fiduciary duties, such conflicts of interest may nonetheless arise. The existence and consequences of such potential conflicts could expose us to loss of profits, claims by our investors and creditors, and harm our business and our results of operations. The risks related to our dependence upon Dr. Kumar are compounded by Dr. Kumar's significant ownership percentage and Dr. Kumar's role in both our company and our subsidiaries, including Eidos. If we were to lose Dr. Kumar or any of our other executives or key personnel, we may not be able to find appropriate replacements on a timely basis. In addition, because certain of our employees provide a centralized source of support across multiple subsidiaries, the loss of any of these employees could negatively affect the operations of the affected subsidiaries, and our financial condition and results of operations could be materially adversely affected.

Furthermore, each of our executive officers may terminate their employment with us at any time. We do not maintain "key person" insurance for any of our executives or employees. Recruiting and retaining qualified scientific and clinical personnel and, if we progress the development of our drug pipeline toward scaling up for commercialization, sales and marketing personnel, will also be critical to our success. The loss of the services of our executive officers or other key employees could impede the achievement of research, development and commercialization objectives and seriously harm our ability to successfully implement our business strategy. Furthermore, replacing executive officers and key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to successfully develop, gain regulatory approval for and commercialize our product candidates. Competition to hire qualified personnel in our industry is intense, and we may be unable to hire, train, retain or motivate these key personnel on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. Furthermore, to the extent we hire personnel from competitors, we may be subject to allegations that they have been improperly solicited or that they have divulged proprietary or other confidential information, or that their former employers own their research output. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

In addition, we rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by employers other than us and may have commitments under consulting or advisory contracts with other entities that may limit their availability to us. If we are unable to continue to attract and retain high quality personnel, our ability to pursue our growth strategy will be limited.

Our reliance on a central team consisting of a limited number of employees who provide various administrative, research and development and other services across our organization, and on dedicated teams at the subsidiary level presents operational challenges that may adversely affect our business.

As of December 31, 2018, we had 16 employees who are employed by our wholly-owned subsidiary, BridgeBio Services, Inc., upon which we rely for various administrative, research and development and other support services shared among us. While we believe this structure enables us to reduce certain infrastructure costs, the small size of our central team may cause us to be unable to devote adequate personnel, time and resources to support the operations of all of our subsidiaries, including their research and development activities, employee recruiting and retention efforts and the management financial and accounting and reporting matters. From time to

time, members of our central team may not have access to adequate information regarding aspects of the business and operations of our subsidiaries to sufficiently manage these affairs. Additionally, because our dedicated subsidiary-level employees and management are primarily incentivized at the subsidiary level, these employees and management team members may not be sufficiently incentivized to maximize the overall value of our entire organization. If our central team fails to provide adequate administrative, research and development or other services across our entire organization, or our subsidiary-level employees and management do not perform in a manner that aligns with the interests of our entire organization, our business, financial condition and results of operations could be harmed.

Changes in funding for the FDA, the SEC and other government agencies could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent those agencies from performing normal functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products or take action with respect to other regulatory matters can be affected by a variety of factors, including government budget and funding levels, ability to hire and retain key personnel and accept payment of user fees, and statutory, regulatory, and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new drugs to be reviewed and/or approved, or for other actions to be taken, by relevant government agencies, which would adversely affect our business. For example, over the last several years, including for 35 days beginning on December 22, 2018, the U.S. government has shut down several times and certain regulatory agencies, such as the FDA and the SEC, have had to furlough critical FDA, SEC and other government employees and stop critical activities. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Similarly, a prolonged government shutdown could prevent the timely review of our patent applications by the United States Patent and Trademark Office, or USPTO, which could delay the issuance of any U.S. patents to which we might otherwise be entitled. Further, upon completion of this offering and in our operations as a public company, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

We will need to expand our organization and we may experience difficulties in managing this growth, which could disrupt our operations.

As of December 31, 2018, we had 130 full-time employees. As we mature, we expect to expand our full-time employee base and to hire more consultants and contractors. Our management may need to divert a disproportionate amount of its attention away from our day-to-day activities and devote a substantial amount of time toward managing these growth activities. We may not be able to effectively manage the expansion of our operations, which may result in weaknesses in our infrastructure, operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If our management is unable to effectively manage our growth, our expenses may increase more than expected, our ability to generate and/or grow revenues could be reduced, and we may not be able to implement our business strategy. Our future financial performance and our ability to commercialize product candidates and compete effectively will depend, in part, on our ability to effectively manage any future growth.

Because we have multiple programs and product candidates in our development pipeline and are pursuing a variety of target indications and treatment modalities, we may expend our limited resources to pursue a particular product candidate and fail to capitalize on development opportunities or product candidates that may be more profitable or for which there is a greater likelihood of success.

We focus on the development of product candidates to address Mendelian diseases and genetically driven cancers, regardless of the treatment modality or the particular target indication within this space. Because we have limited financial and personnel resources, we may forgo or delay pursuit of opportunities with potential target indications or product candidates that later prove to have greater commercial potential than our current and planned development programs and product candidates. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development programs and other future product candidates for specific indications may not yield any commercially viable future product candidates. If we do not accurately evaluate the commercial potential or target market for a particular product candidate, we may be required to relinquish valuable rights to that product candidate through collaboration, licensing or other royalty arrangements in cases in which it would have been more advantageous for us to retain sole development and commercialization rights to such future product candidates.

Additionally, we may pursue additional in-licenses or acquisitions of development-stage assets or programs, which entails additional risk to us. Identifying, selecting and acquiring promising product candidates requires substantial technical, financial and human resources expertise. Efforts to do so may not result in the actual acquisition or license of a successful product candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. For example, if we are unable to identify programs that ultimately result in approved products, we may spend material amounts of our capital and other resources evaluating, acquiring and developing products that ultimately do not provide a return on our investment.

Product liability lawsuits against us could cause us to incur substantial liabilities and could limit commercialization of any product candidates that we may develop.

We face an inherent risk of product liability exposure related to the testing of product candidates in human clinical trials and will face an even greater risk if we commercially sell any medicines that we may develop. If we cannot successfully defend ourselves against claims that our product candidates or medicines caused injuries, we could incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for any product candidates or medicines that we may develop;
- injury to our reputation and significant negative media attention;
- withdrawal of clinical trial participants;
- significant costs to defend the related litigation;
- substantial monetary awards to trial participants or patients;
- loss of revenue; and
- the inability to commercialize our product candidates.

Although we maintain product liability insurance, including coverage for clinical trials that we sponsor, it may not be adequate to cover all liabilities that we may incur. We anticipate that we will need to increase our insurance coverage as we commence additional clinical trials and if we successfully commercialize any product candidates. The market for insurance coverage is increasingly expensive, and the costs of insurance coverage will increase as our clinical programs increase in size. We may not be able to maintain insurance coverage at a reasonable cost or in an amount adequate to satisfy any liability that may arise.

Our employees, independent contractors, consultants, commercial partners and vendors may engage in misconduct or other improper activities, including noncompliance with regulatory standards and requirements.

We are exposed to the risk of fraud, misconduct or other illegal activity by our employees, independent contractors, consultants, commercial partners and vendors. Misconduct by these parties could include intentional, reckless and negligent conduct that fails to: comply with the laws of the FDA and comparable foreign regulatory authorities; provide true, complete and accurate information to the FDA and comparable foreign regulatory authorities; comply with manufacturing standards we have established; comply with healthcare fraud and abuse laws in the United States and similar foreign fraudulent misconduct laws; or report financial information or data accurately or to disclose unauthorized activities. If we obtain FDA approval of our product candidates and begin commercializing those products in the United States, our potential exposure under such laws will increase significantly, and our costs associated with compliance with such laws are also likely to increase. In particular, research, sales, marketing, education and other business arrangements in the healthcare industry are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, educating, marketing and promotion, sales and commission, certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials, which could result in regulatory sanctions and cause serious harm to our reputation. We intend to adopt a code of business conduct and ethics, but it is not always possible to identify and deter misconduct by employees and third parties, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business, including the imposition of significant fines or other sanctions.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. Our operations involve the use of hazardous and flammable materials, including chemicals and biological materials. Our operations also produce hazardous waste products. We generally contract with third parties for the disposal of these materials and wastes. We cannot eliminate the risk of contamination or injury from these materials. In the event of contamination or injury resulting from our use of hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

Although we maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees resulting from the use of hazardous materials, this insurance may not provide adequate coverage against potential liabilities. We do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us in connection with our storage or disposal of biological, hazardous or radioactive materials.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. These current or future laws and regulations may impair our research, development or production efforts. Our failure to comply with these laws and regulations also may result in substantial fines, penalties or other sanctions.

Unfavorable global economic conditions could adversely affect our business, financial condition or results of operations.

Our ability to invest in and expand our business and meet our financial obligations, to attract and retain third-party contractors and collaboration partners and to raise additional capital depends on our operating and financial

performance, which, in turn, is subject to numerous factors, including the prevailing economic and political conditions and financial, business and other factors beyond our control, such as the rate of unemployment, the number of uninsured persons in the United States, political influences and inflationary pressures. For example, an overall decrease in or loss of insurance coverage among individuals in the United States as a result of unemployment, underemployment or the repeal of certain provisions of the ACA, may decrease the demand for healthcare services and pharmaceuticals. If fewer patients are seeking medical care because they do not have insurance coverage, we may experience difficulties in any eventual commercialization of our product candidates and our business, results of operations, financial condition and cash flows could be adversely affected.

In addition, our results of operations could be adversely affected by general conditions in the global economy and in the global financial markets upon which pharmaceutical and biopharmaceutical companies such as us are dependent for sources of capital. In the past, global financial crises have caused extreme volatility and disruptions in the capital and credit markets. A severe or prolonged economic downturn could result in a variety of risks to our business, including a reduced ability to raise additional capital when needed on acceptable terms, if at all, and weakened demand for our product candidates. A weak or declining economy could also strain our suppliers, possibly resulting in supply disruption. Any of the foregoing could harm our business and we cannot anticipate all of the ways in which the current economic climate and financial market conditions could adversely impact our business.

Our internal computer systems, or those used by our third-party research institution collaborators, CROs or other contractors or consultants, may fail or suffer security breaches.

Despite the implementation of security measures, our internal computer systems and those of our future CROs and other contractors and consultants may be vulnerable to damage from computer viruses and unauthorized access. Although to our knowledge we have not experienced any such material system failure or security breach to date, if such an event were to occur and cause interruptions in our operations, it could result in a material disruption of development programs and business operations. For example, the loss of clinical trial data from completed, ongoing or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data. Likewise, we rely on third parties for research and development, the manufacture and supply of drug product and drug substance and to conduct clinical trials, and similar events relating to their computer systems could also have a material adverse effect on our business. To the extent that any disruption or security breach were to result in a loss of, or damage to, our data or systems, or inappropriate disclosure of confidential or proprietary information, we could incur liability and the further development and commercialization of our product candidates could be delayed.

Certain data breaches must also be reported to affected individuals and the government, and in some cases to the media, under provisions of HIPAA, as amended by HITECH, other U.S. federal and state law, and requirements of non-U.S. jurisdictions, including the European Union Data Protection Directive, and financial penalties may also apply.

Our insurance policies may not be adequate to compensate us for the potential losses arising from breaches, failures or disruptions of our infrastructure, catastrophic events and disasters or otherwise. In addition, such insurance may not be available to us in the future on economically reasonable terms, or at all. Further, our insurance may not cover all claims made against us and defending a suit, regardless of its merit, could be costly and divert management’s attention.

Furthermore, the loss of clinical trial data from completed or future clinical trials could result in delays in our regulatory approval efforts and significantly increase our costs to recover or reproduce the data.

We or the third parties upon whom we depend may be adversely affected by earthquakes or other natural disasters and our business continuity and disaster recovery plans may not adequately protect us from a serious disaster.

Earthquakes or other natural disasters could severely disrupt our operations, and have a material adverse effect on our business, results of operations, financial condition and prospects. If a natural disaster, power outage or other event occurred that prevented us from using all or a significant portion of our headquarters, that damaged critical infrastructure, such as the manufacturing facilities of our third-party CMOs, or that otherwise disrupted operations, it may be difficult or, in certain cases, impossible for us to continue our business for a substantial period of time. The disaster recovery and business continuity plans we have in place currently are limited and are unlikely to prove adequate in the event of a serious disaster or similar event. We may incur substantial expenses as a result of the limited nature of our disaster recovery and business continuity plans, which, particularly when taken together with our lack of earthquake insurance, could have a material adverse effect on our business.

Our anticipated international operations may expose us to business, regulatory, political, operational, financial, pricing and reimbursement and economic risks associated with doing business outside of the United States.

We currently have no international operations, but our business strategy incorporates potential international expansion to target patient populations outside the United States. If we receive regulatory approval for and commercialize any of our product candidates in patient populations outside the United States, we may hire sales representatives and conduct physician and patient association outreach activities outside of the United States. Doing business internationally involves a number of risks, including, but not limited to:

- multiple, conflicting, and changing laws and regulations such as privacy regulations, tax laws, export and import restrictions, employment laws, regulatory requirements, and other governmental approvals, permits, and licenses;
- failure by us to obtain and maintain regulatory approvals for the use of our products in various countries;
- additional potentially relevant third-party patent rights;
- complexities and difficulties in obtaining protection and enforcing our intellectual property;
- difficulties in staffing and managing foreign operations;
- complexities associated with managing multiple payor reimbursement regimes, government payors, or patient self-pay systems;
- limits in our ability to penetrate international markets;
- financial risks, such as longer payment cycles, difficulty collecting accounts receivable, the impact of local and regional financial crises on demand and payment for our products, and exposure to foreign currency exchange rate fluctuations;
- natural disasters, political and economic instability, including wars, terrorism, and political unrest, outbreak of disease, boycotts, curtailment of trade, and other business restrictions;
- certain expenses including, among others, expenses for travel, translation, and insurance; and
- regulatory and compliance risks that relate to maintaining accurate information and control over sales and activities that may fall within the purview of the U.S. Foreign Corrupt Practices Act, its books and records provisions, or its anti-bribery provisions.

Any of these factors could significantly harm our potential international expansion and operations and, consequently, our results of operations.

We have identified material weaknesses in our internal control over financial reporting. If our remediation of the material weaknesses is not effective, or if we experience additional material weaknesses in the future or otherwise fail to maintain an effective system of internal controls in the future, we may not be able to accurately or timely report our financial condition or results of operations, which may adversely affect investor confidence in us and, as a result, the value of our common stock.

After the completion of this offering, we will be subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, or the Exchange Act, the Sarbanes-Oxley Act and the rules and regulations of the Nasdaq Stock Market. The Sarbanes-Oxley Act requires, among other things, that we maintain effective disclosure controls and procedures and internal controls over financial reporting. Prior to the completion of this offering, we have been a private company with limited accounting personnel to adequately execute our accounting processes and other supervisory resources with which to address our internal control over financial reporting and, as a result, we may experience difficulty in meeting these reporting requirements in a timely manner. To date, we have never conducted a review of our internal control for the purpose of providing the reports required by the Sarbanes-Oxley Act. During our review and testing, we may identify deficiencies and be unable to remediate them before we must provide the required reports.

In connection with the preparation of our 2017 combined and consolidated financial statements, we and our independent auditors identified material weaknesses in our internal control over financial reporting. A material weakness is a deficiency, or a combination of deficiencies, in internal control over financial reporting, such that there is a reasonable possibility that a material misstatement of our annual or interim consolidated financial statements will not be prevented or detected on a timely basis.

These material weaknesses related to the following:

- We do not have sufficient staffing to enable segregation of duties within accounting functions and do not have sufficient written policies and procedures for accounting and financial reporting. These factors contributed to the lack of a formalized process or controls for our management's timely review and approval of journal entries and related financial statement analysis.
- We do not have finance and accounting staff with the appropriate U.S. GAAP technical expertise to identify, evaluate and account for complex and non-routine transactions. As a result, we did not design and maintain formal accounting policies, processes and controls related to complex transactions necessary for an effective financial reporting process.

As the hiring of additional finance and accounting personnel becomes economically feasible, we intend to take appropriate and reasonable steps to remediate these material weaknesses through the implementation of appropriate segregation of duties and formalization of accounting policies and controls. However, we cannot assure you that these measures will significantly improve or remediate the material weaknesses described above. As of December 31, 2018, the material weaknesses have not been remediated.

In addition, in connection with the audit of the financial statements for the year ended December 31, 2018 of our subsidiary Eidos, which is a public company subject to the reporting requirements of the Exchange Act and the rules and regulations of the Nasdaq Stock Market, Eidos and its independent registered public accounting firm identified a material weakness in Eidos' internal control over financial reporting related to a deficiency in the operation of Eidos' internal controls over the accounting for complex debt and equity transactions and ineffective disclosure controls. While Eidos intends to implement a plan to remediate the material weakness, it has not completed the implementation of this plan and can give no assurance that its current and planned implementation will remediate this deficiency in internal control or that additional material weaknesses or significant deficiencies in its internal control over financial reporting will not be identified in the future.

We may discover additional weaknesses in our system of internal financial and accounting controls and procedures that could result in a material misstatement of our combined and consolidated financial statements.

Our internal control over financial reporting will not prevent or detect all errors and all fraud. A control system, no matter how well designed and operated, can provide only reasonable, not absolute, assurance that the control system's objectives will be met. Because of the inherent limitations in all control systems, no evaluation of controls can provide absolute assurance that misstatements due to error or fraud will not occur or that all control issues and instances of fraud will be detected.

If we are not able to comply with the requirements of the Sarbanes-Oxley Act in a timely manner, or if we are unable to maintain proper and effective internal controls over financial reporting, we may not be able to produce timely and accurate financial statements. If that were to happen, our investors could lose confidence in our reported financial information, the market price of our stock could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities.

If we fail to maintain an effective system of disclosure controls and internal control over financial reporting, our ability to produce timely and accurate financial statements or comply with applicable regulations could be impaired.

As a public company, we will be required to maintain internal control over financial reporting and to report any material weaknesses in such internal controls. The Sarbanes-Oxley Act, requires that we evaluate and determine the effectiveness of our internal control over financial reporting and, beginning with our second annual report following this offering, provide a management report on internal control over financial reporting. However, while we remain an emerging growth company, we will not be required to include an attestation report on internal control over financial reporting issued by our independent registered public accounting firm.

Any failure to develop or maintain effective controls, or any difficulties encountered in their implementation or improvement, could harm our results of operations, cause us to fail to meet our reporting obligations, result in a restatement of our financial statements for prior periods, or adversely affect the results of management evaluations and independent registered public accounting firm audits of our internal control over financial reporting that we will eventually be required to include in our periodic reports that will be filed with the SEC. In addition, to the extent we acquire or establish additional consolidated subsidiaries and VIEs, the financial statements of such entities may not be initially prepared by us, and we will not have direct control over their financial statement preparation. As a result, we will, for our financial reporting, depend on what these entities report to us, which could result in our adding monitoring and audit processes, and increase the difficulty of implementing and maintaining adequate controls over our financial processes and reporting in the future, which could lead to delays in our external reporting. In particular, this may occur where we are establishing such entities with partners that do not have sophisticated financial accounting processes in place, or where we are entering into new relationships at a rapid pace, straining our integration capacity. Furthermore, during the course of the audit of Eidos' financial statements for the fiscal year ended December 31, 2018, Eidos discovered certain errors related to the accounting for complex debt and equity transactions, which required Eidos to restate its unaudited financial information for the quarterly periods ended March 31, 2018, June 30, 2018 and September 30, 2018. If we or any of our publicly listed subsidiaries are required to restate previously issued financial statements for any additional periods, our reputation could be impaired which could cause a loss of investor confidence and adversely materially affect our business, operating results and financial condition. Additionally, if we do not receive the information from the consolidated subsidiaries or controlled VIEs on a timely basis, it could cause delays in our external reporting. Ineffective disclosure controls and procedures and internal controls over financial reporting could also cause investors to lose confidence in our reported financial and other information, which would likely have a negative effect on the trading price of our common stock.

Historically, we have relied upon and expect to continue to rely upon third-party contracted service providers to assist with our financial reporting. We are in the process of designing and implementing the internal control over financial reporting required to comply with the Sarbanes-Oxley Act. This process will be time consuming, costly, and complicated. If we are unable to assert that our internal control over financial reporting is effective or when required in the future, if our independent registered public accounting firm issues an adverse opinion on the

effectiveness of our internal control over financial reporting, investors may lose confidence in the accuracy and completeness of our financial reports, the market price of our common stock could be adversely affected and we could become subject to investigations by the stock exchange on which our securities are listed, the SEC, or other regulatory authorities, which could require additional financial and management resources.

Risks Related to our Equity Securities and this Offering

We are an "emerging growth company," and we cannot be certain if the reduced reporting requirements applicable to emerging growth companies will make our common stock less attractive to investors.

We are an "emerging growth company" as defined in the JOBS Act, and we intend to take advantage of some of the exemptions from reporting requirements that are applicable to other public companies that are not emerging growth companies, including:

- being permitted to provide only two years of audited financial statements prior to our first filing of our Annual Report on Form 10-K, in addition to any required unaudited interim financial statements, with correspondingly reduced "Management's discussion and analysis of financial condition and results of operations" disclosure;
- not being required to comply with the auditor attestation requirements in the assessment of our internal control over financial reporting;
- not being required to comply with any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation or a supplement to the auditor's report providing additional information about the audit and the financial statements;
- reduced disclosure obligations regarding executive compensation; and
- not being required to hold a non-binding advisory vote on executive compensation or obtain stockholder approval of any golden parachute payments not previously approved.

We cannot predict if investors will find our common stock less attractive because we will rely on these exemptions. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile. We may take advantage of these reporting exemptions until we are no longer an emerging growth company. We will remain an emerging growth company until the earlier of (1) the last day of the fiscal year (a) following the fifth anniversary of the completion of this offering, (b) in which we have total annual gross revenue of at least $1.07 billion or (c) in which we are deemed to be a large accelerated filer, which means the market value of our common stock that is held by non-affiliates exceeds $700 million as of the prior June 30th and (2) the date on which we have issued more than $1.0 billion in non-convertible debt during the prior three-year period.

Under Section 107(b) of the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards until such time as those standards apply to private companies. Pursuant to Section 107(b) of the JOBS Act, we have elected to use the extended transition period for complying with new or revised accounting standards under Section 102(b)(2) of The JOBS Act. This election allows us to delay the adoption of new or revised accounting standards that have different effective dates for public and private companies until those standards apply to private companies. As a result, our financial statements may not be comparable to companies that comply with public company effective dates, and our stockholders and potential investors may have difficulty in analyzing our operating results if comparing us to such companies.

The market price of our common stock may be highly volatile, and you may not be able to resell your shares at or above the initial public offering price.

The market price of our common stock is likely to be volatile. Our stock price could be subject to wide fluctuations in response to a variety of factors, including the following:

- adverse results or delays in our preclinical studies or clinical trials;

- reports of AEs or other negative results in clinical trials of third parties' product candidates that target our product candidates' target indications;
- Inability for us to obtain additional funding on reasonable terms or at all;
- any delay in filing an IND, BLA or NDA for our product candidates and any adverse development or perceived adverse development with respect to the FDA's review of that IND, BLA or NDA;
- failure to develop successfully and commercialize our product candidates;
- announcements we make regarding our current product candidates, acquisition of potential new product candidates and companies and/or in-licensing;
- failure to maintain our existing license arrangements or enter into new licensing and collaboration agreements;
- failure by us or our licensors to prosecute, maintain or enforce our intellectual property rights;
- changes in laws or regulations applicable to future products;
- inability to obtain adequate clinical or commercial supply for our product candidates or the inability to do so at acceptable prices;
- adverse regulatory decisions, including failure to reach agreement with applicable regulatory authorities on the design or scope of our planned clinical trials;
- failure to obtain and maintain regulatory exclusivity for our product candidates;
- regulatory approval or commercialization of new products or other methods of treating our target disease indications by our competitors;
- failure to meet or exceed financial projections we may provide to the public or to the investment community;
- the perception of the pharmaceutical industry by the public, legislatures, regulators and the investment community;
- announcements of significant acquisitions, strategic partnerships, joint ventures or capital commitments by us, our strategic collaboration partner or our competitors;
- disputes or other developments relating to proprietary rights, including patents, litigation matters and our ability to obtain patent protection for our technologies;
- additions or departures of our key scientific or management personnel;
- significant lawsuits, including patent or stockholder litigation, against us;
- changes in the market valuations of similar companies;
- sales or potential sales of substantial amounts of our common stock; and
- trading volume of our common stock.

In addition, companies trading in the stock market in general, and Nasdaq, in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

If you purchase our common stock in this offering, you will incur immediate and substantial dilution in the book value of your shares.

Investors purchasing shares of common stock in this offering will pay a price per share that substantially exceeds the pro forma as adjusted book value per share of our tangible assets after subtracting our liabilities.

As a result, investors purchasing shares of common stock in this offering will incur immediate dilution of $ per share, based on the initial public offering price of $ per share, and our pro forma adjusted net tangible book value as of December 31, 2018. Further, based on these assumptions, investors purchasing shares of common stock in this offering will contribute approximately % of the total amount invested by stockholders since our inception, but will own only approximately % of the shares of common stock outstanding. For information on how the foregoing amounts were calculated, see "Dilution" located elsewhere in this prospectus.

This dilution is due to the substantially lower price paid by our investors who purchased shares prior to this offering as compared to the price offered to the public in this offering, and the exercise of stock options granted to our employees. In addition, as of December 31, 2018, options to purchase shares of our common stock at a weighted-average exercise price of $ per share were outstanding. The exercise of any of these options or any outstanding options granted subsequently would result in additional dilution. As a result of the dilution to investors purchasing shares in this offering, as well as other factors, investors may receive significantly less than the purchase price paid in this offering, if anything, in the event of our liquidation.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, would result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We will need additional capital in the future to continue our planned operations. To the extent we raise additional capital by issuing equity securities, our stockholders may experience substantial dilution. We may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities in more than one transaction, investors may be materially diluted by subsequent sales. These sales may also result in material dilution to our existing stockholders, and new investors could gain rights superior to our existing stockholders.

Pursuant to our 2019 Stock Option and Incentive Plan, or the 2019 Plan, which will become effective upon the effectiveness of the registration statement of which this prospectus is a part, we are authorized to grant stock options and other equity-based awards to our employees, directors and consultants. If our board of directors elects to increase the number of shares available for future grant and our stockholders approve of such an increase at our annual meeting, our stockholders may experience additional dilution, and our stock price may fall.

A significant portion of our total outstanding shares is restricted from immediate resale but may be sold into the market in the near future, which could cause the market price of our common stock to decline significantly.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, upon the expiration of the market standoff and lock-up agreements, the early release of these agreements, or the perception in the market that the holders of a large number of shares of common stock intend to sell shares, could reduce the market price of our common stock. After this offering and based on the initial public offering price of $ per share, upon the completion of this offering, we will have shares of common stock outstanding based on shares of our common stock outstanding as of December 31, 2018. Of these shares, the shares we are selling in this offering may be resold in the public market immediately, unless purchased by our affiliates. The remaining shares, or % of our outstanding shares after this offering, are currently prohibited or otherwise restricted under securities laws, market standoff agreements entered into by our stockholders with us or lock-up agreements entered into by our stockholders with the underwriters; however, subject to applicable securities law restrictions and excluding shares of restricted stock that will remain unvested, these shares will be able to be sold in the public market beginning 180 days after the date of this prospectus. J.P. Morgan Securities LLC and Goldman Sachs & Co. LLC may, in their sole discretion, release all or some portion of the shares subject to lock-up agreements at any time and for any reason. In

addition, the shares of unvested restricted stock and common stock issued and outstanding as of December 31, 2018 will become available for sale immediately upon the vesting of such shares, as applicable, and the expiration of any applicable market standoff or lock-up agreements. Shares issued upon the exercise of stock options outstanding under our equity incentive plans or pursuant to future awards granted under those plans will become available for sale in the public market to the extent permitted by the provisions of applicable vesting schedules, any applicable market standoff and lock-up agreements, and Rule 144 and Rule 701 under the Securities Act of 1933, as amended, or the Securities Act. See the section titled "Shares eligible for future sale" for additional information.

Moreover, after the completion of this offering, based on the initial public offering price of $ per share, holders of an aggregate of shares of our common stock will have rights, subject to conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders. We also plan to register all shares of common stock that we may issue under our equity compensation plans. Once we register these shares, they can be freely sold in the public market upon issuance and once vested, subject to volume limitations applicable to affiliates and the lock-up agreements described in the section titled "Underwriting" in this prospectus. If any of these additional shares are sold, or if it is perceived that they will be sold, in the public market, the market price of our common stock could decline.

If securities analysts do not publish research or reports about our business or if they publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our common stock will rely in part on the research and reports that industry or financial analysts publish about us or our business. We do not currently have and may never obtain research coverage by industry or financial analysts. If no or few analysts commence coverage of us, the trading price of our stock could decrease. Even if we do obtain analyst coverage, if one or more of the analysts covering our business downgrade their evaluations of our stock, the price of our stock could decline. If one or more of these analysts cease to cover our stock, we could lose visibility in the market for our stock, which in turn could cause our stock price to decline.

Our principal stockholders and certain members of our management own a significant percentage of our stock and will be able to exert significant control over matters subject to stockholder approval.

When this offering is completed, KKR will beneficially own approximately % of our stock as of December 31, 2018, and KKR, together with Viking Global Opportunities Illiquid Investments Sub-Master LP and Neil Kumar, our chief executive officer, will beneficially own approximately % of our outstanding voting stock when this offering is completed. Therefore, even after this offering, these stockholders will have the ability to influence us through their ownership positions. These stockholders may be able to determine all matters requiring stockholder approval. For example, these stockholders, acting together, may be able to control elections of directors, amendments of our organizational documents, or approval of any merger, sale of assets, or other major corporate transaction. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that you may believe are in your best interest as one of our stockholders.

We have broad discretion in the use of the net proceeds from this offering and may not use them effectively.

Our management will have broad discretion in the application of the net proceeds from this offering, including for any of the purposes described in the section entitled "Use of Proceeds" located elsewhere in this prospectus, and you will not have the opportunity as part of your investment decision to assess whether the net proceeds are being used appropriately. Because of the number and variability of factors that will determine our use of the net proceeds from this offering, their ultimate use may vary substantially from their currently intended use. The failure by our management to apply these funds effectively could harm our business. Pending their use, we may invest the net proceeds from this offering in short-term, investment-grade, interest-bearing securities. These investments may not yield a favorable return to our stockholders.

Provisions in our amended and restated certificate of incorporation and amended and restated bylaws, as well as provisions of Delaware law, could make it more difficult for a third party to acquire us or increase the cost of acquiring us, even if doing so would benefit our stockholders or remove our current management.

Our amended and restated certificate of incorporation and amended and restated bylaws that will become effective immediately prior to the completion of this offering and Delaware law contain provisions that may have the effect of delaying or preventing a change in control of us or changes in our management. Our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective upon the completion of this offering, include provisions that:

- authorize "blank check" preferred stock, which could be issued by our board of directors without stockholder approval and may contain voting, liquidation, dividend and other rights superior to our common stock;
- create a classified board of directors whose members serve staggered three-year terms;
- specify that special meetings of our stockholders can be called only by our board of directors or stockholders holding at least 25% of our outstanding voting stock;
- prohibit stockholder action by written consent;
- establish an advance notice procedure for stockholder approvals to be brought before an annual meeting of our stockholders, including proposed nominations of persons for election to our board of directors;
- provide that vacancies on our board of directors may be filled only by a majority of directors then in office, even if less than a quorum, or by the holders of a majority of the outstanding shares of capital stock then entitled to vote at an election of directors;
- specify that no stockholder is permitted to cumulate votes at any election of directors;
- expressly authorize our board of directors to modify, alter or repeal our amended and restated bylaws; and
- require supermajority votes of the holders of our common stock to amend specified provisions of our amended and restated certificate of incorporation and amended and restated bylaws.

These provisions, alone or together, could delay or prevent hostile takeovers and changes in control or changes in our management.

In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which limits the ability of stockholders owning in excess of 15% of our outstanding voting stock to merge or combine with us. Any provision of our amended and restated certificate of incorporation or amended and restated bylaws or Delaware law that has the effect of delaying or deterring a change in control could limit the opportunity for our stockholders to receive a premium for their shares of our common stock, and could also affect the price that some investors are willing to pay for our common stock.

We are party to a loan and security agreement that contains operating and financial covenants that may restrict our business and financing activities.

In June 2018 we entered into a loan and security agreement, the Loan and Security Agreement, with Hercules Capital, Inc., or Hercules, pursuant to which we were extended a term loan in the aggregate principal amount of up to $35.0 million. In December 2018, we entered into an amended and restated loan and security agreement, the Amended and Restated Loan and Security Agreement, with Hercules, pursuant to which we were extended an additional term loan in the aggregate principal amount of up to $20.0 million. The Amended and Restated Loan and Security Agreement may restrict our ability, among other things, to:

- sell, transfer or otherwise dispose of any of our business or property, subject to limited exceptions;
- make material changes to our business;

- enter into transactions resulting in significant changes to the voting control of our stock;
- make certain changes to our organizational structure;
- consolidate or merge with other entities or acquire other entities;
- incur additional indebtedness or create encumbrances on our assets;
- pay dividends, or make distributions on and, in certain cases, repurchase our stock;
- enter into transactions with our affiliates;
- repay subordinated indebtedness; or
- make certain investments.

In addition, we are required under our Amended and Restated Loan and Security Agreement to comply with various operating covenants and default clauses that may restrict our ability to finance our operations, engage in business activities or expand or fully pursue our business strategies. A breach of any of these covenants or clauses could result in a default under the Amended and Restated Loan and Security Agreement, which could cause all of the outstanding indebtedness under the facility to become immediately due and payable.

If we are unable to generate sufficient cash to repay our debt obligations when they become due and payable, we may not be able to obtain additional debt or equity financing on favorable terms, if at all, which may negatively affect our business operations and financial condition.

Under the Amended and Restated Loan and Security Agreement, we also have an obligation to pledge our equity interests in our subsidiaries. In addition, certain of our non-operating subsidiaries, which are subsidiaries other than those predominantly involved in advancing our development programs are also obligated to enter into a joinder agreement, whereby they shall also agree to comply with the terms of the Amended and Restated Loan and Security Agreement.

Our operating results may fluctuate significantly, which makes our future operating results difficult to predict and could cause our operating results to fall below expectations or our guidance.

Our quarterly and annual operating results may fluctuate significantly in the future, which makes it difficult for us to predict our future operating results. Our operating results may fluctuate due to a variety of factors, many of which are outside of our control and may be difficult to predict, including the following:

- the timing, results and cost of, and level of investment in, our clinical development activities for BBP-265, BBP-831, BBP-454 and BBP-631, and any other product candidates we may identify and pursue, which may change from time to time;
- the cost of manufacturing BBP-009 and the related materials or other product candidates that we may identify, which may vary depending on the quantity of production and the terms of agreements with manufacturers;
- our ability to conduct clinical trials of BBP-265, BBP-831, BBP-454 and BBP-631 in accordance with our plans and to obtain regulatory approval for BBP-265, BBP-831, BBP-454 and BBP-631 or other product candidates that we may identify, and the timing and scope of any such approvals we may receive;
- the timing and success or failure of clinical trials for competing product candidates, or any other change in the competitive landscape of our industry, including consolidation among our competitors or partners;
- expenditures that we or will or may incur to acquire or develop additional product candidates and technologies;
- Our ability to attract, hire and retain qualified personnel;

- the level of demand for BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify, should they receive approval, which may vary significantly;
- future accounting pronouncements or changes in our accounting policies;
- the risk/benefit profile, cost and reimbursement policies with respect to BBP-265, BBP-831, BBP-454, BBP-631 or other product candidates that we may identify, if approved, and existing and potential future drugs that compete with our product candidates; and
- the changing and volatile U.S., European and global economic environments.

The cumulative effects of these factors could result in large fluctuations and unpredictability in our quarterly and annual operating results. As a result, comparing our operating results on a period-to-period basis may not be meaningful. This variability and unpredictability could also result in our failing to meet the expectations of industry or financial analysts or investors for any period. If our operating results fall below the expectations of analysts or investors or below any forecasts we may provide to the market, or if the forecasts we provide to the market are below the expectations of analysts or investors, the price of our common stock could decline substantially.

Our future ability to utilize our net operating loss carryforwards and certain other tax attributes may be limited.

We have incurred substantial losses during our history and we do not expect to become profitable in the near future and we may never achieve profitability. To the extent that we continue to generate taxable losses, unused losses will carry forward to offset a portion of future taxable income, if any, subject to expiration of such carryforwards in the case of carryforwards generated prior to 2018. In addition, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, if a corporation undergoes an "ownership change," generally defined as a greater than 50 percentage point change (by value) in its equity ownership over a three-year period, the corporation's ability to use its pre-change net operating loss carryforwards, or NOLs, and other pre-change tax attributes (such as research and development tax credits) to offset its post-change income or taxes may be limited. Our prior equity offerings and other changes in our stock ownership may have resulted in such ownership changes. In addition, we may experience ownership changes in the future as a result of this offering or subsequent shifts in our stock ownership, some of which are outside of our control. As a result, if we earn net taxable income, our ability to use our pre-change NOLs to offset U.S. federal taxable income may be subject to limitations, which could potentially result in increased future tax liability to us. Additional limitations on our ability to utilize our NOLs to offset future taxable income may arise as a result of our corporate structure whereby NOLs generated by certain of our subsidiaries or controlled entities may not be available to offset taxable income earned by other subsidiaries, controlled entities or BridgeBio. In addition, under the Tax Act, the amount of post-2017 NOLs that we are permitted to deduct in any taxable year is limited to 80% of our taxable income in such year. The Tax Act generally eliminates the ability to carry back any NOLs to prior taxable years, while allowing post-2017 unused NOLs to be carried forward indefinitely. There is a risk that due to changes under the Tax Act, regulatory changes, or other unforeseen reasons, our existing NOLs could expire or otherwise be unavailable to offset future income tax liabilities. At the state level, there may also be periods during which the use of NOLs is suspended or otherwise limited, which could accelerate or permanently increase state taxes owed. For these reasons, we may not be able to realize a tax benefit from the use of our NOLs, even if we attain profitability.

Comprehensive tax reform legislation could adversely affect our business and financial condition.

On December 22, 2017, the Tax Act was signed into law. The Tax Act, among other things, contains significant changes to corporate taxation, including (i) reduction of the corporate tax rate from a top marginal rate of 35% to a flat rate of 21%, (ii) limitation of the tax deduction for interest expense to 30% of adjusted earnings (except for certain small businesses), (iii) limitation of the deduction for net operating losses to 80% of current year taxable

income in respect of net operating losses generated during or after 2018 and elimination of net operating loss carrybacks, (iv) one-time taxation of offshore earnings at reduced rates regardless of whether they are repatriated, (v) immediate deductions for certain new investments instead of deductions for depreciation expense over time, and (vi) modifying or repealing many business deductions and credits. Any federal net operating loss incurred in 2018 and in future years may now be carried forward indefinitely pursuant to the Tax Act. It is uncertain if and to what extent various states will conform to the newly enacted federal tax law. We will continue to examine the impact the Tax Act may have on our business.

We have never and do not currently intend to pay dividends on our common stock, and, consequently, our stockholders' ability to achieve a return on their investment will depend on appreciation in the price of our common stock.

We have never paid cash dividends on any of our capital stock and do not currently intend to pay any cash dividends on our common stock for the foreseeable future. In addition, pursuant to the Amended and Restated Loan and Security Agreement with Hercules, we are not permitted to declare or pay any cash dividends or make cash distributions on any class of our capital stock or any other equity interest, except in limited circumstances. We currently intend to invest our future earnings, if any, to fund our growth. Therefore, you are not likely to receive any dividends on your common stock for the foreseeable future. Since we do not intend to pay dividends, your ability to receive a return on your investment will depend on any future appreciation in the market value of our common stock. There is no guarantee that our common stock will appreciate or even maintain the price at which our holders have purchased it.

An active trading market for our common stock may not develop.

Prior to this offering, there has been no public market for shares of our common stock. Although our common stock has been approved for listing on the Nasdaq Global Market, an active trading market for our shares may never develop or be sustained following this offering. The initial public offering price of our common stock was determined through negotiations between us and the underwriters. This initial public offering price may not be indicative of the market price of our common stock after this offering. In the absence of an active trading market for our common stock, investors may not be able to sell their common stock at or above the initial public offering price or at the time that they would like to sell.

We will incur significant costs as a result of operating as a new public company, and our management will devote substantial time to new compliance initiatives.

As a public company, we will incur significant legal, accounting and other expenses that we did not incur as a private company. We will be subject to the reporting requirements of the Exchange Act, which will require, among other things, that we file with the SEC, annual, quarterly and current reports with respect to our business and financial condition and that of our consolidated subsidiaries. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and Nasdaq to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices.

Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation-related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as "say on pay" and proxy access. Recent legislation permits emerging growth companies to implement many of these requirements over a longer period and up to five years from the pricing of this offering. We intend to take advantage of this new legislation, but cannot guarantee that we will not be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition and results of operations. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business, including our subsidiaries. For example, we expect these rules and regulations to make it more difficult and more expensive for us to obtain director and officer liability insurance and we may be required to incur substantial costs to maintain the same or similar coverage. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus, including the sections entitled “Prospectus Summary,” “Risk Factors,” “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and “Business,” contains forward-looking statements, within the meaning of the Private Securities Litigation Reform Act of 1995, concerning our business, operations and financial performance and condition, as well as our plans, objectives and expectations for our business operations and financial performance and condition that are based on our management’s belief and assumptions and on information currently available to our management. Although we believe that the expectations reflected in these forward-looking statements are reasonable, these statements relate to our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans, objectives of management and expected market growth, and involve known and unknown risks, uncertainties and other factors that may cause our actual results, levels of activity, performance or achievements to be materially different from any future results, levels of activity, performance or achievements expressed or implied by these forward-looking statements. Forward-looking statements in this prospectus include, but are not limited to, statements about:

- the success, cost and timing of our clinical development of our product candidates, including the progress of, and results from, our ongoing and planned Phase 3 clinical trials of BBP-265 and our clinical trials of BBP-831;
- our ability to initiate, recruit and enroll patients in and conduct our clinical trials at the pace that we project;
- our ability to obtain and maintain regulatory approval of our product candidates, and any related restrictions, limitations or warnings in the label of any of our product candidates, if approved;
- our ability to compete with companies currently marketing or engaged in the development of treatments that our product candidates are designed to target;
- our reliance on third parties to conduct our clinical trials and to manufacture drug substance for use in our clinical trials;
- the size and growth potential of the markets for BBP-265, BBP-831, BBP-631, BBP-454 and any of our current product candidates or other product candidates we may identify and pursue, and our ability to serve those markets;
- our ability to identify and advance through clinical development any additional product candidates;
- the commercialization of our current product candidates and any other product candidates we may identify and pursue, if approved, including our ability to successfully build a specialty sales force and commercial infrastructure to market our current product candidates and any other product candidates we may identify and pursue;
- our ability to retain and recruit key personnel;
- our ability to obtain and maintain adequate intellectual property rights;
- our expectations regarding government and third-party payor coverage and reimbursement;
- our estimates of our expenses, ongoing losses, capital requirements and our needs for or ability to obtain additional financing;
- our expected uses of the net proceeds to us from this offering;
- our expectations regarding the time during which we will be an emerging growth company under the JOBS Act;
- our financial performance; and
- developments and projections relating to our competitors or our industry.

In some cases, you can identify forward-looking statements by terminology such as “may,” “will,” “should,” “expects,” “intends,” “plans,” “anticipates,” “believes,” “estimates,” “predicts,” “potential,” “continue” or the

negative of these terms or other comparable terminology. These statements are only predictions. You should not place undue reliance on forward-looking statements because they involve known and unknown risks, uncertainties and other factors, which are, in some cases, beyond our control and which could materially affect results. Factors that may cause actual results to differ materially from current expectations include, among other things, those listed under “Risk Factors” and elsewhere in this prospectus. If one or more of these risks or uncertainties occur, or if our underlying assumptions prove to be incorrect, actual events or results may vary significantly from those implied or projected by the forward-looking statements. No forward-looking statement is a guarantee of future performance. You should read this prospectus and the documents that we reference in this prospectus and have filed with the SEC as exhibits to the registration statement, of which this prospectus is a part, completely and with the understanding that our actual future results may be materially different from any future results expressed or implied by these forward-looking statements.

The forward-looking statements in this prospectus represent our views as of the date of this prospectus. We anticipate that subsequent events and developments will cause our views to change. However, while we may elect to update these forward-looking statements at some point in the future, we assume no obligation to update or revise any forward-looking statements except to the extent required by applicable law. You should, therefore, not rely on these forward-looking statements as representing our views as of any date subsequent to the date of this prospectus.

In addition, statements that “we believe” and similar statements reflect our beliefs and opinions on the relevant subject. These statements are based upon information available to us as of the date of this prospectus, and while we believe such information forms a reasonable basis for such statements, such information may be limited or incomplete, and our statements should not be read to indicate that we have conducted an exhaustive inquiry into, or review of, all potentially available relevant information. These statements are inherently uncertain and you are cautioned not to rely unduly upon these statements.

MARKET, INDUSTRY AND OTHER DATA

We obtained the industry, market and competitive position data used throughout this prospectus from our own internal estimates and research, as well as from independent market research, industry and general publications and surveys, governmental agencies and publicly available information in addition to research, surveys and studies conducted by third parties. Internal estimates are derived from publicly available information released by industry analysts and third-party sources, our internal research and our industry experience, and are based on assumptions made by us based on such data and our knowledge of our industry and market, which we believe to be reasonable. In some cases, we do not expressly refer to the sources from which this data is derived. In that regard, when we refer to one or more sources of this type of data in any paragraph, you should assume that other data of this type appearing in the same paragraph is derived from the same sources, unless otherwise expressly stated or the context otherwise requires. In addition, while we believe the industry, market and competitive position data included in this prospectus is reliable and based on reasonable assumptions, such data involve risks and uncertainties and are subject to change based on various factors, including those discussed in “Risk Factors.” These and other factors could cause results to differ materially from those expressed in the estimates made by the independent parties or by us.

USE OF PROCEEDS

We estimate that our net proceeds from the sale of shares of our common stock in this offering will be approximately $ million, or $ million if the underwriters exercise in full their option to purchase additional shares, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the net proceeds to us from this offering by $ million, assuming the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) our net proceeds from this offering by $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

We intend to use our current capital resources, together with the net proceeds from this offering for working capital and general corporate purposes.

We may also use a portion of the net proceeds to make additional investments in our non-wholly owned subsidiaries, or in-license, acquire or invest in new businesses, technology or assets. Although we have no current agreements, commitments or understandings with respect to any such additional investments or in-license or acquisition, we evaluate such opportunities and engage in related discussions with third parties from time to time.

We estimate that our current capital resources, along with the net proceeds from this offering, will be sufficient for us to fund our operating expenses and capital expenditure requirements through . We cannot guarantee that we will be able to raise additional capital on reasonable terms or at all.

This expected use of the net proceeds from this offering represents our intentions based upon our current plans and business conditions. As of the date of this prospectus, we cannot predict with certainty all of the particular uses for the net proceeds to be received upon the completion of this offering or the amounts that we will actually spend on the uses set forth above.

The amounts and timing of our actual expenditures and the extent of our research and development activities may vary significantly depending on numerous factors, including the progress of our development efforts, the status of and results from any preclinical or clinical trials we may commence in the future, our ability to take advantage of expedited programs or to obtain regulatory approval for any other product candidates we may identify and pursue, the timing and costs associated with the manufacture and supply of any other product candidates we may identify and pursue for clinical development or commercialization, and any unforeseen cash needs. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

We intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared or paid any cash dividends on our capital stock. We do not anticipate paying any dividends on our capital stock in the foreseeable future. We currently intend to retain all available funds and any future earnings to fund the development and growth of our business. Any future determination to declare dividends will be subject to the discretion of our board of directors and will depend on various factors, including applicable laws, our results of operations, financial condition, future prospects and any other factors deemed relevant by our board of directors. Investors should not purchase our common stock with the expectation of receiving cash dividends.

In addition, pursuant to the Amended and Restated Loan and Security Agreement with Hercules, we are not permitted to declare or pay any cash dividends or make cash distributions on any class of our capital stock or any other equity interest, except in limited circumstances.

REORGANIZATION

Existing LLC (BridgeBio Pharma LLC)

Currently, the capital structure of BridgeBio Pharma LLC consists of seven classes of membership units: management incentive units; common units; founder units; Series A preferred units; Series B preferred units; Series C preferred units; and Series D preferred units. The LLC entity is the direct parent company of the various subsidiaries of the LLC entity. The subsidiaries of the LLC entity are focused on identifying, acquiring, developing and, if approved, commercializing our product candidates under development.

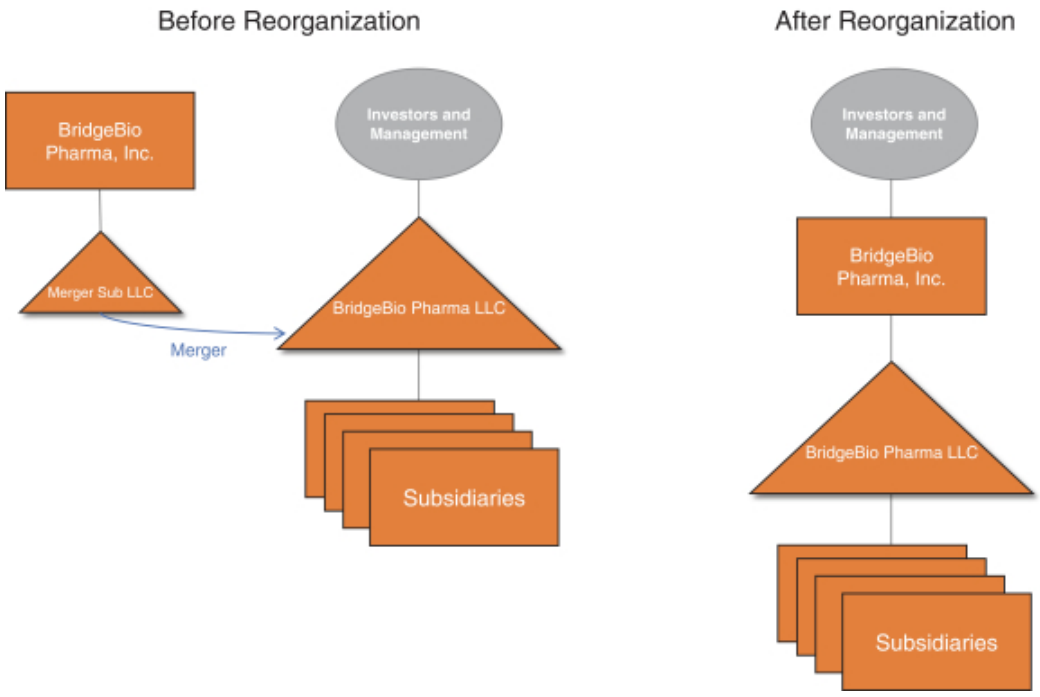
Corporate Reorganization

Prior to the completion of this offering, we intend to engage in a series of transactions, which we refer to collectively as the Reorganization. As a result of the Reorganization, we anticipate BridgeBio Pharma LLC will ultimately become a wholly-owned subsidiary of the Corporation, the Corporation will become the registrant for purposes of this offering and our combined and consolidated financial statements will be reported from the Corporation.

We believe the steps to the Reorganization will include:

- The Corporation will be formed as a Delaware corporation;
- The Corporation will create a Delaware limited liability company, or Merger Sub LLC, which will be a wholly-owned subsidiary of the Corporation;
- Merger Sub LLC will merge with and into BridgeBio Pharma LLC, with BridgeBio Pharma LLC as the surviving entity of the merger; and
- Any other steps necessary to effect the Corporation being the registrant for this offering and our combined consolidated financial statements being reported from the Corporation.

The chart below shows, on a simplified basis, our organizational structure immediately prior to and immediately following the Reorganization:



As part of the Reorganization, the holders of existing units in the LLC entity will exchange those units for shares of common stock of the Corporation, after which those holders will have received 100% of the outstanding capital stock of the Corporation as of immediately prior to the completion of the offering. The capital stock of the Corporation will be allocated to the holders of existing units in the LLC entity pursuant to the distribution provisions of the Fourth Amended and Restated Limited Liability Company Agreement of the LLC entity, or the LLC Agreement, based upon the liquidation value of the LLC entity, assuming it was liquidated immediately prior to the completion of this offering with a value implied by the assumed initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus. Shares of common stock of the Corporation will be allocated pursuant to the distribution provisions of the LLC Agreement as follows:

- holders of Series D preferred units of the LLC entity will receive shares of common stock of the Corporation, which is the aggregate distribution equal to the amount such holders are entitled to receive based on their Series D unit value in accordance with the LLC Agreement;
- holders of Series C preferred units and Series B preferred units of the LLC entity will receive shares of common stock of the Corporation, which is the aggregate distribution equal to the amount such holders are entitled to receive based on their Series C unit value and Series B unit value, respectively, in accordance with the LLC Agreement;
- holders of Series A preferred units of the LLC entity will receive shares of common stock of the Corporation, which is the aggregate distribution equal to the amount such holders are entitled to receive based on their Series A unit value in accordance with the LLC Agreement;
- holders of founder units and common units of the LLC entity will receive shares of common stock of the Corporation, which is the aggregate distribution equal to the amount such holders are entitled to receive based on their founder unit value and common unit value, respectively, in accordance with the LLC Agreement;

- holders of units other than Series D preferred units will receive shares of common stock of the Corporation, which is the aggregate distribution equal to the amount such holders are entitled to receive based on the applicable unit cap for such holders in accordance with the LLC Agreement; and
- holders of all units of BridgeBio Pharma LLC will receive shares of common stock of the Corporation, which reflects the remaining proceeds following the above distributions.

As a result of the Reorganization, the holders of existing units in BridgeBio Pharma LLC will collectively own shares of common stock of the Corporation.

Treatment of Outstanding Incentive Equity of BridgeBio Pharma LLC

In connection with the Reorganization, all of the outstanding incentive equity of BridgeBio Pharma LLC, which is currently comprised of management incentive units and common units of BridgeBio Pharma LLC, will be exchanged for shares of the common stock and restricted stock of BridgeBio Pharma, Inc. as provided for in the distribution provisions of the LLC Agreement. The portion of the outstanding management incentive units and common units of BridgeBio Pharma LLC that have vested as of the consummation of the Reorganization will be exchanged for shares of common stock of BridgeBio Pharma, Inc., and the remaining portion of unvested outstanding management incentive units and common units of BridgeBio Pharma LLC will be exchanged for shares of BridgeBio Pharma, Inc.'s restricted common stock. The shares of restricted common stock will be subject to time-based vesting conditions, in accordance with the terms and conditions of the management incentive units and common units of BridgeBio Pharma LLC from which such shares are exchanged.

Holding Company Structure

Following the consummation of the Reorganization, BridgeBio Pharma, Inc. will be a holding company, and its sole material asset will be 100% of the membership units in BridgeBio Pharma LLC. As the sole and managing member of BridgeBio Pharma LLC, BridgeBio Pharma, Inc. will operate and control all of the business and affairs of BridgeBio Pharma LLC and its subsidiaries, through which we conduct our business. BridgeBio Pharma, Inc. will consolidate the financial results of its subsidiaries, including BridgeBio Pharma LLC and its subsidiaries. Pursuant to the LLC Agreement following the Reorganization, BridgeBio Pharma, Inc. will have the right to determine when distributions will be made to BridgeBio Pharma, Inc. and the amount of any such distributions.

CAPITALIZATION

The following table sets forth our cash and cash equivalents and our capitalization as of December 31, 2018:

- on an actual basis;
- on a pro forma basis to give effect to:
  - the Reorganization; and
  - the filing and effectiveness of our amended and restated certificate of incorporation; and
- on a pro forma as adjusted basis to give further effect to our issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The pro forma and pro forma as adjusted information below is illustrative only, and our capitalization following the completion of this offering will be adjusted based on the actual initial public offering price and other terms of this offering determined at pricing. You should read this table together with our combined and consolidated financial statements and the related notes appearing at the end of this prospectus and the sections of this prospectus titled "Reorganization," "Selected Combined and Consolidated Financial Data" and "Management's Discussion and Analysis of Financial Condition and Results of Operations."

	At December 31, 2018		
	Actual	Pro Forma	Pro Forma As Adjusted(1)
	(in thousands, except share, unit, per share and per unit data)		
Cash and cash equivalents	$ 436,086	$	$
Total long-term debt obligations	$ 54,507	$	$
Redeemable convertible preferred units (Series A, Series B, Series C and Series D); no par value; 407,955,726 units authorized, issued and outstanding, actual; par value; units authorized; units issued and outstanding, pro forma; par value; units authorized; units issued and outstanding, pro forma as adjusted	$ 478,865		
Redeemable founder units; no par value; 11,420,741 units authorized, issued and outstanding, actual; par value; units authorized; units issued and outstanding, pro forma; par value; units authorized; units issued and outstanding, pro forma as adjusted	1,754		
Redeemable common units; no par value; 9,098,522 units authorized; 7,197,783 units issued and outstanding, actual; par value; units authorized; units issued and outstanding, pro forma; par value; units authorized; units issued and outstanding, pro forma as adjusted	1,619		
Management incentive units; no par value; 48,695,602 units authorized; 19,117,628 units issued and outstanding, actual; par value; units authorized; units issued and outstanding, pro forma; par value; units authorized; units issued and outstanding, pro forma as adjusted	3,221		
Redeemable convertible noncontrolling interests	122		
Members' equity (deficit), actual and pro forma; Stockholders' equity, pro forma as adjusted:			
Common stock; no par value; no shares authorized, issued and outstanding, actual; $ par value per share, shares authorized, shares issued and outstanding, pro forma; $ par value per share, shares authorized, shares issued and outstanding, pro forma as adjusted	—		
Accumulated deficit	(170,580)		
Total BridgeBio Pharma LLC members' deficit, actual and pro forma; Total BridgeBio Pharma, Inc. equity, pro forma as adjusted	(170,580)		
Noncontrolling interests	62,361		
Total members' deficit, actual and pro forma; Total stockholders' equity, pro forma as adjusted	(108,219)		
Total capitalization	$ 377,362	$	$

(1) A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of

each of cash and cash equivalents, total stockholders' equity and total capitalization by $ million, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the pro forma as adjusted amount of each of cash and cash equivalents, total stockholders' equity and total capitalization by $ million, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The number of shares of our common stock to be outstanding after this offering assumes the Reorganization takes place prior to the completion of this offering and is based on shares of our common stock (which includes shares of restricted common stock, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus) outstanding as of December 31, 2018, which assumes the exchange of all outstanding units of BridgeBio Pharma LLC as of December 31, 2018 for an aggregate of shares of common stock of BridgeBio Pharma, Inc. immediately prior to the completion of this offering, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus (see "Reorganization").

The table above does not include:

- shares of our common stock reserved for issuance under our 2019 Stock Option and Incentive Plan, which will become effective in connection with this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under our 2019 Stock Option and Incentive Plan; and
- shares of our common stock reserved for issuance under our 2019 Employee Stock Purchase Plan, which will become effective in connection with this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under our 2019 Employee Stock Purchase Plan.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the initial public offering price per share of our common stock and the pro forma as adjusted net tangible book value per share of our common stock immediately after this offering.

Our historical net tangible book value (deficit) and historical net tangible book value (deficit) per share have not been presented as there were no common shares outstanding as of December 31, 2018.

Our pro forma net tangible book value as of December 31, 2018 was $ million, or $ per share of our common stock. Pro forma net tangible book value represents the amount of our total tangible assets less our total liabilities, after giving effect to the Reorganization. Pro forma net tangible book value per share represents pro forma net tangible book value divided by the total number of shares outstanding as of December 31, 2018 after giving effect to the pro forma adjustments described above.

After giving further effect to our issuance and sale of shares of our common stock in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us, our pro forma as adjusted net tangible book value as of December 31, 2018 would have been $ million, or $ per share. This represents an immediate increase in pro forma as adjusted net tangible book value per share of $ to existing stockholders and immediate dilution of $ in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting pro forma as adjusted net tangible book value per share after this offering from the assumed initial public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Assumed initial public offering price per share		$
Pro forma net tangible book value per share as of December 31, 2018	$	
Increase in pro forma as adjusted net tangible book value per share attributable to new investors purchasing common stock in this offering		
Pro forma as adjusted net tangible book value per share after this offering		
Dilution per share to new investors purchasing common stock in this offering		$

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value per share after this offering by $ and dilution per share to new investors purchasing common stock in this offering by $, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. An increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) our pro forma as adjusted net tangible book value per share after this offering by $ and increase (decrease) the dilution per share to new investors purchasing common stock in this offering by $, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

If the underwriters fully exercise their option to purchase additional shares of common stock in this offering, our pro forma as adjusted net tangible book value per share after this offering would be $ and the dilution in pro forma as adjusted net tangible book value per share to new investors purchasing common stock in this offering would be $, assuming no change in the assumed initial public offering price per share and after deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us.

The following table summarizes, as of December 31, 2018, on the pro forma as adjusted basis described above, the total number of shares of common stock purchased from us, the total consideration paid or to be paid, and the average price per share paid or to be paid by existing stockholders and by new investors in this offering at an assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, before deducting estimated underwriting discounts and commissions and estimated offering expenses payable by us. As the table shows, new investors purchasing common stock in this offering will pay an average price per share substantially higher than our existing stockholders paid.

	Shares Purchased		Total Consideration		Average Price Per Share
	Number	Percent	Amount	Percent	
Existing stockholders		%	$	%	$
New investors					
Total		%	$	%	$

A $1.00 increase (decrease) in the assumed initial public offering price of $ per share, which is the midpoint of the price range set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by new investors by $ million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by percentage points, assuming that the number of shares offered by us, as set forth on the cover page of this prospectus, remains the same. An increase (decrease) of 1,000,000 shares in the number of shares offered by us, as set forth on the cover page of this prospectus, would increase (decrease) the total consideration paid by new investors by $ million and, in the case of an increase, would increase the percentage of total consideration paid by new investors by percentage points and, in the case of a decrease, would decrease the percentage of total consideration paid by new investors by percentage points, assuming no change in the assumed initial public offering price per share.

The table above assumes no exercise of the underwriters' option to purchase additional shares in this offering. If the underwriters' option to purchase additional shares is fully exercised, the number of shares of our common stock held by existing stockholders would be reduced to % of the total number of shares of our common stock outstanding after this offering, and the number of shares of common stock held by new investors purchasing common stock in this offering would be increased to % of the total number of shares of our common stock outstanding after this offering.

The table above is based on no shares of common stock outstanding as of December 31, 2018 and gives effect to the Reorganization.

The table above does not include:

- shares of our common stock reserved for issuance under our 2019 Stock Option and Incentive Plan, which will become effective in connection with this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under our 2019 Stock Option and Incentive Plan; and
- shares of our common stock reserved for issuance under our 2019 Employee Stock Purchase Plan, which will become effective in connection with this offering, as well as any future increases in the number of shares of our common stock reserved for issuance under our 2019 Employee Stock Purchase Plan.

If common stock options or share appreciation rights are issued under our equity incentive plan, or if we issue additional shares of common stock in the future, there will be further dilution to investors purchasing common stock in this offering.

SELECTED COMBINED AND CONSOLIDATED FINANCIAL DATA

The following information is presented for BridgeBio Pharma LLC, which will become a wholly owned subsidiary of BridgeBio Pharma, Inc., the entity whose shares are being offered hereby. You should read the following selected combined and consolidated financial data together with our combined and consolidated financial statements and the related notes appearing at the end of this prospectus and the "Management's Discussion and Analysis of Financial Condition and Results of Operations" section of this prospectus. We have derived the combined and consolidated statements of operations and comprehensive loss data for the years ended December 31, 2017 and 2018 and our combined and consolidated balance sheet data for the years ended December 31, 2017 and 2018 from our audited combined and consolidated financial statements appearing at the end of this prospectus. Our historical results are not necessarily indicative of the results that may be expected in the future.

	Year Ended December 31,	
	2017	2018
	(in thousands, except share, unit, per share and per unit data)	
Combined and Consolidated Statements of Operations and Comprehensive Loss:		
Operating expenses:		
Research and development	$ 30,556	$ 140,073
General and administrative	13,302	43,587
Total operating expenses	43,858	183,660
Loss from operations	(43,858)	(183,660)
Other income (expense), net:		
Interest income	39	2,004
Interest expense	(13)	(2,547)
Gain on deconsolidation of PellePharm	—	19,327
Loss from PellePharm	—	(275)
LEO call option expense	—	(3,009)
Other expense	—	(1,291)
Total other income (expense), net	26	14,209
Net loss and comprehensive loss	(43,832)	(169,451)
Net loss attributable to redeemable convertible noncontrolling interests and noncontrolling interests	13,267	38,702
Net loss and comprehensive loss attributable to BridgeBio	$ (30,565)	$ (130,749)
Cumulative returns on redeemable convertible preferred units (Series A, Series B and Series C)	(5,672)	(13,287)
Net loss attributable to redeemable founder units and redeemable common units	$ (36,237)	$ (144,036)
Net loss per unit attributable to redeemable founder unitholders and redeemable common unitholders, basic and diluted	$ (2.18)	$ (8.01)
Total weighted-average redeemable founder units and redeemable common units used in computing net loss per unit, basic and diluted	16,650,073	17,991,781
Pro forma net loss per share, basic and diluted (unaudited)(1)		$
Pro forma weighted average common shares outstanding, basic and diluted (unaudited)(1)		

(1) Immediately prior to the completion of this offering, we will complete a series of transactions pursuant to which BridgeBio Pharma LLC will become a wholly owned subsidiary of BridgeBio Pharma, Inc., a newly formed Delaware corporation. As part of the transactions, unitholders of BridgeBio Pharma LLC will exchange their units of BridgeBio Pharma LLC for shares of BridgeBio Pharma, Inc. These transactions are collectively referred to as the Reorganization. See the section of this prospectus titled "Reorganization."

	As of December 31,	
	2017	2018
	(in thousands)	
Combined and Consolidated Balance Sheet Data:		
Cash and cash equivalents	$ 91,995	$ 436,086
Working capital(1)	88,581	412,646
Total assets	98,044	464,941
Total long-term debt obligations	—	54,507
Redeemable convertible preferred units	143,867	478,865
Redeemable founder units	1,754	1,754
Redeemable common units	1,431	1,619
Accumulated deficit	(61,427)	(170,580)
Noncontrolling interests	2,498	62,361
Total members' deficit	(58,929)	(108,219)

(1) We define working capital as current assets less current liabilities.

MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS

You should read the following discussion and analysis of our financial condition and results of operations together with the section of this prospectus entitled "Selected Combined and Consolidated Financial Data" and our combined and consolidated financial statements and related notes included elsewhere in this prospectus. This discussion and other parts of this prospectus contain forward-looking statements that involve risks and uncertainties, such as statements of our plans, objectives, expectations, intentions and beliefs. Our actual results could differ materially from those discussed in these forward-looking statements. Factors that could cause or contribute to such differences include, but are not limited to, those identified below and those discussed in the section entitled "Risk Factors" included elsewhere in this prospectus.

Overview

We are a team of experienced drug discoverers, developers, and innovators working to create life-altering medicines that target well-characterized genetic diseases at their source. We founded BridgeBio in 2015 to identify and advance transformative medicines to treat patients who suffer from Mendelian diseases, which are diseases that arise from defects in a single gene, and cancers with clear genetic drivers. Our pipeline of over 15 development programs includes product candidates ranging from early discovery to late-stage development. Several of our programs target indications that we believe present the potential for our product candidate, if approved, to target portions of market opportunities of at least $1.0 billion in annual sales, and we have four product candidates that are currently in registrational trials, which are trials we believe could support the filing of an application for marketing authorization.

We focus on genetic diseases because they exist at the intersection of high unmet patient need and tractable biology. Our approach is to translate research pioneered at academic laboratories and leading medical institutions into products that we hope will ultimately reach patients. We are able to realize this opportunity through a confluence of scientific advances: (i) identification of the genetic underpinnings of disease as more cost-efficient genome and exome sequencing becomes available; (ii) progress in molecular biology; and (iii) the development and maturation of longitudinal data and retrospective studies that enable the linkage of genes to diseases. We believe that this often-overlooked early-stage innovation represents one of the greatest practical sources for new drug creation.

Since our inception in 2015, we have focused substantially all of our efforts and financial resources on acquiring and developing product and technology rights, building our intellectual property portfolio and conducting research and development activities for our product candidates within our wholly-owned subsidiaries and controlled entities, including partially-owned subsidiaries and subsidiaries we consolidate based on our deemed majority control of such entities as determined using either the variable interest entity, or VIE model, or the voting interest entity, or VOE model. To support these activities, we and our wholly-owned subsidiary, BridgeBio Services, Inc., (i) identify and secure new programs, (ii) set up new wholly-owned subsidiaries and controlled entities, (iii) recruit key management team members, (iv) raise and allocate capital across the portfolio and (v) provide certain shared services, including accounting and human resources, as well as workspaces. We do not have any products approved for sale and have not generated any revenue from product sales. To date, we have funded our operations with proceeds from the sale of our equity securities and, to a lesser extent, debt borrowings.

As of December 31, 2018, we had cash and cash equivalents of $436.1 million. Since our inception, we have incurred significant operating losses. For the years ended December 31, 2017 and 2018, we incurred net losses of $43.8 million and $169.5 million, respectively, and had an accumulated deficit as of December 31, 2018 of $170.6 million. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of our product candidates at our wholly-owned subsidiaries and controlled entities. We expect to continue to incur significant expenses and increasing operating losses for at least the next several years.

Factors Affecting Comparability

Our historical financial condition and results of operations for the periods presented may not be comparable, either between periods or going forward due to the factors described below.

Eidos Therapeutics, Inc. 2018 Financing Transactions and IPO:

In February 2018, we entered into a note and warrant purchase agreement with Eidos pursuant to which Eidos issued a convertible promissory note, or the Eidos Note, with the principal amount of $10.0 million and a warrant to purchase a number of shares of preferred stock equal to $4.0 million at the price paid by investors in the next equity financing, or the Eidos Warrant. In March 2018, we transferred 10% or $1.0 million of our interest in the Eidos Note and the Eidos Warrant to a minority stockholder of Eidos. In March 2018, the Eidos Note was redeemed into shares of Series B redeemable convertible preferred stock of Eidos at a 30% discount to the price paid by other investors. In conjunction with these transactions, Eidos recognized a preferred stock warrant liability, tranche liability and an embedded derivative, which were recorded at fair value at inception and remeasured to fair value at each subsequent reporting date until the instruments were settled. In 2018, we recorded $1.3 million in other income (expense) in the combined and consolidated statements of operations related to these 2018 Eidos financing transactions. All of these Eidos financial instruments were settled during 2018.

In June 2018, Eidos completed its initial public offering, or the Eidos IPO. All redeemable convertible preferred stock of Eidos was converted into common stock at the closing of the Eidos IPO. As part of the Eidos IPO, we purchased common stock of $17.0 million. The Eidos Warrant was also net exercised upon the completion of the Eidos IPO. We previously determined that Eidos was a controlled VIE as of December 31, 2017 and through its initial public offering in June 2018, at which time we determined that Eidos is no longer a VIE. Subsequent to the Eidos IPO and through December 31, 2018, we held a majority voting interest in Eidos and consolidate Eidos under the VOE model.

PellePharm, Inc. Transactions:

PellePharm entered into a series of agreements, or the LEO Agreement, with LEO Pharma A/S, or LEO, in November 2018. As part of the LEO Agreement, we granted LEO an exclusive, irrevocable option, or the LEO Call Option, to acquire all of PellePharm's shares held by us. The LEO Call Option is exercisable by LEO on or before the occurrence of certain events relating to PellePharm's clinical development programs and no later than July 30, 2021. We account for the LEO Call Option as a current liability in our combined and consolidated financial statements because we are obligated to sell our shares in PellePharm to LEO at a pre-determined price, if the option is exercised. The fair value of the LEO Call Option on issuance was $1.9 million. We will remeasure the LEO Call Option to fair value at each subsequent combined and consolidated balance sheet date until the LEO Call Option is either exercised or expires. We previously determined that we were the primary beneficiary of PellePharm, as of December 31, 2017 and through the date of execution of the LEO Agreement in November 2018. At the time of execution, we concluded that we are no longer the primary beneficiary of, and thus deconsolidated, PellePharm. Subsequent to the LEO Agreement, we account for our retained investment in PellePharm under the equity method and cost method.

Basis of Presentation and Consolidation

Prior to June 2017, we consisted of two separate legal entities, BridgeBio LLC and BridgeBio Pharma LLC. Historically, our members have provided funding to both entities. In June 2017, to consolidate the investments made in both entities, BridgeBio LLC and BridgeBio Pharma LLC merged through a transaction under common control, or the Merger. As part of the Merger, BridgeBio LLC's redeemable convertible Series A preferred units, redeemable convertible Series B preferred units, redeemable founder units and redeemable common units were cancelled and holders of such units were issued the same number of BridgeBio Pharma LLC's redeemable

convertible Series A preferred units, redeemable convertible Series B preferred units, redeemable founder units and redeemable common units. As a result of the Merger, we recorded a capital transaction of $4.5 million to accumulated deficit in June 2017, which represents the difference between the carrying amounts of the cancelled and newly issued units. As a result of the Merger, there was no gain or loss recognized at BridgeBio LLC for tax purposes.

Except as otherwise indicated or the context otherwise requires, all information included herein is presented giving effect to the Merger.

Since our inception, we have created wholly-owned subsidiaries or made investments in certain controlled entities, including partially-owned subsidiaries for which we have majority voting interest under the VOE model or for which we are the primary beneficiary under the VIE model, which we refer to collectively as our consolidated entities. Ownership interests in entities over which we have significant influence, but not a controlling financial interest, are accounted for as cost and equity method investments. Ownership interests in consolidated entities that are held by entities other than us are reported as redeemable convertible noncontrolling interests and noncontrolling interests in our combined and consolidated balance sheets. Losses attributed to redeemable convertible noncontrolling interests and noncontrolling interests are reported separately in our combined and consolidated statements of operations and comprehensive loss.

We have either created or made investments in the following entities, which are consolidated in our combined and consolidated financial statements, with the exception of PellePharm as discussed above:

Consolidated Entities	Relationship as of December 31, 2018	Date control first acquired	Ownership % as of January 1, 2017	Ownership % as of December 31, 2017	Ownership % as of December 31, 2018
TheRas, Inc.	Wholly-owned subsidiary	August 2016	100%	100%	100%
BridgeBio Services, Inc.	Wholly-owned subsidiary	April 2017	—	100%	100%
Origin Biosciences, Inc.	Wholly-owned subsidiary	April 2018	—	—	100%
Fortify Therapeutics, Inc.	Wholly-owned subsidiary	June 2018	—	—	100%
Sub20, Inc.	Wholly-owned subsidiary	June 2018	—	—	100%
Unnamed Entity	Wholly-owned subsidiary	December 2018	—	—	100%
Eidos Therapeutics, Inc.(1)	Partially-owned subsidiary	April 2016	53.8%	79.9%	62.5%
Molecular Skin Therapeutics, Inc.	Controlled VIE	July 2016	80%	56.5%	61.7%
Quartz Therapeutics, Inc.	Controlled VIE	October 2016	100%	89.0%	89.0%
PellePharm, Inc.(2)	VIE	December 2016	52.6%	54.7%	52.1%
Navire Pharma, Inc.	Controlled VIE	February 2017	—	80.0%	78.8%
CoA Therapeutics, Inc.	Controlled VIE	February 2017	—	100%	99.5%
Dermecular Therapeutics, Inc.	Controlled VIE	April 2017	—	86.0%	87.6%
Phoenix Tissue Repair, Inc.	Controlled VIE	July 2017	—	23.0%	56.7%
QED Therapeutics, Inc.	Controlled VIE	January 2018	—	—	94.4%
Adrenas Therapeutics, Inc.	Controlled VIE	January 2018	—	—	90.1%
Orfan Biotech, Inc.	Controlled VIE	January 2018	—	—	85.1%
Ferro Therapeutics, Inc.	Controlled VIE	March 2018	—	—	89.4%
Venthera, Inc.	Controlled VIE	April 2018	—	—	82.0%
Aspa Therapeutics, Inc.	Controlled VIE	June 2018	—	—	92.5%

(1) We previously determined that Eidos was a controlled VIE as of December 31, 2017 and through its initial public offering in June 2018, at which time we determined that Eidos was no longer a VIE. Subsequent to the Eidos IPO and through December 31, 2018, we have held a majority voting interest in Eidos and consolidate Eidos under the VOE model.

(2) We previously determined that we were the primary beneficiary of PellePharm through the date of execution of the Leo Agreement in November 2018, at which time we determined that we are no longer the primary beneficiary and deconsolidated PellePharm.

Financial Operations Overview

Revenue

To date, we have not generated any revenue from product sales and do not expect to generate any revenue from the sale of products in the foreseeable future. If our development efforts for our product candidates are successful and result in regulatory approval, we may generate revenue in the future from product sales. We cannot predict if, when, or to what extent we will generate revenue from the commercialization and sale of our product candidates. We may never succeed in obtaining regulatory approval for any of our product candidates.

Operating Expenses

Research and Development Expenses

Research and development expenses consist primarily of costs incurred for our research activities, including our drug discovery efforts, and the development of our product candidates, which include:

- employee-related expenses, including salaries, related benefits, equity-based compensation and travel expenses for employees engaged in research and development functions;
- expenses incurred in connection with the preclinical and clinical development of our product candidates, including under agreements with contract research organizations, or CROs;
- the cost of consultants and contract manufacturing organizations, or CMOs, that manufacture drug products for use in our preclinical studies and clinical trials;
- facilities, depreciation and amortization, insurance and other direct and allocated expenses incurred as a result of research and development activities; and
- payments made under third-party licensing and asset acquisition agreements.

We expense research and development costs as incurred. Nonrefundable advance payments that we make for goods or services to be received in the future for use in research and development activities are recorded as prepaid expenses. The prepaid amounts are expensed as the related goods are delivered or the services are performed.

Our direct research and development costs are tracked on a program-by-program basis and consist primarily of external costs, such as fees paid to consultants, contractors, CMOs and CROs in connection with our preclinical and clinical development activities. License fees and other costs incurred after a product candidate has been designated and that are directly related to the product candidate are included in direct research and development expenses for that program. License fees and other costs incurred prior to designating a product candidate are included in early stage research programs.

The following table summarizes our research and development expenses by program incurred for the following periods:

	Year ended December 31,	
	2017	2018
	(in thousands)	
BBP-265 (Eidos)	$ 9,286	$ 28,539
BBP-831 (QED)	444	42,726
BBP-631 (Adrenas)	446	8,848
BBP-454 (TheRas)	997	3,663
BBP-009 (PellePharm)(1)	10,995	17,975
Other Programs	8,388	38,322
Total	$30,556	$140,073

(1) Results for PellePharm for 2018 are through the deconsolidation date in November 2018.

We have separately provided additional detail for the research and development expenses incurred in connection with the research and development activities conducted for the product candidates being developed by Eidos, QED, Adrenas, and TheRas, certain of our consolidated entities, as we believe they represent key portfolio value drivers. We have provided additional detail for BBP-009 (PellePharm) as it is the first of our product candidates for which a third party has provided research and development funding and secured an option to acquire. Subsequent to the LEO Agreement through which LEO has obtained the irrevocable option to acquire PellePharm, PellePharm is accounted for as an equity method and cost method investment and we record our percentage of the net income/loss associated with our percentage of PellePharm ownership under the equity method. Expenses for other programs in the table above represent the research and development expenses incurred by us in connection with research on our programs conducted by all of our other consolidated entities.

We are heavily dependent on the success of our product candidates, many of which are in preclinical or the early stages of clinical development, which is a lengthy and expensive process with uncertain outcomes and the potential for substantial delays. We cannot give any assurance that any of our product candidates will receive regulatory approval, which is necessary before they can be commercialized.

Product candidates in later stages of clinical development generally have higher development costs than those in earlier stages of clinical development, primarily due to the increased size and duration of later-stage clinical trials. We expect that our research and development expenses will increase substantially in connection with our planned clinical and preclinical development activities in the near term and in the future. In particular, we expect to incur significant near-term research and development expenses in connection with our ongoing Phase 3 clinical trial of BBP-265 in ATTR-CM, our planned Phase 3 clinical trial of BBP-265 in ATTR-PN and our planned Phase 3 clinical trials for BBP-831 in adjuvant urothelial carcinoma.

General and Administrative Expenses

Our general and administrative costs consist primarily of employee-related costs, travel expenses, expenses for outside professional services, including legal, human resource, audit, accounting and tax services, and allocated facilities-related costs. Employee-related costs include salaries, related benefits and equity-based compensation expense. We expect to incur additional expenses as a result of this offering and operating as a public company, including expenses related to compliance with the rules and regulations of the SEC and listing standards applicable to companies listed on a national securities exchange, additional insurance expenses, investor relations activities and other administrative and professional services. We also expect to increase the size of our administrative, finance and legal functions to support the anticipated growth of our business.

Other Income (Expense), Net

Interest Income

Interest income consists of interest income earned on our cash and cash equivalents.

Interest Expense

Interest expense consists primarily of interest expense incurred under our term loans with Hercules Capital, Inc., or “Hercules”.

Gain on Deconsolidation of PellePharm

After execution of the LEO Agreement, we concluded that PellePharm should be deconsolidated and we recorded our retained interest in PellePharm at fair value, resulting in a gain being recognized.

Loss from PellePharm

We recognize our share of losses from the PellePharm equity method investment as incurred.

LEO Call Option Expense

We account for the LEO Call Option as a current liability as we have the obligation to sell our PellePharm shares to LEO at a pre-determined price if the LEO Call Option is exercised. The LEO Call Option can be exercised at any time through the maturity date. The LEO Call Option was recorded at fair value on the date the option agreement was entered into with LEO in November 2018. The LEO Call Option is subject to remeasurement to fair value at each combined and consolidated balance sheet date until the LEO Call Option is either exercised or expires.

Other Expense

Other expense consists primarily of the change in fair value of the Eidos financial instruments issued and settled in 2018 and other miscellaneous expenses unrelated to our core operations.

Income Taxes

BridgeBio Pharma LLC is a "pass-through" entity under the Internal Revenue Code of 1986, as amended, or the Code, and the members are taxed directly on their respective ownership interests in the combined and consolidated income. Therefore, no provision or liability for federal income tax has been included in our combined and consolidated financial statements. For our consolidated entities, income taxes are accounted for under the asset and liability method. Under this method, deferred income tax assets and liabilities are determined based upon the difference between the consolidated financial statement carrying amounts and the tax basis of assets and liabilities and are measured using the enacted tax rate expected to apply to taxable income in the years in which the differences are expected to be reversed.

As of December 31, 2018, we had net operating losses of approximately $157.5 million and $101.8 million for federal and state income tax purposes, respectively, available to reduce future taxable income, if any. The net operating losses will begin to expire in 2033.

As of December 31, 2018, we had federal research and development credit carryforwards of $4.2 million, which will expire beginning in 2033 if not utilized. As of December 31, 2018, we had California research and development credit carryforwards of $0.8 million. The California research and development tax credits have no expiration date.

A valuation allowance is provided for deferred tax assets where the recoverability of the assets is uncertain. The determination to provide a valuation allowance is dependent upon the assessment of whether it is more likely than not that sufficient future taxable income will be generated to utilize the deferred tax assets. Based on the weight of the available evidence, which includes our consolidated entities historical operating losses and forecast of future losses, we have provided a full valuation allowance against the deferred tax assets resulting from the tax loss and credits carried forward.

Utilization of the net operating loss and credit carryforwards may be subject to a substantial annual limitation due to an ownership change limitation as provided by section 382 of the Code, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. In the event that we have a change of ownership, utilization of the net operating loss and tax credit carryforwards may be restricted.

Net Loss Attributable to Redeemable Convertible Noncontrolling Interests and Noncontrolling Interests

Net loss attributable to noncontrolling interests in our combined and consolidated statements of operations is a result of our investments in our consolidated entities, which include PellePharm, Inc. (through November 2018),

Eidos Therapeutics, Inc., QED Therapeutics, Inc., Adrenas Therapeutics, Inc., Orfan Biotech, Inc., Venthera, Inc., Aspa Therapeutics, Inc., Phoenix Tissue Repair, Inc., Quartz Therapeutics, Inc., Navire Pharma, Inc., Ferro Therapeutics, Inc., Dermecular Therapeutics, Inc., Molecular Skin Therapeutics, Inc., CoA Therapeutics, Inc. and consists of the portion of the net loss of those consolidated entities that is not allocated to us. Changes in the amount of net loss attributable to noncontrolling interests are directly impacted by changes in the net loss of our consolidated entities and are the result of ownership percentage changes.

Critical Accounting Polices and Estimates

Our management's discussion and analysis of our financial condition and results of operations is based on our combined and consolidated financial statements, which have been prepared in accordance with United States generally accepted accounting principles. The preparation of these combined and consolidated financial statements requires us to make estimates and assumptions that affect the reported amounts of assets, liabilities, and the disclosure of contingent assets and liabilities at the date of the combined and consolidated financial statements, as well as revenue and expenses incurred during the reporting periods. Our estimates are based on our historical experience and on various other factors that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying value of assets and liabilities that are not readily apparent from other sources. Actual results may differ from these estimates under different assumptions or conditions.

While our significant accounting policies are described in more detail in Note 2 to our combined and consolidated financial statements included elsewhere in this prospectus, we believe that the following accounting policies are those most critical to the judgments and estimates used in the preparation of our combined and consolidated financial statements.

Variable Interest Entities ("VIE") and Voting Interest Entities ("VOE")

We consolidate those entities in which we have a direct or indirect controlling financial interest based on either the VIE model or the VOE model.

VIEs are entities that, by design, either: (i) lack sufficient equity to permit the entity to finance its activities without additional support from other parties; or (ii) have equity holders that do not have the ability to make significant decisions relating to the entity's operations through voting rights, or do not have the obligation to absorb the expected losses, or do not have the right to receive the residual returns of the entity.

The primary beneficiary of a VIE is required to consolidate the assets and liabilities of the VIE. The primary beneficiary is the party that has both the power to direct the activities of the VIE that most significantly impact the VIE's economic performance and the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE through its interest in the VIE.

To assess whether we have the power to direct the activities of a VIE that most significantly impact the VIE's economic performance, we consider all of the facts and circumstances, including our role in establishing the VIE and our ongoing rights and responsibilities. Our assessment includes identifying the activities that most significantly impact the VIE's economic performance and identifying which party, if any, has power over those activities. In general, the parties that make the most significant decisions affecting the VIE (management and representation on the board of directors) and have the right to unilaterally remove those decision-makers are deemed to have the power to direct the activities of a VIE.

To assess whether we have the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE, we consider all of our economic interests, which primarily include equity investments in preferred and common stock and issuance of notes that are convertible into preferred stock, that are deemed to be variable interests in the VIE. This assessment requires us to apply

judgment in determining whether these interests, in the aggregate, are considered potentially significant to the VIE. Factors considered in assessing the significance include: the design of the VIE, including its capitalization structure; subordination of interests; payment priority; relative share of interests held across various classes within the VIE's capital structure; and the reasons why the interests are held by us.

At the VIE inception, we determine whether we are the primary beneficiary and if the VIE should be consolidated based on the facts and circumstances. We then perform ongoing reassessments at each reporting period on whether changes in the facts and circumstances regarding our involvement with the VIE results in a change to our consolidation conclusion.

Entities that do not qualify as a VIE are assessed for consolidation under the VOE model. Under the VOE model, we consolidate an entity if we determine that we, directly or indirectly, have greater than 50% of the voting shares and that other equity holders in such entities do not have substantive voting, participating or liquidation rights.

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development costs consist of salaries, benefits, and other personnel related costs, including equity-based compensation expense, laboratory supplies, preclinical studies, clinical trials and related clinical manufacturing costs, costs related to manufacturing preparations, fees paid to other entities to conduct certain research and development activities on our behalf, and allocated facility and other related costs. Non-refundable advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized as prepaid expenses until the related goods are delivered or services are performed.

Accrued Research and Development Liabilities

We record accrued liabilities for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical studies and clinical trials, and contract manufacturing activities. We record the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced, and include these costs in accrued research and development liabilities in the combined and consolidated balance sheet and within research and development expense in the combined and consolidated statements of operations. These costs are a significant component of our research and development expenses.

We accrue for these costs based on factors such as estimates of the amount of work completed through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and in accordance with agreements established with our third-party service providers for such services. We make significant judgments and estimates in determining the accrued research and development liabilities balance in each reporting period. As actual costs become known, we adjust our accrued estimates. Although we do not expect our estimates to be materially different from amounts actually incurred, the status and timing of services performed, the number of patients enrolled in clinical trials and the rate of patient enrollment may vary from our estimates and could result in us reporting amounts that are too high or too low in any particular period. Our accrued expenses are dependent, in part, upon the receipt of timely and accurate reporting from clinical research organizations and other third-party service providers. We record advance payments to service providers as prepaid assets, which are expensed as the contracted services are performed. To date, there have been no material differences from our accrued costs to actual costs.

Equity-Based Compensation

Because there is no public market for our units as we are a private company, our board of managers has determined the fair value of management incentive units and common units by considering a number of objective

and subjective factors, including having contemporaneous and retrospective valuations of our equity performed by a third-party valuation specialist, valuations of comparable peer public companies, sales of our redeemable convertible preferred units, operating and financial performance, the lack of liquidity of our units, and general and industry-specific economic outlook. The fair value of our management incentive unit and common unit will be determined by our board of managers until such time as our common units are listed on an established stock exchange. Equity-based compensation is measured at the grant date for all equity-based awards made to employees and non-employees based on the fair value of the awards and is recognized as an expense on a straight-line basis over the requisite service period, which is generally the vesting period. We have elected to recognize the actual forfeitures by reducing the equity-based compensation in the same period as the forfeitures occur. Equity-based compensation for awards made to non-employees was measured as per ASC 505-50 until we early adopted Accounting Standards Update, or ASU, *2018-07 Compensation-Stock Compensation (Topic 718)* on January 1, 2017. We remeasured our equity-classified non-employee awards for which a measurement date had not been established at their adoption-based fair-value based measurement (January 1, 2017), and determined there was no cumulative-effect adjustment to our opening accumulated deficit. Subsequent to the adoption of ASU 2018-07, we account for non-employee awards similar to employee awards.

We have granted management incentive units and common units to employees and non-employees. These awards generally have only a service condition and vest over a period of up to five years. The awards have accelerated vesting upon a fundamental transaction, which is defined as (i) a merger, recapitalization or other business combination, (ii) a sale, transfer, exclusive license or disposition of BridgeBio Pharma LLC or (iii) a final liquidation, dissolution, winding-up or termination of BridgeBio Pharma LLC. Our consolidated entities have granted stock options that are exercisable in the underlying entity's equity and have issued restricted stock awards in the underlying entity's equity to employees and non-employees. None of the awards issued by the consolidated entities are issued for BridgeBio Pharma LLC members' capital. These awards generally have only a service condition and generally vest over a period of up to four years.

We classify equity-based compensation in our combined and consolidated statements of operations and comprehensive loss in the same manner in which the award recipients' payroll costs are classified or in which the award recipients' service payments are classified.

Income Taxes

Since BridgeBio Pharma LLC is a "pass-through" entity under the Code, our members are taxed directly on their respective ownership interests in consolidated income, and, therefore, no provision or liability for federal income tax has been included in the accompanying combined and consolidated financial statements.

For our consolidated entities, income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax base and net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion of all of the deferred tax asset will not be realized.

Our consolidated entities recognize uncertain income tax positions at the largest amount that is more likely than not to be sustained upon audit by the relevant taxing authority. Changes in recognition or measurement are reflected in the period in which judgment occurs. Our consolidated entities' policy is to recognize interest and penalties related to the underpayment of income taxes as a component of the provision for income taxes. To date, there have been no interest or penalties recorded in relation to unrecognized tax benefits.

JOBS Act and Emerging Growth Company Status

We are an emerging growth company, as defined in the JOBS Act. Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the

JOBS Act until such time as those standards apply to private companies. Other exemptions and reduced reporting requirements under the JOBS Act for emerging growth companies include presentation of only two years audited financial statements in a registration statement for an initial public offering, an exemption from the requirement to provide an auditor's report on internal controls over financial reporting pursuant to the Sarbanes-Oxley Act of 2012, an exemption from any requirement that may be adopted by the Public Company Accounting Oversight Board regarding mandatory audit firm rotation, and less extensive disclosure about our executive compensation arrangements. We have elected to use the extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that (i) we are no longer an emerging growth company or (ii) we affirmatively and irrevocably opt out of the extended transition period provided in the JOBS Act. As a result, our combined and consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

As described in Note 2 to our combined and consolidated financial statements, we early adopted multiple accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies. We expect to use the extended transition period for any other new or revised accounting standards during the period in which we remain an emerging growth company.

We will remain an emerging growth company until the earliest of (i) the last day of our first fiscal year in which we have total annual gross revenues of $1.07 billion or more, (ii) the last day of the fiscal year following the fifth anniversary of completion of this offering, (iii) the date on which we have issued more than $1.0 billion of non-convertible debt instruments during the previous three fiscal years, or (iv) the date on which we are deemed a "large accelerated filer" under the rules of the SEC with at least $700.0 million of outstanding equity securities held by non-affiliates.

Recent Accounting Pronouncements

See Note 2, "Summary of significant accounting policies—Recently Adopted Accounting Pronouncements" to our combined and consolidated financial statements included elsewhere in this prospectus for more information.

Results of Operations

	Year Ended December 31, 2017	2018	Increase/ (Decrease)	% Change
	(in thousands, except units and per unit amounts)			
Operating expenses:				
Research and development	$ 30,556	$ 140,073	$ 109,517	358%
General and administrative	13,302	43,587	30,285	228%
Total operating expenses	43,858	183,660	139,802	319%
Loss from operations	(43,858)	(183,660)	(139,802)	319%
Other income (expense), net:				
Interest income	39	2,004	1,965	5,038%
Interest expense	(13)	(2,547)	(2,534)	19,492%
Gain on deconsolidation of PellePharm	—	19,327	19,327	*
Loss from PellePharm	—	(275)	(275)	*
LEO call option expense	—	(3,009)	(3,009)	*
Other expense	—	(1,291)	(1,291)	*
Total other income (expense), net	26	14,209	14,183	54,550%
Net loss and comprehensive loss	(43,832)	(169,451)	(125,619)	287%
Net loss attributable to redeemable convertible noncontrolling interests and noncontrolling interests	13,267	38,702	25,435	192%
Net loss and comprehensive loss attributable to us	$(30,565)	$(130,749)	$(100,184)	328%

** Not meaningful*

Research and Development Expenses

Research and development expenses increased by $109.5 million to $140.1 million for the year ended December 31, 2018, from $30.6 million for the same period in 2017, largely attributable to the number of product candidates under development increasing from seven in 2017 to 15 in 2018 and the initiation of more clinical trials as compared to 2017. The increase was primarily comprised of a $25.0 million increase in professional and consulting services to advance our product candidates, a $20.3 million increase in license fees to acquire various technologies, a $19.2 million increase in clinical development costs for our product candidates, a $18.4 million increase in development and drug discovery efforts for our research programs, a $13.8 million increase in salaries and employee-related benefits, a $11.6 million increase in allocated facility and other expenses and a $1.0 million increase in equity-based compensation expense resulting from equity-based awards granted to employees of consolidated entities.

General and Administrative Expenses

General and administrative expenses increased by $30.3 million to $43.6 million for the year ended December 31, 2018, from $13.3 million for the same period in 2017, largely due to our operations expanding as we added more controlled entities and development programs. The increase was primarily comprised of a $11.8 million increase in professional and consulting services such as administrative, accounting, finance, human resources and information technology services, a $6.1 million increase in allocated facility and other expenses, a $5.7 million increase in salaries and employee-related benefits, a $3.5 million increase in legal fees and a $3.2 million increase in equity-based compensation expense resulting from management incentive units and common units granted by us and from equity-based awards granted to employees of consolidated entities.

Interest Income

Interest income for the year ended December 31, 2018, primarily consisted of the interest earned on our investments in cash equivalents in 2018. Interest income was not material in 2017.

Interest Expense

Interest expense for the year ended December 31, 2018, primarily consisted of the interest accrued on the $55.0 million Hercules term loan drawn in June and December 2018. Interest expense was not material in 2017.

Gain on Deconsolidation of PellePharm

In November 2018, we deconsolidated PellePharm after execution of the LEO Agreement and recognized a gain of $19.3 million as the difference between the fair value of our retained investment in PellePharm and our percentage of the PellePharm net deficit as of the deconsolidation date. There was no such gain recognized in 2017.

LEO Call Option Expense

The LEO Call Option liability was recorded at fair value upon execution of the LEO Agreement in November 2018. The LEO Call Option liability was remeasured to fair value as of December 31, 2018. There was no such liability subject to be recorded and remeasured in 2017.

Loss from PellePharm

Due to the deconsolidation of PellePharm, we accounted for part of our remaining investment in PellePharm under the equity method and we recognized our share of PellePharm earnings or losses from the deconsolidation date through December 31, 2018. PellePharm was a consolidated entity in 2017.

Other Expense

Other expense for the year ended December 31, 2018, consisted primarily of the change in fair value of the Eidos financial instruments issued and settled in 2018.

Liquidity and Capital Resources

Sources of Liquidity

Since our inception, we have incurred significant operating losses. For the years ended December 31, 2017 and 2018, we incurred net losses of $43.8 million and $169.5 million, respectively, and had an accumulated deficit as of December 31, 2018 of $170.6 million. As of December 31, 2018, our outstanding debt was $54.5 million, which is net of $0.5 million of debt issuance costs and debt accretion. Our ability to generate product revenue sufficient to achieve profitability will depend heavily on the successful development and eventual commercialization of our product candidates at our consolidated entities. We expect to continue to incur significant expenses and increasing operating losses for at least the next several years.

In June 2018, our controlled subsidiary, Eidos, completed its U.S. initial public offering of its common stock of which net proceeds received were $95.5 million. As of December 31, 2018, we held 22,589,300 shares of common stock of Eidos. All cash and cash equivalents held by Eidos are restricted and can be applied solely to fund the operations of Eidos.

We had cash and cash equivalents of $436.1 million as of December 31, 2018, of which $238.7 million was held at BridgeBio Pharma LLC. The remaining cash and cash equivalents were held by our wholly-owned subsidiaries and controlled entities, with these funds available for specific entity usage, except in limited circumstances.

Secured Loans

In June 2018, we executed a Loan and Security Agreement, or the Hercules Loan Agreement, with Hercules, pursuant to which Hercules agreed to extend a term loan to us for $35.0 million. The term of the loan is approximately 42 months, with a maturity date of January 1, 2022, or the Maturity Date. The term loan bears interest at a floating rate equal to the greater of (i) the prime rate as reported in the Wall Street Journal plus 4.35% and (ii) 9.35%, payable monthly. No principal payments are due during an interest-only period, commencing on the initial borrowing date and continuing through July 1, 2020, or the Amortization Date. The outstanding balance of the loan is to be repaid monthly beginning on the Amortization Date and extending through the Maturity Date.

In December 2018, we executed the First Amendment to the Loan and Security Agreement, or the First Amendment, and the Hercules Loan Agreement as amended by the First Amendment, the Hercules Amended Loan Agreement, whereby we obtained an additional $20.0 million to increase the total principal balance outstanding to $55.0 million, or the Amended Hercules Term Loan. The additional $20.0 million loan bears interest at a floating rate equal to the greater of (i) the prime rate as reported in the Wall Street Journal plus 3.35% and (ii) 9.10%, payable monthly. Upon draw of the additional $20.0 million, the amortization date on the entire facility was extended until January 1, 2021 or the Amended Amortization Date. The outstanding balance of the original loan of $35.0 million and the additional borrowing of $20.0 million is to be repaid monthly beginning on the Amended Amortization Date, and extending through July 1, 2022, or the Amended Maturity Date, or until the obligations under the Hercules Loan Agreement are repaid in full.

Effective the first fiscal quarter following the completion by us of an initial public offering of our shares on a U.S.-based national exchange with total net proceeds of no less than $175.0 million, we shall receive: (i) a further six month interest-only extension to July 1, 2021, (ii) a further six month maturity extension to January 1, 2023, (iii) a reduction of 0.5% on the then effective interest rate on the entire facility, and (iv) the option to pay up to 1.5% of scheduled cash pay interest on the entire facility as payment in kind, or the PIK Interest, with such cash pay interest paid as PIK Interest at a 1:1.2 ratio. All PIK Interest shall be capitalized and added to the outstanding principal balance under the Hercules Amended Term Loan, which shall then accrue further cash interest and fees pursuant to the terms of the Hercules Amended Loan Agreement.

On the earliest to occur of (i) the Amended Maturity Date, (ii) the date we prepay the outstanding principal amount of the Amended Hercules Term Loan, or (iii) the date the outstanding principal amount of the Amended Hercules Loan otherwise becomes due, we will owe Hercules an end of term charge equal to 6.35% of any principal prepayment with respect to the original $35.0 million term loan, and 5.75% of any principal repayment with respect to the incremental $20.0 million term loan.

The Hercules Amended Loan Agreement contains customary representations and warranties, events of default, and affirmative and negative covenants for a term loan facility of this size and type. However, Hercules has no covenants that limit or restrict the ability of a wholly-owned subsidiary or VIE that is predominantly involved in advancing our development programs to incur indebtedness. Hercules imposes no liquidity covenants on us, and Hercules cannot limit or restrict our ability to dispose of assets, make investments, or make acquisitions. As pledged collateral for our obligations under the Hercules Amended Loan Agreement, we granted Hercules a security interest in all of our assets or personal property, including all equity interests owned or hereafter acquired by us. Further, at Hercules' sole discretion we must make a mandatory prepayment equal to 75% of net cash proceeds received from the sale or licensing of any pledged collateral or assets, including intellectual property, of a wholly-owned subsidiary or VIE owned by us, or the repurchase or redemption of any pledged collateral by certain specified operating companies. None of our wholly-owned subsidiaries and VIEs are a party to, nor provide any credit support or other security in connection with the Hercules Amended Loan Agreement.

Liquidity Risks

As of December 31, 2018, we had cash and cash equivalents of $436.1 million. We believe that our currently available resources will enable us to fund our projected operating expenses and capital expenditures through at least the next 12 months.

We will not generate revenue from product sales unless and until we successfully complete clinical development and obtain regulatory approval for our product candidates. If we obtain regulatory approval for any of our product candidates and do not enter into a commercialization partnership, we expect to incur significant expenses related to developing our internal commercialization capability to support product sales, marketing and distribution. Further, upon the completion of this offering, we expect to incur additional costs associated with operating as a public company. As a result, we will need substantial additional funding to support our continuing operations and pursue our growth strategy. Until such time as we can generate significant revenue from product sales, if ever, we expect to finance our operations through a combination of equity offerings, debt financings, collaborations, strategic alliances and marketing, distribution or licensing arrangements. If we do raise additional capital through public or private equity offerings, the ownership interest of our existing stockholders, including investors in this offering, will be diluted, and the terms of these securities may include liquidation or other preferences that adversely affect our stockholders' rights. If we raise additional capital through debt financing, we may be subject to covenants limiting or restricting our ability to take specific actions, such as incurring additional debt, making capital expenditures or declaring dividends. Further, we may be unable to raise additional funds or enter into such other agreements or arrangements when needed on favorable terms, or at all. If we fail to raise capital or enter into such agreements as, and when, needed, we may have to significantly delay, scale back or discontinue the development and commercialization of one or more of our product candidates.

Because of the numerous risks and uncertainties associated with research, development and commercialization of pharmaceutical products, we are unable to estimate the exact amount of our operating capital requirements. Our future funding requirements will depend on many factors, including, but not limited to:

- the successful achievement of preclinical and clinical milestones;
- continuing our platform research and drug discovery and development efforts;
- conducting preclinical and clinical trials for our current product candidates and additional product candidates;
- establishing a sales, marketing and distribution infrastructure to commercialize any product candidates for which we may obtain regulatory approval;
- establishing and maintaining manufacturing and supply chain capacity sufficient to provide adequate supplies of our product candidates to support our ongoing and planned clinical trials and commercial quantities of any product candidates for which we may obtain marketing approval;
- maintaining, expanding and protecting our intellectual property portfolio;
- acquiring or in-licensing other product candidates and technologies;
- continuing to discover and develop additional product candidates; and
- hiring additional personnel to support our program development efforts to obtain regulatory approval and securing additional facilities for operations; operating as a public company upon completion of this offering.

Because of the numerous risks and uncertainties associated with pharmaceutical product development, we are unable to accurately predict the timing or amount of increased expenses or when or if we will be able to achieve or maintain profitability. Even if we are able to generate product sales, we may not become profitable. If we fail to become profitable or are unable to sustain profitability on a continuing basis, then we may be unable to continue our operations at planned levels and be forced to reduce or terminate our operations.

Cash Flows

The following table summarizes our cash flows during the periods indicated:

	Year ended December 31,	
	2017	2018
	(in thousands)	
Net cash used in operating activities	$ (40,488)	$(136,643)
Net cash used in investing activities	(464)	(21,036)
Net cash provided by financing activities	112,983	501,548
Net increase in cash and cash equivalents and restricted cash	$ 72,031	$ 343,869

Net Cash Flows from Operating Activities

Net cash used in operating activities for the year ended December 31, 2018 was $136.6 million and primarily consisted of our net loss of $169.5 million, which was partially offset by non-cash charges of $10.3 million and a change in net operating assets and liabilities of $22.5 million. Our non-cash charges primarily consisted of $17.9 million for acquired in-process research and development assets, $6.1 million for equity-based compensation expense, and $3.0 million of expense related to the Leo Call Option. These changes were partially offset by a $19.3 million gain on the deconsolidation of PellePharm. The net change in operating assets and liabilities was primarily due to an increase of $16.7 million in accounts payable due to an increase in the level of research and development expenses and timing of payments to vendors, an increase of $5.8 million in accrued research and development liabilities, an increase of $3.4 million in accrued compensation and benefits due to higher headcount, an increase of $3.4 million in other accrued liabilities and an increase of $0.2 million in other liabilities. These changes were partially offset by an increase of $6.1 million in prepaid expenses due to the timing of prepaid clinical and research related expenses.

Net cash used in operating activities for the year ended December 31, 2017 was $40.5 million and primarily consisted of our net loss of $43.8 million, which was partially offset by non-cash charges of $2.1 million and a change in net operating assets and liabilities of $1.2 million. Our net non-cash charges primarily consisted of $1.8 million for equity-based compensation expense and $0.3 million for depreciation and amortization. The net change in operating assets and liabilities was primarily due to an increase of $1.6 million in accounts payable, an increase of $2.6 million in accrued research and development liabilities, an increase of $1.1 million in accrued compensation and benefits, and an increase of $0.3 million in other liabilities. These changes were partially offset by an increase of $4.3 million in prepaid expenses and other current assets and an increase of $0.1 million in other assets.

Net Cash Flows from Investing Activities

Net cash used in investing activities for the year ended December 31, 2018 was $21.0 million, which primarily consisted of $16.0 million paid for in-progress research and development assets acquired through asset acquisitions, $2.2 million related to purchase of property and equipment and a $2.9 million decrease in cash and cash equivalents resulting from the deconsolidation of PellePharm.

Net cash used in investing activities for the year ended December 31, 2017 was $0.5 million, which consisted of our purchase of property and equipment for the purchase of furniture and office equipment, laboratory equipment, and leasehold improvements.

Net Cash Flows from Financing Activities

Net cash provided by financing activities of $501.5 million for the year ended December 31, 2018 was primarily related to the net proceeds of $298.7 million from the issuance of our redeemable convertible Series D preferred

units, net proceeds of $95.5 million from the issuance of common stock in connection with the Eidos IPO, proceeds of $58.4 million from third-party investors in redeemable noncontrolling interests, net proceeds of $56.4 million received from term loans, net proceeds of $36.3 million from the issuance of our redeemable convertible Series C preferred units and proceeds from the issuance of promissory notes for $1.0 million. These amounts were partially offset by the repurchase of a noncontrolling interest in Eidos for $44.2 million and repayment of term loans for $1.1 million. The net cash proceeds from the Eidos initial public offering cannot be used by us or our other subsidiaries and may only be used by Eidos or its subsidiaries, if any.

Net cash provided by financing activities of $113.0 million for the year ended December 31, 2017 was primarily related to the net proceeds of $11.8 million from the issuance of our redeemable convertible Series B preferred units, net proceeds of $95.2 million from the issuance of our redeemable convertible Series C preferred units, proceeds from the issuance of promissory notes for $4.0 million, proceeds from the repayment of nonrecourse notes for $0.1 million, proceeds from third-party investors in redeemable noncontrolling interests for $2.8 million, and proceeds from the common stock issuance and stock option exercise by wholly-owned subsidiaries and VIEs for $0.1 million. These amounts were offset by $1.2 million in cash distributions to our members from the sale of our investment in MyoKardia, Inc.

Contractual Obligations

The following table summarizes our contractual obligations as of December 31, 2018:

	Payments Due by Period				
	Less than 1 year	1 to 3 years	3 to 5 years	More than 5 years	Total
	(in thousands)				
Operating lease obligations	$ 1,924	$ 3,092	$ 695	$ —	$ 5,711
Hercules term loans debt	$ —	$33,764	$21,236	$ —	$55,000
Interest on term loans debt and final end of term payment	$ 5,200	$ 9,166	$ 4,056	$ —	$18,422
Total contractual obligations	$ 7,124	$46,022	$25,987	$ —	$79,133

In addition to the amounts set forth in the table above, we have certain payment obligations under various license and collaboration agreements. Under these agreements we are required to make milestone payments upon successful completion and achievement of certain intellectual property, clinical, regulatory and sales milestones. The payment obligations under the license and collaboration agreements are contingent upon future events such as our achievement of specified development, clinical, regulatory and commercial milestones, and we will be required to make development milestone payments and royalty payments in connection with the sale of products developed under these agreements. As the achievement and timing of these future milestone payments are not probable or estimable, such amounts have not been included in our combined and consolidated balance sheet as of December 31, 2018 or in the contractual obligations table above. For additional information regarding certain of our license and collaboration agreements, see “—License and Collaboration Agreements” below.

In addition, we enter into agreements in the normal course of business with contract research organizations for clinical trials and with vendors for preclinical studies and other services and products for operating purposes, which are generally cancelable upon written notice. These payments are not included in the contractual obligations table above.

License and Collaboration Agreements

Our commitments primarily consist of obligations under our agreements entered into with third-party licensors.

Off-Balance Sheet Arrangements

As of December 31, 2018, we did not have any off-balance sheet arrangements, as defined in Item 303(a)(4)(ii) of SEC Regulation S-K. While we have investments classified as VIEs, their purpose is not to provide off-balance sheet financing.

Quantitative and Qualitative Disclosures about Market Risk

Our primary exposure to market risk is interest rate sensitivity, which is affected by changes in the general level of U.S. interest rates. We held cash and cash equivalents of $436.1 million as of December 31, 2018. We generally hold our cash in interest-bearing demand deposit accounts. Cash equivalents consist of amounts invested in money market accounts. Due to the nature of our cash and cash equivalents, a hypothetical 100 basis point change in interest rates would not have a material effect on the fair value of our cash and cash equivalents.

As of December 31, 2018, we had $55.0 million in variable rate debt outstanding. The Amended Hercules Term Loan matures in July 2022, with interest-only monthly payments until January 2021. The original loan of $35.0 million bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 4.35% and (ii) 9.35% (9.85% as of December 31, 2018) and the additional borrowing of $20.0 million bears interest at a floating rate of equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.35% and (ii) 9.10% (9.10% as of December 31, 2018).

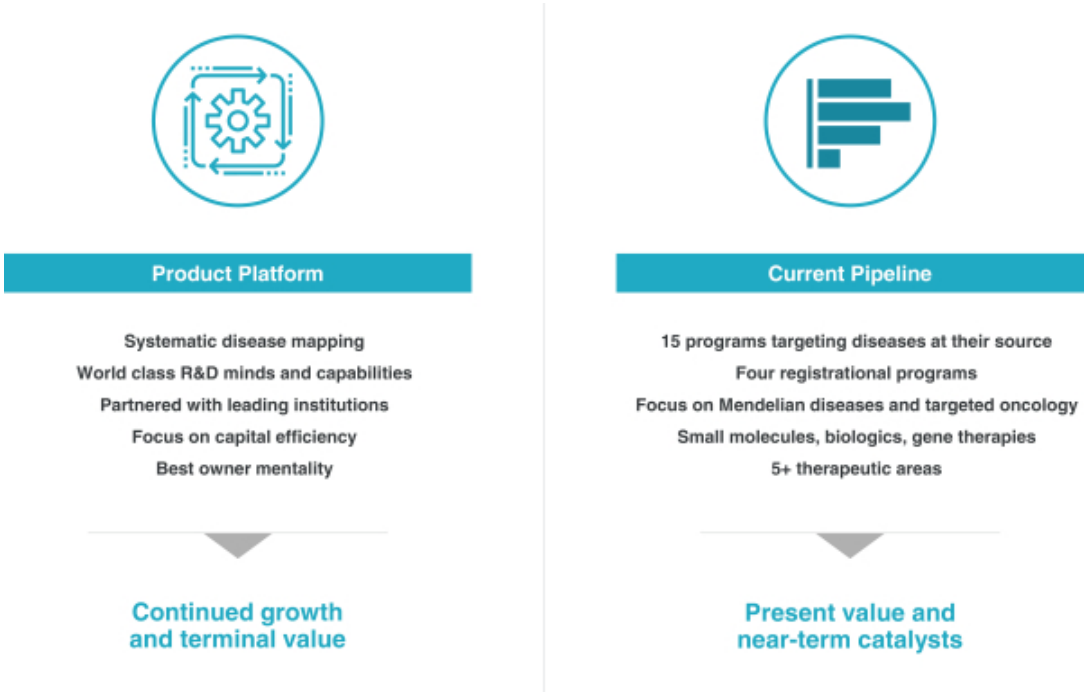
BUSINESS

Overview

We are a team of experienced drug discoverers, developers and innovators working to create life-altering medicines that target well-characterized genetic diseases at their source. We founded BridgeBio in 2015 to identify and advance transformative medicines to treat patients who suffer from Mendelian diseases, which are diseases that arise from defects in a single gene, and cancers with clear genetic drivers. Our pipeline of over 15 development programs includes product candidates ranging from early discovery to late-stage development. Several of our programs target indications that we believe present the potential for our product candidates, if approved, to target portions of market opportunities of at least $1.0 billion in annual sales, and we have four product candidates that are currently in registrational trials, which are trials we believe could support the filing of an application for marketing authorization.

We focus on genetic diseases because they exist at the intersection of high unmet patient need and tractable biology. Our approach is to translate research pioneered at academic laboratories and leading medical institutions into products that we hope will ultimately reach patients. We are able to realize this opportunity through a confluence of scientific advances, including: (i) identification of the genetic underpinnings of disease as more cost-efficient genome and exome sequencing becomes available; (ii) progress in molecular biology; and (iii) the development and maturation of longitudinal data and retrospective studies that enable the linkage of genes to diseases. We believe that this often-overlooked early-stage innovation represents one of the greatest practical sources for new drug creation.

We believe we have developed a sustainable and scalable product platform that supports the continued growth of our company and the advancement of our pipeline.



Our Platform

Our platform is distinguished by several key elements:

- **World class discovery and development talent**: Our team has previously submitted over 30 INDs and 15 NDAs, in aggregate. Our operations are overseen by a Management Committee that is comprised of renowned leaders in cancer and rare disease drug development.
- **Disciplined approach to target identification and prioritization**: We pair a systematic mapping of the genetic disease landscape with a proprietary set of over 10 criteria to narrow our focus on diseases with attractive attributes for drug development. We look for diseases with high unmet need and well-characterized mechanisms that present opportunities to address the root cause of disease.
- **Opportunistic approach to drug candidate selection**: We seek the best science and drug mechanisms of action, wherever they can be found. We accept programs that meet our standards at any stage of development, and we are agnostic to therapeutic area. However, we pursue programs only with validated treatment modalities, with the goal of helping us to avoid the risks often associated with less tested approaches.
- **Focus at the level of each program**: We maintain a decentralized structure wherein each program is housed in its own subsidiary. This allows us to build a team of experts and specialists tailored to the needs of each program, and who are economically incentivized at the program level. We enable our subsidiary leaders to make certain operational decisions outside of a centralized management hierarchy, as we fundamentally believe that those operators who have the most intimate program knowledge are best positioned to make key operational decisions.
- **Operational efficiency**: We aim to rapidly and decisively advance our product candidates to objective critical decision points. At each stage of research, discovery, or development, we direct resources toward the opportunities that we believe are the most promising, and we discontinue programs that do not meet performance thresholds. We field a minimum viable team for each asset, ensuring that each program has sufficient personnel to fit its purpose while eliminating the excess overhead often seen in our industry. We accomplish this by hiring the best talent, centralizing and sharing certain support functions across various programs, and leveraging external providers where appropriate. This enables us to minimize traditionally fixed costs at the program level.
- **Portfolio breadth and diversification:** We have built a broad and diversified portfolio with 15 programs that vary across stage of development, therapeutic category and modality. We believe that our programs are biologically uncorrelated, covering different diseases, different targets, and different modalities, such that the results of one program will not impact the development of others. Further, the breadth of our portfolio mitigates the impact of failure of any single program. As a result, we can be objective about each of our programs and allocate capital efficiently, delivering staged funding across our portfolio based on each program's scientific merits.
- **Optimized ownership for each program:** When we believe that we are best suited to continue a program's development, we will continue to fund it internally. If we believe a strategic partner is better suited to progress a program, we will consider externalizing development at economically attractive terms.

Our Pipeline

Our product platform supports the advancement of our current pipeline, which includes over 15 development programs that can be divided into three key categories:

- **Mendelian**: Ten small molecule and protein replacement product candidates, of which three are currently in registrational trials, one is in Phase 1/2 development, three are currently in IND-enabling development and three are in lead optimization. Over the next 24 months, we expect to have at least six of these product candidates in clinical development. Several of our product candidates in this category target some of the

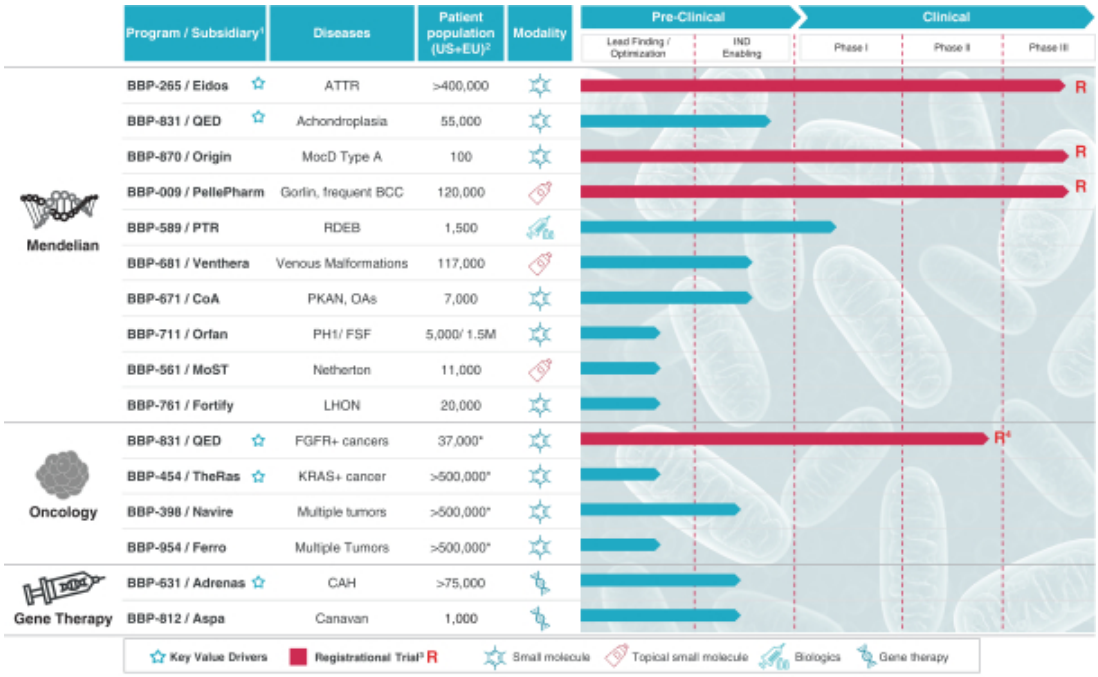
most prevalent Mendelian diseases, including ATTR and achondroplasia. Two of our programs in this category have received breakthrough therapy designation from the FDA.

- **Oncology**: Four targeted oncology programs, including one in registrational development, of which one is in IND-enabling development and two are in lead optimization, that address key oncogenic pathways including FGFR, KRAS and SHP2. These programs have potentially broad applicability across a number of solid tumor types with high unmet patient need.
- **Gene therapy**: Focused on developing treatments for Mendelian diseases that are particularly suited to gene therapy. Our two programs are both in IND-enabling development and we expect both of these programs to be in the clinic by 2020. Our gene therapy programs are led by executives who have substantial domain expertise and are recognized leaders in this field, and we are actively building our gene therapy capabilities.

Of our development programs, we believe the following, which we refer to as our key value drivers, have the greatest potential to drive significant value for our company due to a combination of factors, including their stage of development, potential availability of expedited development pathways, degree of unmet medical need and potential market size in the applicable target indication:

- BBP-265 (also known as AG10, under development at our subsidiary, Eidos Therapeutics, Inc.), a small molecule stabilizer of TTR that is in an ongoing Phase 3 clinical trial for the treatment of ATTR-CM.
- BBP-831 (under development at our subsidiary, QED Therapeutics, Inc.), a small molecule selective FGFR1-3 inhibitor being developed for the treatment of FGFR-driven cancers and achondroplasia, for which we intend to submit an NDA in 2020 for the treatment of CCA as a second-line or later therapy.
- BBP-631 (under development at our subsidiary, Adrenas Therapeutics, Inc.), an AAV5 gene transfer product candidate in preclinical development for the treatment of CAH, driven by 21OHD.
- BBP-454 (under development at our subsidiary TheRas, Inc.), a preclinical development program for small molecule inhibitors of KRAS for the treatment of pan-mutant KRAS-driven cancers, which act via two novel binding pockets.

The following table summarizes our material development programs, their estimated patient populations, their therapeutic modalities and their development status:



[1] Each of our programs is housed in a separate subsidiary; [2] Patient population: Prevalence except for asterisked figures which represent incidence; [3] A clinical trial we believe could support filing an application for marketing authorization, although the FDA and other regulatory authorities have not indicated their agreement or that additional trials will not be required; [4] Planned NDA submission for the treatment of cholangiocarcinoma as a second-line or later therapy

Our Investment Thesis

At BridgeBio, we believe that the healthcare industry stands at the beginning of a new era of genetic medicine. We think that what is needed at this juncture is not simply a new company, but a new type of company, one conceived and designed specifically as an engine for efficiently translating the vast and rapidly growing pool of scientific innovation around genetic disorders into life-changing medicines for patients. We have created a model that we believe has a favorable long-term outlook, thanks to people and a process that we feel will drive success over time. As such, we manage our business with an eye to making the best long-term decision for each asset, rather than prioritizing how our decisions will impact our immediate financial results. We employ this long-term approach because we accept that our model is subject to short-term variance, and we understand that the successes and failures of individual programs are decoupled from the outcomes and value of the rest of our pipeline and our model. Additionally, the time-intensive nature of drug development means that correct operational or investment decisions may not demonstrate revenue results for a period of several years. We believe that taking as many repetitions as possible at pairing well-understood diseases with the best scientific innovation in a highly cost-efficient manner is an effective way to drive long-term value in the face of quarter-to-quarter or year-to-year variance, and we operate our business with that longer timescale in mind.

Our Focus

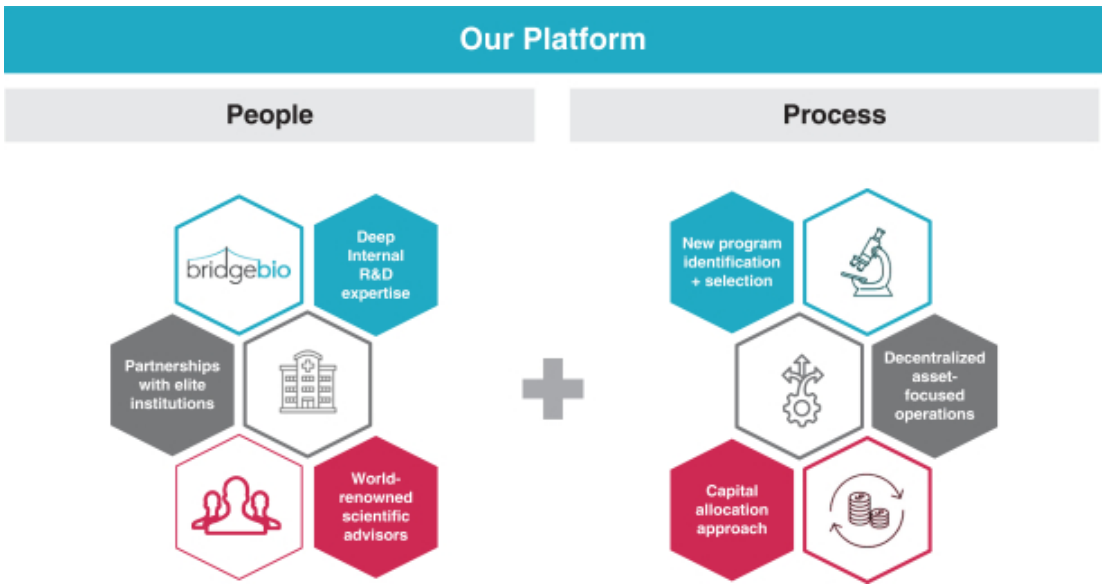
We focus on developing medicines for genetic diseases that arise from mutations in patients' DNA. These mutations can be either inherited or arise spontaneously. The genetic diseases we target include both Mendelian diseases and certain cancers with clear genetic drivers.

We are focused on genetic diseases due to several inherent advantages:

- **Clear targets for drug development:** Genetic diseases often provide direct links from the mutation and pathway of disease to symptoms. This mechanistic clarity allows us to identify tractable targets and develop product candidates whose mechanism of action is designed to treat the source of the disease.
- **Historically higher than average probability of success:** We are pursuing drug development for indications generally classified as orphan diseases. Between 2006 and 2015, drug programs in orphan designated indications had, on average, a 2.5 times higher likelihood of successful development from Phase 1 to approval than drugs across all indications.
- **High unmet need and meaningful commercial opportunity:** Thousands of genetic diseases exist and affect millions of individuals worldwide. Over 7,400 rare Mendelian phenotypes have been identified. However, since 1996, the FDA has approved fewer than 70 treatments for genetically driven conditions. This presents a vast unmet patient need which we believe we can help address.

Our Platform

Our product platform consists of our people and our process.



Our People

We are led by a Management Committee that includes respected leaders in the field of drug development who have worked together previously. This team includes our founders Charles Homcy, Frank McCormick, Phil Reilly and Neil Kumar, and is supplemented by our Chairman of Research & Development, Richard Scheller, and our senior advisor, Len Post. Our research and developments efforts are spearheaded by Chief Scientific Officer, Uma Sinha, and leading medicinal chemist Robert Zamboni.

Our team has contributed to the development of more than 30 molecules from preclinical development through IND submission and more than 15 approved products. Our team has a rich set of experiences at the intersection of genetic disease and company leadership, including founding and leadership roles at companies including bluebird bio, Inc., Genentech, Inc., Global Blood Therapeutics, Inc., MyoKardia, Inc., Onyx Pharmaceuticals, Inc., Portola Pharmaceuticals, Inc. and Voyager Therapeutics, Inc.

Our subsidiaries' management teams consist of individuals with diverse backgrounds, including entrepreneurs, experienced scientists and business and science-oriented professionals. The complementary skills of these groups facilitate the creation of lean teams with overlapping strengths well-suited to our empowered, decentralized management model.

Due to our leaders' relationships and experience, we have built a deep network of relationships across the genetic disease space, with leading institutions, academics and industry.

Our Process

Our process is comprised of three components: new program identification and selection, operations and capital allocation.

New Program Identification and Selection

A disciplined and proactive approach to identifying and selecting new programs is central to our platform. We see the following as critical elements of our new program identification and selection process:

- **Comprehensive mapping of the genetic disease space:** To prospectively inform our search for new development candidates, we pair a systematic mapping of the genetic disease landscape with a proprietary set of over 10 criteria to narrow our focus on diseases with attractive attributes for drug development. We maintain a science-driven, constantly evolving perspective on the universe of potential development targets driving the diseases we prioritize.
- **Targeting well-characterized mechanisms of disease at the source:** We seek to treat genetic diseases by correcting disease pathobiology at its source. By targeting the source, our goal is to mitigate the risks that compensatory pathways may overcome the interventions that we seek to develop. This requires a robust understanding of genotype and phenotype relationships and of the biological pathways involved in each disease. Based on our deep understanding of disease mechanisms, we employ therapeutic modalities that we believe have been technically validated and are biologically suited to address the target disease. As a result, we believe this allows us to mitigate some of the risks associated with the scientific uncertainties often seen with novel modalities.
- **Leveraging deep relationships within the genetic disease area:** Our contacts and partnerships provide us with access to a wide range of ongoing scientific work in genetic disease areas. We also remain proactive, constantly surveying the landscape for potentially actionable opportunities. To date, we have executed partnerships with leading academic institutions such as Boston Children's Hospital, Cincinnati Children's Hospital Medical Center, MD Anderson Cancer Center, the University of California San Francisco, St. Jude Children's Research Hospital, and others. We plan to continue to grow and expand these types of relationships.
- **Thorough vetting combined with early and decisive action:** We follow a disciplined and methodical approach to review new opportunities before committing capital to a development program. Our Management Committee reviews all potential development programs utilizing a number of parameters to vet the attractiveness of investments, with a clear focus on the underlying science. These parameters include mechanistic rationale, preclinical and clinical data generated, potential commercial viability, intellectual property position, prospects for favorable pricing and reimbursement and the potential impact of competition. In addition, our Management Committee is focused on portfolio fit and capital allocation. Once we deem an opportunity appropriate, we move rapidly to acquire or license the asset.

Decentralized, Asset-Focused Operations

We employ a decentralized operating model designed to enable robust scientific discovery and drug development in a scalable and capital efficient manner. As a feature of this model, we establish subsidiary organizations

organized around individual product candidates which are directly responsible for the advancement of each asset. Our approach empowers operational decision making at the level of the program, which we believe increases productivity and speed. Key elements of our operating model include:

- **Subsidiary teams incentivized on individual asset outcomes:** We build teams of experts and specialists tailored to the needs of each program who are economically incentivized at the program level. This creates an intense focus on advancing drug candidates to patients. Our structure leaves certain operational decision-making in the hands of those closest to the programs. We believe that this results in faster and better decision making.
- **Lean cost structure at the program level:** We build our teams with a view towards fielding the minimum viable team for each program. This requires hiring the best talent and using best-in-class external providers wherever possible. Our approach allows us to maintain what we believe is among the lowest ratios of headcount to development candidate programs in the industry. As of December 31, 2018, we had fewer than 150 full time employees, including 16 at the parent company and 114 at subsidiaries. We often assemble teams around early stage assets comprised initially of fewer than five people, growing to approximately ten people at the IND-enabling stage. Once a program is in the clinic, we will size and structure a team commensurate with need, subject to our minimum viable team approach.
- **Minimization of overhead and fixed costs:** Our central team provides operating leverage to our program teams by providing certain shared services and workspaces. We believe this minimizes the waste and excess overhead often incurred in our industry, where individual companies are often required to build out full non-R&D support functions and fixed cost infrastructure, despite relatively small pipelines.
- **Small central team incentivized on portfolio outcomes:** At the parent company level, we maintain a small central team focused on (i) identifying and securing new programs, (ii) setting up new subsidiaries and (iii) recruiting key management team members. The central team is also responsible for raising and allocating capital across the portfolio in collaboration with the Management Committee. Central team members are compensated with equity at the parent level, and are thereby incentivized to maximize value of the portfolio.

Capital Allocation Approach

Our approach to capital allocation is designed to help mitigate the inherent risks of drug development, while, at the same time, maximizing opportunities to create value for shareholders and patients. This capital allocation approach is guided by the following core tenets:

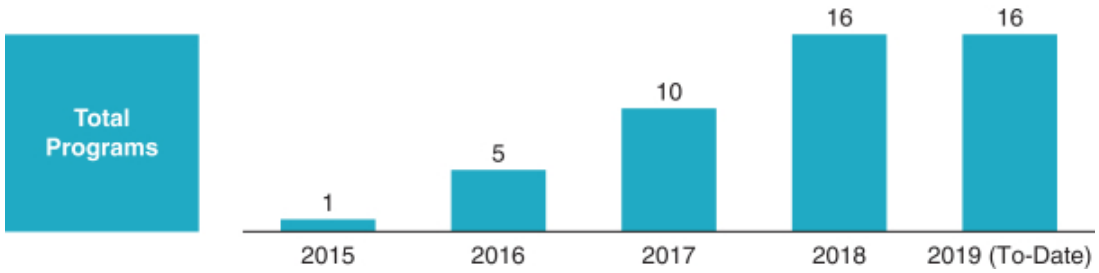
- **Staged funding based on scientific results:** We seek to ensure objective and science-driven decision making when investing in each of our programs. We therefore fund programs with capital sufficient to reach key decision points in their development. Upon reaching these decision points, our Management Committee reviews the data generated by the program and re-evaluates whether the program warrants continued investment. If a program passes such a decision point, we continue to fund its development. If not, we may discontinue its development. Given the risks inherent in early-stage development, we spend judiciously on early stage opportunities.
- **Optimized program ownership:** Our goal is to ensure that each of our programs has the resources and expertise needed to provide the best possible chance to reach patients broadly. While we generally intend to develop our programs through approval and ultimately self-commercialize, we may consider entering into strategic partnerships for our programs when we believe such partnerships will further our goals and are economically attractive.
- **Broadly diversified portfolio:** While we are focused on developing assets in a category with what we believe are meaningfully increased odds of successful development, we recognize that we will likely experience development failures. Given this expectation, we have built a broad and diversified portfolio to mitigate the impact of this risk. Our portfolio of programs in development spans a range of therapeutic

areas, modalities and stages of development. We believe that our programs are uncorrelated, with the success or failure of any individual program being decoupled from the outcome of others in the portfolio, and that this approach provides a fundamentally reduced corporate risk profile.

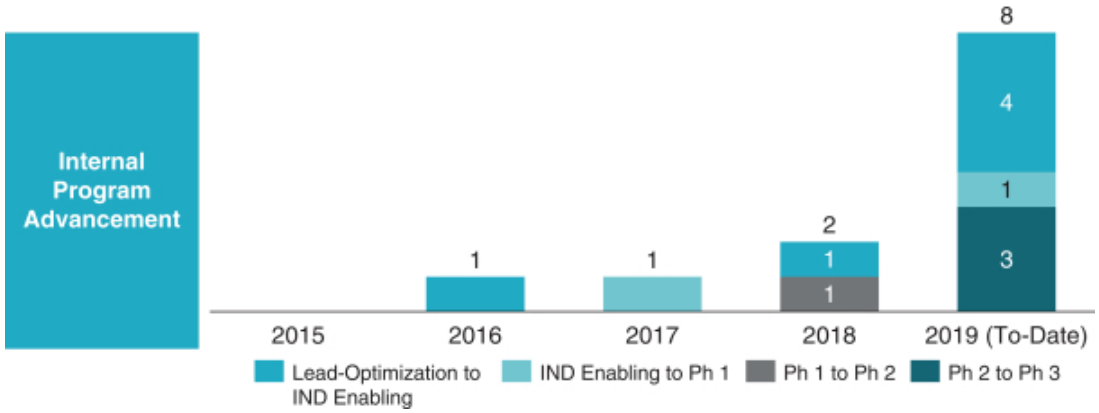
Our Pipeline

Pipeline Growth

Since our inception, we have actively built our pipeline through business development efforts, including the acquisition and in-licensing of assets, and advancing programs through internal stage-gates. The following chart shows the growth of assets in our pipeline:



We have advanced our product candidates through key stage-gates as shown below:



Summary and Key Catalysts

The following table summarizes our programs, their current status and upcoming catalysts:

	Program (Subsidiary[1])	Diseases	Patient population (US+EU)[2]	Modality	Current status	Anticipated upcoming catalysts
Mendelian	BBP-265 (Eidos) ☆	ATTR	>400,000	Small molecule	Phase 3 R	• Phase 2 OLE data (2019) • Initiation of Phase 3 in ATTR-PN (2019)
	BBP-831 (QED) ☆	Achondroplasia	55,000	Small molecule	Phase 1	• Initiate Phase 1/2 (2020)
	BBP-870 (Origin)	MocD Type A	100	Small molecule	Phase 3 R	• NDA submission (2020)
	BBP-009 (PellePharm)	Gorlin, HF-BCC	120,000	Topical small molecule	Phase 3 R	• Initiation of Phase 2b trial in HF-BCC (2019) • Conclude Phase 3 registrational trial in Gorlin Syndrome (2020)
	BBP-589 (PTR)	RDEB	1,500	Biologics	Phase 1	• Data from Phase 1/2 trial (2020)
	BBP-681 (Venthera)	Venous malformations	117,000	Topical small molecule	Pre-Clinical	• IND filing (2019)
	BBP-671 (CoA)	PKAN, CASTOR	7,000	Small molecule	Pre-Clinical	• IND filing (2020)
	BBP-711 (Orfan)	PH1/ FSF	3,000/ 1.5M	Small molecule	Pre-Clinical	• Development candidate nomination (2019)
	BBP-561 (MoST)	Netherton	11,000	Topical small molecule	Pre-Clinical	• Development candidate nomination (2019)
	BBP-761 (Fortify)	LHON	20,000	Small molecule	Pre-Clinical	• Development candidate nomination (2020)
Oncology	BBP-831 (QED) ☆	FGFR+ Cancers	37,000*	Small molecule	Phase 2 R	• Initiate Phase 3 trial for advanced CCA in the 1L setting (2019) • NDA filing for advanced CCA in 2L setting or later (2020) • Initiate Phase 3 trial in adjuvant urothelial carcinoma (2020)
	BBP-454 (TheRas) ☆	KRAS+ cancer	>500,000*	Small molecule	Pre-Clinical	• Development candidate nomination (2020)
	BBP-398 (Navire)	Multiple tumors	>500,000*	Small molecule	Pre-Clinical	• IND filing (2020)
	BBP-954 (Ferro)	Multiple Tumors	>500,000*	Small molecule	Pre-Clinical	• Development candidate nomination (2020)
Gene Therapy	BBP-631 (Adrenas) ☆	CAH	>75,000	Gene therapy	Pre-Clinical	• IND filing (2020)
	BBP-812 (Aspa)	Canavan	1,000	Gene therapy	Pre-Clinical	• IND filing (2020)

☆ Key Value Drivers Registrational Trial[3] R Small molecule Topical small molecule Biologics Gene therapy

[1] Each of our programs is housed in a separate subsidiary
[2] Patient population: Prevalence figures presented except for asterisked which represent incidence; midpoint of range presented where clear estimates are unavailable
[3] A clinical trial we believe could support filing an application for marketing authorization, although the FDA and other regulatory authorities have not indicated their agreement or that additional trials will not be required

KEY VALUE DRIVERS

BBP-265/AG10 (Eidos): TTR Amyloidosis

Summary	• We are developing BBP-265, an oral small molecule TTR, stabilizer, for the treatment of TTR amyloidosis, or ATTR, including both cardiomyopathy and polyneuropathy manifestations, or ATTR-CM and ATTR-PN, respectively
Development Status and Catalysts	• Ongoing – Phase 3 clinical trial in ATTR-CM • 2019 – Planned initiation of Phase 3 clinical trial in ATTR-PN • 2019 – Anticipated reporting of data from ATTR-CM Phase 2 open label extension on safety and key cardiac biomarkers
Disease Overview	• Amyloid deposition can cause ATTR-CM (wild-type and mutant) and ATTR-PN. Both manifestations of disease are progressive, have a significant negative impact on quality of life, and are eventually fatal • ATTR is caused by dissociation of TTR tetramers into monomers and subsequent aggregation as amyloid proteins (amyloid deposition) leading to organ damage • Prevalence greater than 400,000 worldwide for ATTR-CM, and greater than 10,000 worldwide for ATTR-PN • Cardiomyopathy diagnosis by non-invasive nuclear imaging and/or endomyocardial biopsy, polyneuropathy diagnosis by physical exam and/or neurophysiological tests

	• No established standard of care exists for ATTR-CM. Tafamidis, patisiran and inotersen are currently marketed for ATTR-PN in various geographies
Our Product Concept	• Oral small molecule TTR stabilizer designed to bind TTR and mimic the conformation of the naturally occurring T119M rescue mutation, which "super-stabilizes" TTR tetramers • Potential to halt or reverse cardiomyopathy and neuropathy progression • In a Phase 2 clinical trial completed in ATTR-CM patients, BBP-265 was well-tolerated, and findings showed near complete TTR stabilization and restoration of normal serum TTR levels • There is a strong correlation between level of TTR stabilization, TTR serum levels, and disease severity. We believe that clinical outcomes may be correlated to the level of TTR stabilization • TTR is an important biological molecule. We believe that therapeutic interventions that increase serum TTR are likely to result in better clinical outcomes than therapies that decrease serum TTR levels, assuming similar levels of monomer concentration
Key Competitors	• Tafamidis, a TTR tetramer stabilizer • Patisiran, a RNAi TTR knockdown agent • Inotersen, an antisense oligonucleotide TTR knockdown agent

Disease Overview

ATTR is a disease caused by destabilization of TTR tetramers resulting in amyloid deposition. TTR is a protein that occurs naturally in the form of a tetramer, which is a molecular structure consisting of four identical subunits, or monomers, and performs multiple physiologic roles, including the transport of essential hormones and vitamins. In ATTR, TTR tetramers become destabilized due to a mutation in the TTR gene or as part of the natural aging process. Destabilized TTR dissociates into monomers, self-aggregates and assembles into fibrils which are deposited, predominantly in the heart and nervous system, driving disease pathophysiology.

ATTR is commonly categorized by its genotypic cause and primary clinical manifestation: wild-type ATTR cardiomyopathy, or ATTRwt-CM, which results from an age-related process; mutant ATTR cardiomyopathy, or ATTRm-CM; and ATTR polyneuropathy, or ATTR-PN, which is only associated with TTR mutants. All three forms of the disease are progressive and fatal. ATTRwt-CM and ATTRm-CM patients generally present with symptoms later in life (older than 50) and have median life expectancies of three to five years from diagnosis. ATTR-PN presents either in a patient's early 30s or later (older than 50), and results in a median life expectancy of five to ten years from diagnosis. Progression of all forms of the disease causes significant disability, impacts productivity and quality of life, and creates a significant economic burden due to the costs associated with patient need for supportive care. As the disease progresses, ATTRwt-CM and ATTRm-CM patients may require frequent hospitalizations and repeated interventions. ATTR-PN patients experience gradual loss of the ability to walk without assistance, and autonomic nervous system function affecting digestion and blood pressure.

The worldwide estimated prevalence of ATTRwt-CM, ATTRm-CM, and ATTR-PN is approximately 400,000, 40,000, and 10,000, respectively. However, we believe that the cardiomyopathic forms of the disease are significantly underdiagnosed. For example, recent literature has suggested that between 12% to 19% of patients diagnosed with heart failure with preserved ejection fraction may, in fact, have undiagnosed ATTR-CM. This single segment represents approximately half of the 6.0 million to 7.0 million estimated people with heart failure in the United States alone. With the increasing availability of disease modifying therapeutics, disease awareness is heightened.

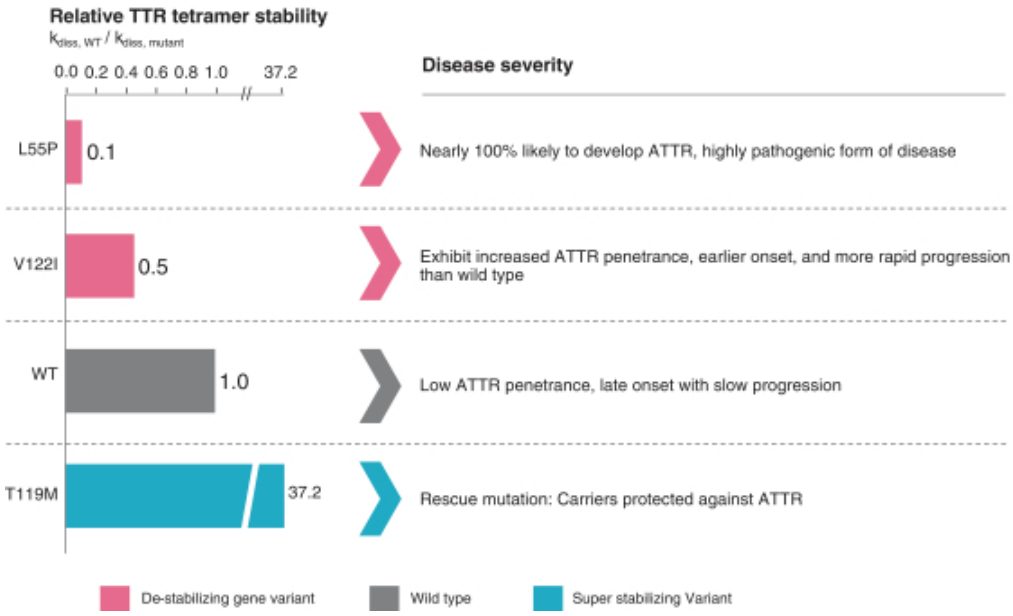
We believe the population of diagnosed ATTR-CM patients is also growing rapidly due to the shift to an accurate and reliable non-invasive diagnostic imaging technique. Historically, a heart biopsy was required to make a diagnosis of ATTR-CM. Recently, however, it has been shown that scintigraphy with technetium-labelled radiotracers is a highly accurate, non-invasive and cost effective method for ATTR-CM diagnosis. We believe that both increased disease awareness and availability of this non-invasive diagnostic imaging technique are allowing for earlier diagnosis of ATTR-CM patients and the identification of previously misdiagnosed patients.

Our Product Concept

BBP-265 is a clinical-stage orally-administered, small molecule TTR stabilizer being developed to treat ATTR at its source by reducing the level of amyloid formation through TTR stabilization. This has been shown in preclinical studies and clinical trials to prevent the dissociation of tetrameric TTR into monomers, and in preclinical studies, to reduce the rate of amyloid fibril formation. In addition, BBP-265 has been shown to lead to increased circulating levels of tetrameric TTR. BBP-265 has been designed to bind TTR in a way that causes TTR's conformational structure to mimic that of the well-characterized T119M variant, a naturally occurring rescue mutation which super stabilizes the TTR tetramer. T119M has been observed to prevent the dissociation of TTR tetramers into monomers; T119M tetramers dissociate 40-fold more slowly than wild-type tetramers in biochemical assays. Known as a trans-allelic trans-suppresor, individuals who coinherit the T119M rescue mutation along with a TTR-destabilizing mutation, are protected against the development of ATTR.

In third party clinical trials of tafamidis and diflunisal, interventional approaches that increased TTR stabilization led to improved outcomes in this disease and were correlated with increases in serum TTR. Further, based on genetic data, there is a correlation between the level of TTR stabilization, serum TTR levels, and disease severity. As a result, we believe that serum TTR is a predictive biomarker for disease prognosis and that there may be a relationship between more effective TTR stabilization, serum TTR levels, and improved clinical outcomes. Based on head-to-head preclinical data, we believe that BBP-265 has the potential to stabilize TTR to a greater extent than other TTR stabilizers.

Human genetics suggest TTR stability is associated with disease severity



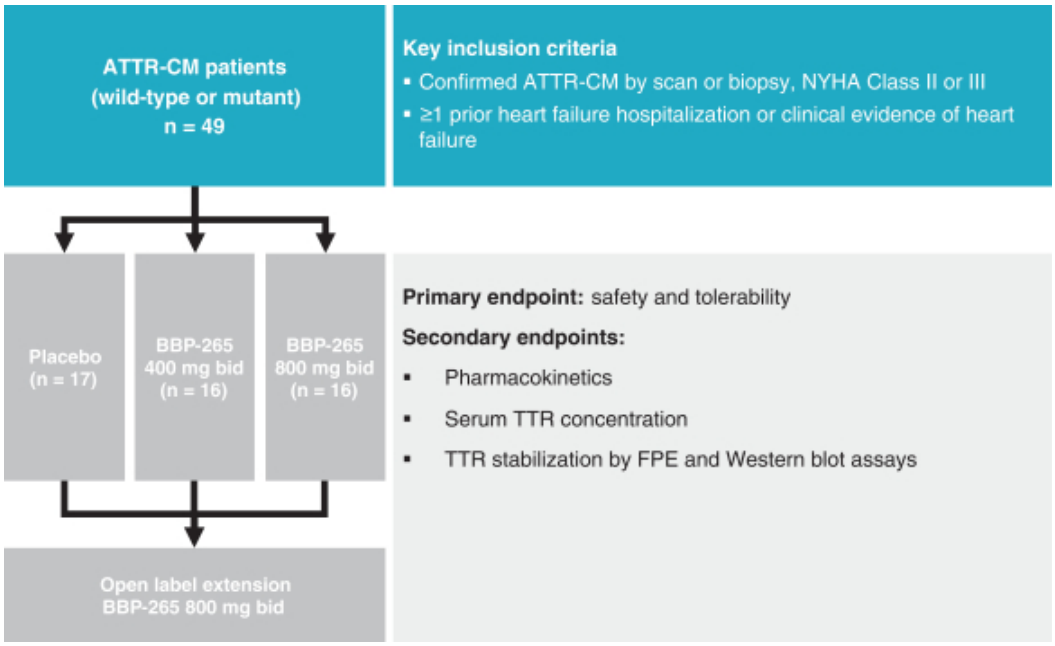
The above chart shows the correlation between TTR stability, as assessed using recombinant protein in vitro, *and disease severity in ATTR patients. Patients with TTR variants that result in highly destabilized TTR are nearly 100% likely to develop the disease, like those with the L55P gene variant. Patients who have super-stabilized TTR, as in the case of individuals with the T119M gene variant, are protected against ATTR and cerebrovascular diseases.*

We believe that TTR is an important plasma protein as evidenced by the fact that it is highly evolutionarily conserved, existing in high concentrations in all vertebrates. We believe that therapies that increase serum TTR are likely to result in better clinical outcomes than therapies that decrease TTR serum levels, assuming similar levels of monomer reduction. This hypothesis is further supported by two prospective studies of 68,602 participants in Denmark over an average 32 years of clinical follow-up, which showed that individuals who inherited the T119M mutation in the absence of a TTR pathogenic gene had higher circulating TTR concentrations, had a lower range of cerebrovascular events, especially fatal or debilitating stroke, and had a five-to-ten year increase in life expectancy relative to the general population. Additionally, data from a retrospective study at Boston University, suggests a correlation between serum TTR changes and mortality in ATTRwt-CM patients.

Clinical Data

Phase 2 Data

In April 2018, we initiated our Phase 2 randomized, placebo-controlled, dose-ranging clinical trial of BBP-265 in 49 patients with symptomatic ATTR-CM, of which 14 had ATTRm-CM. Eligible patients were randomized in a 1:1:1 ratio to placebo or 400 mg or 800 mg of BBP-265 twice daily. The primary objective of the trial was to evaluate the safety and tolerability of BBP-265 administered to adult subjects with symptomatic ATTR-CM. The secondary objectives were to characterize the pharmacokinetics, or PK, of BBP-265 in symptomatic ATTR-CM subjects and to describe the pharmacodynamics, or PD, properties of BBP-265, as well as the PK-PD relationship of BBP-265. The PD assessments of TTR stabilization were measured by fluorescent probe exclusion, Western blot and serum prealbumin (TTR). The trial design is depicted below:



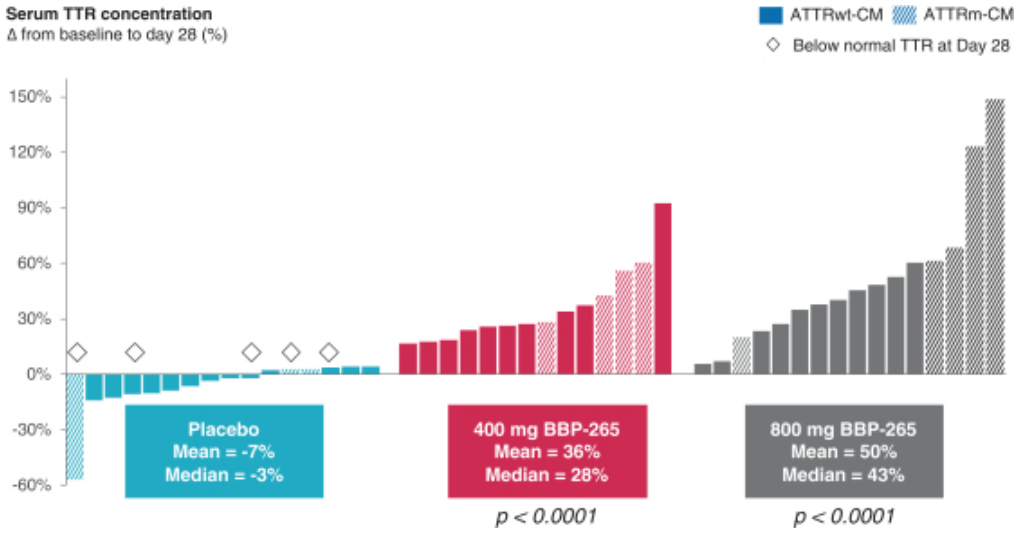
Enrolled symptomatic ATTR-CM subjects ranged in age from 60 to 86 years of age, with a mean age of 74.1, and 92% of subjects were male. In this trial, we enrolled subjects exclusively with advanced disease, with 29% of subjects presenting with New York Heart Association (NYHA) Class III heart failure symptoms and a high baseline NT-proBNP with a mean of 3,368 pg/mL. Additionally, on average, subjects had relatively low TTR at baseline with a mean of 22.0 mg/dL. The laboratory reference range for serum TTR is 20mg/dL to 40 mg/dL in healthy individuals. Both high NT-proBNP and low TTR are biomarkers of disease severity. The subject disposition and baseline characteristics are shown below.

Characteristic	Placebo (n = 17)	BBP-265 400 mg (n = 16)	BBP-265 800 mg (n = 16)	Total (n = 49)
Age, mean (range)	73.2 (60-5)	73.8 (60-83)	75.4 (67-86)	74.1 (60-86)
Male, n (%)	17 (100%)	14 (88%)	14 (88%)	45 (92%)
ATTRm-CM, n (%)	3 (18%)	6 (38%)	5 (31%)	14 (29%)
NYHA Class III, n (%)	5 (29%)	6 (38%)	3 (19%)	14 (29%)
Race, n (%)				
White	13 (76%)	10 (62%)	12 (75%)	35 (72%)
Black	3 (18%)	4 (25%)	3 (19%)	10 (20%)
Other	1 (6%)	2 (13%)	1 (6%)	4 (8%)
NT-proBNP (pg/mL)[1]	3151 ± 2705	3589 ± 3020	3377 ± 2806	3368 ± 2789
Troponin I (ng/mL)[2]	0.17 ± 0.30	0.22 ± 0.24	0.10 ± 0.06	0.16 ± 0.22
TTR (mg/dL)[3]	23.4 ± 5.5	23.2 ± 5.7	19.5 ± 4.2	22.0 ± 5.4

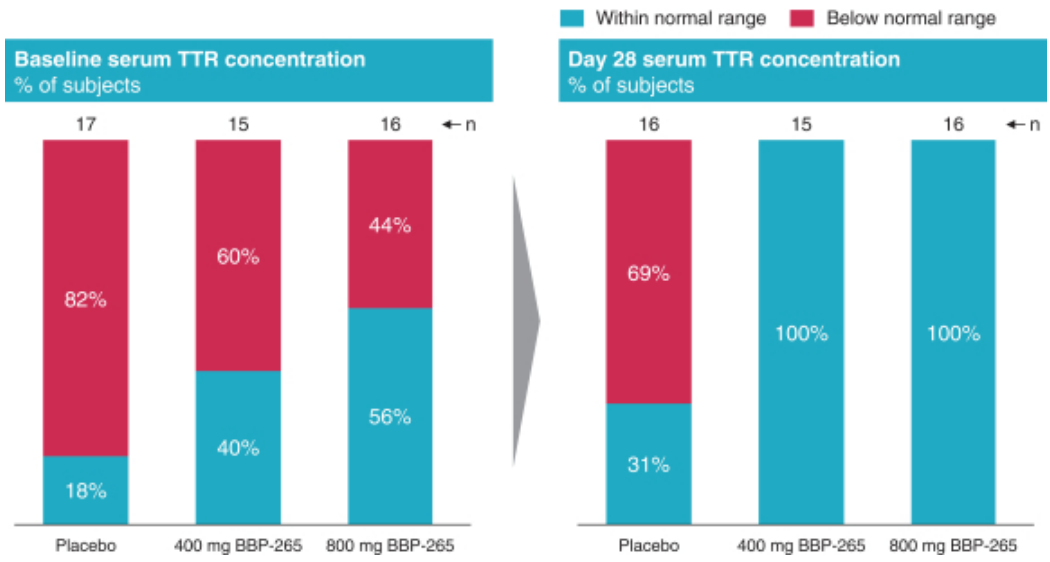
1 NT-proBNP normal range = 0 – 449 pg/mL; NT-proBNP = N-Terminal pro B-type Natriuretic Peptide
2 Troponin I normal range = 0 – 0.02 ng/mL
3 TTR normal range = 20 – 40 mg/dL

Overall, BBP-265 was well-tolerated in symptomatic ATTR-CM subjects with no lab safety signals of potential clinical concern attributed to study drug. In this trial, 88% of subjects administered placebo experienced AEs and 63% and 69% of subjects administered 400 mg and 800 mg BBP-265 experienced AEs, respectively. In both the placebo and active treatment groups, most of the AEs were mild to moderate in severity. The most commonly observed AEs, occurring in four or more subjects across the treatment and placebo groups, were atrial fibrillation, constipation, diarrhea and muscle spasms. Three subjects reported SAEs during this study. One placebo-treated subject experienced two SAEs of atrial fibrillation and congestive heart failure and another placebo-treated subject experienced cellulitis in their lower extremity. One BBP-265 treated subject experienced an SAE of shortness of breath on study, which was considered unlikely to be related to study drug.

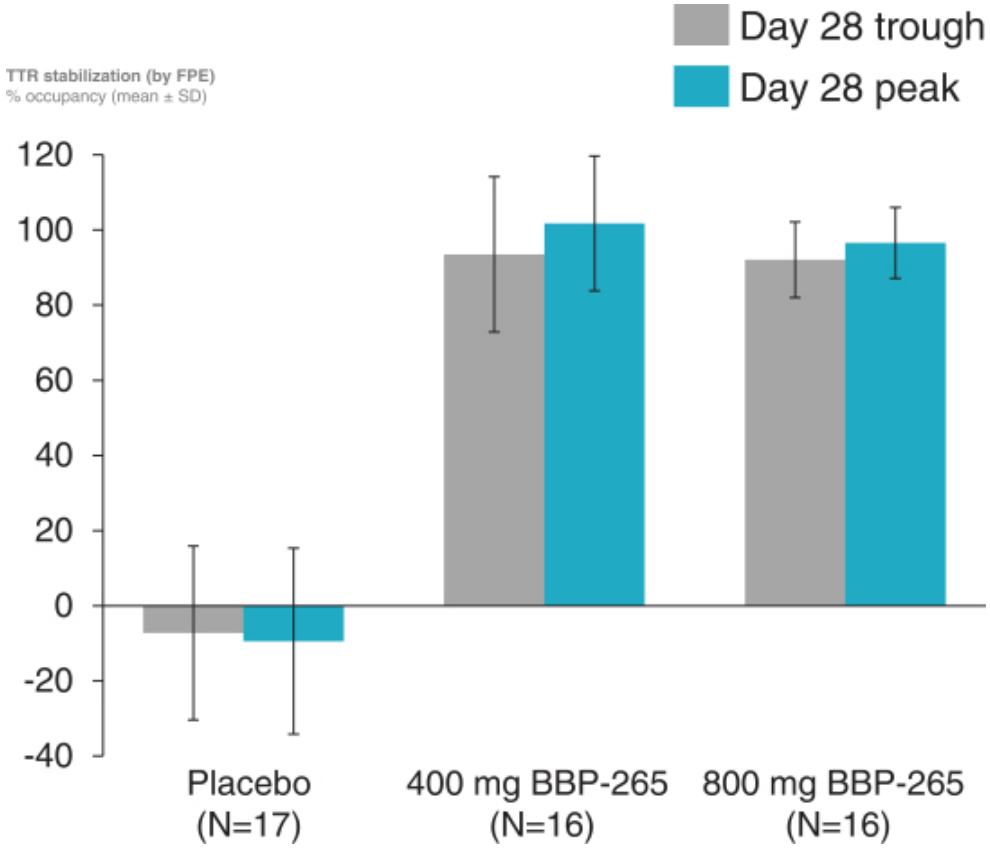
As shown in the chart below, subjects in the placebo group experienced a mean 7% reduction in the circulating tetrameric TTR concentrations compared to baseline. Conversely, subjects administered either 400 mg or 800 mg BBP-265 showed a dose-dependent statistically significant mean increase in circulating TTR of 36% and 50%, respectively, compared to baseline. Compared to placebo, both the 400 mg and 800 mg BBP-265 arms demonstrated statistically significant increases in mean circulating TTR ($p<0.0001$ for both arms). p-value is a statistical calculation that relates to the probability that the difference between groups happened by chance, with a p-value of less than 0.05 (i.e., less than 5% probability that the difference happened by chance) generally being used as the threshold to indicate statistical significance. There was a greater observed treatment effect in subjects with mutant ATTR-CM as compared to subjects with wild-type ATTR-CM, which we believe can be explained, in part, by the lower absolute serum TTR of mutant ATTR-CM subjects at baseline.



The following chart shows that treatment with BBP-265 restored serum TTR concentrations to within the normal range in all subjects at Day 28.



Ex vivo stabilization assays demonstrated near-complete TTR stabilization by BBP-265, with greater than 90% average tetramer stabilization across subjects treated with 400 mg and 800 mg BBP-265 as shown in the chart below. The stabilization response was consistent across mutant and wild-type TTR carriers and replicates previously reported clinical and preclinical TTR stabilization data.



An open label extension study of the Phase 2 clinical trial remains ongoing. We expect to report results from this study in 2019, which we expect will include data on safety, key cardiac biomarkers and key echocardiogram parameters.

Phase 1 Data

In our Phase 1 clinical trial, 56 healthy volunteers were administered BBP-265 and at the highest tested dose we observed greater than 95% stabilization of TTR, on average, across the entire dosing interval and 100% stabilization at peak blood levels. In contrast, the peak blood levels achieved by tafamidis at 20 mg and 80 mg provided approximately 45% and 60% stabilization at peak blood levels, respectively, in our preclinical studies. We believe these observations of BBP-265's comparatively higher stabilization were attributable to BBP-265's binding mode and specificity for binding to TTR and not other plasma proteins.

We observed no clinically important AEs or laboratory-based signals of potential clinical concern associated with BBP-265 in healthy adult volunteers participating in our Phase 1 clinical trial of BBP-265. Most AEs were reported by single subjects, and all were mild to moderate in intensity. The only AEs that occurred in more than one subject were dry mouth, generalized headache, upper respiratory infection, and dizziness, all of which occurred in two separate subjects. In our preclinical studies, BBP-265 exhibited a 40- to 80-fold therapeutic window between its

target therapeutic blood level and those concentrations associated with observed, dose-limiting animal toxicity in 28-day studies. We achieved or exceeded that targeted therapeutic blood level in healthy volunteers and ATTR-CM patients at doses that were well-tolerated in the Phase 1 and Phase 2 clinical trials.

Preclinical Data

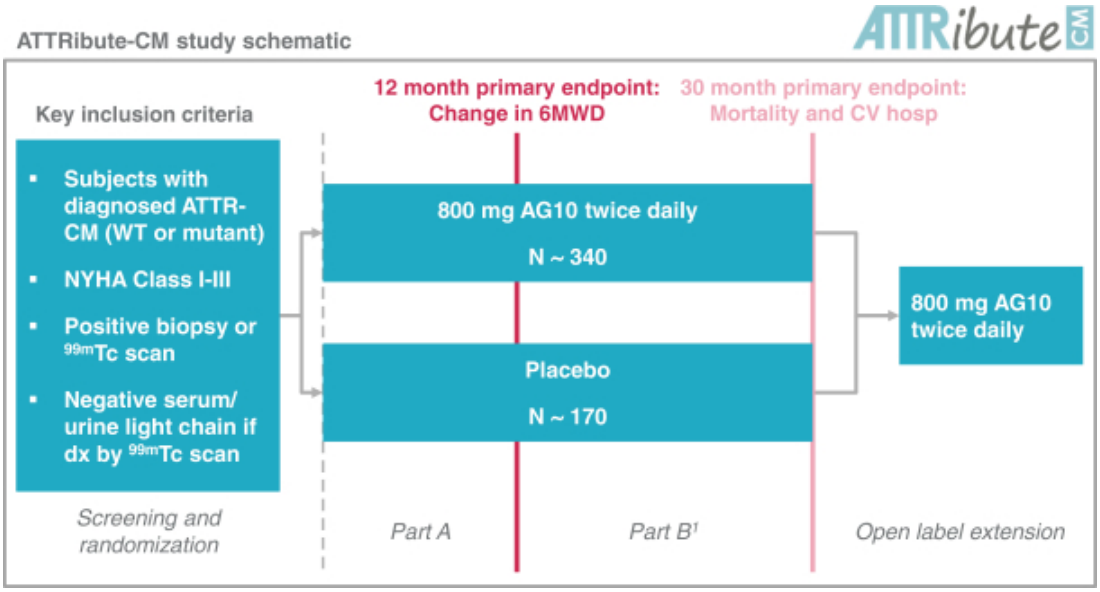
X-ray crystallography indicated that BBP-265 enables hydrogen bonding at the bottom of the thyroxine binding pocket of the TTR molecule, mimicking the structure of the naturally-occurring T119M rescue mutation. To our knowledge, BBP-265 is the only TTR stabilizer in clinical development or clinical use that has been observed in models to mimic this super-stabilizing mechanism of the naturally-occurring T119M rescue mutation.

Further, our preclinical studies in models support that BBP-265's binding to TTR may be highly specific and not significantly affected by the presence of additional plasma proteins. In contrast, published regulatory documents support that tafamidis also binds to the highly abundant plasma protein albumin, which competes with tafamidis' ability to bind and stabilize TTR. This is reflected in the free fraction observed for tafamidis (less than 0.5%) from the reported literature versus BBP-265 (3.6%) in our preclinical studies, suggesting that the percentage of total drug available for TTR binding may be greater for BBP-265 than for tafamidis at therapeutic concentrations.

In our preclinical studies using blood samples from ATTR patients, 10 µM BBP-265 also resulted in greater than 85% TTR stabilization across a range of mutations that led to ATTRm-CM or ATTR-PN, which represent over 70% of all patients with mutation-driven ATTR.

Clinical Development Plan

In November and December of 2018, we met with the FDA to discuss a potential regulatory path for BBP-265 in ATTR-CM. Following these discussions, we initiated a randomized, global Phase 3 study of BBP-265 in ATTR-CM patients (ATTRibute-CM). ATTRibute-CM will enroll approximately 510 subjects with symptomatic ATTR-CM, including both wild-type and mutant TTR carriers with New York Heart Association Class I-III symptoms. Subjects will be randomized 2:1 between treatment (AG10 800 mg twice daily) and placebo. In Part A, change in six-minute walk distance (6MWD) at 12 months will be compared between treatment and placebo groups as a potential registrational endpoint. In Part B, the study will continue for a total duration of 30 months, at which point all-cause mortality and cardiovascular hospitalizations will be compared between treatment and control groups. A schematic of the trial is shown below:



Secondary endpoints include: Kansas City Cardiomyopathy Questionnaire, serum TTR, TTR stabilization
As local standard of care evolves, concomitant use of approved, indicated therapies may be allowed

6MWD = Six minute walk distance; NYHA = New York Heart Association;
99mTc = Technetium labeled pyrophosphate (PYP) or bisphosphonate (e.g., DPD); dx = diagnosis;
CV hosp = cardiovascular-related hospitalizations

We believe the safety and tolerability data of BBP-265 in healthy volunteers and in ATTR-CM patients will also be relevant for the ATTR-PN patient population. Subject to authorization from applicable regulatory authorities, we plan to initiate a Phase 3 clinical development program for BBP-265 in ATTR-PN in 2019. We do not intend to file an IND with the FDA for this indication as we plan to conduct this study outside of the United States.

Market Opportunity

We believe that the total market for ATTR therapeutic interventions will continue to grow for the foreseeable future as the population of diagnosed patients increases as a result of heightened disease awareness and the adoption of non-invasive diagnostic techniques. As such, if BBP-265 is approved, we believe that there could be a significant population of newly diagnosed patients who can be treated with BBP-265 who have not previously been treated with a disease-modifying therapy.

If approved, we believe that BBP-265 could have meaningful commercial potential. Further, we believe that BBP-265, if approved, may present advantages over other therapeutics based on the tolerability of BBP-265 observed in our clinical trials to date and its intended oral route of administration.

Key Competitors

There are three primary therapeutic approaches being studied as treatments for ATTR: TTR knockdown, TTR stabilization and TTR clearance, each of which is expected to compete with BBP-265, if approved.

Among therapeutics that are designed to stabilize TTR, potential competitors include: Vyndaqel (tafamidis), for which Pfizer Inc. has submitted two NDAs for the treatment of ATTR-CM and which is approved in certain countries outside the United States for the treatment of ATTR-PN; SOM0226 (tolcapone, CRX-1008), being developed by Corino Therapeutics Inc.; and diflunisal, a generic, non-steroidal anti-inflammatory drug, or NSAID, that is approved for symptomatic treatment of mild to moderate pain, osteoarthritis and rheumatoid arthritis with a boxed warning for cardiovascular and gastrointestinal risk.

Among therapeutics that are designed to knock down TTR, potential competitors include: ONPATTRO (patisiran), currently marketed by Alnylam Pharmaceuticals, Inc., or Alnylam, for the treatment of ATTR-PN; vutrisiran, currently being developed by Alnylam; TEGSEDI (inotersen), which was developed by Ionis Pharmaceuticals, Inc. and is currently being marketed by Akcea Therapeutics, Inc. for the treatment of ATTR-PN; and preclinical compounds being developed by Intellia Therapeutics, Inc. and Arcturus Therapeutics, Ltd.

Among therapeutics targeting TTR clearance, potential competitors include PRX004, being developed by Prothena Therapeutics plc; and a recombinant human antibody for ATTR that is in preclinical development by Neurimmune Holding AG.

BBP-831/Infigratinib (QED): FGFR-Driven Cancers

Summary	• We are developing infigratinib, an oral FGFR1-3 selective tyrosine kinase inhibitor, or TKI, for the treatment of FGFR-driven cancers
Development Status and Catalysts	• Ongoing – Preparation for NDA submission in advanced CCA, as a second-line or later therapy • Ongoing – Investigator-initiated trial in certain cancers involving FGFR fusions or translocations • 2019 – Anticipated first patient enrollment in Phase 3 clinical trial in advanced CCA as a first-line therapy • 2020 – Planned initiation of Phase 3 clinical trial in adjuvant UC • 2020 – Anticipated NDA filing for treatment of advanced CCA as a second-line or later therapy
Disease Overview	• CCA: – Rare, aggressive cancer of the bile ducts of the liver where the majority of newly diagnosed cases are non-resectable – Incidence of approximately 37,000 in the United States and European Union. Approximately 15% to 20% of patients have FGFR2 fusions or translocations – Standard of care is single-agent or combination chemotherapy

	• UC: – Cancer of the lining of the urinary tract. Most patients with MIBC, and invasive UTUC, will have their tumors excised as a first line of treatment and are most likely to be candidates for adjuvant therapy. Upon resection, however, approximately 50% of cases recur within two years – Incidence of approximately 200,000 in the United States and European Union. In these territories, approximately 45,000 are MIBC and approximately 15,000 are invasive UTUC, which comprise our initial targeted indications. Approximately 15% to 20% of all patients with MIBC and approximately 50% to 60% of patients with invasive UTUC have FGFR3 genomic alterations – There is no standard of care for adjuvant treatment. Some patients may receive platinum-based regimens, but many are ineligible due to impaired renal function • FGFR genomic alteration status determined through standard genomic screening panels • Other FGFR-driven cancers: – Approximately 0.5% of all solid tumor cancers have fusions or translocations in the FGFR gene – FGFR fusions or translocations are particularly prevalent in gastric adenocarcinoma, glioma, carcinoma of unknown primary and endometrial carcinoma • Other FGFR-related syndromes – Tumor-induced ostomalacia, or TIO, is a rare paraneoplastic characterized by bone pain, fractures and muscle weakness. It is caused by tumoral overproduction of fibroblast growth factor 23 (FGF23), which in many cases can be cause by an FGFR1 fusion
Our Product Concept	• Oral small molecule FGFR1-3 specific inhibitor • Designed to abrogate signaling via the FGFR1-3 pathways and inhibit cancer growth in FGFR-driven cancers, including CCA and UC • In Phase 1 and Phase 2 clinical trials, infigratinib has shown activity that we believe to be meaningful in clinical measures such as overall response rate, in advanced CCA with FGFR2 fusions or translocations and in UC with FGFR3 genomic alterations • In advanced CCA, we believe infigratinib could be the first FGFR inhibitor approved for this indication • In UC with FGFR3 genomic alterations, we believe infigratinib, if approved, could play an important role due to the lack of options for adjuvant treatment for patients who are ineligible or unfit to receive platinum-based therapy
Key Competitors	• Pemigatinib, a small molecule FGFR inhibitor • TAS-120, a small molecule FGFR inhibitor • Derazantinib, a small molecule FGFR inhibitor

Disease Overview

FGFRs are a family of genes that regulate multiple biological processes including cell proliferation, angiogenesis, and tissue repair. Amplifications, mutations, and fusions/translocations in FGFR genes are present

in multiple cancers, and it is believed that they are key drivers in certain cancer types. FGFR genomic alterations have been shown to be present in approximately 7% of cancers. FGFR fusions or translocations, more specifically, have been shown to be present in approximately 0.5% of solid tumors.

Below is a table showing the frequency of certain FGFR genomic alterations in different tumor types:

Tumor type	Incidence (U.S. and EU)	Estimated Occurrence of FGFR genomic alterations*	Most common alteration(s)
Cholangiocarcinoma	20,000	15-20%	FGFR2 fusions or translocations
Urothelial carcinoma	200,000		
Non-muscle invasive bladder cancer	130,000	35-60%	FGFR3 mutations
Muscle invasive bladder cancer	41,000	15-20%	FGFR3 mutations
Non-invasive upper tract urothelial carcinoma	13,000	80-90%	FGFR3 mutations
Invasive upper tract urothelial carcinoma	19,500	50-60%	FGFR3 mutations
Gastric adenocarcinoma	40,000	10%	FGFR2 amplifications, FGFR2 fusions or translocations
Glioma	10,000	5%	FGFR3 fusions or translocations, FGFR1 amplifications
Head and neck squamous cell carcinoma	90,000	15%	FGFR1 genomic alterations
Carcinoma of unknown primary	20,000	5-10%	FGFR2/3 fusions or translocations
Endometrial adenocarcinoma	125,000	10-15%	FGFR2 fusions or translocations

* Approximate percentages

Cholangiocarcinoma

CCA is a rare and aggressive epithelial malignancy of the bile ducts of the liver. Approximately 20,000 new cases are diagnosed each year in the United States and European Union. The majority of newly diagnosed cases are non-resectable, meaning the malignancy cannot be removed completely through surgery. CCA, including resectable and non-resectable cases, has a median overall survival, or OS, between 20 and 28 months from diagnosis, and a five-year survival rate of approximately 25%.

Currently, no product has been specifically approved for the treatment of non-resectable CCA. Standard of care in locally advanced (i.e., non-resectable) and/or metastatic disease for first-line treatment is platinum-based chemotherapy, which has median with a progression-free survival, or PFS, of approximately eight months and an OS of approximately 12 months. Approximately 85% of these patients will move on to receive a second-line of treatment.

Second-line treatment for advanced and/or metastatic CCA is alternative single or combination agent chemotherapy; however, second-line chemotherapy has shown only single-digit response rates on average. In a comprehensive review of 25 studies, median PFS was 3.2 months and overall response rate, or ORR, was 7.7% for patients receiving second-line treatment. As a result, the National Comprehensive Cancer Network, or NCCN, guidelines for the treatment of CCA currently do not recommend any specific regimen for second-line treatments. Further, there are currently no targeted therapies approved for the treatment of CCA.

Urothelial Carcinoma

UC is a cancer of the lining of the urinary tract with approximately 200,000 new cases diagnosed each year in the United States and European Union.

UC can be categorized as bladder cancer, or BC, and upper tract urothelial carcinoma, or UTUC. In BC, patients are typically segmented into muscle-invasive, or MIBC, and non-muscle invasive, or NMIBC disease. UTUC, in turn, can be classified as invasive or non-invasive disease. We are initially focused on developing infigratinib for the 45,000 MIBC and 15,000 invasive UTUC cases that occur annually in the United States and European Union.

Patients that present with MIBC or invasive UTUC are typically candidates for surgical resection, specifically radical cystectomy or radical nephroureterectomy, respectively, as an initial treatment. However, upon resection, approximately 50% of cases will recur within two years of surgery. Following surgical resection there is no standard of care for adjuvant treatment, especially for cisplatin ineligible patients. There are limited clinical data suggesting that cisplatin-based adjuvant regimens may increase disease-free survival. And, as renal function is impaired in many patients due to age and surgical removal of the bladder, ureter and/or kidney, many patients are not candidates for cisplatin-based therapy. Data suggests that approximately 40% to 50% of MIBC patients and 70% to 80% of invasive UTUC patients are cisplatin ineligible after radical cystectomy and radical nephroureterectomy, respectively.

Our Product Concept

Signaling via FGFR genes is thought to be a key driver of certain cancers, including CCA and UC. As an FGFR1-3 specific inhibitor, infigratinib abrogates signaling via the FGFR1-3 pathways, interfering with oncogenic signaling and cancer growth.

Infigratinib has shown clinical activity in advanced and/or metastatic CCA with FGFR2 fusions or translocations, with an ORR of 26.9%, in a Phase 2 clinical trial as described below. In advanced and/or metastatic CCA, limited treatment options make FGFR-directed therapies particularly attractive potential treatment options.

Infigratinib has also shown clinical activity in advanced and/or metastatic UC with FGFR3 genomic alterations in a Phase 1 expansion cohort, with an ORR of 25.4%, as described below. The majority of patients with invasive UC undergo surgical resection; however, there is no standard of care for adjuvant treatment post-surgery, especially for cisplatin-ineligible patients. While there is limited evidence for the use of cisplatin-based chemotherapy as an adjuvant treatment, many patients are cisplatin ineligible due to poor renal function. We believe that infigratinib could play a meaningful role as an adjuvant treatment for patients with UC driven by FGFR3 genomic alterations.

Clinical Data

Infigratinib has been studied in ten clinical trials that include four Phase 1 clinical trials in healthy volunteers, three Phase 1 clinical trials in cancer patients, and three Phase 2 clinical trials in certain cancer patients, and has demonstrated clinical proof of concept in CCA and UC. To date, infigratinib has been tested in over 600 subjects, including healthy volunteers and cancer patients, and has demonstrated acceptable tolerability.

In the studies described below, the following revised RECIST guideline version 1.1, or RECIST 1.1, criteria, which are the accepted criteria by the scientific community for the tumor type discussed, were used to define responses:

- ORR, which is defined as the proportion of patients with a best overall response of partial response, or PR, plus those with complete response, or CR.
- Response duration, which is measured from the time of initial response until documented tumor progression.

- Disease control rate, or DCR, which is defined as the proportion of patients who have achieved a best overall response of CR, PR, or stable disease, or SD.
- Progression free survival, or PFS, which is defined as the time from randomization/start of treatment until objective tumor progression or death, whichever occurs first.
- Overall survival, or OS, which is defined as the time from randomization until death from any cause.

CCA Phase 2 Clinical Trial

Infigratinib is being studied in an open-label, single-arm, Phase 2 clinical trial in patients with advanced and/or metastatic CCA, referred to as the '2204 trial. The study initially enrolled patients with any FGFR genomic alterations and was later amended to enroll only patients with FGFR2 fusions or translocations, who represented patients showing the strongest response. To date, we have reported interim data in 71 CCA patients with FGFR2 fusions or translocations, who had previously received a cisplatin-and gemcitabine-containing regimen, or a gemcitabine-containing regimen (for those who are considered intolerant to cisplatin) and are continuing to enroll patients in the trial. Patients received infigratinib 125 mg once daily for 21 days followed by seven days off in 28-day cycles until disease progression. The primary endpoint of the study is ORR. Secondary endpoints include PFS, best overall response, or BOR, DCR, OS, safety and PK. The median age of enrolled subjects is 53 years, 62.0% are female, 100.0% are FGFR2 fusion or translocation positive, and 7.0% have co-existing FGFR2 mutations. A significant majority of patients enrolled in the trial were pretreated, with 65.1% having received at least two prior lines of antineoplastic therapy.

At an interim analysis based on a data cut-off date of August 8, 2018, we observed the following results for FGFR2 fusion or translocation positive patients. The data presented in the table below are based on patients with potential for confirmation (n=67; patients who had completed or discontinued prior to six cycles). All responses were investigator-assessed.

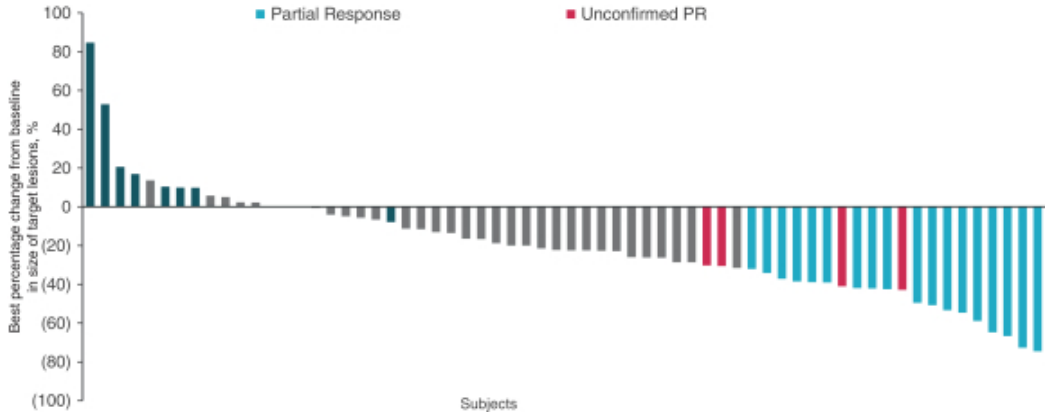
ORR, % (95% CI)	26.9 (16.8-39.1)
ORR in patients receiving prior lines of treatment, %	
£1 (n=28)*	39.3
³2 (n=39)	17.9
BOR‡ (confirmed and unconfirmed PRs)*, %	32.8
DCR, % (95% CI)	83.6 (72.5-91.5)
Median duration of response, months (95% CI)	5.4 (3.7-7.4)
Median PFS, months (95% CI)	6.8 (5.3-7.6)
Median OS, months (95% CI)	12.5 (9.9-16.6)

* Three patients received no prior systemic therapy for advanced or metastatic CCA

‡ BOR defined per RECIST1.1: patients with one scan with greater than 30% change from baseline in target lesions, without confirmation from a second scan

An intention-to-treat analysis was also performed. In the intention-to-treat population (n=71), ORR was 25.4% and BOR was 31.0%.

A waterfall chart showing the change in target lesion size for patients in this trial as of the interim analysis date follows (n=64; patients with potential for confirmation and who had both baseline and one post-baseline assessment available at time of analysis). This chart shows both the change in tumor size, as well as best response per RECIST 1.1 guidelines, providing a visual representation of patient responses to infigratinib treatment:



The ORR as of the interim analysis was observed to be higher in the subsegment of patients who had received only one prior line of therapy (39.3% versus 26.9% for all patients). A waterfall chart showing the change in target lesion size for patients in this subsegment follows (n=27; patients who had received one or fewer prior lines of systemic therapy for treatment of advanced or metastatic CCA and with potential for confirmation and who had both baseline and one post-baseline assessment available at time of analysis). This chart shows both the change in tumor size, as well as response per RECIST 1.1 guidelines, providing a visual representation of patient responses to infigratinib treatment:

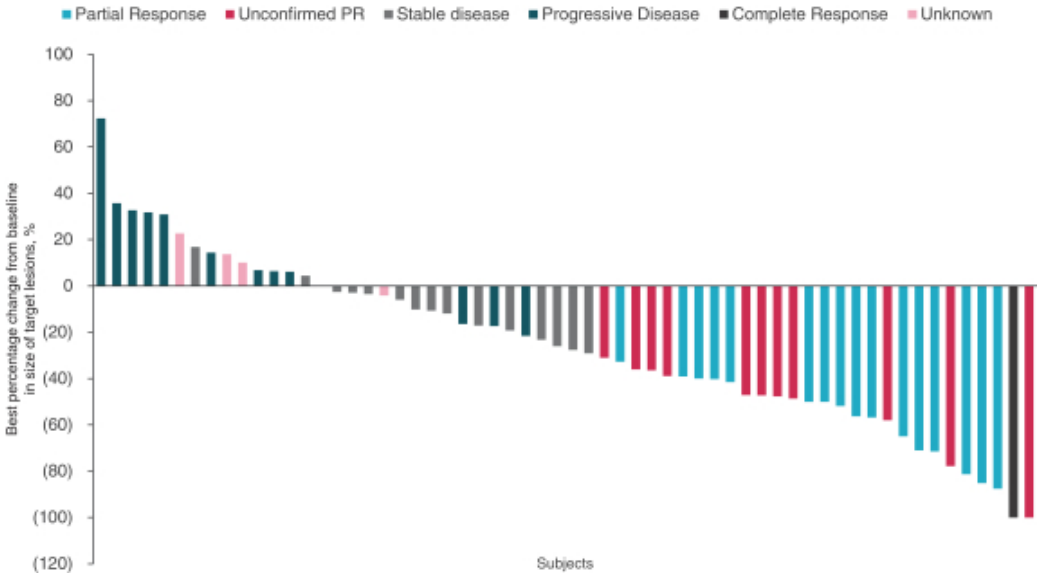
Urothelial Carcinoma Phase 1 Clinical Trial Expansion Cohort

In a Phase 1 open-label, single arm expansion cohort of the ‘2101 study, patients with UC harboring FGFR3 genomic alterations (n=67) received infigratinib 125 mg once daily for 21 days followed by seven days off in 28-day cycles until progression. Patients enrolled in the trial had a median age of 67 years, and 68.7% were male. 92.5% of patients had FGFR3 mutations and 7.5% had FGFR3 fusions or translocations. The primary objective of the ‘2101 study was to determine the maximum tolerated dose, or MTD, and thus the recommended Phase 2

clinical trial dose and schedule of single agent oral BGJ398 in patients with advanced solid tumors. The key secondary objective of the expansion cohort in this study was to assess preliminary anti-tumor activity in patients treated with infigratinib. Other secondary objectives included safety, tolerability and PK analyses. Patients enrolled in the trial were heavily pre-treated, 70% of enrolled patients having received two or more prior lines of therapy. The endpoint assessment of patients from this trial follows:

ORR, %	25.4
BOR (confirmed and unconfirmed PRs), %	41.8
DCR, %	64.2
Median duration of response, months (95% CI)	5.1 (3.9-7.4)
Median PFS, months (95% CI)	3.8 (3.1-5.4)
Median OS, months (95% CI)	7.8 (5.7-11.6)

A waterfall chart highlighting the best percentage change from baseline in size of target lesions in this trial follows (n=60; patients with potential for confirmation and who had both baseline and one post-baseline assessment available at time of analysis). This chart shows both the change in tumor size, as well as response per RECIST 1.1 guidelines, providing a visual representation of patient responses to infigratinib treatment:



Safety Data

Infigratinib has been studied in over 600 patients to date, including 134 healthy volunteers, 421 oncology patients treated with infigratinib monotherapy, and 62 oncology patients treated with infigratinib in combination with BYL719, a phosphoinositide 3-kinase, or PI3K inhibitor. To date, at the dose of 125mg daily (three weeks on, one week off), the dose being used in our ongoing and planned Phase 2 and Phase 3 clinical trials, infigratinib has shown acceptable tolerability with expected on-target class effects. The table below show safety data for all oncology patients (n=421) exposed to infigratinib monotherapy across all studies, dosing levels, and dosing schedules, and provides a summary of the most frequently observed AEs in ³25.0% of oncology patients:

	Hyperphos-phatemia	Fatigue	Constipation	Stomatitis	Decreased appetite	Nausea	Diarrhea	Alopecia
All Grades	61.5%	40.9%	37.1%	33.7%	30.2%	29.0%	27.3%	26.8%
Grade 3+	6.9%	5.4%	1.0%	4.0%	2.9%	2.9%	2.1%	0.0%

The most commonly reported treatment emergent adverse event of any grade was hyperphosphatemia, occurring in 61.5% of patients. Hyperphosphatemia is an on-target AE based on FGFR1 inhibition. Other frequently reported AEs included fatigue (40.9%), constipation (37.1%), stomatitis (33.7%), decreased appetite (30.2%), nausea (29.0%), diarrhea (27.3%), and alopecia (26.8%).

In the '2101 trial, a Phase 1 open-label dose-escalation study of 208 patients with advanced solid malignancies across multiple tumor types at multiple doses, eight grade 3 or 4 AEs (30.8% of grade 3 or 4 AEs observed in this study) were suspected to be related to study treatment, with the most common events being hypophosphatemia (7.7%) and lipase increase (7.7%). This is generally consistent with the number of grade 3 or 4 AEs related to study treatment across all studies to date. The following SAEs in the '2101 trial were adjudicated as being related to infigratinib: cataract, constipation, abdominal pain, hyperphosphatemia, hypophosphatemia (each reported in two patients, or 1.0% of patients); and hypercalcemia (reported in three patients, or 1.5% of patients).

In a Phase 1 expansion cohort of UC patients in the '2101 trial, 70.1% of patients discontinued due to progressive disease, 14.9% due to AEs, 3.0% due to withdrawal of consent, 1.5% due to loss to follow-up, and 1.5% due to death. 35.8% of patients experienced SAEs and 6.0% experienced SAEs suspected to be related to study treatment.

In an ongoing Phase 2 open-label, single arm study for patients with advanced or metastatic CCA and FGFR2 gene fusions or translocations, or the '2204 trial, as of August 8, 2018, 61.4% of patients had discontinued due to progressive disease, 9.6% due to AEs, 8.4% due to physician decision, 4.8% due to withdrawal of consent, 1.2% due to loss to follow-up, 2.4% due to death, and 1.2% for unknown reasons. As of August 8, 2018, 10.8% of patients had ongoing treatment. 39.4% of patients with FGFR2 fusions or translocations experienced SAEs and 11.3% experienced SAEs suspected to be related to study treatment.

In the dose-escalation cohort of the Phase 1 clinical trial, the maximum tolerated dose, or MTD, for infigratinib was found to be 125 mg/ day, which is approximately 2 mg/kg. Per further investigation of tolerability, safety, PD and PK, an alternative dosing schedule, i.e. three weeks on/one week off, at 125 mg was explored. The three weeks on/one week off at 125mg was declared as the recommended Phase 2 dose, or RP2D, by Novartis.

In total, 37.2% (n=157/422) of oncology patients across all trials with monotherapy treatment experienced SAEs. SAEs occurring in greater than 1.0% of patients included dyspnea (2.4%), general physical health deterioration (2.4%), pyrexia (2.1%), sepsis (2.1%), vomiting (2.1%), abdominal pain (1.9%), pneumonia (1.9%), anemia (1.7%), hypercalcemia (1.7%), acute kidney injury (1.4%), constipation (1.4%), dehydration (1.4%), nausea (1.4%), and urinary tract infection (1.4%).

In total, 41.9% (n=26/62) of oncology patients treated with combination treatment experienced SAEs. SAEs occurring in greater than 1.0% of patients included pyrexia (6.5%), general physical health deterioration (3.2%), pleural effusions (3.2%), stomatitis (3.2%), diarrhea (3.2%), deep vein thrombosis (3.2%), dyspnea (1.6%), anemia (1.6%), constipation (1.6%), nausea (1.6%), dysphasia (1.6%), hyponatremia (1.6%), muscular weakness (1.6%), pain in extremity (1.6%), septic shock (1.6%), small intestinal obstruction (1.6%), lower abdominanl pain (1.6%), colostridium difficile colitis (1.6%), headache (1.6%), peripheral edema (1.6%), tumor pain (1.6%), hematoma (1.6%), hyperglycemia (1.6%), hypersensitivity (1.6%), iliac vein occlusion (1.6%), malignant neoplasm progression (1.6%), peripheral swelling (1.6%), peroneal nerve palsy (1.6%), maculopapular rash (1.6%), rectal hemorrhage (1.6%), renal failure (1.6%), skin infection (1.6%), ureteric obstruction (1.6%), and wound decomposition (1.6%).

In healthy volunteers (n=134), no SAEs were reported.

Potential Additional Indications

As demonstrated in early clinical data, treatment with infigratinib monotherapy has shown promising activity across multiple tumor types with FGFR fusions or translocations, including glioblastoma, gallbladder cancer, and

carcinoma of unknown primary. Further, preclinical data suggest that infigratinib is likely to be active in gastric cancer with FGFR activating mutations. Many of Novartis' trials of infigratinib monotherapy did not differentially enroll patients by the type of genomic alteration present in tumors. Based on available data, we believe that tumors harboring specific genomic alterations, including activating mutations, fusions, or translocations are the most likely to be drivers of cancer, and are thus the most likely to be responsive to infigratinib monotherapy. As we consider development of infigratinib monotherapy in indications outside of CCA and UC, we are focusing our development in indications with these specific genomic alterations. We believe that some of the negative results obtained in the Novartis trials, as discussed below, were driven by selection of patients with FGFR amplifications and non-activating mutations, which are genomic alterations that, we believe, may not be key drivers of cancer.

Preclinical data also provide proof-of-concept that infigratinib may provide synergistic efficacy in combination with other anti-cancer agents in indications including: breast cancer in combination with VEGFR inhibitors, and non-small cell lung cancer, or NSCLC, in combination with EGFR inhibitors or MEK inhibitors. In an FGFR1 amplified breast cancer mouse model, *in vivo* synergy with ZD6474, a VEGFR inhibitor, was shown in relation to tumor suppression. In PC9 xenograft mouse models, infigratinib combination with gefitinib (an EGFR inhibitor) prevented development of *in vivo* resistance. Further, dual inhibition with infigratinib and gefitinib suppressed *in vitro* outgrowth of EGFRi-tolerant persister clones. Finally, upfront combination with trametinib forestalled resistance driven by FGFR1 in NCI-H520 (FGFR1 amplified squamous cell carcinoma), DMS114 (FGFR1 amplified small cell lung cancer), and AN3 CA (FGFR2 mutated endometrial carcinoma) cell lines. We believe these preclinical data provide a rationale for potential combination trials with infigratinib that are currently being explored.

Other FGFR-related syndromes: tumor-induced ostomalacia

Tumor-induced ostomalacia, or TIO, is a rare paraneoplastic disease characterized by bone pain, fractures and muscle weakness. It is caused by tumoral overproduction of fibroblast growth factor 23, or FGF23, which acts on the proximal renal tubule, and decrease phosphate reabsorption and 1α-hydroxylation of 25 hydroxyvitamin D, leading to hypophosphatemia and osteomalacia. In up to 60% of cases, a fibronectin-1(FN1)-FGFR1 fusion has been identified that may serve as the primary driver of the syndrome. As a result, we believe an FGFR inhibitor, such as infigratinib, may have benefit in TIO.

Infigratininb is being studied in an ongoing Phase 2, open-label, non-randomized, single-arm, single-site, investigator initiated trial. The primary objective of the study is to induce a complete metabolic response in patients with TIO, as demonstrated by normalization of FGF23 and phosphate homeostasis. Patients will be dosed, initially, with 75mg per day, which will be escalated up to 125mg daily dependent upon on patient response. To-date two patients with TIO have been enrolled in the study and were treated with infigratinib, and we expect to enroll up to 10 patients in this clinical trial. Both patients demonstrated normalization or near normalization of FGF23 and normalization of phosphate levels after treatment.

Other Clinical Trials

The trials of infigratinib conducted with the most advanced clinical data are the '2101 and '2204 trials discussed above, and two other Phase 2 clinical trials, the '2201 and 'US04 trials. In certain cohorts in the '2101, '2201 and 'US04 trials, low rates of response were observed, which led to a decision to cease developing infigratinib in these programs. It should be noted that '2101, '2201, and 'US04 trials enrolled patients with all FGFR genomic alterations. While the '2204 trial initially enrolled patients with all forms of FGFR genomic alterations, it was subsequently amended to enroll patients only with FGFR2 fusions or translocations.

- In the '2101 trial, the indications with the largest number of patients were squamous non-small cell lung cancer, or sqNSCLC, (n=36), breast cancer (n=32), and UC (n=75, including 67 patients in a Phase 1 expansion cohort). sqNSCLC and breast cancer patients predominantly displayed FGFR1 amplifications,

whereas UC patients exclusively displayed FGFR3 mutations. In this trial, ORR was observed to be 11.1% in sqNSCLC, 0.0% in breast cancer, 37.5% in UC patients in the first part of the Phase 1 study (n=8), and 25.4% in UC patients in the Phase 1 expansion cohort (n=67). ORR across all indications for patients at the MTD or RP2D (n=173) was 13.9%, and DCR was 49.1%. Median PFS for this group was 3.1 months (95% CI: 2.1-3.7 months). OS was not collected for the entire cohort of patients and is only available for the UC expansion cohort, which was 7.8 months (95% CI: 5.7-11.6 months), as reported above.

- ‘2201 was a Phase 2 open-label, single arm study for patients with recurrent resectable or unresectable glioblastoma performed by Novartis. Twenty-six patients with FGFR genomic alterations, predominantly amplifications and mutations, were enrolled in the study and responses were seen in two patients. ORR was 7.6% and DCR was 30.8%. Data is still to be analyzed and median PFS and OS are not available.
- ‘US04 was a Phase 2 open-label, single arm study in patients with pre-identified FGFR-genomic alterations and solid tumors and/or hematologic malignancies performed by Novartis. Eighty-five patients, the majority of whom had FGFR amplifications or mutations, were enrolled with multiple tumors. At the last interim analysis, ORR was 7.5% and clinical benefit rate, or CBR, was 15.0% across all indications. Median PFS was 1.8 months (95% CI: 1.8-2.0 months) and median OS was 6.2 months (95% CI: 4.4-9.8 months).
- The ongoing ‘2204 trial was initiated by Novartis and is now being conducted by us in patients with CCA with FGFR2 fusions or translocations. At an interim analysis with a cut-off date of August 8, 2018, ORR was 26.9% and DCR was 83.6% in those patients with potential for confirmation. Other efficacy measures are reported above.

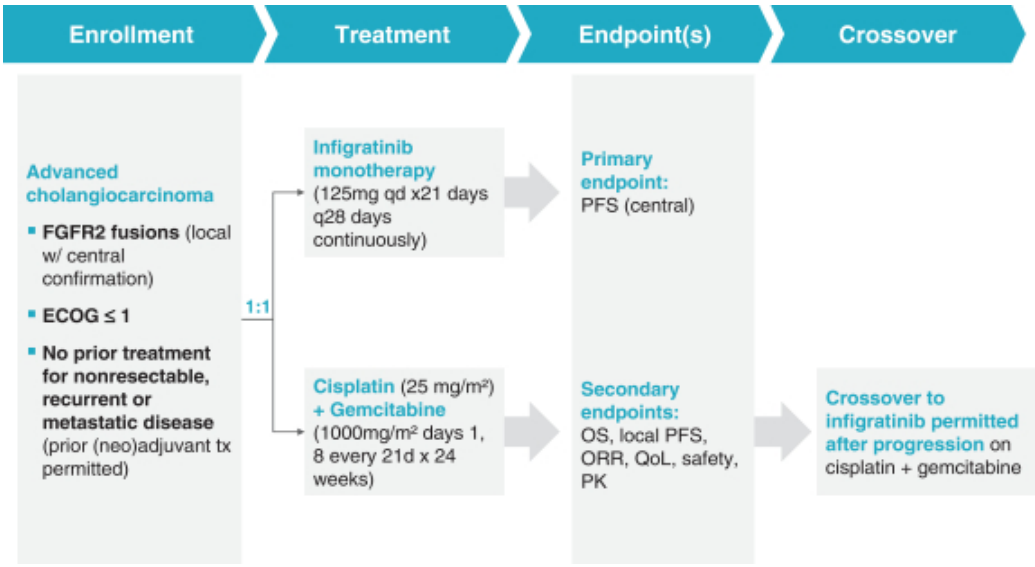
Clinical Development Plans

Advanced CCA

We intend to file an NDA with the FDA for second line and later advanced CCA with FGFR2 fusions or translocations in 2020 with the data that have been generated to date from clinical trials of infigratinib, following meetings with the FDA in 2019, including a planned pre-submission meeting with the Center for Drug Evaluation and Research and the Center for Devices and Radiological Health in mid-2019 to discuss analytical validation and clinical bridging to support the marketing authorization pathway for the companion diagnostic we are developing with FMI. Based on our interactions with the FDA to date, we do not expect to have to perform any additional clinical work specifically related to the companion diagnostic we are developing with FMI. We expect to continue to enroll approximately 20 additional subjects in the ongoing CCA Phase 2 clinical trial (‘2204), although we do not expect that data from these patients will be necessary to file our NDA.

First-line CCA

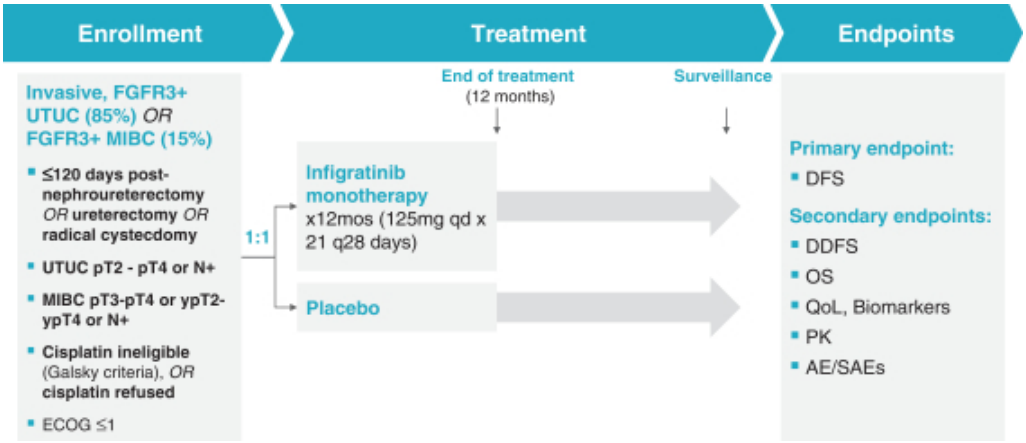
We anticipate enrolling the first patient in a Phase 3 randomized, open-label clinical trial of infigratinib as a first-line therapy for CCA compared to gemcitabine and cisplatin in advanced and/or metastatic CCA with FGFR2 fusions or translocations in 2019. The trial design for this study follows, with a target enrollment of approximately 350 patients globally:



ECOG=Eastern Cooperative Oncology Group, a simple measure of functional status;
DDFS=distant disease-free survival; QoL=quality of life

Adjuvant Urothelial Carcinoma

We expect to initiate a Phase 3 randomized, double-blind, placebo controlled clinical trial in cisplatin-ineligible adjuvant UC with FGFR3 genomic alterations in 2020. The trial design for this study follows with a target enrollment of approximately 250 patients globally:



Other Cancers with FGFR Fusions or Translocations

We are exploring potential clinical development paths for infigratinib in additional FGFR fusion or translocation-driven cancers, as we believe that fusions or translocations are the most likely FGFR genomic alterations to be sensitive to infigratinib monotherapy, based on available data. To date, infigratinib has shown responses in FGFR fusion or translocation-driven CCA and UC, as well as gallbladder cancer, carcinoma of unknown primary, and glioblastoma. An investigator initiated trial has been initiated at the Ohio State University to study infigratinib in patients with multiple tumor types exhibiting FGFR fusions or translocations to further explore the activity of infigratinib in FGFR fusion or translocation-driven solid tumors. Expected enrollment in the trial is approximately 50 patients. Based on data generated from this investigator-initiated trial, as well as ongoing translational research, we plan to implement a development strategy for a tumor agnostic approach, i.e., pursuing approval based on a biomarker rather than a specific cancer indication.

Key Competitors

There are eight other FGFR targeted assets currently known to be in clinical development. These product candidates have not been compared with infigratinib in head-to-head studies. However, efficacy and tolerability data of competitive compounds appears to be in-line with the data from clinical studies of infigratinib.

Key competitors include pemigatinib, an FGFR TKI under Phase 2 and Phase 3 clinical development by Incyte Corporation, TAS-120, an FGFR TKI under Phase 2 clinical development by Taiho Oncology, Inc., derazantinib, an FGFR TKI under Phase 2 and Phase 1/2 clinical development by ArQule, Inc. in collaboration with Basilea Pharmaceutica International Limited, erdafitinib, an FGFR TKI under development by Janssen Pharmaceuticals, Inc. for which an NDA has been submitted, vofatamab, an FGFR3 monoclonal antibody under Phase 1/2 clinical development by Rainier Therapeutics, Inc. and rogaratinib, an FGFR TKI under Phase 2/3 clinical development by Bayer AG.

BBP-831/Infigratinib (QED): Achondroplasia

Summary	• We are developing infigratinib, an oral FGFR1-3 selective TKI in preclinical development for the treatment of achondroplasia at a significantly lower dose than those doses studied in our oncology programs for infigratinib
Development Status and Catalysts	• 2020 – Planned initiation of Phase 1/2 clinical trial
Disease Overview	• Achondroplasia is the most common form of disproportionate short stature • All cases are driven by autosomal dominant FGFR3 gain of function mutations. This leads to downstream signaling through both the MAPK and STAT1 pathways, which impacts hypertrophic differentiation and chondrocyte proliferation, respectively • Prevalence of greater than 55,000 in the United States and European Union, incidence of one in 10,000 to 30,000 live births worldwide • Diagnosis: often suspected prenatally based on shortened long bones and macrocephaly on ultrasound and confirmed by molecular testing after birth. No disease modifying treatments are currently approved in the United States or European Union
Our Product Concept	• Oral small molecule FGFR1-3 specific inhibitor • Has the potential to treat the disease at its source by reducing FGFR3 downstream signaling. Unlike CNP mimetics, this approach also inhibits downstream STAT1 signaling • Preclinical data have demonstrated proof of concept in a mouse model of achondroplasia at doses significantly below those doses studied in our oncology clinical trials

Key Competitors	• Vosoritide, a CNP mimetic • Transcon CNP, a long-acting CNP mimetic • TA-46, a FGFR ligand trap

Disease Overview

Achondroplasia is the most frequent cause of disproportionate short stature, and FGFR3 mutations have been shown to be the molecular source of the condition. Achondroplasia has a prevalence of greater than 55,000 in the United States and European Union, and an estimated worldwide incidence of one in 10,000 to 30,000 live births. The condition leads to a disproportionate short stature with anomalies in bone development and potential for foramen magnum stenosis, spinal stenosis, cardiovascular complications and obesity. The average height is approximately 4’4” for a male and 4’1” for a female with achondroplasia. Lifespan and intelligence are most often normal.

Achondroplasia is an autosomal dominant condition caused by a gain-of-function point mutation in the FGFR3 gene. Approximately 97% of cases are due to G380R substitution and 80% of cases are the result of de novo mutations. FGFR3 is expressed in osteoblasts and chondrocytes where it plays a critical role in regulating bone growth through the MAPK pathway, which drives hypertrophic differentiation, and through the STAT1 pathway, which drives chondrocyte proliferation. Apart from growth hormones, which are approved in Japan, we are not aware of any other medicines approved for marketing by the FDA or the EMA for the treatment of achondroplasia.

Our Product Concept

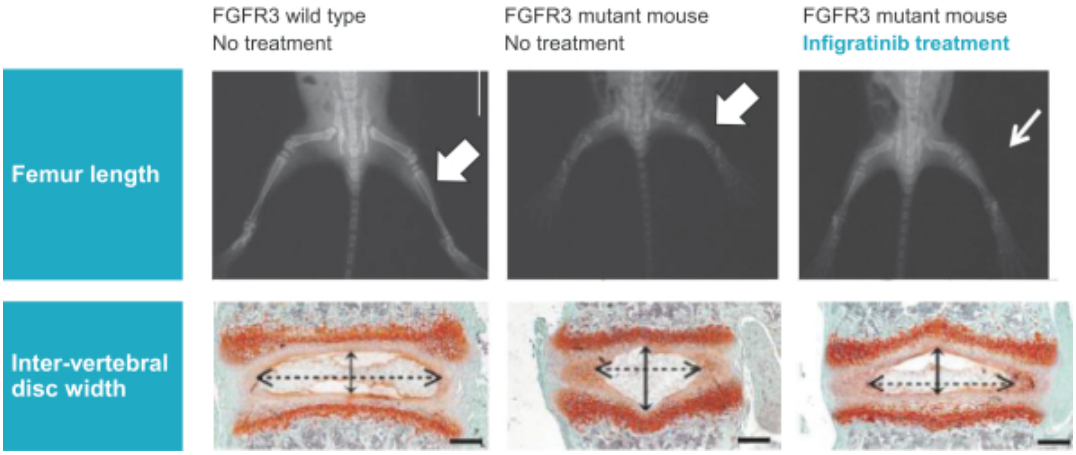
FGFR3 gain-of-function mutations are the driver behind the pathophysiology of achondroplasia. As an FGFR1-3 inhibitor, we believe that infigratinib has the potential to decrease pathologic signaling downstream of FGFR3 and treat achondroplasia at its source.

Preclinical proof of concept has been demonstrated in an achondroplasia mouse model at dose levels as low as 2% of those used in our oncology trials. In our Phase 1 dose escalation clinical trials of infigratinib, we saw acceptable tolerability, including no instances of hyperphosphatemia, at three to six times the expected dose level in our achondroplasia trials. Based on these results, we do not expect significant tolerability issues at the proposed dose level in the clinic.

Preclinical Data

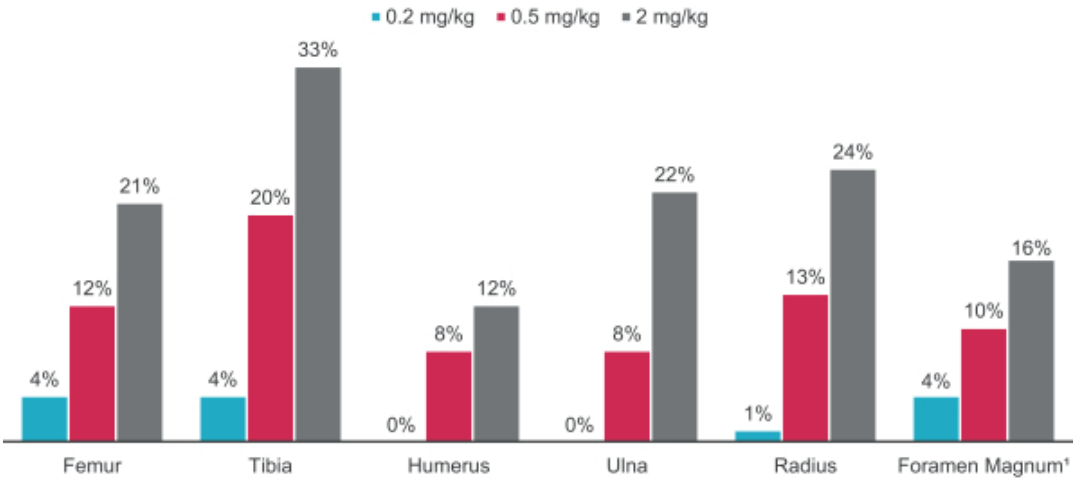
Infigratinib has been studied preclinically in a mouse model of achondroplasia that recapitulates anomalies of the growth plates, vertebrae, and intervertebral discs. Investigators observed that infigratinib rescued *ex vivo* bone growth of mutant mouse embryo femurs after six days of treatment. Further, 15 days of treatment showed *in vivo* bone growth, which mimics human achondroplasia in many respects. Effects on both appendicular and axial skeletal parameters were observed in this study.

Below are figures demonstrating the extent of femur growth and intervertebral disc width rescue in wild-type, untreated model, and infigratinib treated (2 mg/kg) model mice:



In vivo bone growth was further demonstrated at lower doses (0.2 mg/kg and 0.5 mg/kg) by the same laboratory. Together, preclinical studies at all doses have demonstrated meaningful increases in skeletal growth parameters between treated and untreated mutant mice, as follows:

Increase in length compared to non-treated mouse (%)



Notably, treatment with infigratinib did not modify the expression of FGFR1 in the hypertrophic zone of the growth plate. The effects seen were mainly due to FGFR3 inhibition, with no other gross side effects being observed in these preclinical studies.

Clinical Development Plan

Subject to the completion of ongoing juvenile and chronic toxicity studies, we expect to file an IND for infigratinib in achondroplasia and initiate a Phase 1/2 clinical trial in 2020. The Phase 1/2 clinical trial is designed as an open-label, dose-escalation and expansion trial in children with achondroplasia prior to growth

plate closure. The primary objective of this study will be to assess safety and tolerability in children with achondroplasia. Secondary objectives will include PK analyses, change in growth velocity, and assessment of quality of life.

Key Competitors

Infigratinib is the only direct FGFR1-3 inhibitor that has been publicly disclosed in development for the treatment of achondroplasia. There are three other identified companies developing compounds for the treatment of achondroplasia using alternative mechanistic approaches: BioMarin Pharmaceutical Inc. (vosoritide), Ascendis Pharma A/S (TransCon CNP), and Therachon AG (TA-46). Preclinical data for all of the compounds is shown below.

Compound	Vosoritide	TransCon CNP	TA-46
Company	BioMarin Pharmaceutical Inc.	Ascendis Pharma A/S	Therachon AG
Mechanism of Action	• CNP analogue • Designed to reduce signaling via MAPK pathway	• Long-acting CNP analogue • Designed to reduce signaling via MAPK pathway	• FGFR-ligand trap • Designed to reduce signaling via both MAPK and STAT1 pathways
Route of Administration	Subcutaneous	Subcutaneous	Subcutaneous
Status	Phase 3 ongoing	Phase 1 in healthy subjects complete	Phase 1 in healthy subjects ongoing
Tolerability	Injection site reactions; hypotension	Well-tolerated in clinical studies	Undisclosed
Reported preclinical increase in tibia length*	6.6%	12.3%	8.6%
Reported preclinical increase in femur length*	5.2%	Undisclosed	6.2%

* Preclinical data from vosoritide, TransCon CNP is from $FGFR3^{Y367C/+}$ mouse model; TA-46 is from the $FGFR3^{ACH/+}$ mouse model; comparisons are from different preclinical experiments, including differences in protocols and in reported efficacy, and may not be directly comparable.

BBP-631 (Adrenas): Congenital Adrenal Hyperplasia

Summary	• We are developing BBP-631, a preclinical AAV, gene transfer product candidate, for the treatment of CAH, caused by 21OHD. BBP-631 was granted orphan drug designation from both FDA and EMA in 2018.
Development Status and Catalysts	• Ongoing – Nonhuman primate studies, preparation for GLP toxicity studies • 2020 – IND submission anticipated
Disease Overview	• CAH is a debilitating, life-threatening disease defined by an inability to produce the steroids cortisol and aldosterone, and an excess production of testosterone. Complications include adrenal crises, dehydration, and virilization in females. The “classic” form with the most severe phenotype can be categorized into salt-wasting (75%) and simple virilizing (25%), with the former demonstrating only 0-1% of residual enzyme activity • Incidence of approximately 1/20,000 births worldwide for the salt-wasting form, incidence of approximately 1/60,000 births worldwide for the simple virilizing form, and a combined prevalence estimated to be greater than 75,000 in the United States and EU. Over 90% of cases are caused by inactivating mutations in 21OH, with autosomal recessive inheritance • Diagnosis: Newborn screening for 21OHD is conducted in every U.S. state and most European countries by measuring 17α-hydroxyprogesterone

	• Standard of care consists of chronic supraphysiologic doses of exogenous steroids (corticosteroids and mineralocorticoids) leading to significant side effects
Our Product Concept	• Intravenously-administered AAV5 gene transfer therapy intended to replace the 21OH enzyme in the adrenal cortex, potentially normalizing steroid levels (e.g., cortisol, aldosterone, and androgens) • A study in nonhuman primates demonstrated significant transfection in the adrenals where 21OH is synthesized
Key Competitors	• NBI-74788, a CRF receptor antagonist • SPR001, a CRF receptor antagonist • ATR-101, an ACAT1 inhibitor

Disease Overview

CAH is a debilitating and life-threatening disease with no available cure, despite newborn screening for the disease being conducted in every U.S. state. The disease is defined by an inability to produce cortisol and aldosterone, and an excess production of testosterone. Lack of cortisol disrupts glucose metabolism and the body's normal response to stress, leading to potentially fatal adrenal crises, while lack of aldosterone disrupts sodium retention, resulting in low blood pressure, arrhythmia and dehydration. Additionally, excess testosterone causes virilization in females, often leading to ambiguous genitalia and masculinizing features at birth. Hormonal changes during puberty compound the CAH deficiencies. Females often suffer from limited fertility and require intensive treatment before, during, and after pregnancy, and up to 40% of adult males will have adrenal rest tumors which can lead to gonadal dysfunction and infertility, occasionally requiring surgery.

Over 90% of CAH cases are caused by 21OHD, a genetic defect in the CYP21A2 gene coding for the enzyme 21OH. Mutations resulting in loss of enzymatic activity of 21OH prevent conversion of progesterone into 11-deoxycorticosterone and 17-hydroxyprogesterone (17OHP) into 11-deoxycortisol, which are the precursors to aldosterone and cortisol, respectively.

CAH patients with 21OHD can be divided into two categories depending on the type of genetic mutation: classic and non-classic. We are primarily focused on treating classic patients, who have the more severe phenotype and that can be categorized into simple virilizing (approximately 25% of patients) and salt-wasting (approximately 75%) by the severity of aldosterone deficiency and level of residual 21OH enzyme activity. Patients with the salt-wasting form of disease have residual enzyme activity of 0-1% of normal and patients with the simple virilizing phenotype have 1-10% enzyme activity. All patients with the classic form require treatment at birth, as cortisol deficiency can lead to adrenal crisis as early as one to four weeks of life and can quickly lead to death. The salt-wasting form has an incidence of one in 20,000 births, while the simple virilizing form has an incidence of one in 60,000 births. Together, these translate to an estimated 600 classic patients born in the United States and Europe per year. We estimate there are more than 75,000 patients in the United States and Europe in the total addressable patient population.

Current standard of care treatments do not cure patients, but replace missing glucocorticoids, such as cortisol and mineralocorticoids, such as aldosterone, as well as reduce excessive androgen secretion. Although glucocorticoids are the mainstay of CAH therapy, individuals respond in varying ways, and chronic use of glucocorticoids in children and adults requires careful management because of the well-known side effects of these drugs, such as Cushingoid features, metabolic disease, obesity, hypertension, growth retardation, glucose intolerance, electrolyte disturbance, bone demineralization/increased risk of fracture and delayed puberty. Clinical management of classic CAH is often a very difficult balance between hyperandrogenism and hypercortisolism.

Our Product Concept

BBP-631 is a preclinical AAV5 gene transfer product candidate designed for the treatment of CAH due to 21OHD by replacing the 21OH enzyme in the adrenal cortex. Replacement of enzyme function has the potential to normalize flux through the pathway, simultaneously addressing the lack of cortisol and aldosterone, as well as the excess of testosterone and other androgens. Genotype-phenotype correlation studies in CAH suggest that non-classic patients, who are often asymptomatic and do not require treatment, have enzyme activity that is a little as 10% to 20% of normal individuals. We believe that an AAV gene therapy may be able to restore this level of enzymatic activity in CAH patients with both simple virilizing and salt-wasting forms of disease, providing substantial clinical impact and potentially eliminating the need for treatment with exogenous steroids. BBP-631 was granted both FDA and EMA orphan drug designation in 2018 for the treatment of CAH caused by 21OHD.

Development Status

Initial preclinical activity was explored in a Cyp21 knockout mouse model using AAVrh10. An IV injection of vector genomes was observed to improve multiple disease-related factors over a 15-week duration window, including an increase in body weight, a decrease in urinary progesterone (the main substrate of 21OH), and an increase in renin expression (signaling an increased capacity for salt retention).

A study in nonhuman primates (NHP) comparing evaluated AAV serotypes 1, 5, and 6 identified AAV5 as the optimum serotype. We observed significant transfection in the adrenals where 21OH is synthesized. Additionally, AAV5 has relatively low seroprevalence in the human population limiting potential immunogenicity issues.

We are currently conducting two sets of ongoing NHP studies, designed to evaluate durability of expression, dosing/transgene expression relationships, and preliminary safety. Data from these studies will be collected over a six-month period, and the results will inform dose selection for clinical trials and complete IND-enabling work.

In the first set of experiments, which evaluated a lower dose of $3x10^{12}$ vector genomes per kilogram, we have observed increasing Cyp21 mRNA levels up to three months out, with no toxicity reported by investigators. Rapid decreases in vector genome counts and mRNA levels due to adrenal cell turnover have not been observed between 1.5 and 3 months, providing preliminary support for sustained transgene expression. Data from six months is not yet available.

In the second set of experiments, where we are evaluating additional doses of BBP-631, we have also observed increasing Cyp21 mRNA levels up to three months out. We have not observed rapid decreases in vector genome counts and mRNA levels due to adrenal cell turnover between one to three months, supporting our initial findings regarding sustained transgene expression. Data from six months is not yet available.

We anticipate filing an IND for BBP-631 in 2020.

Key Competitors

There are two alternative therapeutic mechanisms being investigated for treatment of CAH. The first are corticotropin-releasing factor type 1 (CRF1) receptor antagonists. CRF1 receptor antagonists regulate the release of adrenocorticotropic hormone (ACTH) from the pituitary gland, which stimulates androgen and cortisol synthesis in the adrenal gland. In healthy individuals, endogenous cortisol provides negative feedback to the release of ACTH, which keeps androgen synthesis well regulated. Because this negative feedback is severely impaired in CAH patients, supraphysiologic doses of exogenous steroids are required to normalize androgen synthesis in these patients. While CRF1 receptor antagonists may regulate androgen synthesis, they do not address the lack of cortisol or aldosterone production in these patients. Therefore, steroid supplementation is still required with CRF1 receptor antagonists. Two CRF receptor antagonists, NBI-74788 (under development by Neurocrine Biosciences, Inc.) and SPR001 (under development by Spruce Biosciences, Inc.), are currently in Phase 2 clinical trials.

The second alternative therapeutic mechanism is acetyl-coenzyme A acetyltransferase 1 (ACAT-1) inhibition. Inhibition of this metabolic enzyme induces targeted cell death in the adrenal gland, reducing steroid production and secretion. However, like CRF1 receptor antagonists, ACAT-1 inhibitors do not address the lack of cortisol or aldosterone production in these patients. ATR-101, an ACAT1 inhibitor, is currently in Phase 2 clinical development by Millendo Therapeutics, Inc.

While these alternative therapeutic mechanisms attempt to address meaningful aspects of the disease by potentially reducing the need for exogenous steroids, neither is able to address the disease at its source by targeting the complete set of features that define the disease. In particular, these mechanisms cannot obviate the need to administer steroids because they do not address the body's inability to synthesize cortisol and aldosterone. In contrast, we believe enzymatic replacement by gene therapy has the potential to simultaneously address all facets of the disease by restoring proper flux through the hormonal pathways, reducing androgen production by providing alternative pathways for the precursor molecules to be converted into cortisol or aldosterone.

BBP-454 (TheRas): KRAS-Driven Cancers

Summary	• We are advancing BBP-454, a preclinical development program for two novel approaches to inhibit KRAS activity, for the treatment of KRAS-driven cancers
Development Status and Catalysts	• Ongoing – Lead optimization • 2020 – Development candidate nomination anticipated
Pathway Overview	• KRAS is a key driver of a number of large cancer indications with high unmet patient need including non-small cell lung cancers, pancreatic adenocarcinomas, and colorectal adenocarcinomas. Historically, KRAS has been thought to be an undruggable target, due to its lack of clear binding pockets • KRAS normally drives cell growth and differentiation. Activating mutations, however, are understood to result in the uncontrolled development of cell proliferation and cancerous growth • In order to signal for tumor growth, KRAS must be tethered to the cell membrane through a domain on KRAS known as the hypervariable region, or HVR. This can only occur when the HVR is in an "open" position • Incidence of over 500,000 patients diagnosed with a KRAS-driven cancer in the United States and European Union
Our Product Concept	• We are developing small molecule, pan-mutant KRAS inhibitors, which act through binding to 2 novel sites on KRAS • Our first approach involves compounds that bind KRAS at a novel pocket on the HVR, characterized by Frank McCormick, one of our co-founders and leader of the NCI RAS initiative, which prevents KRAS from binding to the cell membrane, thereby preventing signaling via the KRAS pathway • The second approach involves targeting a unique residue on KRAS which promotes its degradation and thus down-regulates signaling
Key Competitors	• MRTX849, a KRAS G12C inhibitor • AMG-510, a KRAS G12C inhibitor • mRNA-5671, an mRNA vaccine • Other small molecule KRAS G12C, G12D, and G13C inhibitors

Pathway Overview

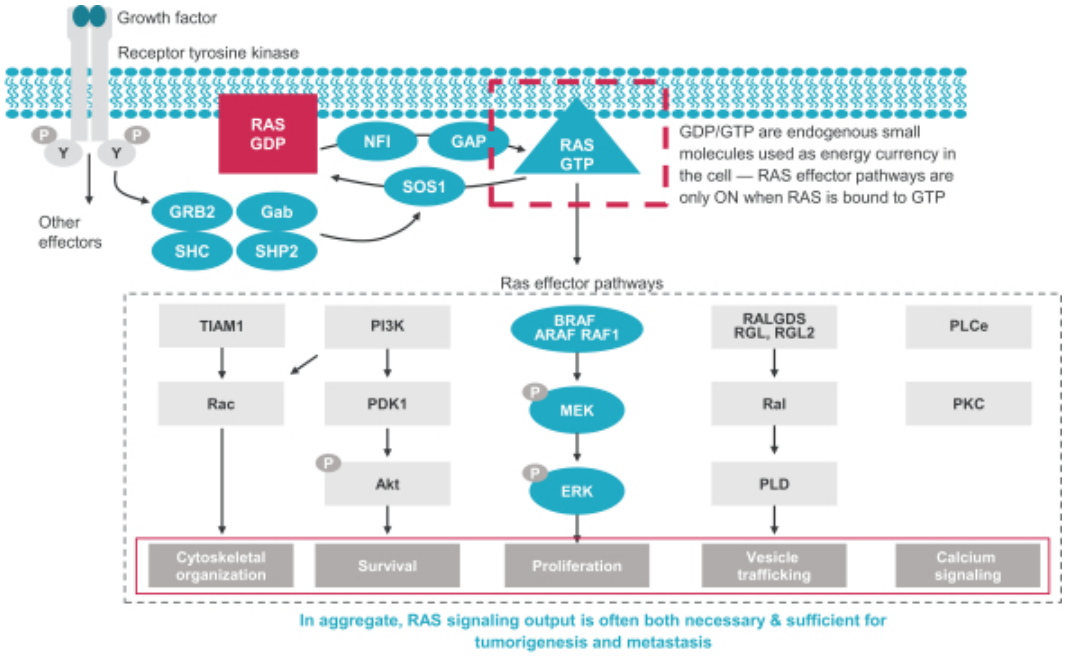
KRAS is a member of the RAS family of oncogenes, which also includes HRAS and NRAS, and together comprise some of the most well-known monogenic drivers of cancer. Mutations in NRAS are frequently found in leukemia and melanoma, while HRAS is frequently mutated in bladder, thyroid, and head and neck squamous cell carcinoma. KRAS mutations are a frequent driver of a number of the largest cancer indications with high unmet medical need, including 30% of non-small cell lung cancers, 98% of pancreatic adenocarcinomas, and 45% of colorectal adenocarcinomas. The most common KRAS mutations involve a change from glycine at position 12 in the protein to aspartic acid (G12D, 36% of all KRAS mutations), valine (G12V, 24%), and cysteine (G12C, 15%) but also include mutations at glycine 13 and glutamine 61. In aggregate, over 500,000 patients in the United States and Europe are diagnosed with KRAS-driven cancers, annually.

KRAS is a G protein, meaning that it cycles between ON and OFF states when bound to GTP or GDP, respectively. When active, KRAS interacts with multiple proteins that initiate a series of reactions that collectively cause cells to grow and divide. Because of its critical position atop multiple pathways, aberrant KRAS activation is a potent driver of unwanted cell growth, resulting in tumors. Normal KRAS is kept almost entirely in its inactive state by GTPase-activating proteins (GAPs), which cause KRAS to quickly convert GTP into GDP. All forms of mutant KRAS are insensitive to GAPs and remain bound to GTP long enough to drive oncogenic signaling. In order to initiate signaling, KRAS is required to be both localized to the cell membrane and bound to GTP. Historically, KRAS has been viewed as an undruggable target, due to the lack of a clear binding pocket to drug.

KRAS localization to the cell membrane is facilitated by modification to KRAS on the HVR. This modification consists of addition of a farnesyl or geranylgeranyl group to the cysteine residue at position 185 (C185) by farnesyl transferase or geranylgeranyl transferase. KRAS can only be modified when the hypervariable region is “open” and accessible to the transferring enzymes. When the hypervariable region is “closed,” KRAS cannot be modified, preventing its association with the cell membrane and subsequent downstream signaling.

An earlier therapeutic strategy inhibiting farnesyl transferase, which transfers farnesyl group onto HRAS to allow membrane association, has generated effective clinical responses in tumors driven by mutant HRAS. Though these molecules proved ineffective in KRAS, which has an adaptive capability to utilize an alternative modification (geranylgeranylation), these results for mutant HRAS provide a proof of concept for using a single agent disrupting localization of an oncogenic RAS mutant to treat RAS-driven tumors.

The RAS Signaling Pathway



Our Product Concept

KRAS-mutant cancers are driven by active, GTP-bound KRAS located at the cell membrane. We are developing two different strategies that target KRAS through novel, mutation-agnostic mechanisms. The first involves preventing modification of C185 in the HVR, disrupting the membrane localization process that is required for KRAS signaling. The second directly reduces concentration of active GTP-bound KRAS by targeting a novel residue to induce degradation.

Frank McCormick, one of our co-founders and leader of the NCI RAS initiative, characterized a novel druggable binding pocket involved in positioning of the HVR on KRAS. Molecules that bind this eponymous “McCormick” pocket were confirmed to stabilize the KRAS HVR in a “closed” state, where C185 is not accessible for modification to localize KRAS to the membrane, thereby preventing oncogenic signaling. This mechanism is independent of the specific mutation causing KRAS tumors and is expected to apply to all oncogenic KRAS mutants. We have identified compounds that bind at this new pocket and covalently modify C185, thus preventing farnesylation and geranylgeranylation and thereby blocking membrane association.

The second approach is another pan-mutant KRAS drug which targets the histidine residue at position 95 (H95), an amino acid unique to KRAS located in the G-domain. Initial preclinical data have demonstrated that our initial series of compounds are able to downregulate KRAS signaling by degrading GTP-KRAS and thereby reducing the concentration of GTP-bound KRAS. We believe that degrading fully processed, active KRAS at the plasma membrane is the most direct strategy for eliminating oncogenic signaling across all mutant KRAS cancers. We believe our approach compares favorably with several other identified competitive approaches, which bind GDP-bound KRAS, which exists only transiently in mutant KRAS cancers. This mechanism is mutation agnostic, in contrast to competitive molecules, which only target a single mutation.

Development Status

Our current lead series targeting C185 show a sub-micromolar cell proliferation IC_{50} in KRAS-expressing fibroblasts, and a greater than 30-fold IC_{50} advantage for mutant KRAS over NRAS and HRAS. Treated cells also show dose-dependent depletion of membrane-associated KRAS, associated with decreased signaling through mutant KRAS and increased cancer cell death.

We are collaborating with the NCI RAS initiative and utilizing one of the most powerful supercomputers in the world at Lawrence Livermore National Labs to conduct molecular dynamics simulations, in order to continue to optimize our initial leads. Initial compounds targeting H95 are similarly under development; and currently studied compounds exhibit high micromolar affinity. We intend to nominate a development candidate in 2020.

Key Competitors

Due to its high prevalence in cancer, we expect to face competition from other small molecule KRAS inhibitors as well as other modalities, including mRNA vaccines, that target KRAS mutations. The majority of these product candidates focus on a single version of mutant KRAS, G12C. This form is particularly accessible for drug development due to the reactivity of the mutant cysteine residue. However, both compounds we are developing will target a broader set of cancers by pursuing mutation-agnostic mechanisms. In particular, our competitors may include:

- MRTX849, a KRAS inhibitor that only targets KRAS harboring a G12C mutation. Mirati Therapeutics, Inc., or Mirati, has dosed its first patient in a Phase 1/2 clinical trial enrolling patients with solid tumors harboring a KRAS G12C mutation. Additionally, Mirati is currently developing a KRAS G12D inhibitor through preclinical testing.
- AMG-510, a KRAS inhibitor that only targets KRAS harboring a G12C mutation, is in Phase 1 clinical development by Amgen Inc.
- AZD4785, an antisense oligonucleotide initially developed by Ionis Pharmaceuticals, Inc. and licensed to AstraZeneca plc, or AstraZeneca, is currently being tested in a Phase 1 clinical trial in NSCLC by AstraZeneca. AZD4785 targets a sequence in KRAS RNA to inhibit protein production.
- mRNA-5671, an mRNA vaccine targeting the four most common KRAS mutations, is currently under joint development by Moderna, Inc. and Merck & Co., Inc. The rationale is to induce a neoantigen response causing T-cells to attack tumors with KRAS mutations.
- ARS-1620, a G12C-specific covalent small molecule, is currently in preclinical development by Wellspring Pharmaceutical Corporation in collaboration with Janssen Pharmaceuticals, Inc.
- Revolution Medicines, Inc. is in the hit-to-lead phase of discovery for small molecule inhibitors of KRAS mutations G12C, G12D, and G13C acquired from Warp Drive Bio, Inc.

MENDELIAN PORTFOLIO

BBP-870 (Origin): MoCD Type A

Summary	• We are developing BBP-870, an IV formulation of synthetic cyclic pyranopterin monophosphate, or cPMP, for the treatment of molybdenum cofactor deficiency, or MoCD, Type A. BBP-870 received breakthrough therapy designation from the FDA in 2013 for MoCD, orphan drug designation from the FDA in 2009 and EMA in 2010 for the treatment of MoCD Type A, and rare pediatric disease designation for the treatment of MoCD Type A in June 2017

Development Status and Catalysts	• 2019 – Planned initiation of rolling NDA submission with application anticipated to be submitted in 2020
Disease Overview	• MoCD Type A is an autosomal recessive inborn error of metabolism that is characterized by the disruption of the molybdenum cofactor, or MoCo, biosynthesis pathway. The disease presents very early in life (median presentation at first day of life) with heterogeneous neurological symptoms such as seizures and feeding difficulties. Median survival for patients with MoCD is estimated to be approximately three years • MOCS1 catalyzes the conversion of GTP to cPMP, a critical component in the biosynthesis of molybdenum cofactor. Patients with MoCD Type A have dysfunctional MOCS1 and are unable to produce cPMP • Incidence estimated to be one in 100,000 to 200,000 live births worldwide, with MoCD Type A accounting for approximately two-thirds of all cases • Diagnosis: Confirmed by genotyping. Blood and urine metabolite analyses are readily available to further initial clinical suspicion • There are no available treatments approved for any form of MoCD. Supportive care and anti-convulsant therapy may be used to manage symptoms
Our Product Concept	• IV-administered, synthetically manufactured cPMP is designed to restore the biosynthetic production of molybdenum cofactor in patients with MoCD Type A • To date, subjects with MoCD in clinical trials of BBP-870 have seen meaningful improvements in symptoms and symptomatic progression relative to historical controls. Patients have survived for a median of greater than eight years, well in excess of that seen in natural history studies of patients with the disease
Key Competitors	• We are not currently aware of any key competitors

Disease Overview

MoCD is an autosomal recessive inborn error of metabolism that is characterized by the disruption of the molybdenum cofactor, or MoCo, biosynthesis pathway. This results in reduced activity of enzymes that require MoCo as a co-factor. In patients with MoCD, sulfite and S-sulfocysteine, or SSC, accumulate, resulting in brain injury. SSC is typically at very low or undetectable levels in healthy individuals, and this metabolite can be a diagnostic parameter for these patients. Patients diagnosed with MoCD are classified based on which gene is dysfunctional (MOCS1, MOCS2, MOCS3 or GPHN). Each gene product is necessary for a different step of the MoCo biosynthesis pathway. MOCS1 gene-related mutations are the most common cause of MoCD. Patients with MoCD Type A, or those with mutations in MOCS1, account for approximately two thirds of all patients with MoCD.

Disease presentation is complex, and symptoms often overlap with a number of different diseases. However, simple blood and urine metabolite analysis can potentially rapidly and cheaply narrow down the potential causative disease to either MoCD or isolated sulfite oxidase deficiency, or ISOD. Currently, only genotyping can confirm the diagnosis of MoCD type A.

MoCD prognosis is poor, with a median age at onset of symptoms within one day of birth and a median survival time of 36 months. Patients who survive beyond the neonatal period are likely to have severe irreversible central nervous system injury due to sulfite toxicity. A natural history study of 82 patients conducted in 2015 described key signs and symptoms in patients with MoCD including seizures (72%), feeding difficulties (26%), hypotonia (11%), motor development delay (9%), lens dislocation (2%), hemiplegia (2%), and hyperreflexia (1%).

The incidence of MoCD is estimated on average to be between 1/100,000 to 1/200,000 live births globally, with Type A accounting for two-thirds of all cases. Multiple publications state that there are over 100 known cases of MoCD to date, although MoCD is thought to be widely underdiagnosed. These estimates are likely underestimates of the true incidence due to a lack of awareness among physicians, the high infant mortality rate associated with the condition, and the potential clinical overlap with other conditions. There are no approved therapies for MoCD, and typically only supportive care such as anticonvulsants is used.

Our Product Concept

Patients with MoCD Type A are deficient in cyclic pyranopterin monophosphate, or cPMP, due to defects in MOCS1, which catalyzes the conversion of GTP to cPMP in patients with normal physiology. We are developing BBP-870 as a direct replacement of the missing substrate for the synthesis of MoCo in these patients, which, if successful, we believe may allow for restoration of normal MoCo biosynthesis.

Clinical Data and Development History

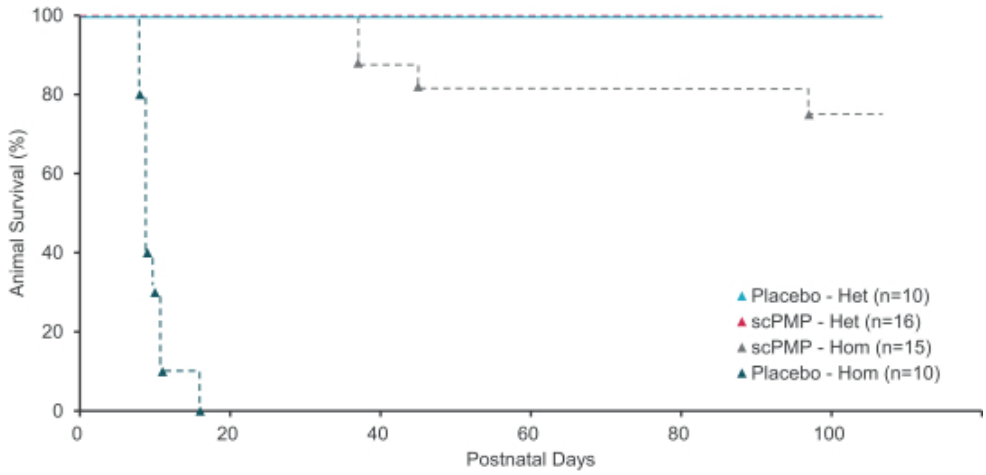
Studies with recombinant cPMP (rcPMP)

cPMP was first tested clinically in pediatric patients with MoCD by Colbourne Pharmaceuticals (previously Orphatec Pharma) on a compassionate use basis. Colbourne utilized recombinant E. coli-derived cPMP (rcPMP) and administered the drug to 16 patients diagnosed with MoCD (11 Type A and 5 Type B). In patients with MoCD Type A, biomarkers returned to close to normal within two days of treatment with rcPMP. This was maintained for up to five years throughout the study. Eight patients with Type A disease rapidly improved under treatment and convulsions were either completely suppressed or substantially reduced. Three patients treated early remained seizure free and demonstrated near-normal long-term development. No biochemical or clinical response was detected in patients with Type B disease, as expected based on the molecular pathway and deficiencies of disease.

Of the 11 patients with MoCD Type A treated with rcPMP on a compassionate use basis, seven went on to receive BBP-870 in the Phase 2 clinical trial, as described below. Of the four patients who did not enroll in the Phase 2 clinical trial of BBP-870, two died, and the remainder were not receiving treatment as of the start of the BBP-870 Phase 2 clinical trial.

Studies with BBP-870 (scPMP)

Alexion acquired Colbourne's rcPMP program and devised a synthetic manufacturing route to create BBP-870 (scPMP) – the monohydrobromide dihydrate salt of cPMP. This was done in order to improve the manufacturing process and reduce the costs of manufacturing. In preclinical studies, BBP-870 improved survival in MOCS1 knockout mice as shown in the following figure and reduced SSC in MOCS1 knockout mice to normal levels.



Phase 1 Clinical Trial

Alexion ran a randomized, blinded, placebo-controlled, single-dose, sequential-cohort, dose-escalation Phase 1 study designed to evaluate the safety, tolerability, and PK of IV BBP-870 in healthy adult subjects. This was the first time BBP-870 was administered to humans. A total of three dose cohorts were enrolled, each with six active and two placebo subjects, at the following doses: 0.10 mg/kg, 0.32 mg/kg, 0.90 mg/kg. In total, 18 subjects received BBP-870 and six received placebo.

This clinical trial demonstrated that single administered doses were well-tolerated in healthy adult subjects. One SAE was observed in the placebo arm of the trial and no SAEs were observed in patients receiving BBP-870. The maximum tolerable dose was not determined as no dose-limiting toxicities were observed.

Phase 2 Clinical Trial

BBP-870 is being studied in an ongoing Phase 2 clinical trial, which was initiated by Alexion and remains active, but not enrolling new patients. This study is a multicenter, multinational, open-label, dose-escalation study designed to evaluate the safety and efficacy in infants and children with a diagnosis of MoCD Type A confirmed by mutation in the MOCS1 gene, who were previously receiving treatment with rcPMP from Colbourne Pharma. There was no pre-specified primary efficacy endpoint. Secondary efficacy endpoints included change from baseline in: biomarkers, clinical neurological findings, motor and cognitive assessments, feeding patterns and other parameters. It was anticipated that as patients transitioned from rcPMP to BBP-870, they would have no change in their clinical status, thereby demonstrating comparable efficacy of BBP-870 to rcPMP.

On enrollment into the study, patients discontinued rcPMP and received daily IV infusions of BBP-870 at the same dose as their last dose of rcPMP. Dose escalation could occur after two months of treatment with BBP-870 until the patient either reached a dose that was not tolerated, or the patient's exposure exceeded or was predicted to exceed that of the no observed adverse effects level, or NOAEL, AUC. After the six-month initial treatment period, patients entered the 60-month extension period, and continue to receive daily dosing of BBP-870 at their final tolerated dose.

A total of seven patients with MoCD Type A have been enrolled into the study. As of March 13, 2019, no patients have dropped out of the trial, and all continue to receive BBP-870 at daily doses between 240 and 1,200 µg/kg. The duration of treatment with scPMP in the study ranges from over two years to almost five years. The prior duration of treatment with rcPMP for the patients enrolled in the study ranged from approximately eight months to more than six years. As of March 13, 2019, these seven patients have generally maintained clinical stability. As of January 31, 2019, the median age of the seven patients who remain in the trial is greater than eight years. The median survival for untreated patients is approximately three years.

BBP-870 has been well-tolerated. While there have been 31 SAEs and five AEs observed in the trial as of March 13, 2019, most were reported as recovered, and most were reported as not related or unlikely to be related to study drug. No SAEs or AEs definitely related to study drug were reported. Further, there were no deaths and no discontinuations of the clinical study or treatment as a result of an AE in subjects who received BBP-870 in this study. By System Organ Class, or SOC, the SAEs and AEs were as follows: infection and infestations (17), respiratory, thoracic and mediastinal disorders (two), general disorders and administration site conditions (10), product issues (three), surgical and medical procedures (one), metabolism and nutrition disorders (two) and vascular disorders (one).

Phase 2/3 Clinical Trial

A Phase 2/3 clinical trial of BBP-870 was initiated by Alexion in neonates with newly diagnosed MoCD Type A and remains open, although it is not currently enrolling new patients. In July 2017, in advance of our acquisition of the BBP-870 program, enrollment was paused by Alexion. Two subjects enrolled in the trial. One subject was determined not to have a diagnosis of MoCD Type A on genetic analysis and was discontinued from the study after 17 days of treatment. The other subject remains on study drug. As of March 13, 2019, the patient remaining on study drug demonstrated progress on developmental milestones, along with improvement in biomarkers. There were 11 SAEs and two AEs observed (10 SAEs and two AEs in the subject remaining on study drug); however, these were adjudicated to be unrelated or unlikely to be related to study drug. By SOC for the subject remaining on study drug, the SAEs and AEs were as follows: respiratory, thoracic and mediastinal disorders (one); product issues (one); infections and infestations (five), general disorders and administration site conditions (two), gastrointestinal disorders (two) and cardiac disorders (one). One SAE of cardiac failure was observed after discontinuation in the subject not diagnosed with MoCD Type A. The SAE was reported as resolved and was considered not to be related to treatment with study drug.

Clinical Development Plan

Subject to our plan for a Type B meeting with the FDA that we intend to request for 2019 and further planned communications with the FDA following such meeting, we expect to initiate the submission of a rolling NDA seeking regulatory approval for BBP-870 for the treatment of MoCD Type A in the United States in 2019, based on existing safety and efficacy data. We expect that the NDA submission will be submitted by 2020, with a request for priority review.

While we believe the existing safety and efficacy data for BBP-870 are sufficient to support approval in the United States, we are considering additional clinical trial and expanded access program options in 2019. We believe that these could enable us to gather more data about MoCD Type A and BBP-870, identify patients who will ultimately be candidates for commercial therapy in the event that BBP-870 is approved, and most importantly, provide patients with a devastating and generally lethal disease the potential to receive treatment prior to commercial approval. Meetings with the European Medicines Agency are pending and therefore the data requirements sufficient for a marketing authorization application, or MAA, filing are unknown.

BBP-870 originally received orphan drug designation from the FDA in 2009 and EMA in 2010 for the treatment of MoCD Type A. In 2013, BBP-870 received breakthrough therapy designation from the FDA for MoCD and most recently, BBP-870 received a rare pediatric disease designation in June 2017 for the treatment of MoCD Type A.

In the event that BBP-870 receives marketing authorization, we intend to market and distribute the drug worldwide. Given the severity of disease and lack of any available disease modifying treatments, we believe that there will be meaningful demand for our product if it is approved. While the current estimated incidence of one in 100,000 to 200,000 live births is low, we believe that the incidence of the condition may be underestimated.

We believe this is due to the lack of physician awareness of the disease, high rates of infant mortality, and general CNS symptomatology that is not necessarily distinct from other diseases.

We are currently planning and executing on activities to both increase disease awareness amongst the physician community and to identify prospective patients for therapy. We are working with leading neonatologists, pediatric neurologists, and geneticists to increase awareness of MoCD Type A, and to educate the medical community that readily accessible metabolite testing can be used to screen patients. We are also speaking with providers of in-vitro diagnostic panels to include MoCD Type A in their screening assays.

As an FDA-designated rare pediatric disease, we plan to pursue a priority review voucher which would issue upon NDA approval by the FDA if applicable requirements are met. These vouchers entitle the holder of such voucher to request priority review of a subsequent drug or biologic application. Such vouchers are transferrable and we may elect to sell the voucher if and when received.

Key Competitors

We are not currently aware of any key competitors.

BBP-009/Patidegib (PellePharm): Gorlin Syndrome and High Frequency Basal Cell Carcinoma

Summary	• We are developing BBP-009, an investigational topical gel formulation of patidegib, a hedgehog inhibitor, for the treatment of Gorlin Syndrome and High-Frequency Basal Cell Carcinoma, or HF-BCC. We have received breakthrough therapy designation from the FDA, as well as orphan drug designation from both the FDA and EMA for BBP-009
Development Status and Catalysts	• Ongoing – Phase 3 registrational trial in Gorlin Syndrome • 2019 – Anticipated initiation of Phase 2b clinical trial in HF-BCC
Disease Overview	• Basal Cell Carcinomas, or BCCs, a form of skin tumor, are universally driven by overactivation of the hedgehog pathway • Gorlin Syndrome is caused by a genetic mutation in Patched1, or PTCH1, the primary inhibitor of the hedgehog signaling pathway • Uninhibited hedgehog signaling can cause tumorigenesis, leading to the formation of BCCs, particularly on the face and sun-exposed regions • HF-BCC is the presentation of more than nine BCCs over a period of three years, without having the genetic mutation present in Gorlin Syndrome • Gorlin Syndrome has a prevalence of approximately 1/31,000 individuals worldwide, approximately 10,000 patients in the United States and 17,000 in the European Union. HF-BCC has a larger patient group of approximately 1/9,000 individuals, approximately 35,000 patients in the United States and 57,000 in the European Union • Diagnosis: Clinical diagnosis, with potential for genetic confirmation • No FDA or EMA approved therapies for Gorlin Syndrome currently exist. Current treatments involve surgical resection of BCCs, or topical 5-FU or imiquimod, which are effective only in treating superficial BCCs
Our Product Concept	• BBP-009 is a topically formulated small molecule hedgehog inhibitor, or HHI • Designed to treat BCCs using the HHI mechanism validated by studies with oral HHIs • Potential to have fewer safety and tolerability concerns than those associated with oral therapies that leave them unsuited to long-term or chronic treatment

	• We believe Phase 2 clinical trials completed in Gorlin Syndrome and sporadic, nodular BCC patients demonstrated proof of concept and signs of efficacy against BCCs without the adverse events of oral HHIs
Key Competitors	• SUBA-itraconazole, an anti-fungal currently in Phase 2b clinical development for Basal Cell Carcinoma Nevus Syndrome

Disease Overview

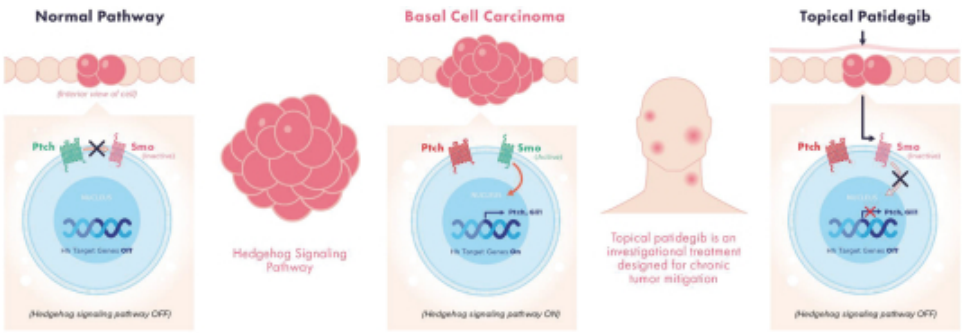
Gorlin Syndrome

Gorlin Syndrome, also known as Basal Cell Carcinoma Nevus Syndrome, is a condition that increases the risk of developing basal cell carcinomas, or BCCs, a form of skin tumors. This disease is driven by a genetic mutation in the tumor suppressor gene encoding Patched1, or PTCH1, which acts as the primary inhibitor of the hedgehog signaling pathway. PTCH1 inhibits hedgehog signaling by down-regulating the signal receptor protein known as "Smoothened," or SMO. When PTCH1 cannot block SMO, the hedgehog signaling pathway is not inhibited, and it can act tumorigenically, leading to the formation of BCCs. Patients with Gorlin Syndrome can develop hundreds of BCCs, particularly on the face and other sun-exposed areas. At present, Gorlin Syndrome is not well-addressed by the available treatment options; the main intervention is surgery to remove BCCs, which is painful for the patient, can lead to scarring, and is not an ideal option for a condition that requires long-term chronic treatment. Gorlin Syndrome patients can undergo as many as 30 surgeries per year. Worldwide prevalence is approximately one in 31,000 individuals and there are approximately 10,000 Gorlin Syndrome patients in the United States and 17,000 in the European Union.

HF-BCC

Patients with HF-BCC are understood to have a Gorlin-like phenotype and more than three BCCs per year, without actually having Gorlin Syndrome. These patients exist at a prevalence of about one in 9,000, representing an estimated 35,000 patients in the United States and 57,000 in the European Union.

Patidegib: A Small Molecule That Inhibits Hedgehog Signaling



Our Product Concept

Patidegib is under development to treat the BCCs that characterize Gorlin Syndrome at their source by turning off the hedgehog signaling pathway. It is designed to block the SMO signal, thus turning off the oncogenic hedgehog activity. Oral HHIs like the FDA-approved vismodegib have demonstrated significant efficacy against BCCs in the clinic via this mechanism. However, oral HHIs' high toxicity makes them poor candidates for long-term chronic use; in a 42-person trial in Gorlin Syndrome patients assigned 2:1 to vismodegib versus placebo, 54% of patients discontinued oral vismodegib due to on-target class side effects (hair loss, muscle cramps, taste

loss), and only one in five eligible patients could continue vismodegib for 18 months. We believe that a topically formulated HHI has the potential to treat BCCs just as effectively as an orally delivered HHI – while avoiding the systemic toxicity of the oral drug.

Patidegib is designed to bind and inhibit SMO at single-digit nanomolar concentrations. Unlike other HHIs, it can be formulated into a topical gel stable at room temperature. In 2013, PellePharm, Inc. in-licensed the worldwide rights to patidegib from Infinity Pharmaceuticals, Inc., or Infinity, after Infinity had completed an oral Phase 1 clinical trial of patidegib in 94 patients with solid tumors refractory to standard therapy (39 of whom had BCCs). Following the acquisition of the BBP-009 program, PellePharm formulated patidegib into a topical gel. A formulation of 2% patidegib gel delivered skin concentrations of drug above IC_{50} for SMO, the concentration at which 50% of SMO is inhibited. In preclinical Gorlin mouse models, a 4% patidegib gel showed comparable effects to oral vismodegib on reduction in BCC size and GLI1 levels, a key biomarker of this disease.

Clinical Data

We have conducted two Phase 2 clinical trials with topical patidegib gel, as well as a Maximum Use Systemic Exposure, or MUSE, study.

Of these two Phase 2 clinical trials, we conducted a Phase 2a, multi-center, double-blind, randomized, vehicle-controlled proof-of-concept clinical trial of 2% and 4% patidegib topical gel in the United Kingdom, or the ‘201 trial. In the ‘201 trial, a total of 17 Gorlin syndrome patients with surgically eligible BCCs were randomized in a 1:1:1 ratio to receive patidegib topical gel, 2% or 4%, or vehicle gel applied twice daily for 26 weeks. The primary efficacy endpoints were decrease in tumor size, which was defined as percent decrease in the sum of the greatest diameter of baseline treatment-targeted surgically-eligible basal cell carcinomas, or SEBs, at Week 26 and change in GLI1 mRNA levels at Week 6.

The ‘201 trial did not meet its primary efficacy endpoints in the intent-to-treat population. However, post-hoc image analysis performed by a group of four independent dermatologists suggested significant measurement error caused in one subject by dermatitis (rash), which was measured and obscured the BCC, and in another subject by the accidental identification of a non-BCC lesion as a BCC as histological confirmation of BCCs was not required in this study. Upon correcting for these errors in a modified intent-to-treat, or mITT, population, patidegib demonstrated a statistically significant decrease in SEB size in the cohort of patients receiving patidegib 2% cohort vs vehicle ($p=0.04$). In addition, in the mITT population, complete clinical response was observed in 12 of 45 tumors exposed to either patidegib 2% or 4%, whereas complete clinical response was observed in 0 of 16 placebo-treated lesions. Most importantly, the ITT population patidegib gel-treated subjects developed a mean three-fold fewer number of new facial SEBs (0.4 new facial SEBs in patidegib gel-treated subjects vs. 1.4 new facial SEBs in vehicle) during the six months of application.

In the ‘201 trial, SAEs were reported in two subjects, both of which were in the vehicle control group and neither was considered related to study drug. The SOC of these SAEs was infections and infestations (pneumonia, pneumonia pneumococcal), both of which later resolved. One of these patients discontinued from the trial due to the SAE. No patients treated in an active arm of the trial experienced an SAE, or withdrew from the trial due to an AE or SAE. In the ‘201 trial, treatment-related AEs were observed as follows: in the 2% cohort, one AE of muscle spasms, and one AE of trigeminal neuralgia; in the 4% cohort, one AE of gastrointestinal disorders, four AEs of application site conditions, and one AE of dysgeusia; in the vehicle cohort one AE of application site reaction, two AEs of muscle spasms, one AE of dysgeusia, and one AE of alopecia.

We also conducted a Phase 2a, double-blind, randomized, dose-response clinical study of topical patidegib gel in patients with sporadic BCCs, or the ‘202 trial. In the ‘202 trial, a total of 36 subjects with BCC were enrolled into one of our sequential cohorts, each randomized 2:1 to receive active study drug or vehicle gel. The cohorts were: 2% patidegib gel once daily, or QD, 4% patidegib gel QD, 2% patidegib gel twice daily, or BID, and 4% patidegib gel BID. The primary efficacy endpoint was the change in GLI1 mRNA levels in drug-treated versus

vehicle-treated tumors after 12 weeks of treatment. While the trial failed to meet its primary efficacy endpoint, decreases in GLI1 mRNA levels were observed in the patidegib 2% QD and BID cohorts, as well as the patidegib 4% BID cohort, while the patidegib 4% QD and vehicle cohorts demonstrated an increase in GLI1 mRNA levels.

In the '202 trial, no patients discontinued due to an AE. One patient in the vehicle control group experienced an SAE of diverticulitis that the investigator deemed as unlikely related to study drug. The patient was hospitalized and the patient recovered. 34.3% of subjects experienced at least one AE, and no preferred term was reported for >1 subject in any treatment group. Two treatment-related AEs were reported in one patient in the 4% cohort – eyelid edema and application site edema. Both AEs were mild and resolved.

Based on the data from the '201 trial, and specifically the *post hoc* clinical data that demonstrated a reduction in the number of new SEBs in treated subjects, the FDA granted patidegib breakthrough therapy designation for the reduction of the life-long, serious clinical morbidity and disease burden of persistently developing BCCs in patients with basal cell nevus syndrome (BCNS) (also known as Gorlin syndrome). We also received orphan drug designation from both the FDA and EMA for treatment of nevoid basal cell carcinoma syndrome, or Gorlin syndrome.

In addition to these two Phase 2a clinical trials, a MUSE study was performed in 22 patients. In this study, 4% patidegib topical gel was applied twice per day for two weeks to 25% of body surface area of the healthy adult subjects to assess PK and tolerability. Systemic drug levels in the MUSE study were 500-fold lower than seen in patients on oral HHIs. Twice-daily administration of 4% patidegib topical gel to healthy adults was well tolerated. The only treatment-emergent AE reported for more than one subject was application site pruritus, which was reported for two subjects and resolved without requiring any action. Treatment-emergent AEs considered to be possibly related or probably related to study drug were application site pruritus, application site erythema, and muscle spasms. Across these three trials where subjects were treated with topical patidegib, no AEs commonly associated with oral hedgehog inhibitors were seen (hair loss, cramping, taste loss), and no SAEs were seen amongst the patidegib-exposed subjects.

Clinical Development Plan

We have initiated a registrational, multicenter, randomized, double-blind, vehicle-controlled Phase 3 clinical trial for topical patidegib gel, 2%, as a treatment for Gorlin Syndrome. The study is expected to enroll 150 subjects in two arms, randomized 1:1. The primary objective of the trial is to assess the reduction in the number of new surgically eligible BCCs on the face of subjects, over 12 months. The secondary objective is to assess safety and tolerability.

We also intend to study the use of topical patidegib gel in non-Gorlin patients with high-frequency BCCs in a Phase 2b clinical trial, which we expect to initiate in 2019.

Partnerships

In November 2018, we through our investment in PellePharm, Inc., or PellePharm, entered into a partnership with LEO Pharma, pursuant to which LEO has acquired a minority stake in PellePharm and has agreed to provide additional non-dilutive capital to fund the development of topical patidegib, including our planned Phase 3 clinical trial. LEO also acquired an option to purchase all shares in PellePharm at a later date. See "— Our Material Agreements—BBP-009 (Patidegib): Option Agreement with LEO Pharma A/S."

Key Competitors

Mayne Pharma is currently developing SUBA itraconazole, an antifungal agent, for basal cell carcinoma nevus syndrome. This program is currently in Phase 2b.

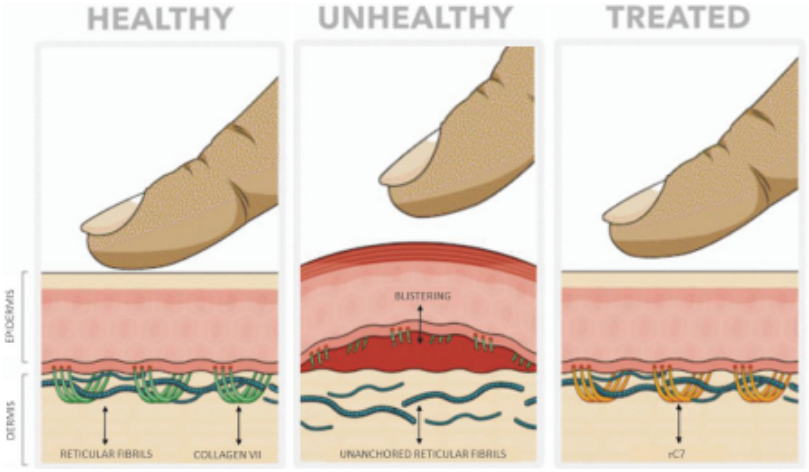
BBP-589/PTR-01 (Phoenix Tissue Repair): Recessive Dystrophic Epidermolysis Bullosa (RDEB)

Summary	• We are developing BBP-589, an IV-administered recombinant collagen type VII, or rC7, protein replacement therapy, for the treatment of recessive dystrophic epidermolysis bullosa, or RDEB • BBP-589 received orphan drug designation from the FDA and EMA in 2014 for the treatment of dystrophic epidermolysis bullosa
Development Status and Catalysts	• Ongoing – Phase 1/2 clinical trial • 2020 – Anticipated data readout from Phase 1/2 clinical trial
Disease Overview	• DEB is a rare, genetic, multisystem disorder stemming from a lack of collagen type VII fibrils anchoring together layers of epithelial tissue, most notably skin. It is characterized by incurable, extremely fragile blistering skin; deformed limbs; and numerous co-morbidities, including squamous cell carcinoma and early death. RDEB, is a subtype of DEB with more severe symptoms • Both DEB and RDEB are driven by mutations in COL7A1 gene coding for collagen type VII. Dysfunctional or deficient collagen type VII cannot anchor epidermal basement membrane to underlying papillary dermis • Incidence of DEB is approximately 6/1,000,000 live births and prevalence is in approximately 3/1,000,000 people in certain western countries; RDEB prevalence is estimated at approximately 1.4 to 1.5 in 1,000,000 in western countries • Current standard of care for both DEB and RDEB is mostly preventative and palliative symptom management (e.g., dressings, wound care, pain management, and nutritional supplements)
Our Product Concept	• Designed to be an IV-administered rC7, protein replacement • A functional form of collagen type VII is intended to compensate for the dysfunctional protein in patients • In *in vivo* models, rC7 accumulated at the basement membrane zone at the epidermal/dermal junction, formed functional anchoring fibrils, and reversed the DEB phenotype
Key Competitors	• KB103, a topical HSV-1 gene therapy • EB-101, *ex vivo* autologous gene-corrected keratinocytes • QR-313, an RNA oligonucleotide therapy for DEB exon 73

Disease Overview

DEB is a genetic condition caused by mutations in the COL7A1 gene encoding the protein collagen type VII, a type of collagen protein that plays an important structural function. Collagen type VII resides in the basement membrane beneath stratified squamous epithelia and forms anchoring fibrils that hold layers of the epithelium together, most notably the epidermal and dermal layers of the skin. In DEB patients, mutations of the COL7A1 gene lead to deficient anchoring fibrils, resulting in normal physical touch or friction upon the epithelium causing severe blistering, wounds, and scarring of the skin as well as the mucous membranes and gastrointestinal tract, which are lined with epithelial cells. These patients can also suffer from joint contractures and pseudosyndactyly as a result of this condition as well as many other comorbidities, and they experience a shortened life expectancy often due to squamous cell carcinomas.

RDEB is a subtype of DEB that tends to have more severe symptoms and clinical outcomes. At present, there is no approved therapy for RDEB. All of the current standard of care treatment approaches rely on protective or palliative interventions. These include bandaging and disinfecting of wounds, nutritional supplementation and pain management none of which address the underlying cause of the disease. We believe there is a significant unmet need for a therapeutic option that can potentially address the cause of disease systemically and offer respite from the effects of the disease.



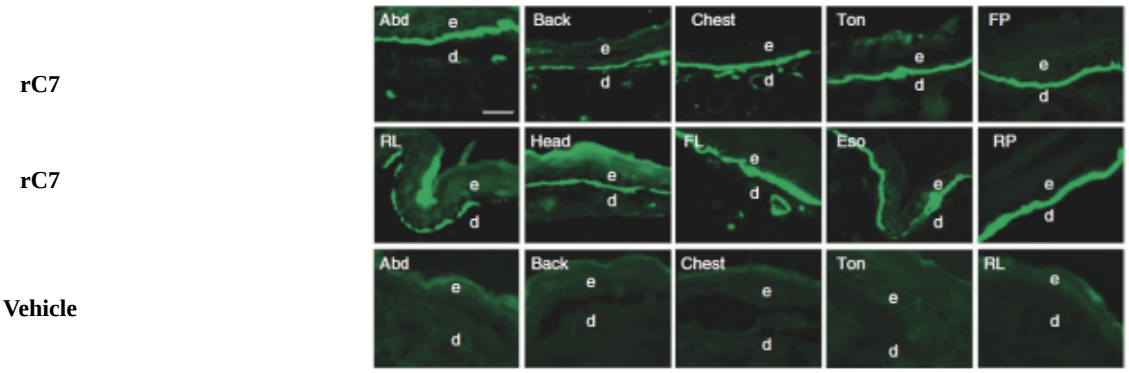
Our Product Concept

DEB is caused by dysfunctional collagen type VII protein. BBP-589 is a recombinant version of collagen type VII that is intended to take the place of the patient's defective protein and reverse the DEB phenotype by forming the anchoring fibrils needed to hold the dermis and epidermis together. We have successfully generated a Chinese Hamster Ovary, or CHO, cell line to produce rC7 protein for use in further development. BBP-589, also referred to as PTR-01, has received orphan drug designation for the treatment of DEB in both the United States and European Union, respectively. As a systemic protein replacement therapy candidate, rC7 is intended for intravenous delivery, a modality that has proven effective at delivering rC7 to the skin's basement membrane in preclinical animal models.

Preclinical Data

Preclinical studies have shown that rC7 distributes to the basement membrane of the skin. In COL7A1 knockout mouse models, treatment with intravenously delivered rC7 was observed to restore anchoring fibrils, promote healing and improve survival.

As shown in the images below, rC7 was detected in target tissues by immunofluorescence (IF) in COL7A1 knockout mice following a single IV injection. Injected rC7 was detected at the dermal—epidermal junction, or DEJ, of multiple skin sites (top two rows); none was detected in vehicle-treated mice (bottom row).



Newborn RDEB mice were intravenously injected with 16 mg *of CHO derived rC7 or vehicle control via the superficial temporal vein, and tissue samples were obtained 5 to 14 days after mice were injected and subjected to immunofluorescence (IF) staining. Abd, abdomen; Eso, esophagus; FL, front leg; FP, front paw; RL, rear leg; RP, rear paw; Ton, tongue; E, epidermis; D, dermis*

Immunogold electron microscopy of skin obtained from COL7A1 knockout mice injected with rC7 showed formation of anchoring fibrils in the correct location. A single IV administration of rC7 to neonatal COL7A1 knockout mice was associated with a statistically significant improvement in survival compared to vehicle-treated controls.

In single bolus dose toxicity studies conducted in rats and non-human primates, or NHP, rC7 was shown to be well-tolerated. In PD studies, the rC7 administered product was detectable at up to four weeks in the tissue of COL7A1 knockout mouse while the serum half-life ranged from one to five hours in mouse, rat, and NHP. A 28-day repeat dose rat toxicology study and two 28-day NHP repeat-dosing IV toxicology studies included histopathology observations consistent with immune complexes and/or compound deposition. The NOAEL was determined at 4 mg/kg for NHP only, which was used to inform the starting dose of the Phase 1/2 clinical trial.

Clinical Development Plan

Going forward, we expect to continue to develop BBP-589 in patients with RDEB. The present Phase 1/2 randomized, saline-controlled, single-blind, multiple ascending dose, dose-escalation trial was initiated in November 2018. This first-in human study in adult RDEB patients will evaluate ascending doses of BBP-589 over three cohorts administering a total of three doses of BBP-589 and three doses of saline control IV to all patients in a cross-over design over a 10-week period. The primary objective of the trial is to evaluate the safety, tolerability and PK of BBP-589 in RDEB patients. Additionally, the trial will assess the proof of biologic activity through skin biopsy evaluation of C7, and formation of anchoring fibrils. Wound healing and clinically meaningful patient reported outcomes will also be evaluated at multiple timepoints. We expect to complete the trial in early 2020.

Key Competitors

A number of companies are developing potentially competitive products for RDEB. Krystal Biotech, Inc. is developing KB103, a topical HSV-1 gene therapy currently in a Phase 1/2 clinical trial. Abeona Therapeutics, Inc. is developing EB-101, a topical therapy consisting of *ex vivo* autologous gene-corrected keratinocytes which

has completed a Phase 1/2 clinical trial. ProQR Therapeutics N.V. is developing QR-313, an RNA oligonucleotide therapy for DEB exon 73. Fibrocell Science, Inc. is developing FCX-007, a COL7A1 gene therapy which has completed a Phase 1/2 clinical trial.

BBP-681 (Venthera): Venous and Lymphatic Malformations

Overview	• We are developing BBP-681, a preclinical transdermal PI3K inhibitor, for the treatment of cutaneous venous and lymphatic malformations
Development Status and Catalysts	• Ongoing – IND-enabling toxicology and formulation • 2019 – Anticipated IND submission
Disease Overview	• Venous malformations, or VMs, are large, disorganized veins that can cause significant morbidity due to functional impairment, pain, bleeding, and disfigurement. Lymphatic malformations, or LMs, involve the lymphatic vessels and cause functional impairment and pain similar to VM, lymphatic leakage and disfigurement. VM and LM can be isolated, mixed, or be part of complex syndromes known collectively as PIK3CA-related overgrowth syndromes, or PROS • The majority of VMs and LMs are driven by mutations in PIK3CA or its directly upstream activator TEK • Prevalence of greater than 75,000 VMs in the United States and EU in the skin and greater than 42,000 LMs in United States and European Union in the skin • These lesions typically present at birth, and diagnosis is confirmed with radiographic imaging • Standard of care is generally non-disease-modifying and invasive; ranges from compression bandages and aspirin, to laser ablation, surgical resection, and sclerotherapy
Our Product Concept	• Topically formulated gel of proprietary small molecule inhibitor of PI3Ka under development to treat VM and LM • PI3K inhibition has been observed to cause a regression of lesions in a transgenic VM mouse model • BYL719, an orally dosed PI3K inhibitor, quickly and markedly improved VMs and LMs in PROS patients in a recent compassionate use study. Compared to oral dosing, we believe the transdermal approach may drive a higher local concentration of drug in the cutaneous lesion, with a lower concentration systemically • We believe transdermal therapy has the potential to replace or complement treatment across standard of care, and across the spectrum of severity. A topical gel has the potential to be used to treat an isolated VM/LM skin lesion or the skin manifestations of complex PROS
Key Competitors	• ART-001, an orally dosed PI3Ka inhibitor for VMs and PROS • ARQ-092, an orally dosed AKT inhibitor for Proteus Syndrome and other PROS

Disease Overview

VMs are large, disorganized veins that can cause significant morbidity due to functional impairment, pain, bleeding, and disfigurement. LMs involve lymphatic channels that are overgrown and/or disconnected from the

lymphatic system. These cause similar functional impairment to VMs, as well as pain, lymphatic leakage, and disfigurement. The standard of care for both VMs and LMs is often invasive and generally not disease-modifying. Intervention consists mostly of laser ablation of lesions, surgical resection and sclerotherapy, each of which are painful, rarely curative, and prone to complications. In the United States and Europe combined, it is estimated there are over 75,000 patients with cutaneous venous malformations, and another 42,000 cutaneous lymphatic malformations. The current standard of care options, like resection, laser ablation, and sclerotherapy, tend to not be curative, and the lesions require repeated, invasive treatment.

The majority of VMs and LMs are caused by mutations in PIK3CA or its directly upstream activator TEK. A recent compassionate use trial in 2018 showed that an orally dosed inhibitor of PI3Ka, the protein encoded by PIK3CA, causes a regression of VMs and LMs. The study was conducted in 19 patients with PIK3CA mutations and showed that vascular lesions, both on the skin and visceral, responded to inhibition of PI3K.

Our Product Concept

Our product candidate, targeting the cutaneous and subcutaneous manifestations of the disease, is a transdermal gel designed to permeate the skin and inhibit PI3Ka. Similar to observations in other transdermal approaches, we believe BBP-681 may yield a lower systemic concentration than orally dosed PI3Ka inhibitors and a higher concentration in the superficial but symptomatic lesions. In skin flux assays in Franz cell chambers, skin permeability greater than 100 fold above those achieved by topical rapamycin, an off-label therapy for LM and VM, was observed. Our PI3K inhibitor showed consistent suppression of the PI3K/AKT pathway in multiple cell lines including a human VM-derived TEK mutant endothelial cell line, as well as a mouse derived PIK3CA mutant endothelial cell line. Ten-point dose curves using a MTS viability assay in the same cell lines suggest that our compound may be at least as potent in cells as BYL719.

Development Plan

We are manufacturing GLP-grade quantities of this compound to support ongoing IND-enabling toxicology studies, and expect to file an IND by the end of 2019.

Key Competitors

Various other compounds are currently in development for PROS, including ART-001, which is under preclinical development by ARTham Therapeutics, Inc. as an orally dosed PI3Ka inhibitor for VMs and PROS, and Miransertib (ARQ-092), an orally available, selective, pan-AKT (protein kinase B) inhibitor in Phase 1/2 clinical development by Arqule, Inc. for Proteus Syndrome and other PROS.

BBP-671 (CoA): PKAN and Organic Acidemias

Summary	• We are developing BBP-671, a series of preclinical oral small molecules, allosteric activators of pantothenate kinases, for the treatment of Pantothenate Kinase Associated Neurodegeneration, or PKAN, and Organic Acidemias, or OAs
Development Status and Catalysts	• Ongoing – IND-enabling development • 2020 – Anticipated IND submission in OAs
Disease Overview	*PKAN:* • PKAN is a rare genetic disorder with progressive neurodegeneration. Early onset patients typically demonstrate motor deficits with possible visual problems from retinal degeneration within six years of age. Later onset disease is heterogeneous, with

	psychiatric symptoms and progressive parkinsonism developing in late childhood to adulthood • Inactivating mutations in the rate-limiting coenzyme A (CoA) synthetic enzyme PanK2 is postulated to lead to CoA depletion • Prevalence of approximately one in 1,000,000, with between 800 to 850 patients in the United States and European Union • Diagnosed by magnetic resonance imaging, or MRI, and genetic testing • No currently approved treatments *OA:* • Organic acidemias are caused by mutations in enzymes that disrupt amino acid metabolism leading to acute decompensations requiring hospitalization, as well as long term complications involving multiple organ systems, such as the heart, pancreas, kidney, liver, and brain • Mutations in metabolic enzymes lead to organic acid accumulation and is hypothesized to lead to CoA sequestration • Incidence of approximately 5 in 100,000 births • Newborn screening for OAs occurs in every U.S. state and most European countries • Standard of care includes dietary restriction and supplementation, but unmet need remains high due to metabolic decompensations and long-term complications
Our Product Concept	• Oral small molecule, allosteric activator of PanK 1-3 enzymes • Increased CoA synthesis restores CoA levels, which are thought to be depleted in PKAN, and overcomes metabolic dysregulation in OAs
Key Competitors	*PKAN*: • Fosmetpantotenate, an oral small molecule, substrate replacement agent • A substrate replacement agent under development by COMET Therapeutics *OA:* • mRNA-3704, mRNA-3927, systemic intracellular therapeutics for select organic acidemias • LB-001 and SEL-302, gene therapy agents for methylmalonic acidemia

Disease Overview

Pantothenate Kinase-Associated Neurodegeneration

PKAN is a rare, progressive neurodegenerative disorder arising in early childhood. The disease is defined by an accumulation of iron in the brain, which can be detected on an MRI and confirmed with genetic tests showing mutations in the PANK2 gene. While the symptomatology and progression vary widely, most patients develop symptoms before six years of age, while others present in late childhood to adulthood. Early onset patients typically demonstrate motor deficits with possible night-blindness from retinal degeneration. Later onset disease is heterogeneous, with psychiatric symptoms and progressive parkinsonism. There are currently no approved disease modifying therapies, with current treatments only partially controlling symptoms. PKAN affects approximately one in 1,000,000 people, and there are estimated to be between 800 and 850 patients in the United States and Europe.

Organic Acidemias

OAs are caused by mutations in key enzymes of amino acid metabolism including propionyl-CoA carboxylase for propionic acidemia, or PA, methylmalonyl-CoA mutase for methylmalonic acidemia, or MMA, isovaleryl-CoA dehydrogenase for isovaleric acidemia and glutaryl-CoA dehydrogenase for glutaric acidemia type 1. Together OAs are identified in approximately five in 100,000 births through standard newborn screening. Toxicity in these diseases is driven by defective amino acid metabolism that results in high concentrations of acyl-CoA, and likely to sequestration of free CoA, and altered mitochondrial energy metabolism. Chronic metabolic disorders such as OA are frequently accompanied by malnutrition and developmental delay, with acute crises of metabolic decompensation that often results in permanent neurological damage. Current treatments include dietary restriction, administration of L-carnitine and glycine to promote transfer and excretion of acyl-CoAs, and liver transplantation. Despite these strategies, unmet need remains high as existing treatment strategies do not altogether prevent metabolic decompensations, nor long term complications such as neurodegeneration (in MMA and PA), kidney disease (in MMA) and cardiomyopathy (in PA).

More broadly, the pathophysiology of a group of up to 60 inborn-errors of metabolism may be associated with decreases in CoA or CoA intermediates. As an upregulator of CoA biosynthesis, BBP-671 may be potentially applicable as a treatment in these diseases, which affect an estimated 200,000 patients globally.

Our Product Concept

Pantazines are positive allosteric modulators of the Pantothenate Kinase, or PanK, enzyme family (PanK1, PanK2 and PanK3), which are the rate-limiting step in coenzyme A (CoA) synthesis. Using a combination of X-ray crystallography and in vitro enzyme activity assays, it has been shown that the pantazines bind to and activate all PanK enzymes by locking the protein in an active conformation to continually catalyze formation of 4'-phosphopantothenate, resulting in increased CoA production. In PKAN, mutations in the PanK2 enzyme lead to the development of neurological deficits, likely as a result from insufficient CoA. It is hypothesized in PKAN, pantazines can increase the activity of the remaining functional PanK1 and PanK3 enzymes to increase CoA to normal levels and improve dysfunction associated with PKAN. Indeed in a mouse model with deletion of PanK1 and PanK2 in neurons only PanK3 is expressed, yet pantazine treatment can increase CoA in the brain of these mice.

In PA, defective amino acid metabolism results in accumulation of toxic metabolites that inhibit key energetic pathways, resulting in a severe metabolic disorder. Increasing free CoA and acetyl-CoA may overcome inhibition of mitochondrial respiration caused by accumulation of toxic metabolites and organic acids.

BBP-671 is a series of small molecules designed to use a novel approach to increasing CoA synthesis through allosteric modulation of the PanK family of enzymes, responsible for the first and rate-limiting step in CoA synthesis. The compounds in our BBP-671 program are intended to be orally administered once-daily, as a highly central nervous system penetrant small molecule, and potentially as a combination therapy.

Preclinical Data

In preclinical *in vitro* studies, targeting PanK3 with one of our BBP-671 compounds increased PanK activity, and is thought to increase CoA in cells by locking the enzyme in the "on" position. In preclinical studies, this BBP-671 compound prevented feedback inhibition of PanK enzymes by acetyl-CoA and propionyl-CoA, and increased PanK activity in the presence of acyl-CoAs by up to 15-fold. BBP-671 has been optimized for high BBB penetration. This BBP-671 compound dose dependently increased CoA levels in the brain of wild-type mice after 5 doses by oral gavage.

In a mouse model of brain CoA deficiency, which lack PANK1 and PANK2 in neurons, animals have been shown to have reduced median survival of only 52 days, a 21% reduction in brain CoA levels and a significant locomotor defect measured as a 60% reduction in percent of time moving in the open-field test. The same

BBP-671 compound administered in the diet at a dose of 15 mg/kg/day from weaning increased brain CoA and improved motor phenotype by significantly increasing movement in an open-field test. Median survival was significantly prolonged to 150 days.

We have studied our compounds in a hypomorphic mouse model of PA, where the mouse PCCA gene is deleted and the human A138T PCCA mutant protein is expressed. In the mouse model, plasma biomarkers associated with the human disease are increased and growth is impaired. The same BBP-671 compound administered in the diet at 10 mg/kg/day from weaning in this mouse model of PA increased free CoA in the liver to a level comparable to that observed in untreated wild-type animals. Mice treated with this BBP-671 compound gained weight at a similar rate as wild-type mice, unlike untreated mice that gained weight more slowly. The BBP-671 compound decreased the C3-carnitine/C2-carnitine ratio by more than 50%, consistent with increasing free CoA leading to improvements relevant to the disease.

In non-clinical toxicology studies, we have observed dose-limiting corneal toxicity in a 14 day repeat dosing experiment in dogs. This BBP-671 compound did not achieve a NOAEL in these test subjects; however an NOAEL was achieved in rodents. We believe the toxicity observed is consistent with a species and chemotype-specific mechanism. Therefore, we have initiated the process of manufacturing scale-up for two backup BBP-671 compounds, which we intend to use for non-GLP toxicology studies in 2019.

Development Plan

We are continuing IND-enabling work and subject to toxicology findings, we anticipate filing an IND in 2020.

Key Competitors

For PKAN, Retrophin, Inc.'s substrate replacement approach is currently in a Phase 3 clinical trial. Consistent with preclinical pharmacokinetic data suggesting fosmetpantotenate has a short half-life, their treatment is currently dosed three times a day in the trial. COMET Therapeutics has a similar substrate replacement therapy in preclinical development.

For OA, Moderna, Inc. has filed an IND for mRNA-3704 for MMA, and mRNA-3927 for PA is in preclinical testing. Hemoshear Therapeutics, LLC also has two preclinical programs for MMA and PA. Two gene therapy programs for MMA have been disclosed by Selecta Biosciences Inc. and LogicBio Therapeutics, Inc., with both planning for IND filings in 2019. Gene therapies, similar to liver transplantation, are expected to address systemic sequelae, but may not address CNS manifestations. Synlogic, Inc. also has a discovery program for PA.

BBP-711 (Orfan): Primary Hyperoxaluria and Frequent Stone Formers

Summary	• We are advancing BBP-711, a preclinical development program for potential oral small molecule inhibitors of glycolate oxidase, or GO, for the treatment of primary hyperoxaluria and patients who experience frequent kidney stone formation
Development Status and Catalysts	• Ongoing – Lead optimization • 2019 – Expect to nominate a development candidate
Disease Overview	• Primary hyperoxaluria, or PH1, is a rare, autosomal-recessive inborn error of metabolism driven by a defect in the AGXT gene, which codes for the enzyme alanine-glyoxylate aminotransferase, or AGXT • Deficiencies in the AGXT enzyme translate into the incapacity of PH1 patients to detoxify glyoxylate into glycine. As a result, glyoxylate is oxidized into oxalate which cannot be metabolized by humans. Elevated oxalate levels form calcium oxalate crystals, and subsequently kidney stones, which damage the kidneys, culminating in renal dysfunction

	• Prevalence for PH1 is estimated to be 5,000 patients in the United States and EU. Due to heterogeneous symptom presentation and similarity with other diseases, we believe that the disease is underdiagnosed. Prevalence for FSF is estimated to be 1.5 million in the United States and European Union • Diagnosis: Early in life (median 7.7 years) after initial presentation with urinary problems, including kidney stones, blood in urine and progressive renal failure; confirmed by genotyping • Standard of care involves symptomatic management through supplementation with vitamin B6, increased fluid intake, and citrate, to intensive dialysis and lithotripsy. Ultimately, the only curative treatment is a combined liver and kidney transplant
Our Product Concept	• We are selecting an oral small molecule candidate designed to inhibit GO, an enzyme that converts glycdate to glyoxylate • By inhibiting GO, BBP-711 is designed to prevent the conversion of glycolate to glyoxylate, reduce the downstream production of oxalate and reduce the concentration of urinary oxalate; glycolate can be safely eliminated through urine • In preclinical mouse models of PH1, BBP-711 reduced urinary oxalate • Additionally, idiopathic recurrent kidney stones occur in approximately 1% of the world's population, who are also referred to as frequent stone formers, or FSF. Approximately 80% of kidney stones are primarily composed of calcium oxalate. We believe BBP-711 has the potential to show efficacy in such patients
Key Competitors	• Lumasiran, a RNAi agent targeting GO • DCR-PHXC, a RNAi agent targeting hepatic LDHA

Disease Overview

Primary Hyperoxaluria

PH1 is a severe, rare, autosomal-recessive inborn error of metabolism driven by the overproduction of endogenous oxalate due to deficiencies in the liver peroxisomal enzyme alanine-glyoxylate aminotransferase, or AGXT. PH1 presents early in life after initial presentation with urinary problems, including kidney stone formation, blood in the urine and progressive renal dysfunction. The median progression to end-stage renal disease, or ESRD, in patients with PH1 is approximately 24 years. Diagnosis is difficult, as symptoms are non-specific and disease awareness amongst physicians is relatively low.

In normal individuals, AGT is responsible for the catalysis of glyoxylate to glycine, which can safely be eliminated in urine. However, in patients with PH1, as AGT is inactive, glyoxylate levels increase and another enzyme, LDH, converts glyoxylate to oxalate. The elevated excretion of urinary oxalate, or UOx, promotes the generation of calcium oxalate crystals in the kidney and the urinary tract triggering recurrent nephrolithiasis and/or nephrocalcinosis which culminates in progressive kidney disease and kidney failure.

There are no pharmacologic disease-modifying therapies for PH1, and treatment is focused on symptomatic management. Patients receive supplementation with vitamin B6 and citrate, and are directed to increased fluid intake in order to dilute UOx. Approximately 40% of the PH1 patients are responsive to vitamin B6 supplementation; however, responders are typically unable to achieve UOx normalization with this approach. Intensive dialysis and lithotripsy may be indicated as the disease progresses and symptoms become more severe. The only potentially curative therapy for the disease is combined liver and kidney transplant, which has significant associated morbidity and mortality.

FSF

Kidney stones affect approximately 10% and 5% of the male and female populations, respectively, and after the first stone, the recurrence rate is between 4% to 5% for both males and females. Calcium oxalate is found in approximately 80% of urinary stones, with 60% of stones composed of pure calcium oxalate.

Our Product Concept

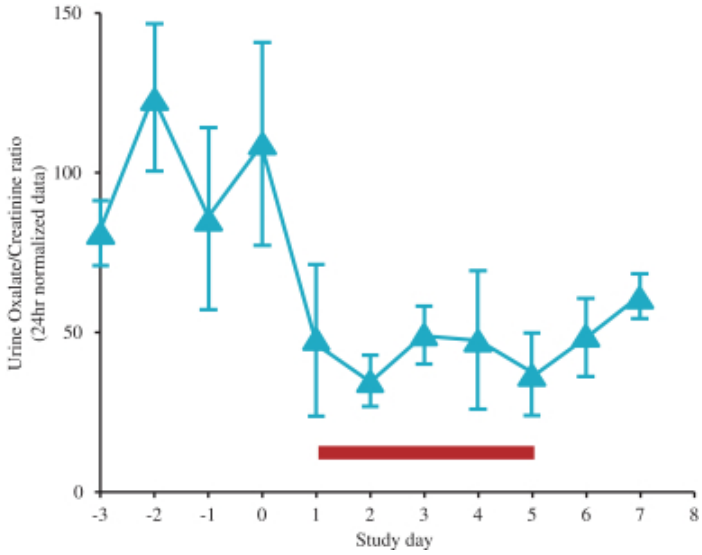
GO is a hepatic, peroxisomal enzyme that plays a key role in the production of oxalate, the molecule responsible for driving PH1 disease pathophysiology. Specifically, GO catalyzes the conversion of glycolate to glyoxylate, which is then converted to oxalate by LDH.

BBP-711 is a preclinical development program for oral small molecules designed to inhibit GO. By inhibiting GO, the production of glyoxylate is reduced, leading to the reduction in production of oxalate. By reducing oxalate formation, we believe that BBP-711 has the potential to reduce UOx in PH1 patients, and may therefore have potential as a future treatment for PH1.

In addition, there are many FSF that have recurrent idiopathic kidney stones made from calcium oxalate. While the present understanding of disease pathophysiology is incomplete, elevated levels of UOx and calcium increase the risk of calcium oxalate kidney stone formation. Treatments aimed at reducing dietary uptake of oxalate have shown efficacy in some, but not all, patients. We believe that BBP-711 has the potential to serve as a treatment for patients with calcium oxalate kidney stones by reducing levels of the key substrate necessary for intrinsic production of UOx, a key driver of kidney stone formation in these patients. As such, we may pursue an IND for BBP-711 in FSF as a potential expansion indication.

Preclinical Data

We are currently in the lead-optimization stage of preclinical development of BBP-711. Our lead series of potent and selective inhibitors of GO have been observed to reduce hyperoxaluria in mice homozygous for a null mutation in the AGXT1 gene, a well-validated model for PH1. The figure below shows UOx levels of AGXT1 knockout mice before and after five days of dosing (indicated with red line) with our lead development candidate.



Development Plan

We continue to optimize our initial lead series of product candidates and intend to nominate a development candidate for IND-enabling studies in 2019.

Key Competitors

Key competitors for PH1 include Alnylam Pharmaceuticals, Inc., or Alnylam, and Dicerna Pharmaceuticals, Inc., or Dicerna. Alnylam is developing a Phase 3 RNAi therapeutic candidate targeting GO (Lumasiran) for the treatment of PH1. Dicerna is developing a Phase 2/3 RNAi therapeutic candidate targeting LDHA for the treatment of all subtypes of PH.

BBP-561 (MoST): Netherton Syndrome

Summary	• We are developing BBP-561, a preclinical program for the development of topical KLK5/7 inhibitors, for the treatment of Netherton Syndrome
Development Status and Catalysts	• Ongoing – Lead optimization • 2019 – Anticipated development candidate selection
Disease Overview	• Netherton Syndrome is a devastating genetic disease characterized by skin breakdown complicated by risk of sepsis, severe malnutrition, and dehydration in affected neonates. It can additionally lead to chronic problems including allergy, infection, and inflammation • Driven by a loss of function mutation in the gene SPINK5, which encodes the serine protease inhibitor LEKTI, the subsequent, uninhibited serine protease activity by KLK5 and KLK7 leads to premature loss or disruption of the outer layer of the skin, or stratum corneum, as the proteins holding the skin together are degraded. • Prevalence of 4,000 – 17,000 patients in the United States and European Union • No disease-modifying therapy exists. Palliative and preventative treatments are used to manage symptoms
Our Product Concept	• We are developing a topically formulated, small molecule serine protease inhibitor designed to be active against both KLK5 and KLK7 • Restored inhibition of KLK5 and KLK7 prevents breakdown of proteins required for maintaining intact outer skin • Studies in a LEKTI-knockout mouse indicated that both KLK5 and KLK7 inhibition were required to reverse Netherton Syndrome phenotype
Key Competitors	• LM-030, a topical kallikrein inhibitor • SXR1096, a preclinical small molecule kallikrein inhibitor • AZT-02, a Staphylococcus epidermis strain engineered to express LEKTI • KB-104, a HSV-1 based topical gene therapy

Disease Overview

Netherton Syndrome is a devastating genetic disease caused by an autosomal recessive mutation in the gene SPINK5 (Serine Protease Inhibitor of Kazal Type 5), which encodes protein LEKTI (lympho-epithelial kazal type related inhibitor type 5). LEKTI is a serine protease inhibitor expressed in skin where a key function is to

inhibit Kallikrein 5 and 7, or KLK5/7. Unregulated KLK5/7 serine protease activity leads to premature detachment of the stratum corneum, the outer skin layer. Loss of stratum corneum can be life-threatening to neonates due to systemic sepsis or severe dehydration due to the compromised epithelial barrier, and it can lead to chronic problems for patients, including allergy, infection, and inflammation.

Netherton Syndrome has an estimated prevalence of between one out of 50,000-200,000, from which a potential population of 1,600-6,500 patients are estimated in the United States and another 3,700-15,000 patients in Europe. Currently, no disease-modifying therapy exists for Netherton Syndrome.

Our Product Concept

A 2017 paper in the Public Library of Science Genetics journal indicated that in a SPINK5/LEKTI-knockout mouse, only the combined knockout of KLK5 and KLK7 was sufficient to reverse the Netherton Syndrome phenotype. With this in mind, we evaluated previously described KLK inhibitors and used this information as a starting point for our lead optimization work to identify a molecule with properties suitable for IND-track development. Our medicinal chemistry work yielded BBP-561, which are serine protease inhibitors that have been observed to inhibit KLK5 and KLK7 *in vitro*.

Development Plan

We intend to continue our IND-enabling work with BBP-561 pursuing improved synthesis, topical formulation development, development candidate finalization and selection. We anticipate nominating a development candidate in 2019.

Key Competitors

LifeMax Healthcare International Corp. is developing LM-030, a topical kallikrein inhibitor, which has completed a Phase 2a clinical trial. Sixera Pharma Ab is developing SXR1096, a preclinical small molecule kallikrein inhibitor. Azitra Inc. is developing AZT-02, a Staphylococcus epidermis strain engineered to express LEKTI in preclinical development. Krystal Biotech, Inc. is developing KB-104, an HSV-1 based topical gene therapy in preclinical development.

BBP-761 (Fortify): Leber's Hereditary Optic Neuropathy

Summary	• We are developing BBP-761, a preclinical program for the treatment of Leber's Hereditary Optic Neuropathy, or LHON
Development Status and Catalysts	• Ongoing – Lead optimization • 2020 – Anticipated development candidate nomination
Disease Overview	• LHON is a rare mitochondrial disease of the eye, which manifests as rapidly progressive and severe loss of central vision predominantly in young adults • Onset occurs most frequently in a single eye and is followed by the second eye, while bilateral presentation occurs in approximately 25% of cases. Most patients reach legal blindness several months after disease onset • Caused by mutations in subunits of Complex I of the electron transport chain, a key protein complex for energy metabolism found in mitochondria, which results in mitochondrial dysfunction • Prevalence of approximately 20,000 patients in the United States and European Union and incidence of approximately 500 new patients annually • Patients are typically diagnosed based on clinical history and examination findings, and often confirmed with a genetic test

	• There are currently no treatments for the disease approved in the United States. Idebenone (Santhera) was approved in the European Union for LHON in 2015 under exceptional circumstances, as its pivotal trial did not meet its primary endpoint
Our Product Concept	• We are developing an intravitreal injectable of a succinate pro-drug • Increasing the levels of succinate is thought to restore mitochondrial function by upregulating Complex II activity, which is intended to compensate for Complex I dysfunction
Key Competitors	• GS010, an AAV2 gene therapy vector encoding mitochondrial gene ND4 • Elamipretide, a topical cardiolipin stabilizer • Idebenone, a small molecule antioxidant and electron carrier

Disease Overview

LHON manifests as rapidly progressive and severe loss of central vision predominantly in young adults. Onset occurs most frequently in a single eye and is followed by the second eye, while bilateral presentation occurs in approximately 25% of cases. Most patients reach legal blindness within several months following disease onset. LHON is driven by mutations in subunits of Complex I of the electron transport chain, causing dysfunctional oxidative phosphorylation in the mitochondria (reduced mitochondrial function and energy production). This leads to degeneration of the retinal ganglion cells of the eye.

There are approximately 20,000 patients in the United States and European Union with LHON and there are approximately 500 new patients diagnosed annually.

Our Product Concept

BBP-761 is in preclinical development as a therapy for LHON for which there are no currently approved drug therapies in the United States. Succinate is a substrate of Complex II of the electron transport chain. As a succinate pro-drug, we believe BBP-761 may have potential to increase Complex II activity. The *in vitro* application of succinate pro-drugs to recessive NDUFS2-mutant fibroblast models of Complex I dysfunction has shown that the compounds increased oxygen consumption rate and normalized spare respiratory capacity, measures of mitochondrial function, through increasing Complex II activity. Our product concept is to provide a succinate prodrug to the retina through regular intravitreal injections in order to increase Complex II activity to compensate for Complex I dysfunction. We believe that BBP-761 has the potential to treat LHON if it is found to be effective in increasing mitochondrial activity.

Development Plan

BBP-761 is currently in the lead-optimization stage of preclinical development. We intend to pursue further preclinical development around ocular drug delivery as well as *in vitro* and *in vivo* efficacy and safety and intend to nominate a development candidate in 2020.

Key Competitors

GenSight Biologics S.A. is developing GS010, an intravitreal AAV2-ND4 gene therapy that is currently in Phase 3 clinical development for the treatment of LHON. Stealth BioTherapeutics Inc. is developing elamipretide, a peptide that stabilizes cardiolipin delivered through topical eye drops. The Phase 2 clinical trial of elamipretide did not reach its primary endpoint. Santhera Pharmaceuticals Holding AG received an exceptional circumstances marketing authorization from the EMA for Idebenone as a treatment for LHON in 2015.

ONCOLOGY

BBP-398 (Navire): Targeting Multiple Oncology Indications

Summary

- BBP-398 is a preclinical small molecule inhibitor of SHP2 for the potential treatment of cancers driven by hyperactive receptor tyrosine kinase, or RTK, or MAPK signaling

Development Status and Catalysts

- Ongoing – IND-enabling development
- 2020 – Anticipated IND submission

Pathway Overview

- SHP2 is a phosphatase that acts downstream of receptor tyrosine kinases in the MAPK signaling pathway. SHP2 is critical in signaling in these pathways. Increased MAPK signaling is a hallmark of a number of cancer types, including: cancers driven by RTK genetic alterations, cancers with RTK fusion mutations, and cancers with constitutively active MAPK signaling. Additionally, SHP2 is implicated as a downstream mediator of PD-1 signaling, a key target of immuno-oncology treatment
- A summary of key cancer types in which SHP2 signaling is implicated includes:

Category	Mutation	Key Cancer Types	U.S. Incidence
RTK Genetic Alterations	EGFR	NSCLC	35,000
	HER2	Breast cancer	35,000
RTK Fusions	ALK, RET, ROS1	NSCLC	23,000
Constitutively Active RAS/MAPK Signaling	NF-1 Loss of Function	Melanoma, NSCLC, Ovarian, Bladder, others	65,000
	KRAS Amplification	Esophageal, gastric, ovarian	9,000
	BRAF	Melanoma	45,000
PD-1/PD-L1 Treated Tumors	N/A	NSCLC, HNSCC, UC, Gastric, HCC, Cervical cancer, others	>100,000

Our Product Concept

- Oral small molecule, allosteric SHP2 inhibitor
- Designed to lock the SHP2 enzyme in its inactive conformation, abrogating signaling via the MAPK pathway, and hindering growth of cancers driven by overactivation of the MAPK pathway, either as a monotherapy or in combination with established tyrosine kinase inhibitors (TKI)
- We have developed highly potent compounds with pERK IC_{50} in the 10-100nM range and anti-proliferative effects in KRAS-mutant pancreatic cancer, and RTK-driven esophageal squamous cell carcinoma cells *in vitro* and xenograft tumor models *in vivo*
- Designed to have limited activity against the hERG channel, which is implicated in cardiac toxicity, giving a high therapeutic index, which we believe will be particularly important for use in combination with other anti-cancer therapies in the clinic

Key Competitors	• TNO-155 (Novartis International AG) • RMC-4630 (Revolution Medicines) • JAB-3068 (Jacobio Pharmaceuticals, Inc.) • Undisclosed preclinical asset (Relay Therapeutics, Inc.) • Undisclosed preclinical asset (Redx Pharma Plc)

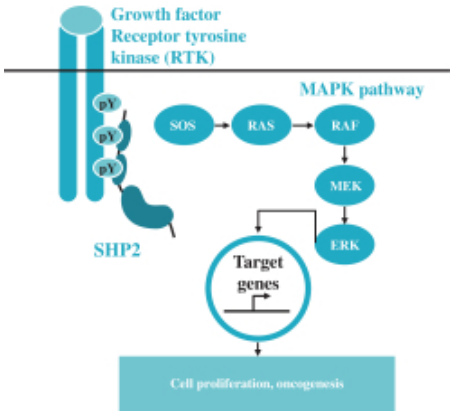
Pathway Overview

Cellular signaling networks governing cell proliferation, survival, adhesion and migration are frequently dysregulated in a variety of cancers. A key component of these networks are protein tyrosine phosphatases (PTPs), which are enzymes that remove phosphate groups from specific residues on substrate proteins, often changing their cellular location or function. SHP2 is an important member of this family, which has been shown to interact with growth factor receptors, scaffolding adaptor proteins, and immune inhibitory receptors. While key substrates remain incompletely validated, SHP-2 has been demonstrated to be a positive contributor to growth signaling pathways upstream of RAS and MAPK activity.

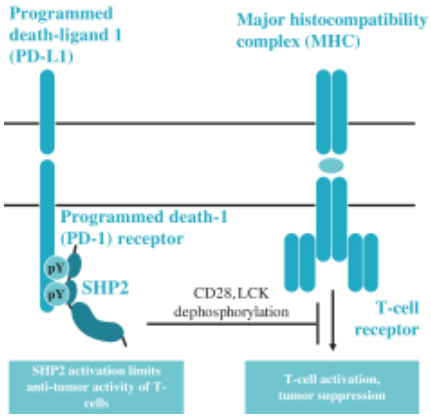
Upregulated MAPK signaling has been implicated as a driver of multiple cancer types, including cancers with RTK genetic alterations, RTK gene fusions, and cancers driven by constitutively active KRAS/MAPK signaling.

Outside of the MAPK pathway, active SHP2 limits T-cell response by binding to the receptor PD-1 and dephosphorylating CD28 and LCK, limiting signaling through the major histocompatibility complex (MHC). Reducing the amount of active SHP2 with an inhibitor may allow stronger T-cell activation, resulting in more effective tumor suppression.

Inhibiting SHP2 may suppress tumors driven by excess RTK/MAPK signaling



Inhibiting SHP2 may sensitize tumors to immune checkpoint inhibition



Our Product Concept

BBP-398 has been designed to have a higher therapeutic index and reduced off-target activity on hERG potassium channels, which are often implicated in cardiac toxicity. A higher therapeutic index is highly desirable in a SHP2 inhibitor to enhance tolerability when used in combination with other anti-cancer therapies.

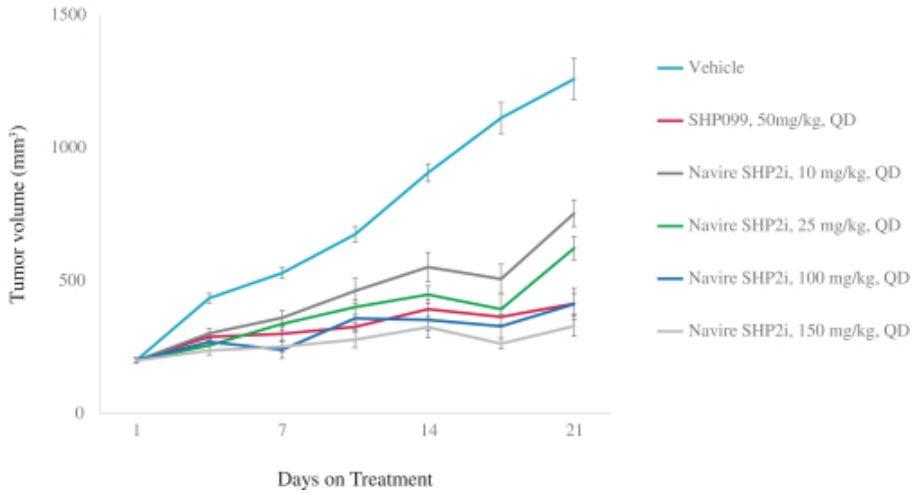
Because of its involvement in signaling pathways aberrant in many cancers, we believe the inhibition of SHP2 activity is a promising therapeutic hypothesis applicable to multiple cancer types either as a monotherapy or in

combination with other drugs. Current molecules in development interact with the catalytic, N-SH2 and C-SH2 domains simultaneously to stabilize SHP2 in its closed, inactive conformation, reducing the amount of active SHP2 in the cell, and thus limiting its contribution to signaling pathways downstream.

Our therapeutic hypotheses have been supported by data from multiple preclinical studies including:

- Inhibition of RAS and MAPK signaling and strong anti-proliferative effects of SHP2 single agent treatment in KRAS G12C mutant cell lines *in vitro*
- Inhibition of MAPK signaling and tumor-stasis upon SHP-2 single agent treatment of KRAS G12C mutant MiaPaCa and RTK-driven KYSE xenograft models *in vivo*

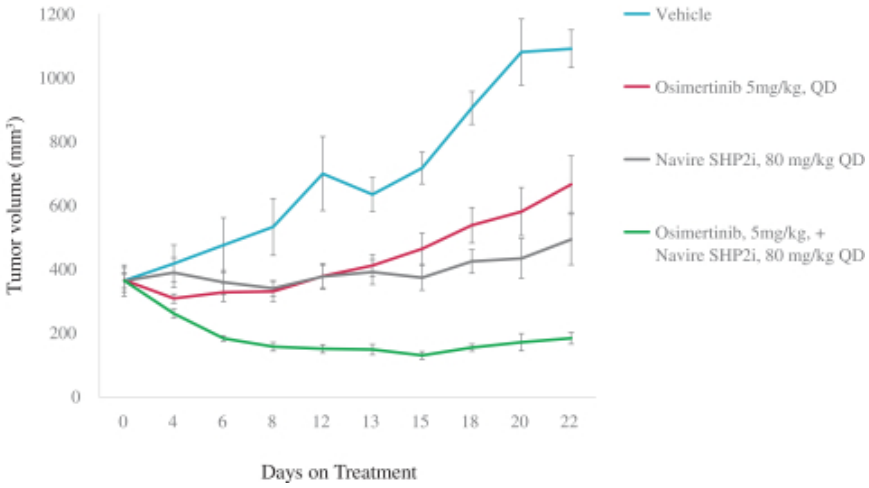
KYSE-520 xenograft tumor volumes upon treatment with Navire SHP2i QD



Above, a representative experiment indicating dose-dependent anti-tumor efficacy of our second generation series in RTK-driven esophageal squamous cell carcinoma (KYSE-520) xenograft tumors over 21 days of dosing.

- Therapeutic synergy of SHP2 inhibition in combination with MEK inhibitor tremetinib in MiaPaCa xenograft model *in vivo*
- Enhanced efficacy upon SHP2 inhibition in combination with anti-PD-1 therapy in H22 hepatocarcinoma xenograft model
- Restored sensitization of EGFR-mutated HCC827 NSCLC xenograft tumors to EGFR targeted therapy, osimertinib, upon SHP2 inhibition resulting in tumor regression

Osimertinib resistant HCC827-ER1 xenograft tumor volumes upon treatment with osimertinib alone, Navire SHP2i alone or in combination



Above, a representative experiment demonstrating the first generation Navire SHP2 inhibitor sensitized RTK inhibitor, osimertinib, resistant NSCLC xenograft tumors to osimertinib when given in combination.

Development Plan

We recently nominated our development candidate, BBP-398, which is currently in IND-enabling development. BBP-398 was nominated from a series of second-generation SHP2 inhibitors that have been optimized for minimal off-target activity on hERG potassium channels, an off-target interaction implicated in cardiac toxicity.

In preclinical PK studies in rodents, dogs and monkeys, the second-generation series demonstrated favorable PK, which we believe may support once daily dosing in humans. To date, consistent with our in vitro hERG assays, no evidence of QT/QTc prolongation has been observed in a dog cardiovascular safety study with one of our second-generation SHP2 inhibitors.

Currently, IND-enabling studies are ongoing, and we anticipate filing an IND in 2020.

Key Competitors

Multiple third parties are in active development of SHP2 inhibitors with similar mechanisms of action. These include three molecules in Phase 1 clinical trials in patients with solid tumors. Novartis International AG is testing TNO-155 in advanced EGFR-mutant NSCLC and KRAS-mutant NSCLC, CRC, esophageal squamous cell cancer (SCC), and head and neck SCC, while Revolution Medicines, Inc. is testing RMC-4630 in advanced relapsed or refractory solid tumors. Jacobio Pharmaceuticals, Inc. is testing their SHP-2 inhibitor, JAB-3068, in a first in human dose escalation study in NSCLC, head and neck, and esophageal cancer in China and the United States. Two other programs are in preclinical development by Relay Therapeutics and Redx Pharma.

BBP-954 (Ferro): Multiple Oncology Indications

Summary	• BBP-954 is our preclinical discovery program for irreversible inhibitors of glutathione peroxidase 4, or GPX4, for the treatment of solid and hematological cancers

Development Status and Catalysts	• Ongoing – Lead optimization • 2020 – Anticipated development candidate nomination
Pathway Overview	• Ferroptosis is a form of oxidative programmed cell death that cancer cells must avoid in order to survive and form tumors • GPX4 is an enzyme that protects cancer cells from ferroptosis by neutralizing toxic lipid free radicals. By inhibiting GPX4, we aim to trigger ferroptosis in cancer cells • Preclinical data generated by us and third parties suggest many of the most common cancers are sensitive to GPX4 inhibition, both in monotherapy and combination with standard anti-cancer agents such as kinase inhibitors and chemotherapy • Cancer types which may be treatable with a GPX4 inhibitor include:
Our Product Concept	• Oral small molecule irreversible GPX4 inhibitor • Based on *in vitro* preclinical data, we believe BBP-954 has the potential to be effective in many cancer types; sensitivity to BBP-954 *in vitro* (less than 100nM cellular IC_{50}) included 100% of RCC, 94% of NHL, 92% of pancreatic, 88% of sarcoma • Early derivatives of BBP-954 provided *in vivo* proof-of-concept with 50% tumor growth inhibition in a sarcoma xenograft model
Key Competitors	• Bayer AG and the Broad Institute are collaborating to develop GPX4 inhibitors

Key Cancer Types	U.S. Incidence
Renal Cell Carcinoma (RCC)	65,000
Non-Hodgkin's Lymphoma (NHL)	75,000
Pancreatic	55,000
Sarcoma	13,000
NSCLC	200,000
Breast	270,000
Melanoma	45,000

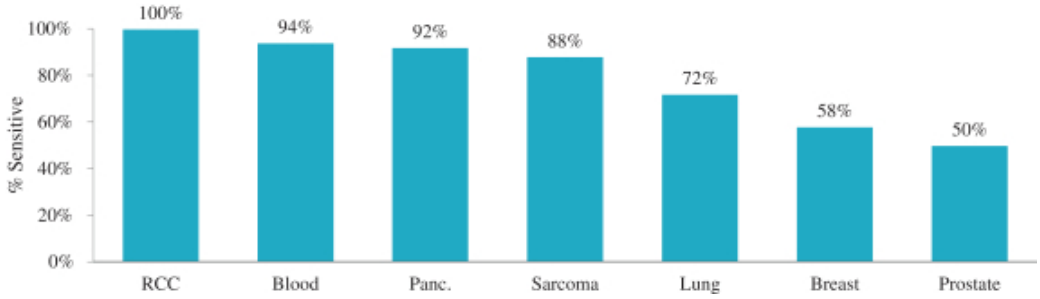
Pathway Overview

GPX4 is a lipid hydroperoxidase which protects cells from ferroptosis, a form of non-apoptotic cell death that is the result of toxic accumulation of lipid free radicals. Evasion of programmed cell death, including ferroptosis, is a hallmark of cancer and a growing body of evidence implicates GPX4 inhibition as a novel and potentially effective approach to treating cancer, both as a monotherapy and in combination with multiple standard anti-cancer agents including targeted kinase inhibitors and chemotherapy. Thus, we believe BBP-954 may be applicable in several common cancer types (see table above) which account for more than 500,000 new cases each year in the United States alone.

Our Product Concept

BBP-954 is our discovery program for a selective, oral, irreversible GPX4 inhibitors for the treatment of solid and hematologic cancer. Our preclinical data to date suggest that compounds in our BBP-954 program can be highly potent and specific GPX4 inhibitors and ferroptosis inducers. Internal *in vitro* and *in vivo* preclinical data, together with recent academic studies, suggest GPX4 inhibitors may have anti-tumor activity in many of the most

common cancers (including lung, melanoma, pancreatic, kidney, lymphoma), as well as less common tumors such as bone and soft-tissue sarcomas, for which there are currently few effective treatment options. In a cell-based screen of more than 300 cancer cell-lines derived from more than 10 tumor types, greater than 70% of lines tested were sensitive to our compounds (sensitivity defined as IC_{50} less than or equal to 100 nM). The most uniformly sensitive tumor types in our *in vitro* panel are summarized below:



Cell-based screen of more than 300 cancer cell-lines derived from more than 10 tumor types. Samples were considered sensitive if they showed an IC_{50} of 100 nM or less.

We established preliminary in vivo proof-of-concept data in a sarcoma xenograft model using one of our initial compounds, which showed a 50% decrease in tumor growth relative to vehicle treated animals. The compound was well-tolerated over the 28-day dosing period (measured by change from baseline in body weight) despite clear target engagement in several normal tissues including kidney, liver, lung, heart and pancreas. Additionally, multiple independent academic studies have shown tumor regression using genetic inactivation of GPX4, including xenograft models of RCC, melanoma and sarcoma.

Development Plan

We are currently in the lead-optimization stage of preclinical development. We anticipate nominating a development candidate in 2020.

Key Competitors

Bayer AG and the Broad Institute are developing small molecule inhibitors of GPX4. We are not aware of any other active GPX4 inhibitor discovery programs.

GENE THERAPY

BBP-812 (Aspa): Canavan Disease

Summary	• We are developing BBP-812, a preclinical AAV, gene transfer therapy candidate, for the treatment of Canavan Disease
Development Status and Catalysts	• Ongoing – IND-enabling development • 2020 – Anticipated IND submission
Disease Overview	• Canavan Disease is a fatal, progressive neurodegenerative disorder that begins in infancy. The disease is a leukodystrophy, caused by degradation of white matter in the brain.

	Patients typically miss developmental milestones, have a rapidly increasing head circumference, progressive lack of motor control, and often do not live past their mid-teens • Caused by inactivating mutations in the gene encoding aspartocylase (ASPA) that normally catalyzes diacylation of N-acetyl-l-aspartate (NAA) into aspartate and acetate. Results in elevated NAA levels • Incidence of one in 100,000 births worldwide • Diagnosis: Clinical suspicion after missed developmental milestones is confirmed by elevated NAA in urine • No treatments approved for Canavan Disease, care is focused on symptom management
Our Product Concept	• Designed to replace ASPA gene with AAV9 gene therapy restoring missing enzymatic activity • BBP-812 uses a self-complementary AAV9 vector
Key Competitors	• We are not currently aware of any key competitors

Disease Overview

Canavan Disease is a fatal, progressive neurodegenerative disorder that begins in infancy. The disease is a leukodystrophy, caused by degradation of white matter in the brain, which prevents proper synaptic communication of neurons. Canavan Disease typically presents within three to five months of birth with missed or regressed developmental milestones, a rapidly increasing head circumference, lack of head and motor control, seizures, low tone, which then progresses to spasticity, and sometimes blindness. Many of the patients do not live past their mid-teens, though some do survive longer.

Canavan Disease is exceedingly rare, with an estimated prevalence of less than approximately one in 100,000 births, corresponding to approximately 90 births annually in the United States and Europe. The current total estimated disease population is around 1,000 in the United States and Europe, some of whom are catalogued in patient registries and patient advocacy groups. Current treatment is limited to supportive symptomatic care, and there are no drugs currently approved or registered in clinical development for Canavan disease.

Canavan Disease is caused by a deficit in the ASPA gene, which encodes Aspa, an enzyme that catalyzes the diacylation of NAA into aspartate and acetate. Though the exact molecular pathophysiology of the disease has not yet been elucidated, significant demyelination in the deep cortical white matter is a hallmark of the disease. Additionally, Aspa inactivity results in a significant increase in urinary NAA, which can be quantified by mass spectrometry and confirm diagnosis.

Our Product Concept

BBP-812 is a self-complementary AAV, or AAV9 gene transfer product candidate intended to treat Canavan Disease by replacing the aspartoacylase enzyme. The vector uses a CB6 promoter, which is constitutively active. A recent publication using the same vector construct showed that expression of Aspa was sufficient to rescue the phenotype and lifespan of mice lacking the ASPA gene. Data in a knockout mouse model of Canavan Disease showed strong evidence of activity out to one year, which was the latest time point evaluated. No notable adverse effects were observed, and the therapy at the high dose restored survival, motor function, and NAA to wild-type levels. While little data have been presented publicly, a single compassionate use case performed at the University of Florida for a Canavan Disease patient treated with simultaneous intravenous and

intracerebroventricular injection of rAAV9-CB6-ASPA was associated with improved functional outcomes in a 6-month update as measured by motor abilities. In a Phase 1 clinical trial for Spinal Muscular Atrophy Type 1, AAV9 was well-tolerated in humans at doses as high as $2x10^{14}$ vector genomes per kilogram.

Development Status

Following ongoing route-of-administration, dose-finding, and IND-enabling toxicology, we expect to file an IND submission for BBP-812 in 2020. Given the small number of patients and the extremely high unmet need, we intend to explore an abbreviated and accelerated clinical development plan, as well as to pursue a rare pediatric disease designation from the FDA.

Key Competitors

We are not aware of commercially active small molecule or conventional biologic programs aimed at treating Canavan Disease. A gene therapy developed by Dr. Paula Leone and licensed to Bamboo Therapeutics (acquired by Pfizer Inc.) was in preclinical development at the time of the Bamboo acquisition, but its current development status is unknown.

Additional Program Related Information

Manufacturing

We do not own or operate, and currently have no plans to establish, any manufacturing facilities. We currently depend on third-party CMOs, for all of our requirements of raw materials, drug substance and drug product for our preclinical research and our ongoing clinical trials of our product candidates. We have not entered into long-term agreements with our current CMOs. We intend to continue to rely on CMOs for later-stage development and commercialization of our product candidates, including any additional product candidates that we may identify. Although we rely on CMOs, we have personnel and third-party consultants with extensive manufacturing experience to oversee the relationships with our contract manufacturers. Several of our development candidates have or are in the near term expected to have redundant and overlapping drug substance and drug product supply chains.

BBP-631 (Adrenas), and BBP-812 (Aspa)

We are working with a leading contract manufacturer to produce our vector for toxicology experiments and our first-in-human clinical trial. We believe this contract manufacturer can scale all the way through commercial production. Currently, our vector is being produced in a HEK293 triple transfection suspension system for both AAV programs.

BBP-009 (PellePharm)

BBP-009, or patidegib, is a semi-synthetic small molecule derived from a natural product raw material, cyclopamine. The current source of cyclopamine is from the wild harvest of Veratrum californicum, or corn lily, in the western United States. The roots of the plant are harvested on private and federal land by a third-party contractor who holds contracts and/or permits for harvesting Veratrum californicum with private landholders and the U.S. Forest Service. After drying and milling, cyclopamine is isolated and purified from the resulting biomass. Cyclopamine is then converted to patidegib in twelve chemical steps at two contract manufacturing facilities. Patidegib is formulated as a hydro-alcoholic gel for topical administration and packaged in laminate tubes. Ongoing R&D studies are aimed at developing a process to produce cyclopamine using plant cell fermentation as an alternative source of cyclopamine.

We currently have development and manufacturing contracts and quality agreements with multiple CMOs for the harvest of Veratrum californicum, and the manufacturing of cyclopamine, drug substance and drug product. We anticipate that these CMOs will have capacity to support commercial scale production.

BBP-598 (Phoenix Tissue Repair)

We believe the current inventory of BBP-598 drug product is sufficient to complete the ongoing Phase 1/2 proof-of-concept clinical trial. Selection of a CMO to support late-stage development, late-phase clinical supply, and commercial supply is ongoing, and we expect to select a CMO in the first quarter of 2019. Late-stage development activities will be focused on process establishment, facility-fit, and cost of goods optimization. We have acquired/licensed a portfolio of patents that relates to the composition and production of rCOL7 and support manufacture of product for commercial purposes.

Sales and Marketing

We intend to begin building a commercial infrastructure in the United States and selected other territories to support the commercialization of each of our product candidates when we believe a regulatory approval in a particular territory is likely. Because most of our target indication are rare diseases with a concentrated prescribing audience and a small number of key opinion leaders who influence the treatments prescribed for the relevant patient population, we currently believe that we can effectively address each market using our own targeted, specialty sales and marketing organization supported by internal sales personnel, an internal marketing group and distribution support.

We intend to evaluate our commercialization strategy as we advance each product candidate through clinical development. In any core markets outside of the United States that we may identify, where appropriate, we may utilize strategic partners, distributors or contract sales forces to expand the commercial availability of our product candidates. We currently do not expect that we will require large pharmaceutical partners for the commercialization of any of our product candidates, although we may consider partnering in certain territories or indications or for other strategic purposes.

Intellectual Property

We strive to protect the proprietary technology that we believe is important to our business, including seeking and maintaining patents and patent applications intended to cover our product candidates and compositions, their methods of use and processes for their manufacture, and any other aspects of inventions that are commercially important to the development of our business. We have entered into various license agreements to obtain the rights to use certain patents for the development and commercialization of our product candidates. See “—Our Material Agreements.” We also rely on trade secrets to protect aspects of our business that are not amenable to, or that we do not consider appropriate for, patent protection.

Our success will depend on our ability to obtain and maintain patent and other proprietary rights protecting our commercially important technology, inventions and know-how related to our business, defend and enforce our current and future issued patents, if any, preserve the confidentiality of our trade secrets and operate without infringing the valid and enforceable patents and proprietary rights of third parties. We also rely on know-how, continuing technological innovation and potential in-licensing opportunities to develop and maintain our intellectual property portfolio. We seek to obtain domestic and international patent protection, and endeavor to promptly file patent applications for new commercially valuable inventions.

The patent positions of biopharmaceutical companies like us are generally uncertain and involve complex legal, scientific and factual questions. In addition, the coverage claimed in a patent application can be significantly reduced before the patent is issued, and patent scope can be reinterpreted by the courts after issuance. Moreover, many jurisdictions permit third parties to challenge issued patents in administrative proceedings, which may result in further narrowing or even cancellation of patent claims. We cannot predict whether the patent applications we are currently pursuing will issue as patents in any particular jurisdiction or whether the claims of any patents, if issued, will provide sufficient protection from competitors.

Because patent applications in the United States and certain other jurisdictions are maintained in secrecy for 18 months or potentially even longer, and since publication of discoveries in the scientific or patent literature often

lags behind actual discoveries, we cannot be certain of the priority of inventions covered by pending patent applications. Moreover, we may have to participate in interference proceedings or derivation proceedings declared by the United States Patent and Trademark Office, or USPTO, to determine priority of invention.

QED Therapeutics, Inc.

For our subsidiary, QED Therapeutics, Inc., we license rights from Novartis to two issued U.S. patents, and related pending and issued foreign patents and patent applications in Australia, Canada, China, Europe, Japan and Mexico, as well as in other countries in Asia and in South America, that are directed to compositions of matter of BBP-831. The issued U.S. patents are expected to expire between 2026 and 2029, which takes into account patent term adjustments granted by the USPTO. The foreign patents and patent applications, if issued, are expected to expire between 2025 and 2030.

QED Therapeutics also has licensed rights from Novartis to one pending U.S. patent application, and related pending and issued foreign patents and patent applications in Australia, Canada, China, Europe, Japan and Mexico, as well as in other countries in Asia and in South America, that are directed to pharmaceutical formulations containing BBP-831. The issued patents and patent applications, if issued, are expected to expire in 2034.

QED Therapeutics has also licensed rights from Inserm Transfer ESA and Assistance Publique-Hôpitaux de Paris to one issued U.S. patent and one pending U.S. patent application, and one granted patent in Europe, that are directed to methods of treating achondroplasia using BBP-831. The issued U.S. patent, granted patent in Europe, and the pending patent application, if issued, are expected to expire in 2032.

Eidos Therapeutics, Inc.

For our subsidiary Eidos Therapeutics, Inc., we license rights from the Board of Trustees of the Leland Stanford Junior University, or Stanford, to five issued U.S. patents with claims directed to composition of matter and methods of use relating to BBP-265. These patents are expected to expire in 2031 or 2033. We also license rights from Stanford to one pending U.S. patent application, one issued European patent, one pending European patent application, and one issued Japanese patent with claims directed to composition of matter and methods of use relating to BBP-265. These patents and patent applications, if issued, are expected to expire in 2031 or 2033.

In addition, we own a pending U.S. patent application, a pending PCT patent application, and a patent application pending in Taiwan with claims directed to salt and solid forms relating to BBP-265. These patent applications, if issued, are expected to expire in 2038.

Origin Biosciences, Inc.

For our subsidiary Origin Biosciences, Inc., we own two issued U.S. patents with claims directed to methods of use and manufacturing processes relating to BBP-870, and two issued Canadian patents that relate to BBP-870. The issued U.S. and Canadian patents are expected to expire in 2025 or 2032.

PellePharm, Inc.

For our subsidiary, PellePharm, Inc., we own one pending U.S. patent application with claims directed to topical formulations and methods of use, including treating basal cell carcinoma relating to BBP-009 and over 10 related foreign patent applications pending in various jurisdictions, including Australia, Canada, Europe, Japan, and Mexico. These patent applications, if issued, are expected to expire in 2036.

Additionally, we license rights from Infinity Discovery Inc., or Infinity Pharmaceuticals, Inc. and the Johns Hopkins University, to eight issued U.S. patents with claims directed to composition of matter and methods of use relating to BBP-009, two related pending U.S. patent applications, over 60 related issued foreign patents in

various jurisdictions, including Australia, Canada, China, Europe (validated in various countries), Japan, Korea, Mexico, and Singapore, and over four related foreign patent applications pending in various jurisdictions, including Brazil, Israel, Thailand, and the United Arab Emirates. The issued U.S. and foreign patents are expected to expire between 2025 and 2028. The pending U.S. and foreign patent applications, if issued, are expected to expire in 2027.

Adrenas Therapeutics, Inc.

For our subsidiary Adrenas Therapeutics, Inc., we own one pending PCT patent application with claims directed to recombinant AAV vectors relating to BBP-631. Any patent applications claiming the benefit of this PCT patent application, if issued, are expected to expire in 2039.

Aspa Therapeutics, Inc.

For our subsidiary, Aspa Therapeutics, Inc., we license rights from the University of Massachusetts to one issued U.S. patent with claims directed to methods of treating Canavan disease using BBP-812, one related pending U.S. patent application, one related issued European patent, four related foreign patents issued in various jurisdictions, including Europe and Japan, and four related foreign patent applications pending in various jurisdictions, including Canada, Europe, and Japan. The issued U.S. patent is expected to expire in 2031. The pending U.S. patent application, if issued, is expected to expire in 2036. The foreign patents and any patents issuing from the foreign patent applications are expected to expire between 2031 and 2036.

CoA Therapeutics, Inc.

For our subsidiary, CoA Therapeutics, Inc., we license rights from St. Jude Children's Research Hospital, Inc., or St. Jude, to one pending U.S. patent application with claims directed to composition of matter and methods of use relating to BBP-671, and over 10 related foreign patent applications pending in various jurisdictions, including Australia, Canada, China, Europe, Japan, and Mexico. These patent applications, if issued, are expected to expire in 2037.

Additionally, CoA Therapeutics, Inc., co-owns with St. Jude, three pending PCT patent applications directed to composition of matter and methods of use relating to BBP-671. Any patent applications claiming the benefit of these PCT patent applications, if issued, are expected to expire in 2038.

Ferro Therapeutics, Inc.

For our subsidiary, Ferro Therapeutics, Inc., we license from K-Gen Limited one U.S. provisional patent application, directed to compositions of matter and methods of use relating to BBP-954. Any patent applications claiming the benefit of this provisional patent application, if issued, are expected to expire in 2039.

Fortify Therapeutics

For our subsidiary, Fortify Therapeutics, we license rights from NeuroVive Pharmaceutical AB, in the field of LHON for use directly in the eye, to one pending U.S. patent application with claims directed to compounds, one related issued European patent, and over 12 related foreign patent applications pending in various jurisdictions, including Australia, Canada, China, Japan, and Mexico. The issued European patent, and pending U.S. patent application and foreign patent applications, if issued, are expected to expire in 2035.

Navire Pharma, Inc.

For our subsidiary, Navire Pharma, Inc., we license rights from The University of Texas to one pending U.S. patent application and five related foreign patent applications pending in Australia, Canada, China, Europe, and Japan with claims directed to composition of matter and methods of use relating to BBP-398. These patent applications, if issued, are expected to expire in 2037.

Orfan Biotech, Inc.

For our subsidiary Orfan Biotech, Inc., we own one U.S. provisional patent application and one pending PCT patent application with claims directed to compounds and methods of use thereof. Any patent applications claiming the benefit of the PCT patent application, if issued, are expected to expire in 2038. Any patent applications claiming the benefit of the U.S. provisional patent application, if issued, are expected to expire in 2039.

Phoenix Tissue Repair, Inc.

For our subsidiary Phoenix Tissue Repair, Inc., we license rights from the University of Southern California, or USC, to five pending U.S. patent applications, with claims directed to methods of use, including treating epidermolysis bullosa with collagen 7. If issued, these U.S. patent applications are expected to expire between 2027 and 2035. We also license rights from USC to three related foreign patents issued in Australia, Europe and Japan, and over seven related foreign patent applications pending in various jurisdictions including Australia, Canada, Europe, and Japan. The foreign patents and patent applications, if issued, are expected to expire between 2027 and 2035.

We also own an issued U.S. patent with claims directed to collagen 7 modification for enhancing the degradability of collagen, and related issued patents in the United Kingdom, France and Germany. The issued U.S. patent is expected to expire in November 2019. The issued patents in the United Kingdom, France and Germany are expected to expire in 2022.

We also own one pending U.S. patent application with claims directed to methods of treating epidermolysis and chronic skin wounds with collagen 7, with related patent applications pending in Australia, Canada, and Europe. These patent applications, if issued, are expected to expire in 2033.

We also own a pending U.S. patent application with claims directed to formulations comprising collagen 7 and seven related foreign patent applications pending in various jurisdictions, including Canada, China, Europe, Japan, and Mexico. These patent applications, if issued, are expected to expire in 2036.

TheRas, Inc.

For our subsidiary TheRas, Inc., we license rights from The Regents of the University of California and Leidos Biomedical Research, Inc. to one pending U.S. patent application with claims directed to modulators of K-RAS, which include claims to the modulators as composition of matter and their use in therapy, including the treatment of cancer, and over ten related foreign patent applications pending in various jurisdictions, including Australia, Canada, China, Europe, Japan, and Mexico. The U.S. patent application and foreign patent applications, if issued, are expected to expire in 2036. We also license rights to an international (PCT) patent application. Any patent applications claiming the benefit of this international patent application, if issued, are expected to expire in 2038.

Venthera, Inc.

For our subsidiary Venthera, Inc., we license rights from the Memorial Sloan Kettering Cancer Center to one pending U.S. patent application with claims directed to methods of treating vascular malformation and five related foreign patent applications pending in Australia, Canada, Europe, Israel and New Zealand. These patent applications, if issued, are expected to expire in 2036. We also own one U.S. provisional patent application directed to new compounds, compositions/formulations and methods for treating vascular malformation. Any patent applications claiming priority to this U.S. provisional patent application, if issued, are expected to expire in 2040.

Our Material Agreements

BBP-265: License Agreement with the Board of Trustees of the Leland Stanford Junior University

In April 2016, through our subsidiary Eidos Therapeutics, Inc., we entered into an exclusive license agreement with Stanford for rights relating to novel transthyretin aggregation inhibitors. Under our agreement, Stanford has

granted us an exclusive worldwide license to make, use and sell products that are covered by the licensed patent rights. This license grant expires when the last licensed patent expires. The patent rights exclusively licensed to us under the license are described in more detail above under the heading "—Intellectual property—BBP-265."

Stanford retains the right, on behalf of itself and all other non-profit academic research institutions, to practice under the patent rights for any non-profit purpose, including sponsored research and collaborations. We may grant sublicenses to third parties so long as we are actively pursuing the development or commercialization of products covered by the patent rights. We may also be required to sublicense our rights under the agreement at Stanford's request under certain conditions, including if we are unwilling or unable to serve a potential market or territory and there is a third party willing to be a sublicensee in such market or territory.

We are obligated to pay to Stanford a yearly license maintenance fee during the term of the agreement, but we may offset the maintenance fee against earned royalty payments due on net sales occurring in that year. Stanford is entitled to receive a royalty as a percentage of net sales of licensed products, in the low single digits. We have agreed to pay Stanford a percentage of non-royalty revenue we receive from our sublicensees, with the amount owed decreasing annually for three years based on when we enter into the applicable sublicense agreement. In addition, we are obligated to pay Stanford up to approximately $1.0 million upon the achievement of specific intellectual property, clinical and regulatory milestone events. In the event of a change of control transaction with respect to Eidos, we are obligated to pay Stanford a change of control fee of $250,000 in connection with the assignment of the license agreement to the acquirer of Eidos.

Under the license agreement with Stanford, we are obligated to use commercially reasonable efforts to develop, manufacture, and commercialize at least one licensed product; to develop markets for such licensed products; and to meet certain development milestones as agreed upon between us and Stanford.

Subject to the expiration of the license grant described above, the agreement does not have a specified term. We may terminate the agreement by providing prior written notice to Stanford, and Stanford has the right to terminate the agreement if we fail to achieve certain milestones or make payments under the agreement, or are not actively pursuing development of a licensed product, or if we otherwise materially breach the agreement and fail to cure such breach within a specified grace period.

BBP-831: License Agreement with Novartis International Pharmaceutical Ltd.

In January 2018, through our subsidiary QED Therapeutics, Inc., or QED, we entered into a license agreement with Novartis International Pharmaceutical Ltd., or Novartis, for certain intellectual property rights, including patents and know-how, related to BBP-831 for the treatment of patients with FGFR-driven diseases, including CCA, UC and achondroplasia. We refer to this agreement as the Novartis License.

Pursuant to the Novartis License, we obtained a license to research, develop, make, have made, use, import, offer for sale, sell, have sold and otherwise commercialize BBP-831, as well as therapeutic products incorporating BBP-831 that would, but for the license grant, infringe Novartis' license patent rights, or that were developed using or that incorporate or embody Novartis' licensed know-how, in all fields of use worldwide. The license grant to us includes the right to sublicense through multiple tiers. We also have certain rights to intellectual property licensed to Novartis' affiliate under a materials transfer agreement with a third party.

The Novartis License is subject to Novartis' existing obligations to supply a third party with BBP-831 to support the third party's clinical trials, and we have an ongoing obligation to inform Novartis of our or our sublicensees' intent to seek regulatory approval for and commercialize BBP-831 for various indications, with potential reversionary rights to Novartis in the event of a subsequent decision not to seek regulatory approval and commercialization, or a determination by Novartis that we have failed to sufficiently pursue regulatory approval and commercialization, for Novartis to grant such third party limited rights to develop and commercialize BBP-831.

Under the terms of the Novartis License, we made a one-time payment of $15.0 million to Novartis and agreed to issue shares of Series A preferred stock of QED valued at approximately $1.7 million in the aggregate to Novartis. In addition, we are obligated to make contingent milestone payments totaling $60.0 million upon achievement of certain regulatory milestones. We are also obligated to make contingent milestone payments totaling $35.0 million upon achievement of certain sales milestones for therapeutic products incorporating BBP-831. QED also agreed to pay Novartis tiered low double-digit royalties on net sales of therapeutic products incorporating BBP-831.

Under the Novartis License, we are required to use commercially reasonable efforts to develop BBP-831, and to obtain regulatory approval for and commercialize BBP-831 in the United States and the European Union.

We may terminate the Novartis License in its entirety or on a product-by-product or country-by-country basis at any time with 60 days' prior written notice to Novartis. Novartis may terminate if QED ceases to function as a going concern, is the subject of certain bankruptcy or similar proceedings, or otherwise winds down or discontinues its business. Either party may terminate for material breach that is not cured by the other party within a specified time period of receiving notice of such material breach. Otherwise, the Novartis License terminates on a product-by-product and country-by-country basis on the latest of the expiration of licensed patent rights, the expiration of regulatory exclusivity, or the tenth anniversary of the first commercial sale in such country.

BBP-870: Asset Purchase Agreement with Alexion Pharma Holding Unlimited Company

In June 2018, through our subsidiary Origin Biosciences, Inc., we entered into an asset purchase agreement with Alexion Pharma Holding Unlimited Company, or Alexion, pursuant to which we acquired Alexion's right, title and interest in certain assets relating to BBP-870, including patents and other intellectual property rights.

In the event that a Priority Review Voucher, or PRV, is granted to us by the FDA, we have agreed to pay Alexion a percentage in the mid-teens of any proceeds received by us by from our sale of the PRV to a third party. If we do not sell the PRV to a third party within 180 days after our receipt of the PRV, we are obligated to pay Alexion $18.78 million, which amount is creditable against any amounts otherwise due to Alexion in accordance with the preceding sentence upon any future sale by us of the PRV. We are obligated to make contingent milestone payments totaling $3.0 million upon achievement of certain development milestones and $17.0 million upon achievement of certain sales milestones for products containing the BBP-870 molecule. We also agreed to pay Alexion tiered royalties ranging from the low-to mid-teens on net sales of products containing the BBP-870 molecule.

We are obligated to use commercially reasonable efforts to obtain a PRV, achieve specified milestone events and commercialize at least one product containing the BBP-870 molecule after receipt of regulatory approval.

BBP-009 (Patidegib): Option Agreement with LEO Pharma A/S

In November 2018, through PellePharm, Inc., or PellePharm, we entered into an option agreement with LEO Pharma A/S, or LEO Pharma, and LEO Spiny Merger Sub, Inc., pursuant to which LEO Pharma was granted an exclusive, irrevocable option to acquire PellePharm. The option is exercisable by LEO Pharma on or before the occurrence of certain events relating to PellePharm's clinical development programs, and in no event later than July 30, 2021. As consideration for the option, LEO Pharma paid to PellePharm exclusivity payments totaling approximately $27.9 million in the aggregate and purchased a minority equity interest in PellePharm for approximately $5.1 million. In addition, LEO Pharma has agreed to pay additional exclusivity payments to PellePharm in an amount not to exceed $37.0 million in the aggregate under certain circumstances.

Pursuant to the option agreement, we have agreed to conduct the business of PellePharm in the ordinary course and in accordance with applicable laws, comply with the terms of our organizational documents, and use

commercially reasonable efforts to operate the business of PellePharm in accordance with a mutually agreed budget and to complete a Phase 2 clinical trial of patidegib for HF-BCC and a Phase 3 clinical trial of patidegib for Gorlin Syndrome. In addition, we and LEO Pharma have formed a joint development committee to oversee the development of, and to make decisions regarding the commercialization of, patidegib.

BBP-589: Asset Purchase Agreement with Shire Human Genetic Therapies, Inc. and Lotus Tissue Repair

In July 2017, through our subsidiary, Phoenix Tissue Repair, Inc. or Phoenix, we entered into an asset purchase agreement with Shire Human Genetic Therapies, Inc., or Shire, and Lotus Tissue Repair, Inc. or Lotus, pursuant to which we acquired from Shire and Lotus the right, title and interest in certain assets relating to recombinant human collagen type VII, including patents and other intellectual property rights, as well as data and regulatory filings, relating to the treatment of DEB, and assumed certain liabilities with respect thereto. In connection with the acquisition of such assets, (1) Shire and Lotus granted to us a non-exclusive, worldwide, irrevocable, perpetual, royalty-free, sublicenseable license under certain intellectual property related to the acquired assets but retained by Shire and Lotus, for the exploitation of certain recombinant human collagen type VII products in all fields, and (2) we granted to Shire and Lotus a non-exclusive, worldwide, irrevocable, perpetual, royalty-free, sublicenseable license under certain of the acquired intellectual property assets to exploit products other than recombinant human collagen type VII products and other than for the treatment of DEB in humans.

As partial consideration for our acquisition of the assets, we agreed to pay a purchase price of $1.5 million and issued shares of common stock in Phoenix at a nominal value to Lotus. We are obligated to make contingent milestone payments totaling $27.0 million upon achievement of certain regulatory milestones. In addition, we are obligated to make contingent milestone payments totaling $60.0 million upon achievement of certain sales milestones. We also agreed to pay to Shire and Lotus tiered single-digit royalties on annual net sales for products containing the recombinant human collagen type VII.

We are obligated to use commercially reasonable efforts to develop, obtain FDA approval for and commercialize at least one product for the treatment of DEB in humans.

BBP-454: License Agreement with Regents of The University of California

In September 2016, through our subsidiary TheRas, Inc., or TheRas, we entered into a license agreement with the Regents of the University of California, or UCSF, which was amended in January 2017, August 2017 and September 2018, relating to certain patent rights related to KRAS inhibitors and modulators, which we refer to collectively as the UCSF License.

Under the UCSF License, we acquired an exclusive, royalty-bearing, sublicensable (through multiple tiers), worldwide license to make, have made, use, sell, offer for sale and import products, services, and methods covered by the licensed patent rights, and to perform licensed processes, in each case, in prophylactic and therapeutic uses in humans. In addition, we received an option for certain inventions conceived and reduced to practice during a specified term. Under the UCSF License, UCSF retains, on behalf of itself and a third party, the right to make, use and practice certain of the licensed intellectual property rights for research and educational purposes, and the right to license to other academic and nonprofit organizations to practice the patent rights for research and educational purposes, including with respect to sponsored research performed on behalf of commercial entities. The rights and interests of any such commercial entity shall be subject to the licenses granted to us pursuant to the UCSF License. The UCSF License is also subject to pre- existing rights of the U.S. Government and the NIH.

In connection with the UCSF License and subsequent amendments, we paid issue fees totaling $300,000. In addition, under the terms of the UCSF License, we are required to pay to UCSF certain annual license maintenance fees unless we are selling or otherwise exploiting licensed products or services paying royalties to UCSF on net sales for such licensed products or services. With respect to such royalty obligations, we agreed to

pay UCSF low single-digit tiered royalties on annual net sales of licensed products and services, with a minimum royalty requirement of $100,000. Our obligation to pay royalties continues on a country-by-country basis until the expiration of all licensed patent rights covering licensed products in such country. In addition, we are obligated to make contingent milestone payments totaling up to $22.4 million upon the achievement of certain clinical or regulatory milestones. In the event that we sublicense the patent rights, UCSF is also entitled to receive a percentage of the sublicensing income received by us.

We are also required to make a one-time "Index Milestone Payment" to UCSF in the event of (i) an initial public offering, or (ii) a change of control transaction, in each case with respect to TheRas. Such Index Milestone Payment is calculated by multiplying (a) a number of shares equal to a specified percentage of the then-outstanding fully-diluted shares of common stock of TheRas by (b)(1) in the case of an initial public offering by TheRas, the offering price per share of the securities sold to the underwriters in the offering, or (2) in the case of a change of control transaction with respect to TheRas, the per share consideration that would be received by TheRas' shareholders in such transaction, in each case subject to certain adjustments. To the extent that an Index Milestone Payment becomes due prior to a bona fide financing transaction of at least $45 million, such Index Milestone Payment is equal to the greater of the amount calculated as described above, or $1.8 million.

Under the UCSF License, we also assumed certain obligations with respect to fund-raising, and must report on our progress in achieving the milestones set forth in the UCSF License on a periodic basis. The UCSF License also includes certain participation rights pursuant to which UCSF has the right to purchase specified amounts of securities offered by TheRas in financing transactions.

Under the UCSF License, we are obligated to diligently proceed with the development, manufacture and sale of at least one licensed product and/or service, and to earnestly and diligently market such licensed product and/or service after receipt of any requisite regulatory approvals and in quantities sufficient to meet market demand. We are also required to use good faith and diligent efforts to meet the milestones set forth in the UCSF License, subject to any revisions that may be permitted under certain circumstances. UCSF has the right to either terminate the UCSF License or reduce the license to a nonexclusive license if we are unable to perform our diligence obligations.

The agreement will continue until the last to expire or abandonment of the patent rights on a licensed product-by-licensed product and country-by-country basis. We may terminate the agreement by providing prior written notice to UCSF or we may terminate the rights under patent rights on a country-by-country basis by giving notice in writing to UCSF. UCSF has the right to terminate the agreement if we fail to make any payments, challenge any UCSF patent rights or otherwise materially breach the agreement and fail to cure such breach within a specified grace period.

BBP-398: Collaboration and License Agreement with the Board of Regents of The University of Texas System and The University of Texas M.D. Anderson Cancer Center

In March 2017, through our subsidiary Navire Pharma, Inc. (formerly known as PTP Pharmaceuticals, Inc.), or Navire, we entered into a collaboration and license agreement with The Board of Regents of the University of Texas System, or the Board of Regents, and The University of Texas M.D. Anderson Cancer Center, or MD Anderson. Under the agreement, we acquired an exclusive, royalty-bearing, sublicensable, worldwide license to develop, make, use and sell SHP2 and PTPN11 inhibitors covered by the licensed technology in all fields. The Board of Regents and MD Anderson each retain the right to practice the licensed patent rights for non-commercial, research and academic purposes, and also to grant non-exclusive licenses to other academic and nonprofit organizations to practice the patent rights for non-commercial, research and educational purposes (but excluding any research sponsored by a for-profit entity). Our license is also subject to a non-exclusive license granted to the U.S. government. To further the goals of the collaboration agreement, we granted a non-exclusive license to our technology to MD Anderson for the purpose of carrying out the development plan.

In partial consideration for the exclusive license grant, we issued the Board of Regents shares of common stock of Navire valued at approximately $280,000 pursuant to a stock purchase agreement entered into simultaneously. If commercial sales of a licensed product commence, we will pay MD Anderson royalties at percentage rates ranging in the low single digits on net sales of licensed products. We may offset payments made to third parties to obtain rights needed for the commercialization of a licensed product against royalties payable to MD Anderson provided that such expenses in a given year may not be credited against more than a specified percentage of the royalties in such year and subject to a minimum floor in the low single digits. Our obligation to pay various royalties continues on a country by country basis with respect to any licensed product depends on regulatory status, patent coverage, and financing status. For licensed products that satisfy certain regulatory conditions, the related royalty extends for three years after the first sale. Additionally, if certain financing conditions are achieved, then (i) for licensed products covered by licensed patents, the royalty obligation continues until the expiration of all licensed patent rights covering such licensed product in such country, and (ii) for licensed products without coverage by licensed patents, the royalty obligation extends for 10 years after first sale.

Under the collaboration and license agreement, we are obligated to use commercially reasonable efforts to conduct all development activities under the agreement and to commercialize the licensed products following regulatory approval.

The agreement will continue for thirty years unless earlier terminated. We may terminate the agreement for convenience, provided that MD Anderson shall not be required to forego payments made or equity issued to MD Anderson under the collaboration and license agreement or the stock purchase agreement. MD Anderson has the right to terminate the agreement if we fail to pay royalties or otherwise materially breach the agreement or the stock purchase agreement and fail to cure such breach within a specified cure period, or if BridgeBio Pharma LLC commits a material breach of its obligations under any agreement with Navire, or if Navire breaches obligations under a Series A Preferred Stock Purchase Agreement between Navire and BridgeBio Pharma LLC.

Government Regulation

Government authorities in the United States at the federal, state and local level and in other countries regulate, among other things, the research, development, manufacture, testing, quality control, approval, labeling, packaging, storage, record-keeping, promotion, advertising, distribution, post-approval monitoring and reporting, marketing and export and import of drug and biological products, including gene therapies, as well as diagnostics, and any future product candidates. Generally, before a new drug, biologic or diagnostic can be marketed, considerable data demonstrating its quality, safety and efficacy must be obtained, organized into a format specific for each regulatory authority, submitted for review and approved, authorized, or cleared by the applicable regulatory authority.

U.S. Government Regulation of Drug and Biological Products

In the United States, the FDA regulates drugs under the FDCA, and its implementing regulations and biologics under the FDCA and the Public Health Service Act, or PHSA, and their implementing regulations. Both drugs and biologics also are subject to other federal, state and local statutes and regulations, such as those related to competition. The process of obtaining regulatory approvals and the subsequent compliance with appropriate federal, state, and local statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or following approval may subject an applicant to administrative actions or judicial sanctions. These actions and sanctions could include, among other actions, the FDA's refusal to approve pending applications, withdrawal of an approval, license revocation, a clinical hold, untitled or warning letters, voluntary or mandatory product recalls or market withdrawals, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement and civil or criminal fines or penalties. Any agency or judicial enforcement action could have a material adverse effect on our business, the market acceptance of our products and our reputation.

Our product candidates must be approved by the FDA through either an NDA, or a BLA, process before they may be legally marketed in the United States. The process generally involves the following:

- completion of extensive preclinical studies in accordance with applicable regulations, including studies conducted in accordance with GLP, requirements;
- submission to the FDA of an IND application, which must become effective before human clinical trials may begin;
- approval by an IRB, or independent ethics committee at each clinical trial site before each human trial may be initiated;
- performance of adequate and well-controlled human clinical trials in accordance with applicable IND regulations, GCP, requirements and other clinical trial-related regulations to establish the safety and efficacy of the investigational product for each proposed indication;
- submission to the FDA of an NDA or BLA;
- a determination by the FDA within 60 days of its receipt of an NDA or BLA to accept the filing for review;
- satisfactory completion of one or more FDA pre-approval inspections of the manufacturing facility or facilities where the drug or biologic will be produced to assess compliance with Current Good Manufacturing Practices, or cGMP, requirements to assure that the facilities, methods and controls are adequate to preserve the drug or biologic's identity, strength, quality and purity;
- potential FDA audit of the clinical trial sites that generated the data in support of the NDA or BLA;
- payment of user fees for FDA review of the NDA or BLA; and
- FDA review and approval of the NDA or BLA, including consideration of the views of any FDA advisory committee, prior to any commercial marketing or sale of the drug or biologic in the United States.

The preclinical and clinical testing and approval process requires substantial time, effort and financial resources, and the regulatory scheme for drugs and biologics is evolving and subject to change at any time. We cannot be certain that any approvals for our product candidates will be granted on a timely basis, or at all.

Preclinical Studies

Before testing any drug, biological or gene therapy candidate in humans, the product candidate must undergo rigorous preclinical testing. Preclinical studies include laboratory evaluation of product chemistry and formulation, as well as *in vitro* and animal studies to assess safety and in some cases to establish a rationale for therapeutic use. The conduct of preclinical studies is subject to federal and state regulations and requirements, including GLP regulations for safety/toxicology studies.

An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data, any available clinical data or literature and plans for clinical trials, among other things, to the FDA as part of an IND. An IND is a request for authorization from the FDA to administer an investigational product to humans, and must become effective before human clinical trials may begin. Some long-term preclinical testing, such as animal tests of reproductive AEs and carcinogenicity, may continue after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time, the FDA raises concerns or questions related to one or more proposed clinical trials and places the trial on clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to commence. Additionally, the review of information in an IND submission may prompt FDA to, among other things, scrutinize existing INDs or marketed products and could generate requests for information or clinical holds on other product candidates or programs.

Clinical Trials

The clinical stage of development involves the administration of the investigational product to healthy volunteers or patients under the supervision of qualified investigators, generally physicians not employed by or under the trial sponsor's control, in accordance with GCP requirements, which include the requirement that all research subjects provide their informed consent for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the clinical trial, dosing procedures, subject selection and exclusion criteria and the parameters to be used to monitor subject safety and assess efficacy. Each protocol, and any subsequent amendments to the protocol, must be submitted to the FDA as part of the IND. Furthermore, each clinical trial must be reviewed and approved by an IRB for each institution at which the clinical trial will be conducted to ensure that the risks to individuals participating in the clinical trials are minimized and are reasonable in relation to anticipated benefits. The IRB also approves the informed consent form that must be provided to each clinical trial subject or his or her legal representative, and must monitor the clinical trial until completed. There also are requirements governing the reporting of ongoing clinical trials and completed clinical trial results to public registries. Information about certain clinical trials, including clinical trial results, must be submitted within specific timeframes for publication on the www.clinicaltrials.gov website.

In addition to the submission of an IND to the FDA before initiation of a clinical trial in the United States, certain human clinical trials involving recombinant or synthetic nucleic acid molecules had historically been subject to review by the RAC, of the NIH Office of Biotechnology Activities, or the OBA, pursuant to the NIH Guideline. On August 17, 2018, the NIH issued a notice in the Federal Register and issued a public statement proposing changes to the oversight framework for gene therapy trials, including changes to the applicable NIH Guidelines to modify the roles and responsibilities of the RAC with respect to human clinical trials of gene therapy products, and requesting public comment on its proposed modifications. During the public comment period, which closed October 16, 2018, the NIH announced that it will no longer accept new human gene transfer protocols for review as a part of the protocol registration process or convene the RAC to review individual clinical protocols. These trials will remain subject to the FDA's oversight and other clinical trial regulations, and oversight at the local level will continue as set forth in the NIH Guidelines. Specifically, under the NIH Guidelines, supervision of human gene transfer trials includes evaluation and assessment by an IBC, a local institutional committee that reviews and oversees research utilizing recombinant or synthetic nucleic acid molecules at that institution. The IBC assesses the safety of the research and identifies any potential risk to public health or the environment, and such review may result in some delay before initiation of a clinical trial. While the NIH Guidelines are not mandatory unless the research in question being conducted at or sponsored by institutions receiving NIH funding of recombinant or synthetic nucleic acid molecule research, many companies and other institutions not otherwise subject to the NIH Guidelines voluntarily follow them.

A sponsor who wishes to conduct a clinical trial outside of the United States may, but need not, obtain FDA authorization to conduct the clinical trial under an IND. If a foreign clinical trial is not conducted under an IND, the sponsor may submit data from the clinical trial to the FDA in support of an NDA or BLA. The FDA will accept a well-designed and well-conducted foreign clinical study not conducted under an IND if the study was conducted in accordance with GCP requirements, and the FDA is able to validate the data through an onsite inspection if deemed necessary.

Clinical trials generally are conducted in three sequential phases, known as Phase 1, Phase 2 and Phase 3, and may overlap.

- *Phase 1* clinical trials generally involve a small number of healthy volunteers or disease-affected patients who are initially exposed to a single dose and then multiple doses of the product candidate. The primary purpose of these clinical trials is to assess the metabolism, pharmacologic action, side effect tolerability and safety of the product candidate.
- *Phase 2* clinical trials involve studies in disease-affected patients to evaluate proof of concept and/or determine the dose required to produce the desired benefits. At the same time, safety and further PK and PD

information is collected, possible adverse effects and safety risks are identified and a preliminary evaluation of efficacy is conducted.

- *Phase 3* clinical trials generally involve a large number of patients at multiple sites and are designed to provide the data necessary to demonstrate the effectiveness of the product for its intended use, its safety in use and to establish the overall benefit/risk relationship of the product and provide an adequate basis for product labeling.

In August 2018, the FDA released a draft guidance entitled "Expansion Cohorts: Use in First-In-Human Clinical Trials to Expedite Development of Oncology Drugs and Biologics," which outlines how drug developers can utilize an adaptive trial design commonly referred to as a seamless trial design in early stages of oncology drug development, i.e., the first-in-human clinical trial, to compress the traditional three phases of trials into one continuous trial called an expansion cohort trial. Information to support the design of individual expansion cohorts are included in IND applications and assessed by FDA. Expansion cohort trials can potentially bring efficiency to drug development and reduce developmental costs and time.

Post-approval trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication and are commonly intended to generate additional safety data regarding use of the product in a clinical setting. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval of an NDA or BLA.

Progress reports detailing the results of the clinical trials, among other information, must be submitted at least annually to the FDA and written IND safety reports must be submitted to the FDA and the investigators 15 days after the trial sponsor determines the information qualifies for reporting for serious and unexpected suspected AEs, findings from other studies or animal or *in vitro* testing that suggest a significant risk for human subjects and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must also notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction as soon as possible but in no case later than seven calendar days after the sponsor's initial receipt of the information.

Phase 1, Phase 2, Phase 3 and other types of clinical trials may not be completed successfully within any specified period, if at all. The FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects or patients are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug or biologic has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether a trial may move forward at designated check points based on access to certain data from the trial. Concurrent with clinical trials, companies usually complete additional animal studies and also must develop additional information about the chemistry and physical characteristics of the drug or biologic as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of the product and, among other things, companies must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the product candidates do not undergo unacceptable deterioration over their shelf life.

FDA Review Process

Following completion of the clinical trials, data are analyzed to assess whether the investigational product is safe and effective for the proposed indicated use or uses. The results of preclinical studies and clinical trials are then

submitted to the FDA as part of an NDA or BLA, along with proposed labeling, chemistry and manufacturing information to ensure product quality and other relevant data. The NDA or BLA is a request for approval to market the drug or biologic for one or more specified indications and must contain proof of safety and efficacy for a drug or safety, purity and potency for a biologic. The application may include both negative and ambiguous results of preclinical studies and clinical trials, as well as positive findings. Data may come from company-sponsored clinical trials intended to test the safety and efficacy of a product's use or from a number of alternative sources, including studies initiated by investigators. To support marketing approval, the data submitted must be sufficient in quality and quantity to establish the safety and efficacy of the investigational product to the satisfaction of FDA. FDA approval of an NDA or BLA must be obtained before a drug or biologic may be marketed in the United States.

Under the Prescription Drug User Fee Act, or PDUFA, as amended, each NDA or BLA must be accompanied by a user fee. FDA adjusts the PDUFA user fees on an annual basis. Fee waivers or reductions are available in certain circumstances, including a waiver of the application fee for the first application filed by a small business. Additionally, no user fees are assessed on NDAs or BLAs for products designated as orphan drugs, unless the product also includes a non-orphan indication.

The FDA reviews all submitted NDAs and BLAs before it accepts them for filing, and may request additional information rather than accepting the NDA or BLA for filing. The FDA must make a decision on accepting an NDA or BLA for filing within 60 days of receipt, and such decision could include a refusal to file by the FDA. Once the submission is accepted for filing, the FDA begins an in-depth review of the NDA or BLA. Under the goals and policies agreed to by the FDA under PDUFA, the FDA targets ten months, from the filing date, in which to complete its initial review of a new molecular entity NDA or original BLA and respond to the applicant, and six months from the filing date of a new molecular entity NDA or original BLA designated for priority review. The FDA does not always meet its PDUFA goal dates for standard and priority NDAs or BLAs, and the review process is often extended by FDA requests for additional information or clarification.

Before approving an NDA or BLA, the FDA will conduct a pre-approval inspection of the manufacturing facilities for the new product to determine whether they comply with cGMP requirements. The FDA will not approve the product unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. The FDA also may audit data from clinical trials to ensure compliance with GCP requirements. Additionally, the FDA may refer applications for novel products or products which present difficult questions of safety or efficacy to an advisory committee, typically a panel that includes clinicians and other experts, for review, evaluation and a recommendation as to whether the application should be approved and under what conditions, if any. The FDA is not bound by recommendations of an advisory committee, but it considers such recommendations when making decisions on approval. The FDA likely will reanalyze the clinical trial data, which could result in extensive discussions between the FDA and the applicant during the review process. After the FDA evaluates an NDA or BLA, it will issue an approval letter or a Complete Response Letter. An approval letter authorizes commercial marketing of the drug or biologic with specific prescribing information for specific indications. A Complete Response Letter indicates that the review cycle of the application is complete and the application will not be approved in its present form. A Complete Response Letter usually describes all of the specific deficiencies in the NDA or BLA identified by the FDA. The Complete Response Letter may require the applicant to obtain additional clinical data, including the potential requirement to conduct additional pivotal Phase 3 clinical trial(s) and/or to complete other significant and time-consuming requirements related to clinical trials, or to conduct additional preclinical studies or manufacturing activities. If a Complete Response Letter is issued, the applicant may either resubmit the NDA or BLA, addressing all of the deficiencies identified in the letter, or withdraw the application or request an opportunity for a hearing. Even if such data and information are submitted, the FDA may decide that the NDA or BLA does not satisfy the criteria for approval. Data obtained from clinical trials are not always conclusive and the FDA may interpret data differently than we interpret the same data.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug or biological product intended to treat a rare disease or condition, which is generally a disease or condition that affects fewer than 200,000 individuals in the United States, or more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making the product available in the United States for this type of disease or condition will be recovered from sales of the product.

Orphan drug designation must be requested before submitting an NDA or BLA. After the FDA grants orphan drug designation, the identity of the therapeutic agent and its potential orphan use are disclosed publicly by the FDA. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product that has orphan drug designation subsequently receives the first FDA approval for the disease or condition for which it has such designation, the product is entitled to orphan drug exclusivity, which means that the FDA may not approve any other applications to market the same drug for the same indication for seven years from the date of such approval, except in limited circumstances, such as a showing of clinical superiority to the product with orphan exclusivity by means of greater effectiveness, greater safety or providing a major contribution to patient care or in instances of drug supply issues. Competitors, however, may receive approval of either a different product for the same indication or the same product for a different indication but that could be used off-label in the orphan indication. Orphan drug exclusivity also could block the approval of one of our products for seven years if a competitor obtains approval before we do for the same product, as defined by the FDA, for the same indication we are seeking approval, or if our product is determined to be contained within the scope of the competitor's product for the same indication or disease. If we pursue marketing approval for an indication broader than the orphan drug designation we have received, we may not be entitled to orphan drug exclusivity. Orphan drug status in the European Union has similar, but not identical, requirements and benefits.

Rare Pediatric Disease Designation and Priority Review Vouchers

Under the FDCA, as amended, the FDA incentivizes the development of drugs and biologics that meet the definition of a "rare pediatric disease," defined to mean a serious or life-threatening disease in which the serious of life-threatening manifestations primarily affect individuals aged from birth to 18 years and the disease affects fewer than 200,000 individuals in the United States or affects more than 200,000 in the United States and for which there is no reasonable expectation that the cost of developing and making in the United States a drug for such disease or condition will be received from sales in the United States of such drug. The sponsor of a product candidate for a rare pediatric disease may be eligible for a voucher that can be used to obtain a priority review for a subsequent human drug or biologic application after the date of approval of the rare pediatric disease drug product, referred to as a priority review voucher, or PRV. A sponsor may request rare pediatric disease designation from the FDA prior to the submission of its NDA or BLA. A rare pediatric disease designation does not guarantee that a sponsor will receive a PRV upon approval of its NDA or BLA. Moreover, a sponsor who chooses not to submit a rare pediatric disease designation request may nonetheless receive a PRV upon approval of their marketing application if they request such a voucher in their original marketing application and meet all of the eligibility criteria. If a PRV is received, it may be sold or transferred an unlimited number of times. Congress has extended the PRV program until September 30, 2020, with the potential for PRVs to be granted until 2022.

Expedited Development and Review Programs

A sponsor may seek to develop and obtain approval of its product candidates under programs designed to accelerate the development, FDA review and approval of new drugs and biologics that meet certain criteria. For example, the FDA has a fast track program that is intended to expedite or facilitate the process for reviewing new drugs and biologics that are intended to treat a serious or life threatening disease or condition and demonstrate the potential to address unmet medical needs for the condition. Fast track designation applies to both the product

and the specific indication for which it is being studied. For a fast track-designated product, the FDA may consider sections of the NDA or BLA for review on a rolling basis before the complete application is submitted, if the sponsor provides a schedule for the submission of the sections of the application, the FDA agrees to accept sections of the application and determines that the schedule is acceptable and the sponsor pays any required user fees upon submission of the first section of the application. The sponsor can request the FDA to designate the product for fast track status any time before receiving NDA or BLA approval, but ideally no later than the pre-NDA or pre-BLA meeting.

A product submitted to the FDA for marketing, including under a fast track program, may be eligible for other types of FDA programs intended to expedite development or review, such as priority review and accelerated approval. Priority review means that, for a new molecular entity or original BLA, the FDA sets a target date for FDA action on the marketing application at six months after accepting the application for filing as opposed to ten months. A product is eligible for priority review if it is designed to treat a serious or life-threatening disease condition and, if approved, would provide a significant improvement in safety and effectiveness compared to available therapies. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug or biologic designated for priority review in an effort to facilitate the review. If criteria are not met for priority review, the application for a new molecular entity or original BLA is subject to the standard FDA review period of ten months after FDA accepts the application for filing. Priority review designation does not change the scientific/medical standard for approval or the quality of evidence necessary to support approval.

A product may also be eligible for accelerated approval if it is designed to treat a serious or life-threatening disease or condition and demonstrates an effect on either a surrogate endpoint that is reasonably likely to predict clinical benefit or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, or IMM, that is reasonably likely to predict an effect on IMM or other clinical benefit, taking into account the severity, rarity, or prevalence of the disease or condition and the availability or lack of alternative treatments. As a condition of approval, the FDA may require that a sponsor of a drug or biologic receiving accelerated approval perform adequate and well-controlled post-marketing clinical trials. In addition, the FDA currently requires as a condition for accelerated approval pre-approval of promotional materials, which could adversely impact the timing of the commercial launch of the product. FDA may withdraw approval of a drug or indication approved under accelerated approval if, for example, the confirmatory trial fails to verify the predicted clinical benefit of the product.

Additionally, a drug or biologic may be eligible for designation as a breakthrough therapy if the product is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. If the FDA designates a breakthrough therapy, it may take actions appropriate to expedite the development and review of the application, which may include holding meetings with the sponsor and the review team throughout the development of the therapy; providing timely advice to, and interactive communication with, the sponsor regarding the development of the drug to ensure that the development program to gather the nonclinical and clinical data necessary for approval is as efficient as practicable; involving senior managers and experienced review staff, as appropriate, in a collaborative, cross-disciplinary review; assigning a cross-disciplinary project lead for the FDA review team to facilitate an efficient review of the development program and to serve as a scientific liaison between the review team and the sponsor; and considering alternative clinical trial designs when scientifically appropriate, which may result in smaller trials or more efficient trials that require less time to complete and may minimize the number of patients exposed to a potentially less efficacious treatment. Breakthrough therapy designation comes with all of the benefits of fast track designation, which means that the sponsor may file sections of the BLA for review on a rolling basis if certain conditions are satisfied, including an agreement with the FDA on the proposed schedule for submission of portions of the application and the payment of applicable user fees before the FDA may initiate a review.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or the time period for FDA review or approval may not be shortened. Furthermore, fast track designation, priority review, accelerated approval and breakthrough therapy designation do not change the standards for approval.

Pediatric Information and Pediatric Exclusivity

Under the Pediatric Research Equity Act, or PREA, certain NDAs and BLAs and certain supplements to an NDA or BLA must contain data to assess the safety and efficacy of the drug for the claimed indications in all relevant pediatric subpopulations and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may grant deferrals for submission of pediatric data or full or partial waivers. The Food and Drug Administration Safety and Innovation Act, or FDASIA, amended the FDCA to require that a sponsor who is planning to submit a marketing application for a drug that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration submit an initial Pediatric Study Plan, or PSP, within 60 days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before the initiation of the Phase 3 or Phase 2/3 study. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials and/or other clinical development programs.

A drug or biologic product can also obtain pediatric market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing exclusivity periods and patent terms. This six-month exclusivity, which runs from the end of other exclusivity protection or patent term, may be granted based on the voluntary completion of a pediatric study in accordance with an FDA-issued “Written Request” for such a study.

Post-Marketing Requirements

Following approval of a new product, the manufacturer and the approved product are subject to continuing regulation by the FDA, including, among other things, monitoring and record-keeping activities, reporting of adverse experiences, complying with promotion and advertising requirements, which include restrictions on promoting products for unapproved uses or patient populations (known as “off-label use”) and limitations on industry-sponsored scientific and educational activities. Although physicians may prescribe legally available products for off-label uses, manufacturers may not market or promote such uses. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability, including investigation by federal and state authorities. Prescription drug promotional materials must be submitted to the FDA in conjunction with their first use or first publication. Further, if there are any modifications to the drug or biologic, including changes in indications, labeling or manufacturing processes or facilities, the applicant may be required to submit and obtain FDA approval of a new NDA/BLA or NDA/BLA supplement, which may require the development of additional data or preclinical studies and clinical trials.

The FDA may also place other conditions on approvals including the requirement for a REMS, to assure the safe use of the product. If the FDA concludes a REMS is needed, the sponsor of the NDA or BLA must submit a proposed REMS. The FDA will not approve the NDA or BLA without an approved REMS, if required. A REMS could include medication guides, physician communication plans or elements to assure safe use, such as restricted distribution methods, patient registries and other risk minimization tools. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Product approvals may be withdrawn for non-compliance with regulatory standards or if problems occur following initial marketing.

FDA regulations require that products be manufactured in specific approved facilities and in accordance with cGMP regulations. We rely, and expect to continue to rely, on third parties for the production of clinical and commercial quantities of our products in accordance with cGMP regulations. These manufacturers must comply with cGMP regulations that require, among other things, quality control and quality assurance, the maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. Manufacturers and other entities involved in the manufacture and distribution of approved drugs or biologics are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with cGMP requirements and other laws. Accordingly, manufacturers must continue to expend time, money and effort in the area of production and quality control to maintain cGMP compliance. The discovery of violative conditions, including failure to conform to cGMP regulations, could result in enforcement actions, and the discovery of problems with a product after approval may result in restrictions on a product, manufacturer or holder of an approved NDA or BLA, including recall.

Once an approval is granted, the FDA may issue enforcement letters or withdraw the approval of the product if compliance with regulatory requirements and standards is not maintained or if problems occur after the drug or biologic reaches the market. Corrective action could delay drug or biologic distribution and require significant time and financial expenditures. Later discovery of previously unknown problems with a drug or biologic, including AEs of unanticipated severity or frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Other potential consequences include, among other things:

- restrictions on the marketing or manufacturing of the drug or biologic, suspension of the approval, complete withdrawal of the drug from the market or product recalls;
- fines, warning letters or holds on post-approval clinical trials;
- refusal of the FDA to approve applications or supplements to approved applications, or suspension or revocation of drug or biologic approvals;
- drug or biologic seizure or detention, or refusal to permit the import or export of drugs; or
- injunctions or the imposition of civil or criminal penalties.

Regulation of Companion Diagnostics

We believe that the success of certain of our product candidates may depend, in part, on the development and commercialization of a companion diagnostic. Companion diagnostics identify patients who are most likely to benefit from a particular therapeutic product; identify patients likely to be at increased risk for serious side effects as a result of treatment with a particular therapeutic product; or monitor response to treatment with a particular therapeutic product for the purpose of adjusting treatment to achieve improved safety or effectiveness. Companion diagnostics are regulated as medical devices by the FDA. In the United States, the FDCA and its implementing regulations, and other federal and state statutes and regulations govern, among other things, medical device design and development, preclinical and clinical testing, premarket clearance or approval, registration and listing, manufacturing, labeling, storage, advertising and promotion, sales and distribution, export and import, and post-market surveillance. Unless an exemption or FDA exercise of enforcement discretion applies, diagnostic tests generally require marketing clearance or approval from the FDA prior to commercialization. The two primary types of FDA marketing authorization applicable to a medical device are premarket notification, also called 510(k) clearance, and approval of a premarket, or PMA approval.

To obtain 510(k) clearance for a medical device, or for certain modifications to devices that have received 510(k) clearance, a manufacturer must submit a premarket notification demonstrating that the proposed device is substantially equivalent to a previously cleared 510(k) device or to a preamendment device that was in

commercial distribution before May 28, 1976, or a predicate device, for which the FDA has not yet called for the submission of a PMA. In making a determination that the device is substantially equivalent to a predicate device, the FDA compares the proposed device to the predicate device or predicate devices and assesses whether the subject device is comparable to the predicate device or predicate devices with respect to intended use, technology, design and other features which could affect safety and effectiveness. If the FDA determines that the subject device is substantially equivalent to the predicate device or predicate devices, the subject device may be cleared for marketing. The 510(k) premarket notification pathway generally takes from three to twelve months from the date the application is completed, but can take significantly longer.

PMA applications must be supported by valid scientific evidence, which typically requires extensive data, including technical, preclinical, clinical and manufacturing data, to demonstrate to the FDA's satisfaction the safety and effectiveness of the device. For diagnostic tests, a PMA application typically includes data regarding analytical and clinical validation studies. As part of its review of the PMA, the FDA will conduct a pre-approval inspection of the manufacturing facility or facilities to ensure compliance with the Quality System Regulation, or QSR, which requires manufacturers to follow design, testing, control, documentation and other quality assurance procedures. The FDA's review of an initial PMA application is required by statute to take between six to ten months, although the process typically takes longer, and may require several years to complete. If the FDA evaluations of both the PMA application and the manufacturing facilities are favorable, the FDA will either issue an approval letter or an approvable letter, which usually contains a number of conditions that must be met in order to secure the final approval of the PMA. If the FDA's evaluation of the PMA or manufacturing facilities is not favorable, the FDA will deny the approval of the PMA or issue a not approvable letter. A not approvable letter will outline the deficiencies in the application and, where practical, will identify what is necessary to make the PMA approvable. Once granted, PMA approval may be withdrawn by the FDA if compliance with post-approval requirements, conditions of approval or other regulatory standards is not maintained or problems are identified following initial marketing.

On July 31, 2014, the FDA issued a final guidance document addressing the development and approval process for "In Vitro Companion Diagnostic Devices." According to the guidance document, for novel therapeutic products that depend on the use of a diagnostic test and where the diagnostic device could be essential for the safe and effective use of the corresponding therapeutic product, the premarket application for the companion diagnostic device should be developed and approved or cleared contemporaneously with the therapeutic, although the FDA recognizes that there may be cases when contemporaneous development may not be possible. However, in cases where a drug cannot be used safely or effectively without the companion diagnostic, the FDA's guidance indicates it will generally not approve the drug without the approval or clearance of the diagnostic device. The FDA also issued a draft guidance in July 2016 setting forth the principles for co-development of an in vitro companion diagnostic device with a therapeutic product. The draft guidance describes principles to guide the development and contemporaneous marketing authorization for the therapeutic product and its corresponding in vitro companion diagnostic.

Once cleared or approved, the companion diagnostic device must adhere to post-marketing requirements including the requirements of FDA's quality system regulation, adverse event reporting, recalls and corrections along with product marketing requirements and limitations. Like drug and biologic makers, companion diagnostic makers are subject to unannounced FDA inspections at any time during which the FDA will conduct an audit of the product(s) and the company's facilities for compliance with its authorities.

Biosimilars and Exclusivity

Certain of our product candidates are regulated as biologics. An abbreviated approval pathway for biological products shown to be similar to, or interchangeable with, an FDA-licensed reference biological product was created by the Biologics Price Competition and Innovation Act of 2009, or BPCI Act, as part of the ACA. This amendment to the PHSA, in part, attempts to minimize duplicative testing. Biosimilarity, which requires that the biological product be highly similar to the reference product notwithstanding minor differences in clinically

inactive components and that there be no clinically meaningful differences between the product and the reference product in terms of safety, purity and potency, can be shown through analytical studies, animal studies and a clinical trial or trials. Interchangeability requires that a biological product be biosimilar to the reference product and that the product can be expected to produce the same clinical results as the reference product in any given patient and, for products administered multiple times to an individual, that the product and the reference product may be alternated or switched after one has been previously administered without increasing safety risks or risks of diminished efficacy relative to exclusive use of the reference biological product without such alternation or switch. Complexities associated with the larger, and often more complex, structure of biological products as compared to small molecule drugs, as well as the processes by which such products are manufactured, pose significant hurdles to implementation that are still being worked out by the FDA.

A reference biological product is granted four and twelve year exclusivity periods from the time of first licensure of the product. FDA will not accept an application for a biosimilar or interchangeable product based on the reference biological product until four years after the date of first licensure of the reference product, and FDA will not approve an application for a biosimilar or interchangeable product based on the reference biological product until twelve years after the date of first licensure of the reference product. “First licensure” typically means the initial date the particular product at issue was licensed in the United States. Date of first licensure does not include the date of licensure of (and a new period of exclusivity is not available for) a biological product if the licensure is for a supplement for the biological product or for a subsequent application by the same sponsor or manufacturer of the biological product (or licensor, predecessor in interest, or other related entity) for a change (not including a modification to the structure of the biological product) that results in a new indication, route of administration, dosing schedule, dosage form, delivery system, delivery device or strength, or for a modification to the structure of the biological product that does not result in a change in safety, purity, or potency. Therefore, one must determine whether a new product includes a modification to the structure of a previously licensed product that results in a change in safety, purity, or potency to assess whether the licensure of the new product is a first licensure that triggers its own period of exclusivity. Whether a subsequent application, if approved, warrants exclusivity as the “first licensure” of a biological product is determined on a case-by-case basis with data submitted by the sponsor.

Other Regulatory Matters

Manufacturing, sales, promotion and other activities following product approval are also subject to regulation by numerous regulatory authorities in the United States in addition to the FDA, including the CMS, including the Office of Inspector General and Office for Civil Rights, other divisions of the Department of HHS, the Department of Justice, the Drug Enforcement Administration, the Consumer Product Safety Commission, the Federal Trade Commission, the Occupational Safety & Health Administration, the Environmental Protection Agency and state and local governments.

Healthcare providers, physicians, and third party payors will play a primary role in the recommendation and prescription of any products for which we obtain marketing approval. Our current and future arrangements with healthcare providers and physicians and any future arrangements with third party payers, may expose us to broadly applicable fraud and abuse and other healthcare laws and regulations that may constrain the business or financial arrangements and relationships through which we market, sell and distribute any drugs for which we obtain marketing approval. In the United States, these laws include: the federal Anti-Kickback Statute, the False Claims Act, and HIPAA.

The Anti-Kickback Statute makes it illegal for any person, including a prescription drug manufacturer (or a party acting on its behalf), to knowingly and willfully solicit, receive, offer or pay any remuneration, directly or indirectly, in cash or in kind, that is intended to induce or reward referrals, including the purchase, recommendation, order or prescription of a particular drug, for which payment may be made under a federal healthcare program, such as Medicare or Medicaid. Violations of this law are punishable by imprisonment, criminal fines, administrative civil money penalties and exclusion from participation in federal healthcare

programs. In addition, a person or entity does not need to have actual knowledge of the statute or specific intent to violate it. Moreover, the ACA provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti Kickback Statute constitutes a false or fraudulent claim for purposes of the federal civil False Claims Act.

Although we would not submit claims directly to payors, drug manufacturers can be held liable under the federal civil False Claims Act, which imposes civil penalties, including through civil whistleblower or qui tam actions, against individuals or entities (including manufacturers) for, among other things, knowingly presenting, or causing to be presented to federal programs (including Medicare and Medicaid) claims for items or services, including drugs, that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services. Penalties for a False Claims Act violation include three times the actual damages sustained by the government, plus mandatory civil penalties for each separate false claim, the potential for exclusion from participation in federal healthcare programs and, although the federal False Claims Act is a civil statute, conduct that results in a False Claims Act violation may also implicate various federal criminal statutes. The government may deem manufacturers to have "caused" the submission of false or fraudulent claims by, for example, providing inaccurate billing or coding information to customers or promoting a product off-label. Claims which include items or services resulting from a violation of the federal Anti-Kickback Statute are false or fraudulent claims for purposes of the False Claims Act. Our future marketing and activities relating to the reporting of wholesaler or estimated retail prices for our products, if approved, the reporting of prices used to calculate Medicaid rebate information and other information affecting federal, state and third-party reimbursement for our products, and the sale and marketing of our product candidates, are subject to scrutiny under this law.

HIPAA created new federal criminal statutes that prohibit among other things, knowingly and willfully executing, or attempting to execute, a scheme to defraud or to obtain, by means of false or fraudulent pretenses, representations or promises, any money or property owned by, or under the control or custody of, any healthcare benefit program, including private third party payors, knowingly and willfully embezzling or stealing from a healthcare benefit program, willfully obstructing a criminal investigation of a healthcare offense, and knowingly and willfully falsifying, concealing or covering up by trick, scheme or device, a material fact or making any materially false, fictitious or fraudulent statement in connection with the delivery of or payment for healthcare benefits, items or services. Like the federal Anti-Kickback Statute a person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation.

The civil monetary penalties statute imposes penalties against any person or entity that, among other things, is determined to have presented or caused to be presented a claim to a federal health program that the person knows or should know is for an item or service that was not provided as claimed or is false or fraudulent.

We may be subject to data privacy and security regulations by both the federal government and the states in which we conduct our business. HIPAA, as amended by HITECH, and their implementing regulations, mandates, among other things, the adoption of uniform standards for the electronic exchange of information in common healthcare transactions, as well as standards relating to the privacy and security of individually identifiable health information, which require the adoption of administrative, physical and technical safeguards to protect such information. Among other things, HITECH makes HIPAA's security standards directly applicable to business associates, defined as independent contractors or agents of covered entities, which include certain health care providers, health plans, and healthcare clearinghouses, that create, receive or obtain protected health information in connection with providing a service for or on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities and business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions. In addition, certain state laws govern the privacy and security of health information in certain circumstances, some of which are more stringent than HIPAA and many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts. Failure to comply with these laws, where applicable, can result in the imposition of significant civil and criminal penalties.

Additionally, the federal Physician Payments Sunshine Act, or the Sunshine Act, within the ACA, and its implementing regulations, require that certain manufacturers of drugs, devices, biological and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program (with certain exceptions) report annually to CMS information related to certain payments or other transfers of value made or distributed to physicians and teaching hospitals, or to entities or individuals at the request of, or designated on behalf of, physicians, certain other healthcare professionals, and teaching hospitals and to report annually certain ownership and investment interests held by physicians, certain other healthcare professionals, and their immediate family members. In addition, many states also govern the reporting of payments or other transfers of value, many of which differ from each other in significant ways, are often not pre-empted, and may have a more prohibitive effect than the Sunshine Act, thus further complicating compliance efforts.

Similar federal, state and foreign fraud and abuse laws and regulations, such as state anti-kickback and false claims laws, may apply to sales or marketing arrangements and claims involving healthcare items or services. Such laws are generally broad and are enforced by various state agencies and private actions. Also, many states have similar fraud and abuse statutes or regulations that may be broader in scope and may apply regardless of payor, in addition to items and services reimbursed under Medicaid and other state programs. Some state laws require pharmaceutical companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant federal government compliance guidance, and require drug manufacturers to report information related to payments and other transfers of value to physicians and other healthcare providers or marketing expenditures.

In order to distribute products commercially, we must comply with state laws that require the registration of manufacturers and wholesale distributors of drug and biological products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain. Several states have enacted legislation requiring pharmaceutical and biotechnology companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, and/or register their sales representatives, as well as to prohibit pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical and biotechnology companies for use in sales and marketing, and to prohibit certain other sales and marketing practices. All of our activities are potentially subject to federal and state consumer protection and unfair competition laws.

The scope and enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform, especially in light of the lack of applicable precedent and regulations. Federal and state enforcement bodies have recently increased their scrutiny of interactions between healthcare companies and healthcare providers, which has led to a number of investigations, prosecutions, convictions and settlements in the healthcare industry. It is possible that governmental authorities will conclude that our business practices may not comply with current or future statutes, regulations or case law involving applicable fraud and abuse or other healthcare laws and regulations. If our operations are found to be in violation of any of these laws or any other governmental regulations that may apply to us, we may be subject to significant civil, criminal and administrative penalties, damages, fines, disgorgement, contractual damages, reputational harm, diminished profits and future earnings, individual imprisonment, exclusion of drugs from government funded healthcare programs, such as Medicare and Medicaid, and the curtailment or restructuring of our operations, any of which could adversely affect our ability to operate our business and our financial results. If any of the physicians or other healthcare providers or entities with whom we expect to do business is found to be not in compliance with applicable laws, they may be subject to criminal, civil or administrative sanctions, including exclusions from government funded healthcare programs. Ensuring business arrangements comply with applicable healthcare laws, as well as responding to possible investigations by government authorities, can be time- and resource-consuming and can divert a company's attention from the business.

Current and Future Legislation

In the United States and some foreign jurisdictions, there have been, and likely will continue to be, a number of legislative and regulatory changes and proposed changes regarding the healthcare system directed at broadening the availability of healthcare, improving the quality of healthcare, and containing or lowering the cost of healthcare.

For example, in March 2010, the ACA was enacted in the United States. The ACA includes measures that have significantly changed, and are expected to continue to significantly change, the way healthcare is financed by both governmental and private insurers. Among the provisions of the ACA of greatest importance to the pharmaceutical industry are that the ACA:

- made several changes to the Medicaid Drug Rebate Program, including increasing pharmaceutical manufacturers' rebate liability by raising the minimum basic Medicaid rebate on most branded prescription drugs to 23.1% of average manufacturer price, or AMP, and adding a new rebate calculation for "line extensions" (i.e., new formulations, such as extended release formulations) of solid oral dosage forms of branded products, as well as potentially impacting their rebate liability by modifying the statutory definition of AMP.
- imposed a requirement on manufacturers of branded drugs to provide a 70% point-of-sale discount off the negotiated price of branded drugs dispensed to Medicare Part D beneficiaries in the coverage gap (i.e., "donut hole") as a condition for a manufacturer's outpatient drugs being covered under Medicare Part D.
- extended a manufacturer's Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations.
- expanded the entities eligible for discounts under the 340B Drug Discount Program.
- established a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted, or injected.
- imposed an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs, apportioned among these entities according to their market share in certain government healthcare programs.
- established a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research. The research conducted by the Patient-Centered Outcomes Research Institute may affect the market for certain pharmaceutical products. The ACA established the Center for Medicare and Medicaid Innovation within CMS to test innovative payment and service delivery models to lower Medicare and Medicaid spending, potentially including prescription drug spending. Funding has been allocated to support the mission of the Center for Medicare and Medicaid Innovation through 2019.

Some of the provisions of the ACA have yet to be fully implemented, while certain provisions have been subject to judicial and Congressional challenges. Further, on January 20, 2017, President Trump signed an Executive Order directing federal agencies with authorities and responsibilities under the ACA waive, defer, grant exemptions from, or delay the implementation of any provision of the ACA that would impose a fiscal burden on states or a cost, fee, tax, penalty or regulatory burden on individuals, healthcare providers, health insurers, or manufacturers of pharmaceuticals or medical devices. In addition, CMS has recently finalized regulations that would give states greater flexibility in setting benchmarks for insurers in the individual and small group marketplaces, which may have the effect of relaxing the essential health benefits required under the ACA for plans sold through such marketplaces. The Tax Act includes a provision repealing, effective January 1, 2019, the tax-based shared responsibility payment imposed by the ACA on certain individuals who fail to maintain qualifying health coverage for all or part of a year that is commonly referred to as the "individual mandate." Additionally, on January 22, 2018, President Trump signed a continuing resolution on appropriations for fiscal

year 2018 that delayed the implementation of certain ACA-mandated fees, including the so-called “Cadillac” tax on certain high cost employer-sponsored insurance plan, the annual fee imposed on certain high cost employer-sponsored insurance plans, the annual fee imposed on certain health insurance providers based on market share, and the medical device exercise tax on non-exempt medical devices. Further, the Bipartisan Budget Act of 2018, or the BBA, among other things, amends the ACA, effective January 1, 2019, to reduce the coverage gap in most Medicare drug plans, commonly referred to as the “donut hole.” In July 2018, CMS announced that it is suspending further collections and payments to and from certain ACA qualified health plans and health insurance issuers under the ACA risk adjustment program pending the outcome of federal district court litigation regarding the method CMS uses to determine this risk adjustment. On December 14, 2018, a U.S. District Court Judge in the Northern District of Texas, or the Texas District Court Judge, ruled that the individual mandate is a critical and inseverable feature of the ACA, and therefore, because it was repealed as part of the Tax Act, the remaining provisions of the ACA are invalid as well. The Texas District Court Judge, as well as the Trump Administration and CMS, have stated that the ruling will have no immediate effect, and on December 30, 2018 the Texas District Court Judge issued an order staying the judgment pending appeal. It is unclear how this decision, subsequent appeals, and other efforts to repeal and replace the ACA will impact the ACA.

Congress also could consider additional legislation to repeal, replace, or further modify elements of the ACA. Thus, the full impact of the ACA, or any law replacing elements of it, and the political uncertainty regarding any repeal and replacement on the ACA, on our business remains unclear. Many of the details regarding the implementation of the ACA are yet to be determined, and at this time, it remains unclear the full effect that the ACA would have on our business. There have been judicial and Congressional challenges to the ACA, and we expect such challenges and amendments to continue in the future.

Moreover, in May 2018, the Trump administration released its “Blueprint to Lower Drug Prices and Reduce Out-of-Pocket Costs,” or the Blueprint. The Blueprint contains several potential regulatory actions and legislative recommendations aimed at lowering prescription drug prices, including measures to promote innovation and competition for biologics, changes to Medicare Part D to give plan sponsors more leverage when negotiating prices with manufacturers, and updating the Medicare drug-pricing dashboard to make price increases and generic competition more transparent. In addition, the Department of HHS released a Request for Information, or RFI, soliciting public input on ways to lower drug pricing. Together, the recommendations in the Blueprint and RFI, if enacted by Congress and HHS, could lead to changes to Medicare Parts B and D, including the transition of certain drugs covered under Part B to Part D or the offering of alternative purchasing options under the Competitive Acquisition Program that currently applies to selected drugs and biologics covered under Part B. In September 2018, CMS announced that it will allow Medicare Advantage Plans the option to use step therapy for Part B drugs beginning January 1, 2019. While most of the proposed measures will require authorization through additional legislation to become effective, Congress and the Trump administration have each indicated that it will continue to seek new legislative, administrative and/or additional measures to control drug costs.

Other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation’s automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers up to 2% per fiscal year, which went into effect in April 2013, following passage of the Bipartisan Budget Act of 2013, and will remain in effect through 2027 unless additional congressional action is taken. Further, in January 2013, President Obama signed into law the American Taxpayer Relief Act of 2012, which, among other things, further reduced Medicare payments to several providers, including hospitals, imaging centers and cancer treatment centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors, which may adversely affect our future profitability. Additionally, there has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices.

Specifically, there have been several recent U.S. Congressional inquiries and proposed bills designed to, among other things, bring more transparency to drug pricing, review the relationship between pricing and manufacturer patient programs and reform government program reimbursement methodologies for drugs.

Further, on May 30, 2018, the Trickett Wendler, Frank Mongiello, Jordan McLinn, and Matthew Bellina Right to Try Act of 2017, or the Right to Try Act, was signed into law. The law, among other things, provides a federal framework for certain patients to request access to certain investigational new drug products that have completed a Phase I clinical trial and that are undergoing investigation for FDA approval. There is no obligation for a pharmaceutical manufacturer to make its drug products available to eligible patients as a result of the Right to Try Act.

We cannot predict what healthcare reform initiatives may be adopted in the future. Further federal, state and foreign legislative and regulatory developments are likely, and we expect ongoing initiatives to increase pressure on drug pricing. Such reforms could have an adverse effect on anticipated revenues from product candidates and may affect our overall financial condition and ability to develop product candidates.

Packaging and Distribution in the United States

If our products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Products must meet applicable child-resistant packaging requirements under the U.S. Poison Prevention Packaging Act. Manufacturing, sales, promotion and other activities also are potentially subject to federal and state consumer protection and unfair competition laws.

The distribution of pharmaceutical products is subject to additional requirements and regulations, including extensive record-keeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products.

The failure to comply with any of these laws or regulatory requirements subjects firms to possible legal or regulatory action. Depending on the circumstances, failure to meet applicable regulatory requirements can result in criminal prosecution, fines or other penalties, injunctions, exclusion from federal healthcare programs, requests for recall, seizure of products, total or partial suspension of production, denial or withdrawal of product approvals, or refusal to allow a firm to enter into supply contracts, including government contracts. Any action against us for violation of these laws, even if we successfully defend against it, could cause us to incur significant legal expenses and divert our management's attention from the operation of our business. Prohibitions or restrictions on sales or withdrawal of future products marketed by us could materially affect our business in an adverse way.

Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business.

Other U.S. Environmental, Health and Safety Laws and Regulations

We may be subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations may involve the use of hazardous and flammable materials, including chemicals and biological materials, and may also produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and waste products, we cannot completely eliminate the risk of contamination or injury resulting from these materials. In the event of contamination or injury resulting from the use or disposal of our hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees, but this insurance may not provide adequate coverage against potential liabilities. However, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. Current or future environmental laws and regulations may impair our research, development or production efforts. In addition, failure to comply with these laws and regulations may result in substantial fines, penalties or other sanctions.

U.S. Patent Term Restoration and Marketing Exclusivity

Depending upon the timing, duration and specifics of FDA approval of our future product candidates, some of our U.S. patents may be eligible for limited patent term extension under the Drug Price Competition and Patent Term Restoration Act of 1984, commonly referred to as the Hatch-Waxman Amendments. The Hatch-Waxman Amendments permit restoration of the patent term of up to five years as compensation for patent term lost during the FDA regulatory review process. Patent-term restoration, however, cannot extend the remaining term of a patent beyond a total of 14 years from the product's approval date and only those claims covering such approved drug product, a method for using it or a method for manufacturing it may be extended. The patent-term restoration period is generally one-half the time between the effective date of an IND and the submission date of an NDA or BLA plus the time between the submission date of an NDA or BLA and the approval of that application, except that the review period is reduced by any time during which the applicant failed to exercise due diligence. Only one patent applicable to an approved drug is eligible for the extension and the application for the extension must be submitted prior to the expiration of the patent. The USPTO, in consultation with the FDA, reviews and approves the application for any patent term extension or restoration. In the future, we may apply for restoration of patent term for our currently owned or licensed patents to add patent life beyond its current expiration date, depending on the expected length of the clinical trials and other factors involved in the filing of the relevant NDA or BLA.

Marketing exclusivity provisions under the FDCA also can delay the submission or the approval of certain applications. The FDCA provides a five-year period of non-patent marketing exclusivity within the United States to the first applicant to gain approval of an NDA for a new chemical entity. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement. The FDCA also provides three years of marketing exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, new indications, dosages or strengths of an existing drug. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active agent. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

European Union Drug Development

In the European Union, our future products also may be subject to extensive regulatory requirements. As in the United States, medicinal products can be marketed only if a marketing authorization from the competent regulatory agencies has been obtained.

Similar to the United States, the various phases of preclinical and clinical research in the European Union are subject to significant regulatory controls. Although the EU Clinical Trials Directive 2001/20/EC has sought to harmonize the EU clinical trials regulatory framework, setting out common rules for the control and authorization of clinical trials in the European Union, the EU Member States have transposed and applied the provisions of the Directive differently. This has led to significant variations in the member state regimes. Under the current regime, before a clinical trial can be initiated it must be approved in each of the EU countries where the trial is to be conducted by two distinct bodies: the National Competent Authority, or NCA, and one or more Ethics Committees, or ECs. Under the current regime all suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the NCA and ECs of the Member State where they occurred.

The EU clinical trials legislation currently is undergoing a transition process mainly aimed at harmonizing and streamlining clinical-trial authorization, simplifying adverse-event reporting procedures, improving the supervision of clinical trials and increasing their transparency. Recently enacted Clinical Trials Regulation EU No 536/2014 ensures that the rules for conducting clinical trials in the European Union will be identical.

European Union Drug Marketing

Much like the Anti-Kickback Statue prohibition in the United States, the provision of benefits or advantages to physicians to induce or encourage the prescription, recommendation, endorsement, purchase, supply, order or use of medicinal products is also prohibited in the European Union. The provision of benefits or advantages to physicians is governed by the national anti-bribery laws of European Union Member States, such as the UK Bribery Act 2010. Infringement of these laws could result in substantial fines and imprisonment.

Payments made to physicians in certain European Union Member States must be publically disclosed. Moreover, agreements with physicians often must be the subject of prior notification and approval by the physician's employer, his or her competent professional organization and/or the regulatory authorities of the individual EU Member States. These requirements are provided in the national laws, industry codes or professional codes of conduct, applicable in the EU Member States. Failure to comply with these requirements could result in reputational risk, public reprimands, administrative penalties, fines or imprisonment.

European Union Drug Review and Approval

In the European Economic Area, or EEA, which is comprised of the 27 Member States of the European Union (including Norway and excluding Croatia), Iceland and Liechtenstein, medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA. There are two types of marketing authorizations.

- The Community MA is issued by the European Commission through the Centralized Procedure, based on the opinion of the Committee for Medicinal Products for Human Use, or CHMP, of the EMA, and is valid throughout the entire territory of the EEA. The Centralized Procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, advanced-therapy medicines such as gene-therapy, somatic cell-therapy or tissue-engineered medicines and medicinal products containing a new active substance indicated for the treatment of HIV, AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and other immune dysfunctions and viral diseases. The Centralized Procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the European Union.
- National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for products not falling within the mandatory scope of the Centralized Procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in another Member States through the Mutual Recognition

Procedure. If the product has not received a National MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure. Under the Decentralized Procedure an identical dossier is submitted to the competent authorities of each of the Member States in which the MA is sought, one of which is selected by the applicant as the Reference Member State, or RMS. The competent authority of the RMS prepares a draft assessment report, a draft summary of the product characteristics, or SPC, and a draft of the labeling and package leaflet, which are sent to the other Member States (referred to as the Member States Concerned) for their approval. If the Member States Concerned raise no objections, based on a potential serious risk to public health, to the assessment, SPC, labeling, or packaging proposed by the RMS, the product is subsequently granted a national MA in all the Member States (i.e., in the RMS and the Member States Concerned).

Under the above described procedures, before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

European Union New Chemical Entity Exclusivity

In the European Union, new chemical entities, sometimes referred to as new active substances, qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. The data exclusivity, if granted, prevents regulatory authorities in the European Union from referencing the innovator's data to assess a generic application for eight years, after which generic marketing authorization can be submitted, and the innovator's data may be referenced, but not approved for two years. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are determined to bring a significant clinical benefit in comparison with currently approved therapies.

European Union Orphan Designation and Exclusivity

In the European Union, the EMA's Committee for Orphan Medicinal Products grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of life-threatening or chronically debilitating conditions affecting not more than 5 in 10,000 persons in the European Union community (or where it is unlikely that the development of the medicine would generate sufficient return to justify the investment) and for which no satisfactory method of diagnosis, prevention or treatment has been authorized (or, if a method exists, the product would be a significant benefit to those affected).

In the European Union, orphan drug designation entitles a party to financial incentives such as reduction of fees or fee waivers and ten years of market exclusivity is granted following medicinal product approval. This period may be reduced to six years if the orphan drug designation criteria are no longer met, including where it is shown that the product is sufficiently profitable not to justify maintenance of market exclusivity. Orphan drug designation must be requested before submitting an application for marketing approval. Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review and approval process.

European Pediatric Investigation Plan

In the EEA, MAAs for new medicinal products not authorized have to include the results of studies conducted in the pediatric population, in compliance with a pediatric investigation plan, or PIP, agreed with the EMA's Pediatric Committee, or PDCO. The PIP sets out the timing and measures proposed to generate data to support a pediatric indication of the drug for which marketing authorization is being sought. The PDCO can grant a deferral of the obligation to implement some or all of the measures of the PIP until there are sufficient data to demonstrate the efficacy and safety of the product in adults. Further, the obligation to provide pediatric clinical trial data can be waived by the PDCO when this data is not needed or appropriate because the product is likely to

be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients. Once the marketing authorization is obtained in all Member States of the European Union and trial results are included in the product information, even when negative, the product is eligible for six months' supplementary protection certificate extension.

European Data Collection

The collection and use of personal health data in the European Economic Area, or the EEA, is governed by the GDPR, which became effective May 25, 2018. The GDPR applies to any company established in the EEA and to companies established outside the EEA that process personal data in connection with the offering of goods or services to data subjects in the EU or the monitoring of the behavior of data subjects in the European Union. The GDPR enhances data protection obligations for data controllers of personal data, including stringent requirements relating to the consent of data subjects, expanded disclosures about how personal data is used, requirements to conduct privacy impact assessments for "high risk" processing, limitations on retention of personal data, mandatory data breach notification and "privacy by design" requirements, and creates direct obligations on service providers acting as data processors. The GDPR also imposes strict rules on the transfer of personal data outside of the EEA to countries that do not ensure an adequate level of protection, like the U.S. Failure to comply with the requirements of the GDPR and the related national data protection laws of the EEA Member States may result in fines up to 20 million Euros or 4% of a company's global annual revenues for the preceding financial year, whichever is higher. Moreover, the GDPR grants data subjects the right to claim material and non material damages resulting from infringement of the GDPR. Given the breadth and depth of changes in data protection obligations, maintaining compliance with the GDPR, will require significant time, resources and expense, and we may be required to put in place additional mechanisms ensuring compliance with the new data protection rules. This may be onerous and adversely affect our business, financial condition, results of operations and prospects.

Rest of the World Regulation

For other countries outside of the European Union and the United States, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. Additionally, the clinical trials must be conducted in accordance with GCP requirements and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Additional Laws and Regulations Governing International Operations

If we further expand our operations outside of the United States, we must dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we plan to operate. The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with certain accounting provisions requiring the company to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry,

because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

Various laws, regulations and executive orders also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the United States, it will require us to dedicate additional resources to comply with these laws, and these laws may preclude us from developing, manufacturing, or selling certain products and product candidates outside of the United States, which could limit our growth potential and increase our development costs.

The failure to comply with laws governing international business practices may result in substantial civil and criminal penalties and suspension or debarment from government contracting. The SEC also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions.

Coverage and Reimbursement

Successful commercialization of new drug products depends in part on the extent to which reimbursement for those drug products will be available from government health administration authorities, private health insurers, and other organizations. Government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drug products they will pay for and establish reimbursement levels. The availability and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford a drug product. Sales of drug products depend substantially, both domestically and abroad, on the extent to which the costs of drugs products are paid for by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular drug products. In many countries, the prices of drug products are subject to varying price control mechanisms as part of national health systems. In general, the prices of drug products under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for drug products, but monitor and control company profits. Accordingly, in markets outside the United States, the reimbursement for drug products may be reduced compared with the United States.

In the United States, the principal decisions about reimbursement for new drug products are typically made by CMS, an agency within the HHS. CMS decides whether and to what extent a new drug product will be covered and reimbursed under Medicare, and private payors tend to follow CMS to a substantial degree. However, no uniform policy of coverage and reimbursement for drug products exists among third-party payors and coverage and reimbursement levels for drug products can differ significantly from payor to payor.

The Medicare Prescription Drug, Improvement, and Modernization Act of 2003, or the MMA, established the Medicare Part D program to provide a voluntary prescription drug benefit to Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs. Unlike Medicare Parts A and B, Part D coverage is not standardized. Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. While all Medicare drug plans must give at least a standard level of coverage set by Medicare, Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a Part D prescription drug plan must be

developed and reviewed by a pharmacy and therapeutic committee. Government payment for some of the costs of prescription drugs may increase demand for drugs for which we obtain marketing approval. Any negotiated prices for any of our products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental payors.

For a drug product to receive federal reimbursement under the Medicaid or Medicare Part B programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts to entities eligible to participate in the 340B drug pricing program. The required 340B discount on a given product is calculated based on the average manufacturer price, or AMP, and Medicaid rebate amounts reported by the manufacturer. As of 2010, the ACA expanded the types of entities eligible to receive discounted 340B pricing, although under the current state of the law these newly eligible entities (with the exception of children's hospitals) will not be eligible to receive discounted 340B pricing on orphan drugs. As 340B drug pricing is determined based on AMP and Medicaid rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discount to increase. The American Recovery and Reinvestment Act of 2009 provides funding for the federal government to compare the effectiveness of different treatments for the same illness. The plan for the research was published in 2012 by the Department of HHS, the Agency for Healthcare Research and Quality and the National Institutes for Health, and periodic reports on the status of the research and related expenditures are made to Congress. Although the results of the comparative effectiveness studies are not intended to mandate coverage policies for public or private payors, it is not clear what effect, if any, the research will have on the sales of our drug candidates, if any such drug or the condition that they are intended to treat are the subject of a trial. It is also possible that comparative effectiveness research demonstrating benefits in a competitor's drug could adversely affect the sales of our drug candidate. If third-party payors do not consider our drugs to be cost-effective compared to other available therapies, they may not cover our drugs after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our drugs on a profitable basis.

These laws, and future state and federal healthcare reform measures may be adopted in the future, any of which may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for any product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

Outside of the United States, the pricing of pharmaceutical products and medical devices is subject to governmental control in many countries. For example, in the European Union, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost effectiveness of a particular therapy to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. Other countries may allow companies to fix their own prices for products, but monitor and control product volumes and issue guidance to physicians to limit prescriptions. Efforts to control prices and utilization of pharmaceutical products and medical devices will likely continue as countries attempt to manage healthcare expenditures.

Employees

As of December 31, 2018, we had 130 full-time employees, including 16 through our wholly-owned subsidiary, BridgeBio Services Inc. We have never had a work stoppage, and none of our employees is represented by a labor organization or under any collective-bargaining arrangements. We consider our employee relations to be good.

Facilities

We lease our office space, which consists of approximately 3,900 square feet located in Palo Alto, California. Our lease expires on April 30, 2020. We believe our current office is sufficient to meet our needs for the foreseeable future.

Legal Proceedings

As of the date of this prospectus, we were not party to any legal matters or claims that, in the opinion of our management, are likely to have a material adverse effect on our business. In the future, we may become party to legal matters and claims arising in the ordinary course of business, the resolution of which we do not anticipate would have a material adverse impact on our financial position, results of operations or cash flows.

MANAGEMENT

Executive Officers and Directors

The following table and discussion sets forth the name, age as of March 31, 2019 and position of the individuals who currently serve as directors and executive officers of BridgeBio Pharma LLC and will begin to serve as the directors and executive officers of BridgeBio Pharma, Inc. in connection with this offering. The following also includes certain information regarding our directors' and officers' individual experience, qualifications, attributes and skills and brief statements of those aspects of our directors' backgrounds that led us to conclude that they are qualified to serve as directors.

Name	Age	Position(s)
Executive Officers		
Neil Kumar, Ph.D.	40	Chief Executive Officer, Director
Brian C. Stephenson, Ph.D., CFA	38	Chief Financial Officer
Uma Sinha, Ph.D.	62	Chief Scientific Officer
Charles Homcy, M.D.	70	Chairman of Pharmaceuticals, Director
Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon)	68	Chairman of Oncology
Richard H. Scheller, Ph.D.	65	Chairman of Research & Development, Director
Michael Henderson, M.D.	29	Senior Vice President, Asset Acquisition, Strategy and Operations
Cameron Turtle, D. Phil.	29	Senior Vice President, Portfolio Management and Corporate Development
Non-Management Directors		
Eric Aguiar, M.D.	56	Director
James C. Momtazee	47	Director
Ali J. Satvat	41	Director

Executive Officers

Neil Kumar, Ph.D., is a co-founder and has served as our Chief Executive Officer and a member of our board of directors since April 2015. Dr. Kumar has also served as the Chief Executive Officer of our subsidiary, Eidos Therapeutics, Inc. (Nasdaq: EIDX), a clinical stage biopharmaceutical company, and a member of Eidos Therapeutics' board of directors since March 2016. Prior to that, he served as the interim vice president of business development at MyoKardia, Inc. (Nasdaq: MYOK), a clinical stage biopharmaceutical company, from 2012 to 2014. Prior to that, Dr. Kumar served as a principal at Third Rock Ventures, a venture capital firm, from 2011 to 2014. Before joining Third Rock Ventures, he served as an associate principal at McKinsey & Company, a worldwide management consulting firm, from 2007 to 2011. He received his B.S. and M.S. degrees in chemical engineering from Stanford University and received his Ph.D. in chemical engineering from the Massachusetts Institute of Technology.

We believe that Dr. Kumar is qualified to serve as a member of our board of directors based on his perspective and experience he brings as our founder and Chief Executive Officer and his extensive experience in the health care industry.

Brian C. Stephenson, Ph.D., CFA has served as our Chief Financial Officer since October 2018. Prior to joining us, Dr. Stephenson served as Partner and the Head of Life Sciences for Capital IP Investment Partners, a special situation investment fund, from 2015 to 2018. From 2011 to 2014, Dr. Stephenson was a Director/Vice President Leerink Partners, an investment bank. Prior to that, Dr. Stephenson was an Engagement Manager at McKinsey & Company, a worldwide management consulting firm. He received his Ph.D. and M.S. degrees in chemical engineering from the Massachusetts Institute of Technology and his B.S. in chemical engineering from Brigham Young University. Dr. Stephenson is also a Chartered Financial Analyst charterholder.

Uma Sinha, Ph.D. has served as Chief Scientific Officer since April 2016 and serves as the chief scientific officer of other BridgeBio subsidiaries, including Eidos Therapeutics. Prior to that, Dr. Sinha served as chief scientific officer of Global Blood Therapeutics, Inc. (Nasdaq: GBT), a clinical stage biopharmaceutical company, from 2014 to 2015 and previously as senior vice president of research from 2013 to 2014. She was vice president, head of biology at Portola Pharmaceuticals, Inc. (Nasdaq: PTLA), a clinical stage biotechnology company, from 2010 to 2012 and was the vice president of translational biology from 2004 to 2010. Previously, Dr. Sinha held senior research positions at Millennium Pharmaceuticals, Inc., a biopharmaceutical company, and COR Therapeutics, Inc., a biopharmaceutical company. Dr. Sinha received her Ph.D. in biochemistry from the University of Georgia and her B.Sc. with honors in chemistry from Presidency College.

Charles Homcy, M.D. has served as a member of our board of directors since November 2018 and as our Chairman of Pharmaceuticals since February 2019. In 2010, Dr. Homcy joined Third Rock Ventures, a venture capital firm, where he is currently a partner. In 2003, he co-founded Portola Pharmaceuticals (Nasdaq: PTLA), a clinical biotechnology company, and he served as their president and chief executive officer until 2010. Prior to that, Dr. Homcy served as the president of research and development at Millennium Pharmaceuticals, Inc. (currently, Takeda Oncology), a biopharmaceutical company, following its acquisition of COR Therapeutics, Inc. in 2002. He joined COR Therapeutics, Inc., a biopharmaceutical company, in 1995 as executive vice president of research and development, and he served as a director of the company from 1988 to 2002. Dr. Homcy was a clinical professor of medicine at the University of California, San Francisco Medical School, and attending physician at the San Francisco Veterans Affairs Hospital from 1997 to 2011. He was previously president of the medical research division of American Cyanamid-Lederle Laboratories, a division of Wyeth-Ayest Laboratories. He currently serves on the board of directors of Portola Pharmaceuticals, Inc., a position he has held since 2004, and of Global Blood Therapeutics, Inc., a position he has held since 2012. Dr. Homcy holds a B.A. and an M.D. from Johns Hopkins University and currently serves on its board of trustees.

We believe that Dr. Homcy is qualified to serve as a member of our board of directors based on his significant experience building and leading successful biotechnology companies and his scientific expertise.

Frank McCormick, Ph.D., F.R.S., D.Sc. (Hon) has served as our Chairman of Oncology since April 2019. Dr. McCormick has held the positions of Director the UCSF Helen Diller Family Comprehensive Cancer Center, a multidisciplinary research and medical care organization and served as Associate Dean of the UCSF School of Medicine from 1997-2014. Prior to joining the UCSF faculty, Dr. McCormick pursued cancer-related work with several biotechnology firms, including Cetus Corporation as Director of Molecular Biology from 1981 to 1990 and Vice President of Research from 1990 to 1991, and Chiron Corporation as Vice President of Research from 1991 to 1992. In 1992, Dr. McCormick founded Onyx Pharmaceuticals and served as its Chief Scientific Officer until 1996. Dr. McCormick received his B.Sc. in biochemistry from the University of Birmingham, and his Ph.D. in biochemistry from the University of Cambridge and held postdoctoral fellowships in the U.S. at the State University of New York at Stony Brook and in London at the Imperial Cancer Research Fund. Dr. McCormick is a Fellow of the Royal Society, an institution dedicated to science, since 1996, a member of the National Academy of Sciences since 2014 and has served as President, 2012-2013, for the American Association for Cancer Research. Since 2013, Dr. McCormick has led the National Cancer Institute’s Ras Initiative at the Frederick National Laboratories for Cancer Research overseeing the national effort to develop therapies against Ras-driven cancers.

Richard H. Scheller, Ph.D. has served as a member of our board of directors since January 2018 and as our Chairman of Research & Development effective as of January 2019. Dr. Scheller has been Chief Science Officer and Head of Therapeutics at 23andMe, a personal genetics company, since 2015. Previously, Dr. Scheller was the Executive Vice President of Research and Early Development and a member of the Executive Committee at Genentech, Inc., a biotechnology corporation, from February 2001 to December 2014. From January 2009 to December 2014, Dr. Scheller was also a member of the Enlarged Executive Committee at Hoffmann-La Roche Ltd, a pharmaceutical company. Dr. Scheller currently serves as a member of the board of directors of Xenon Pharmaceuticals Inc., a clinical stage biopharmaceutical company, ORIC Pharmaceuticals, Inc., a biopharmaceutical company, Affinita Biotech, Inc., a preclinical stage biotech company and Alector, Inc., a

clinical-stage biopharmaceutical company. Dr. Scheller holds a B.Sc. in Biochemistry from the University of Wisconsin-Madison and a Ph.D. in Chemistry from the California Institute of Technology. He completed his post-doctorate in Molecular Neurobiology at Columbia University and was also a post-doctorate fellow at California Institute of Technology.

We believe that Dr. Scheller is qualified to serve as a member of our board of directors based on his scientific background and his senior management experience in the pharmaceutical industry.

Michael Henderson, M.D. has served as our Senior Vice President, Asset Acquisition, Strategy and Operations since December 2017. Dr. Henderson joined BridgeBio as our Vice President of Asset Acquisition, Strategy and Operations in April 2016. Dr. Henderson serves as the Chief Business Officer of certain of our subsidiaries, QED Therapeutics, Inc. and Origin Biosciences, Inc., since December 2017 and June 2018, respectively. Dr. Henderson also serves on the board of directors for certain of our subsidiaries, including Quartz Therapeutics, Inc. since September 2016, TheRas, Inc. since September 2016 and Adrenas Therapeutics, Inc. since July 2017. Prior to BridgeBio, Dr. Henderson worked as a Senior Associate at McKinsey & Company from January 2015 to April 2016 and prior to that, he co-founded PellePharm, Inc., in August 2011. Dr. Henderson received his B.A. with high honors in global health with a citation in Spanish from Harvard University and his M.D. with a scholarly concentration in health services and policy from Stanford University where he was a member of both the Ignite and Leadership in Health Disparities Programs.

Cameron Turtle, D. Phil. has served as our Senior Vice President, Portfolio Management and Corporate Development, since January 2018 and served as a Director, Portfolio Management, from February 2017 to December 2017. Mr. Turtle has also worked for our subsidiary, Eidos Therapeutics, since February 2017, currently as the chief business officer. Mr. Turtle previously worked as vice president of business development and operations for our subsidiary, Navire Pharmaceuticals, Inc., from February 2017 to March 2018. From August 2016 to January 2017, Mr. Turtle was a consultant at McKinsey & Company. Mr. Turtle received his B.S. with honors in bioengineering from the University of Washington and his D. Phil. in cardiovascular medicine from University of Oxford, St. John’s College, where he was a Rhodes Scholar.

Non-Management Directors

Eric Aguiar, M.D. has served as a member of our board of directors since March 2019. Dr. Aguiar has been a partner at Aisling Capital since January 2016 and prior to that was a partner at Thomas, McNerney and Partners, a healthcare venture capital and growth equity fund, since 2007. Prior to joining that firm, he was a Managing Director of HealthCare Ventures, a healthcare focused venture capital firm, from 2001 to 2007. Dr. Aguiar currently serves on the board of directors of Invitae Corporation (NYSE: NVTA) since September 2010, Biohaven Corporation (NYSE: BHVN) since October 2016 and Eidos Therapeutics (Nasdaq: EIDX) since March 2018. Dr. Aguiar is a member of the Board of Overseers of the Tufts School of Medicine and a member of the Council on Foreign Relations. Dr. Aguiar received his medical degree with honors from Harvard Medical School. He graduated with honors from Cornell University as a College Scholar. He was also a Luce Fellow and is a Chartered Financial Analyst.

We believe that Dr. Aguiar is qualified to serve as a member of our board of directors based on his medical and finance background and experience as an investor in life science companies.

James C. Momtazee has served as a member of our board of directors since March 2016. He is a member of KKR Management LLC, an affiliate of KKR & Co. Inc., and he has been employed by Kohlberg Kravis Roberts & Co. L.P., a private equity investment firm, since 1996. Mr. Momtazee currently serves on the board of directors of PRA Health Sciences, Inc. (Nasdaq: PRAH), a global contract research organization as well as several private companies. He previously served on the boards of directors of Jazz Pharmaceuticals plc (Nasdaq: JAZZ), a biopharmaceutical company, from 2004 to 2014, HCA Healthcare Inc. (formerly HCA Holdings Inc.; NYSE: HCA), a health care services company, from 2006 to 2014, and Entellus Medical, Inc., a medical technology company, from 2017 to 2018. He received an A.B. from Stanford University and an M.B.A. from the Stanford Graduate School of Business.

We believe that Mr. Momtazee is qualified to serve as a member of our board of directors based on his significant expertise in financing and financial matters, including expertise and experience in structuring complex financial transactions and a broad understanding of the market related to those transactions.

Ali J. Satvat has served as a member of our board of directors since March 2016. Mr. Satvat has also served on the board of our subsidiary, Eidos Therapeutics, Inc., a clinical stage biopharmaceutical company, since June 2018. Mr. Satvat joined Kohlberg Kravis Roberts & Co. L.P., a private equity investment firm in January 2012 and is a member of KKR on the Health Care industry team within KKR's Americas Private Equity platform. Mr. Satvat leads KKR's Health Care Strategic Growth investing efforts and sits on the Health Care Strategic Growth Investment Committee and the Health Care Strategic Growth Portfolio Management Committee. Mr. Satvat has served as a member of the board of directors of Coherus BioSciences, Inc. (Nasdaq: CHRS), a biotechnology company, since May 2014, as well as multiple privately held organizations. Mr. Satvat served as a member of the board of directors of PRA Health Sciences, Inc. (Nasdaq: PRAH), a global contract research organization, from September 2013 through April 2018. Prior to joining KKR, Mr. Satvat was a principal with Apax Partners LLP, a British private equity firm, where he invested in health care from 2006 to 2012. Previously, Mr. Satvat held various positions with Johnson & Johnson Development Corporation, a venture capital subsidiary of Johnson & Johnson, Audax Group, a private equity company, and The Blackstone Group, a multinational private equity, alternative asset management and financial services firm. Mr. Satvat holds an A.B. in History and Science from Harvard College and an M.B.A. in Health Care Management and Entrepreneurial Management from the Wharton School of the University of Pennsylvania. Mr. Satvat currently serves on the board of directors of the Healthcare Private Equity Association.

We believe that Mr. Satvat is qualified to serve as a member of our board of directors based on his expertise in financing and financial matters, as well as his extensive investment experience in the health care industry.

Composition of our Board of Directors

Our board of directors consists of members, each of whom will be members pursuant to the board composition provisions of our amended and restated certificate of incorporation.

Effective upon the completion of this offering, we intend to form a nominating and corporate governance committee. Our nominating and corporate governance committee and our board of directors may consider a broad range of factors relating to the qualifications and background of director nominees, which may include diversity, which is not only limited to race, gender or national origin, although we currently have no formal policy regarding board diversity. Our nominating and corporate governance committee's and our board of directors' priority in selecting board members is to identify persons who will further the interests of our stockholders through his or her established record of professional accomplishment, the ability to contribute positively to the collaborative culture among board members, knowledge of our business, understanding of the competitive landscape and professional and personal experiences and expertise relevant to our growth strategy. Our directors hold office until their successors have been elected and qualified or until the earlier of their resignation or removal. Our amended and restated certificate of incorporation and amended and restated bylaws that will become effective upon the completion of this offering also provide that our directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the votes that all our stockholders would be entitled to cast in an annual election of directors, and that any vacancy on our board of directors, including a vacancy resulting from an enlargement of our board of directors, may be filled by vote of a majority of our directors then in office.

Director Independence

Upon the completion of this offering, we expect that our common stock will be listed on the Nasdaq Global Market. Applicable rules of the Nasdaq Stock Market LLC, or Nasdaq, require a majority of a listed company's board of directors to be comprised of independent directors within one year of listing. In addition, the Nasdaq

rules require that, (1) on the date of the completion of the offering, at least one member of each of a listed company's audit, compensation and nominating and corporate governance committees be independent, (2) within 90 days of the date of the completion of the offering, a majority of the members of such committees be independent and (3) within one year of the date of the completion of the offering, all the members of such committees be independent. Audit committee members must also satisfy the independence criteria set forth in Rule 10A-3 under the Exchange Act. Under applicable Nasdaq rules, a director will only qualify as an "independent director" if, in the opinion of the listed company's board of directors, that person does not have a relationship that would interfere with the exercise of independent judgment in carrying out the responsibilities of a director.

In order to be considered independent for purposes of Rule 10A-3, a member of an audit committee of a listed company may not, other than in his or her capacity as a member of the audit committee, the board of directors, or any other board committee, accept, directly or indirectly, any consulting, advisory, or other compensatory fee from the listed company or any of its subsidiaries or otherwise be an affiliated person of the listed company or any of its subsidiaries.

Our board of directors has determined that , and are independent directors for purposes of the rules of Nasdaq and the SEC. In making such determination, our board of directors considered the relationships that each director has with us, and all other facts and circumstances that our board of directors deemed relevant in determining their independence, including the beneficial ownership of our capital stock by each director. Our board of directors also considered the association of our directors with the holders of more than 5% of our common stock. Upon the completion of this offering, we expect that the composition and functioning of our board of directors and each of our committees will comply with all applicable requirements of Nasdaq and the rules and regulations of the SEC, subject to the transition rules described above for newly listed companies. There are no family relationships among any of our directors or executive officers.

Staggered board. In accordance with the terms of our amended and restated certificate of incorporation and amended and restated bylaws that will become effective upon the completion of this offering, our board of directors will be divided into three classes, Class I, Class II and Class III, with each class serving staggered three-year terms. Upon the expiration of the term of a class of directors, directors in that class will be eligible to be elected for a new three-year term at the annual meeting of stockholders in the year in which their term expires.

- Our Class I directors will be , and ;
- Our Class II directors will be and ; and
- Our Class III directors will be and .

Our amended and restated certificate of incorporation and amended and restated bylaws that will become effective upon the completion of this offering provide that the number of directors may be changed only by resolution of our board of directors.

The division of our board of directors into three classes with staggered three-year terms may delay or prevent stockholder efforts to effect a change of our management or a change of control.

Committees of our Board of Directors

Our board of directors plans on establishing an audit committee, a compensation committee and a nominating and corporate governance committee, each of which will operate pursuant to a charter to be adopted by our board of directors and which will be effective upon completion of the offering. Following the completion of this offering, copies of each committee's charter will be posted on the Corporate Governance section of our website, at https://bridgebio.com. The inclusion of our website address in this prospectus does not incorporate by reference the information on or accessible through our website into this prospectus.

Audit committee. Effective upon completion of this offering, , and will serve on the audit committee, which will be chaired by . Our board of directors has determined that and are "independent" for audit committee purposes as that term is defined in the rules of the SEC and the applicable Nasdaq rules, and has sufficient knowledge in financial and auditing matters to serve on the audit committee. Our board of directors has designated as an "audit committee financial expert," as defined under the applicable rules of the SEC. We intend to rely on the phase-in provisions of Rule 10A-3 of the Exchange Act and the Nasdaq transition rules applicable to companies completing an initial public offering, and we plan to have an audit committee comprised solely of directors that are independent for purposes of serving on an audit committee within one year after our listing. The audit committee's responsibilities include:

- appointing, approving the compensation of, and assessing the independence of our independent registered public accounting firm;
- pre-approving auditing and permissible non-audit services, and the terms of such services, to be provided by our independent registered public accounting firm;
- reviewing the overall audit plan with our independent registered public accounting firm and members of management responsible for preparing our financial statements;
- reviewing and discussing with management and our independent registered public accounting firm our annual and quarterly financial statements and related disclosures as well as critical accounting policies and practices used by us;
- coordinating the oversight and reviewing the adequacy of our internal control over financial reporting;
- establishing policies and procedures for the receipt and retention of accounting-related complaints and concerns;
- recommending based upon the audit committee's review and discussions with management and our independent registered public accounting firm whether our audited financial statements shall be included in our Annual Report on Form 10-K;
- monitoring the integrity of our financial statements and our compliance with legal and regulatory requirements as they relate to our financial statements and accounting matters;
- preparing the audit committee report required by SEC rules to be included in our annual proxy statement;
- reviewing all related person transactions for potential conflict of interest situations and approving all such transactions; and
- reviewing quarterly earnings releases.

Compensation committee. Effective upon completion of this offering, , and will serve on the compensation committee, which will be chaired by . Our board of directors has determined that each of and is "independent" under the applicable rules and regulations of Nasdaq, and is a "non-employee director" as defined in Rule 16b-3 promulgated under the Exchange Act. We intend to rely on the Nasdaq transition rules applicable to companies completing an initial public offering, and we plan to have a compensation committee comprised solely of directors that are independent for purposes of serving on a compensation committee within one year after our listing. The compensation committee's responsibilities include:

- annually reviewing and approving corporate goals and objectives relevant to the compensation of our Chief Executive Officer;
- evaluating the performance of our Chief Executive Officer in light of such corporate goals and objectives and determining the compensation of our Chief Executive Officer;
- reviewing and approving the compensation of our other executive officers;
- reviewing and establishing our overall management compensation, philosophy and policy;

- overseeing and administering our compensation and similar plans;
- evaluating and assessing potential and current compensation advisors in accordance with the independence standards identified in the applicable Nasdaq rules;
- retaining and approving the compensation of any compensation advisors;
- reviewing and approving our policies and procedures for the grant of equity-based awards;
- reviewing and making recommendations to the board of directors with respect to director compensation;
- reviewing and discussing with management the compensation disclosure to be included in our annual proxy statement or Annual Report on Form 10-K; and
- reviewing and discussing with the board of directors the corporate succession plans for the Chief Executive Officer and other key officers.

Nominating and corporate governance committee. Effective upon completion of this offering, , and will serve on the nominating and corporate governance committee, which will be chaired by . Our board of directors has determined that each of and is "independent" as defined in the applicable Nasdaq rules. We intend to rely on the Nasdaq transition rules applicable to companies completing an initial public offering, and we plan to have a nominating and corporate governance committee comprised solely of directors that are independent for purposes of serving on a nominating and corporate governance committee within one year after our listing. The nominating and corporate governance committee's responsibilities include:

- developing and recommending to the board of directors criteria for board and committee membership;
- establishing procedures for identifying and evaluating board of director candidates, including nominees recommended by stockholders;
- reviewing the size and composition of the board of directors to ensure that it is composed of members containing the appropriate skills and expertise to advise us;
- identifying individuals qualified to become members of the board of directors;
- recommending to the board of directors the persons to be nominated for election as directors and to each of the board's committees;
- developing and recommending to the board of directors a code of business conduct and ethics and a set of corporate governance guidelines;
- developing a mechanism by which violations of the code of business conduct and ethics can be reported in a confidential manner; and
- overseeing the evaluation of the board of directors and management.

Our board of directors may from time to time establish other committees.

Compensation Committee Interlocks and Insider Participation

None of the members of our compensation committee has at any time during the prior three years been one of our officers or employees. None of our executive officers currently serves, or in the past fiscal year has served, as a member of the board of directors or compensation committee of any entity that has one or more executive officers serving on our board of directors or compensation committee.

Code of Business Conduct and Ethics

We plan to adopt a code of business conduct and ethics that applies to all of our employees, officers and directors, including those officers responsible for financial reporting, which will be effective upon completion of

this offering. Upon the completion of this offering, our code of business conduct and ethics will be available on our website at *https://bridgebio.com*. We intend to disclose any substantive amendments to the code, or any waivers of its requirements, on our website or in a Current Report on Form 8-K.

Board Leadership Structure and Board's Role in Risk Oversight

We do not currently have a chairman of the board; however, once we are a public company, we may establish a role of chairman of the board that is separate from the role of Chief Executive Officer. We believe that separating these positions would allow our Chief Executive Officer to focus on our day-to-day business, while allowing the chairman of the board to lead the board of directors in its fundamental role of providing advice to and independent oversight of management. Our board of directors recognizes the time, effort and energy that the Chief Executive Officer is required to devote to his position in the current business environment, as well as the commitment required to serve as our chairman, particularly as the board of directors' oversight responsibilities continue to grow. While our amended and restated bylaws and corporate governance guidelines will not require that our chairman and Chief Executive Officer positions be separate, our board of directors believes that having separate positions may provide the appropriate leadership structure for us and would demonstrate our commitment to good corporate governance.

Risk is inherent with every business, and how well a business manages risk can ultimately determine its success. We face a number of risks, including risks relating to our financial condition, development and commercialization activities, operations, strategic direction and intellectual property as more fully discussed in the section titled "Risk Factors" appearing elsewhere in this prospectus. Management is responsible for the day-to-day management of risks we face, while our board of directors, as a whole and through its committees, has responsibility for the oversight of risk management. In its risk oversight role, our board of directors has the responsibility to satisfy itself that the risk management processes designed and implemented by management are adequate and functioning as designed.

The role of the board of directors in overseeing the management of our risks is conducted primarily through committees of the board of directors, as disclosed in the descriptions of each of the committees above and in the charters of each of the committees. The full board of directors (or the appropriate board committee in the case of risks that are under the purview of a particular committee) discusses with management our major risk exposures, their potential impact on us, and the steps we take to manage them. When a board committee is responsible for evaluating and overseeing the management of a particular risk or risks, the chairman of the relevant committee reports on the discussion to the full board of directors during the committee reports portion of the next board meeting. This enables the board of directors and its committees to coordinate the risk oversight role, particularly with respect to risk interrelationships.

Limitation on Liability and Indemnification Matters

Our amended and restated certificate of incorporation, which will become effective immediately prior to the consummation of this offering, will contain provisions that limit the liability of our directors for monetary damages to the fullest extent permitted by Delaware law. Consequently, our directors will not be personally liable to us or our stockholders for monetary damages for any breach of fiduciary duties as directors, except liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- unlawful payments of dividends or unlawful stock repurchases or redemptions as provided in Section 174 of the Delaware General Corporation Law; or
- any transaction from which the director derived an improper personal benefit.

Each of our amended and restated certificate of incorporation and amended and restated bylaws, which will become effective immediately prior to the consummation of this offering, will provide that we are required to indemnify our directors and officers, in each case to the fullest extent permitted by Delaware law. Our amended and restated bylaws will also obligate us to advance expenses incurred by a director or officer in advance of the final disposition of any action or proceeding, and permit us to secure insurance on behalf of any officer, director, employee or other agent for any liability arising out of his or her actions in that capacity regardless of whether we would otherwise be permitted to indemnify him or her under Delaware law. We intend to enter into agreements to indemnify our directors, executive officers and other employees as determined by our board of directors. With specified exceptions, these agreements provide for indemnification for related expenses including, among other things, attorneys' fees, judgments, fines and settlement amounts incurred by any of these individuals in any action or proceeding. We believe that these bylaw provisions and indemnification agreements are necessary to attract and retain qualified persons as directors and officers. We also maintain directors' and officers' liability insurance.

The limitation of liability and indemnification provisions in our amended and restated certificate of incorporation and amended and restated bylaws may discourage stockholders from bringing a lawsuit against our directors and officers for breach of their fiduciary duty. They may also reduce the likelihood of derivative litigation against our directors and officers, even though an action, if successful, might benefit us and our stockholders. Further, a stockholder's investment may be adversely affected to the extent that we pay the costs of settlement and damage.

EXECUTIVE AND DIRECTOR COMPENSATION

Executive Compensation Overview

The following discussion contains forward-looking statements that are based on our current plans, considerations, expectations and determinations regarding future compensation programs. The actual amount and form of compensation and the compensation policies and practices that we adopt in the future may differ materially from currently planned programs as summarized in this discussion.

The compensation provided to our named executive officers for the fiscal year ended December 31, 2018 is detailed in the Summary Compensation Table and accompanying footnotes and narrative that follow this section. Our named executive officers for the fiscal year ended December 31, 2018, which consists of our Chief Executive Officer and our two most highly compensated executive officers other than our Chief Executive Officer, are:

- Neil Kumar, Ph.D., our Chief Executive Officer;
- Brian C. Stephenson, Ph.D., CFA, our Chief Financial Officer; and
- Uma Sinha, Ph.D., our Chief Scientific Officer.

Dr. Sinha is employed by one of our consolidated subsidiaries, Eidos Therapeutics, Inc., or Eidos, as its Chief Scientific Officer. The compensation information set forth below for Dr. Sinha consists of compensation provided to Dr. Sinha through Eidos and CoA Therapeutics, Inc., or CoA, another one of our consolidated subsidiaries, for whom Dr. Sinha provides consulting services.

Summary Compensation Table

The following table presents total compensation awarded to, earned by or paid to our named executive officers for services rendered to us in all capacities during the fiscal year ended December 31, 2018.

Name & Principal Position	Year	Salary ($)	Bonus ($)(1)	Stock Awards ($)(2)	Option Awards ($)(3)	Non-Equity Incentive Plan Compensation ($)	All Other Compensation ($)	Total ($)
Neil Kumar, Ph.D. *Chief Executive Officer*	2018	450,000						450,000
Brian C. Stephenson, Ph.D., CFA(4) *Chief Financial Officer*	2018	74,375	330,240	1,942,500				2,347,115
Uma Sinha, Ph.D. *Chief Scientific Officer*	2018	394,362(5)	159,226	896,808	540,670		759,869(6)	2,750,935

(1) The amounts reported for Dr. Stephenson represent a $30,240 discretionary cash bonus paid by us for the fiscal year ended December 31, 2018, based on Dr. Stephenson's performance during such fiscal year, and a one-time signing bonus equal to $300,000 paid in connection with Dr. Stephenson's commencement of employment with us. The amount reported for Dr. Sinha represent a discretionary cash bonus paid by Eidos for the fiscal year ended December 31, 2018, based on Dr. Sinha's performance during such fiscal year.

(2) The amounts reported represent the aggregate grant-date fair value of restricted stock awards granted by us to Dr. Stephenson and by Eidos to Dr. Sinha calculated in accordance with Financial Accounting Standards Board, Accounting Standards Codification Topic 718, or FASB ASC 718, assuming the consummation of the Reorganization. Such grant-date fair value does not take into account any estimated forfeitures related to service-vesting conditions. The assumptions used in calculating the grant-date fair value of the awards reported in this column are set forth in Note 14 to our audited financial statements included in this prospectus. These amounts do not correspond to the actual value that may be recognized by the named executive officers upon vesting of the applicable awards or sale of the underlying shares of stock.

(3) The amounts reported represent the aggregate grant-date fair value of stock option awards granted by Eidos and CoA, calculated in accordance with FASB ASC 718. Such grant-date fair value does not take into account any estimated forfeitures related to service-vesting conditions. The assumptions used in calculating the grant-date fair value of the awards reported in this column are set forth in Note 14 to our audited financial statements included in this prospectus. These amounts do not correspond to the actual value that may be recognized by the named executive officers upon exercise of the applicable awards or sale of the underlying shares of stock.
(4) Dr. Stephenson commenced employment with us on October 29, 2018, and his annual base salary was pro-rated accordingly.
(5) The amount includes $40,385 paid for unused and accrued paid time off.
(6) The amount represents tax gross ups relating to income recognized by Dr. Sinha in connection with Eidos' forgiveness of the purchase price for Dr. Sinha's Eidos restricted stock grants.

Narrative to summary compensation table

Base salary

During the fiscal year ended December 31, 2018, the annual base salaries for Dr. Kumar and Dr. Stephenson were $450,000 and $420,000, respectively. The annual base salary paid to Dr. Stephenson was pro-rated for the year based on the commencement of his employment with us on October 29, 2018. From January 1, 2018 through November 4, 2018, Dr. Sinha's annual base salary, which was paid through our subsidiary, Eidos, was $350,000. Effective as of November 5, 2018, Dr. Sinha's annual base salary was increased to $375,000.

Bonus Arrangements

During the fiscal year ended December 31, 2018, Dr. Kumar did not earn any bonuses and Drs. Stephenson and Sinha earned bonuses as set forth in the Summary Compensation Table above.

Equity compensation

During the fiscal year ended December 31, 2018, we granted incentive units of BridgeBio Pharma LLC to Dr. Stephenson. In connection with the Reorganization, outstanding vested and unvested incentive units of BridgeBio Pharma LLC will be exchanged for shares of common stock and restricted stock, respectively, of BridgeBio Pharma, Inc. under the 2019 Plan. The shares of restricted stock will be issued with time-based vesting conditions in accordance with the terms and conditions, including time-based vesting terms, of the incentive units from which such shares were converted. See "Reorganization". The number of shares of common stock and restricted stock of BridgeBio Pharma, Inc. to be issued to our named executive officers in connection with the Reorganization with respect to incentive units of BridgeBio Pharma LLC granted in 2018 is set forth in the table below. During the fiscal year ended December 31, 2018, Dr. Sinha was granted restricted shares of Eidos common stock, a stock option to purchase shares of Eidos' common stock as well as a stock option to purchase shares of CoA's common stock.

Named Executive Officer	Number of Vested Incentive Units of BridgeBio Pharma LLC	Number of Shares of Common Stock of BridgeBio Pharma, Inc.	Number of Unvested Incentive Units of BridgeBio Pharma LLC	Number of Shares of Common Stock of BridgeBio Pharma, Inc.
Brian C. Stephenson, Ph.D.	58,333		1,691,667	

Employment arrangements with our named executive officers

We initially entered into an offer letter with each of the named executive officers in connection with his or her employment with us, which set forth the terms and conditions of the named executive officer's employment.

Arrangements in place during the fiscal year ended December 31, 2018 for named executive officers

Neil Kumar, Ph.D.

On December 1, 2017, we, through our wholly-owned subsidiary, BridgeBio Services, Inc., or Services Company, entered into an offer letter with Dr. Kumar, who currently serves as our Chief Executive Officer. The offer letter provided for Dr. Kumar's at-will employment and set forth his initial annual base salary, initial target annual bonus opportunity, and his eligibility to participate in our employee benefit plans generally. In the event of a termination of his employment by the Services Company without "cause" or Dr. Kumar's resignation from employment with the Services Company for "good reason" (as such terms are defined in the offer letter), in either case subject to Dr. Kumar's execution of an effective release of claims in favor of the Company, Dr. Kumar will be entitled to the following severance benefits: (i) a lump sum payment equal to twelve months of his then-current base salary; (ii) a pro-rated bonus based on Company and individual performance for the year of termination; and (iii) up to twelve months of COBRA reimbursements for Dr. Kumar and his dependents. Dr. Kumar is subject to the Service Company's standard proprietary information and inventions agreement.

Brian C. Stephenson, Ph.D., CFA

On October 28, 2018, we, through Services Company, entered into an offer letter with Dr. Stephenson, Ph.D., CFA, who currently serves as our Chief Financial Officer. The offer letter provided for Dr. Stephenson's at-will employment and set forth his initial annual base salary, initial target annual bonus opportunity, one-time sign-on bonus equal to $300,000 (subject to repayment if Dr. Stephenson voluntarily resigns from the Company within his first year of employment), and his eligibility to participate in our employee benefit plans generally. Dr. Stephenson was also granted 1,750,000 incentive units in the Company as provided in the LLC Agreement. Dr. Stephenson is subject to the Service Company's standard proprietary information and inventions agreement.

Uma Sinha, Ph.D.

On June 1, 2016, through our subsidiary Eidos, we entered into an employment offer letter with Dr. Sinha, who currently serves as our Chief Scientific Officer. The offer letter provided for Dr. Sinha's at-will employment and set forth her initial annual base salary and her eligibility to participate in our employee benefit plans. In May 2018, we entered into an amendment to Dr. Sinha's offer letter to provide her with certain severance benefits. This amendment provides that, in the event of a termination of her service relationship by Eidos without "cause" (as defined in Dr. Sinha's offer letter) or Dr. Sinha's resignation from Eidos for "good reason" (as defined in Dr. Sinha's offer letter), in either case within the period commencing one month before and ending twelve months following a change in control, subject to Dr. Sinha's execution of an effective release of claims in favor of Eidos, Dr. Sinha will be entitled to the following severance benefits: (i) a lump sum payment equal to nine months of her then-base salary; (ii) an amount equal to her target bonus for the year in which her employment was terminated (pro-rated in the case of any partial year during which she was employed by Eidos) and (iii) up to nine months of COBRA reimbursements for Dr. Sinha and her dependents. In the event of a termination of her service relationship by Eidos without cause or Dr. Sinha's resignation from Eidos for good reason, in either case other than in connection with a change in control, subject to Dr. Sinha's execution of an effective release of claims in favor of Eidos, Dr. Sinha will be entitled to the following severance benefits: (i) a lump sum payment equal to six months of her then-base salary; (ii) an amount equal to her target bonus for the year in which her employment was terminated (pro-rated in the case of any partial year during which she was employed by Eidos) and (iii) up to six months of COBRA reimbursements for Dr. Sinha and her dependents. Dr. Sinha is subject to Eidos' standard proprietary information and inventions agreement. Additionally, Dr. Sinha provides services to our consolidated subsidiary, CoA, as a consultant.

Outstanding equity awards at fiscal year end

The following table presents the outstanding equity awards held by each of our named executive officers as of December 31, 2018. The table assumes the completion of the Reorganization prior to the consummation of this offering and the conversion of incentive units as described above.

		Option Awards				Stock Awards	
Name	Vesting Commencement Date	Number of securities underlying unexercised options (#) exercisable	Number of securities underlying unexercised options (#) unexercisable	Option exercise price ($)	Option expiration date	Number shares or units that have not vested (#)	Market value of shares or units that have not vested ($)(1)
Neil Kumar, Ph.D.							
Brian C. Stephenson, Ph.D., CFA							
Uma Sinha, Ph.D.	6/1/2016					42,823(2)	589,244
	6/1/2016					24,793(2)	341,151
	9/7/2017					16,207(3)	233,008
	9/7/2017					22,118(2)	304,343
	9/7/2017					80,760(3)	1,111,257
	11/5/2018	— (4)	60,000(4)	13.20	11/5/2028		
	8/1/2017					38,425(5)	9,222

(1) Assumes an initial public offering price of $ per share, which is the midpoint of the estimated price range set forth on the cover page of this prospectus, except that for Eidos stock awards, assumes the closing market price of a share of Eidos' common stock as of 12/31/18, which was $13.76 and for CoA stock awards, assume the fair market value of a share of CoA's common stock as of 12/31/18, which was $0.24.

(2) Dr. Sinha purchased Eidos restricted stock for a price equal to the fair market value per share on the grant date, which vests as follows: 25% on the first anniversary of the vesting commencement date and the remaining 75% in equal monthly installments over the 36 month period following such anniversary, subject to continued service through each applicable vesting date.

(3) Dr. Sinha purchased Eidos restricted stock, for a price equal to the fair market value per share on the grant date which vests as follows: 100% in equal monthly installments over the 48 month period following the vesting commencement date, subject to continued service through each applicable vesting date.

(4) The shares underlying this Eidos stock option award vest as follows: 25% on the first anniversary of the vesting commencement date and the remaining 75% in equal monthly installments over the 36 month period following such anniversary, subject to continued service through each applicable vesting date.

(5) Dr. Sinha early exercised her CoA stock option award and received shares of restricted stock that vest as follows: 25% on the first anniversary of the vesting commencement date and the remaining 75% in equal installments over the 36 month period following such anniversary, subject to continued service through each applicable vesting date.

Employee benefits and stock plans

2019 stock option and incentive plan

In connection with this offering, our board of directors plans to adopt a 2019 Stock Option and Incentive Plan, or the 2019 Plan. The 2019 Stock Plan will become effective on the date immediately prior to the date on which the registration statement of which this prospectus is part is declared effective by the SEC. The 2019 Stock Plan will provide flexibility to our compensation committee to use various equity-based incentive awards as compensation tools to motivate our workforce.

We will initially reserve shares of our common stock, or the Initial Limit, for the issuance of awards under the 2019 Stock Plan. The 2019 Stock Plan provides that the number of shares reserved and available for issuance under the plan will automatically increase each January 1, beginning on January 1, 2020, by % of the outstanding number of shares of our common stock on the immediately preceding December 31, or such lesser number of shares as determined by our compensation committee. This is referred to herein as the Annual Increase. This number will be subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

The shares we issue under the 2019 Stock Plan will be authorized but unissued shares or shares that we reacquire. The shares of common stock underlying any awards that are forfeited, cancelled, held back upon exercise or settlement of an award to satisfy the exercise price or tax withholding, reacquired by us prior to vesting, satisfied without any issuance of stock, expire or are otherwise terminated (other than by exercise) under the 2019 Stock Plan will be added back to the shares of common stock available for issuance under the 2019 Stock Plan.

The maximum aggregate number of shares that may be issued in the form of incentive stock options may not exceed the Initial Limit cumulatively increased on January 1, 2020, and on each January 1 thereafter by the lesser of (i) the Annual Increase for such year or (ii) shares of common stock.

The grant date fair value of all awards made under our 2019 Stock Plan and all other cash compensation paid by us to any non-employee director in any calendar year may not exceed $ for the first year of service and $ for each year of service thereafter.

The 2019 Stock Plan will be administered by our compensation committee. Our compensation committee will have full power to select, from among the individuals eligible for awards, the individuals to whom awards will be granted, to make any combination of awards to participants, and to determine the specific terms and conditions of each award, subject to the provisions of the 2019 Stock Plan. Persons eligible to participate in the 2019 Stock Plan will be those full or part-time employees, non-employee directors and consultants of the Company and its affiliates, as selected from time to time by our compensation committee in its discretion.

The 2019 Stock Plan will permit the granting of both options to purchase common stock intended to qualify as incentive stock options under Section 422 of the Internal Revenue Code, or the Code, and options that do not so qualify. The option exercise price of each option will be determined by our compensation committee but may not be less than 100% of the fair market value of our common stock on the date of grant. The term of each option will be fixed by our compensation committee and may not exceed ten years from the date of grant. Our compensation committee will determine at what time or times each option may be exercised.

Our compensation committee will be able to award stock appreciation rights subject to such conditions and restrictions as it may determine. Stock appreciation rights will entitle the recipient to shares of common stock or cash, equal to the value of the appreciation in our stock price over the exercise price. The exercise price of each stock appreciation right may not be less than 100% of the fair market value of the common stock on the date of grant. The term of each stock appreciation right will be fixed by our compensation committee and may not exceed ten years from the date of grant. Our compensation committee will determine at what time or times each stock appreciation right may be exercised.

Our compensation committee will be able to award restricted shares of common stock and restricted stock units to participants subject to such conditions and restrictions as it may determine. These conditions and restrictions may include the achievement of certain performance goals and/or continued employment or service relationship with us through a specified vesting period. Our compensation committee may also be permitted to grant shares of common stock that are free from any restrictions under the 2019 Stock Plan. Unrestricted stock may be granted to participants in recognition of past services or other valid consideration and may be issued in lieu of cash compensation due to such participant.

Our compensation committee will be able to grant cash bonuses under the 2019 Stock Plan to participants, subject to the achievement of certain performance goals.

The 2019 Stock Plan will provide that upon the effectiveness of a "sale event," as defined in the 2019 Stock Plan, an acquirer or successor entity may assume, continue or substitute outstanding awards under the 2019 Stock Plan. To the extent that awards granted under our 2019 Stock Plan are not assumed or continued or substituted by the successor entity, except as may be otherwise provided in the relevant award certificate, all awards with time-based vesting, conditions or restrictions will become fully vested and nonforfeitable as of the effective time of the sale event, and all awards with conditions and restrictions relating to the attainment of performance goals may become vested and nonforfeitable in connection with a sale event in the compensation committee's discretion or to the extent specified in the relevant award certificate. Upon the effective time of the sale event, all outstanding awards granted under the 2019 Stock Plan will terminate to the extent not assumed, continued or substituted for. In the event of such termination, individuals holding options and stock appreciation rights will be permitted to exercise such options and stock appreciation rights (to the extent exercisable) within a specified period of time prior to the sale event. In addition, in connection with the termination of the 2019 Stock Plan upon a sale event, we may make or provide for a payment, in cash or in kind, to participants holding vested and exercisable options and stock appreciation rights equal to the difference between the per share cash consideration payable to stockholders in the sale event and the exercise price of the options or stock appreciation rights and we may make or provide for a payment, in cash or in kind, to participants holding other vested awards.

Our board of directors will be able to amend or discontinue the 2019 Stock Plan and our compensation committee will be permitted to amend the exercise price of options and amend or cancel outstanding awards for purposes of satisfying changes in law or any other lawful purpose but no such action may adversely affect rights under an award without the holder's consent. Certain amendments to the 2019 Stock Plan will require the approval of our stockholders.

No awards will be granted under the 2019 Stock Plan after the date that is 10 years from the date of stockholder approval. No awards under the 2019 Stock Plan will be made prior to the date of this prospectus.

2019 Employee Stock Purchase Plan

In connection with this offering, our board of directors plans to adopt a 2019 Employee Stock Purchase Plan, or an ESPP, which will become effective on the date immediately prior to the date on which the registration statement of which this prospectus is part is declared effective by the SEC. The ESPP will initially reserve and authorize the issuance of up to a total of shares of common stock to participating employees. The ESPP will provide that the number of shares reserved and available for issuance will automatically increase each January 1, beginning on January 1, 2020, by the least of shares of our common stock, % of the outstanding number of shares of our common stock on the immediately preceding December 31, or such lesser number of shares as determined by our compensation committee. This number will be subject to adjustment in the event of a stock split, stock dividend or other change in our capitalization.

All employees whose customary employment is for more than hours per week and who have completed at least days of employment will be eligible to participate in the ESPP. Any employee who owns 5% or more of the total combined voting power or value of all classes of stock will not be eligible to purchase shares under the ESPP.

We will make one or more offerings, consisting of one or more purchase periods, each year to our employees to purchase shares under the ESPP. Offerings will usually begin every six months and will continue for six-month periods, referred to as offering periods. Each eligible employee may elect to participate in any offering by submitting an enrollment form at least 15 business days before the relevant offering date.

Each employee who is a participant in the ESPP may purchase shares by authorizing contributions of between 1% and % of his or her compensation during an offering period. Unless the participating employee has

previously withdrawn from the offering, his or her accumulated contributions will be used to purchase shares on the last business day of the purchase period at a price equal to 85% of the fair market value of the shares on the first business day of the offering period or the last business day of the purchase period, whichever is lower, provided that no more than shares of common stock (or a lesser number as established by the plan administrator in advance of the purchase period) may be purchased by any one employee during each purchase period. Under applicable tax rules, an employee may purchase no more than $25,000 worth of shares of common stock, valued at the start of the offering period, under the ESPP for each calendar year in which a purchase right is outstanding.

The accumulated contributions of any employee who is not a participant on the last day of a purchase period will be refunded. An employee's rights under the ESPP terminate upon voluntary withdrawal from the plan or when the employee ceases employment with us for any reason.

The ESPP may be terminated or amended by our board of directors at any time, but will automatically terminate on the 10-year anniversary of this offering. An amendment that increases the number of shares of common stock that are authorized under the ESPP and certain other amendments will require the approval of our stockholders. The plan administrator may adopt subplans under the ESPP for employees of our non-U.S. subsidiaries, if any.

Senior Executive Cash Incentive Bonus Plan

In connection with this offering, our board of directors plans to adopt a Senior Executive Cash Incentive Bonus Plan, or the Bonus Plan. The Bonus Plan will provide for cash bonus payments based upon the attainment of performance targets established by our compensation committee. The payment targets will be related to financial and operational measures or objectives with respect to our company, or corporate performance goals, as well as individual performance objectives.

Our compensation committee may select corporate performance goals from among the following: , any of which may be measured in absolute terms, as compared to any incremental increase, in terms of growth, or as compared to results of a peer group.

Each executive officer who is selected to participate in the Bonus Plan will have a target bonus opportunity set for each performance period. The bonus formulas will be adopted in each performance period by the compensation committee and communicated to each executive. The corporate performance goals will be measured at the end of each performance period after our financial reports have been published or such other appropriate time as the compensation committee determines. If the corporate performance goals and individual performance objectives are met, payments will be made as soon as practicable following the end of each performance period, but not later than 74 days after the end of the fiscal year in which such performance period ends. Subject to the rights contained in any agreement between the executive officer and us, an executive officer must be employed by us on the bonus payment date to be eligible to receive a bonus payment. The Bonus Plan will also permits the compensation committee to approve additional bonuses to executive officers in its sole discretion.

401(k) plan and other benefits

Our eligible U.S. employees participate in a tax-qualified retirement plan sponsored by Services Company that provides an opportunity to save for retirement on a tax-advantaged basis. Plan participants are able to defer eligible compensation subject to applicable annual Code limits. The plan sponsor has the ability to make discretionary contributions to the 401(k) plan, but has not done so to date. The 401(k) plan is intended to be qualified under Section 401(a) of the Code with the 401(k) plan's related trust intended to be tax exempt under Section 501(a) of the Code. As a tax-qualified retirement plan, contributions to the 401(k) plan and earnings on those contributions are not taxable to the participants until distributed from the 401(k) plan.

Director Compensation Overview

Prior to this offering, we did not have a formal policy or plan to compensate our non-employee directors. Non-employee directors not affiliated with KKR generally received a director fee of $60,000 and were reimbursed for travel, food, lodging and other expenses directly related to their activities as directors. During the fiscal year ended December 31, 2018, James Momtazee and Ali Satvat were general managers of KKR and did not receive compensation from us for their service as directors on our board of directors. Directors who also serve as employees receive no additional compensation for their service as directors. During the fiscal year ended December 31, 2018, Dr. Kumar received no additional compensation for his service as a director. See the section titled "Executive and Director Compensation—Summary Compensation Table" for more information about Dr. Kumar's compensation for the fiscal year ended December 31, 2018.

In connection with the Reorganization, outstanding vested and unvested incentive units of BridgeBio Pharma LLC will be exchanged for shares of common stock and restricted stock, respectively, of BridgeBio Pharma, Inc. under the 2019 Stock Plan. The shares of restricted stock will be issued with time-based vesting conditions in accordance with the terms and conditions, including time-based vesting terms, of the incentive units from which such shares were converted. See "Reorganization". The number of shares of common stock and restricted stock of BridgeBio Pharma, Inc. to be issued to our directors in connection with the Reorganization with respect to incentive units of BridgeBio Pharma LLC granted in 2018 is set forth in the table below:

Director	Number of Vested Incentive Units of Bridge Bio Pharma LLC	Number of Shares of Common Stock of BridgeBio Pharma, Inc.	Number of Unvested Incentive Units of Bridge Bio Pharma LLC	Number of Shares of Common Stock of BridgeBio Pharma, Inc.
Charles Homcy, M.D.				
James C. Momtazee				
Ali J. Satvat				
Richard H. Scheller, Ph.D.				

The following table provides certain information concerning compensation earned by our non-employee directors during the year ended December 31, 2018.

Name(1)	Fees earned or paid in cash ($)	Stock awards ($)(2)	All other compensation ($)	Total ($)
Charles Homcy, M.D.	—	—	200,000(2)	200,000
Richard H. Scheller, Ph.D.	60,000	40,000	—	100,000

(1) Assuming the consummation of the Reorganization, as of December 31, 2018, Drs. Homcy and Scheller each had shares of restricted stock of BridgeBio Pharma, Inc. outstanding and Messrs. Momtazee and Satvat did not have any equity awards outstanding.

(2) Pursuant to a consulting agreement by and between Dr. Homcy and the Company, dated May 1, 2017, which expired on May 15, 2018, we paid Mr. Homcy a consulting fee of $200,000 in exchange for consulting services provided by Dr. Homcy in the area of oncology and pipeline matters.

CERTAIN RELATIONSHIPS AND RELATED PERSON TRANSACTIONS

In addition to the compensation arrangements, including employment, termination of employment and change in control arrangements and indemnification arrangements, discussed in the sections titled “Management” and “Executive and Director Compensation” and the registration rights described in the section titled “Description of Capital Stock—Registration Rights,” the following is a description of each transaction since January 1, 2016 and each currently proposed transaction in which:

- we have been or are to be a participant;
- the amount involved exceeded or exceeds $120,000; and
- any of our directors, executive officers, or holders of more than 5% of our capital stock, or any immediate family member of, or person sharing the household with, any of these individuals, had or will have a direct or indirect material interest.

Private Placements of Securities

Series B Preferred Unit Financing

In March 2016, BridgeBio LLC issued and sold an aggregate of 15,568,183 Series B preferred units at a price of $0.44 per unit, for an aggregate purchase price of approximately $6.9 million. The following table summarizes purchases of Series B preferred units of BridgeBio LLC by related persons:

Purchaser	Series B preferred units of BridgeBio LLC	Total Purchase Price
KKR Genetic Disorder L.P.(1)(2)	13,875,142	$6,105,063
Neil Kumar, LLC(3)	350,284	$ 154,125
Charles Homcy	58,381	$ 25,688

(1) KKR Genetic Disorder L.P., beneficially owns more than 5% of our outstanding units as of December 31, 2018.
(2) James C. Momtazee and Ali J. Satvat, members of our board of directors, are officers of the general partner of KKR Genetic Disorder L.P.
(3) Neil Kumar, our chief executive officer, is the sole member of Neil Kumar, LLC.

From March 2016 through May 2017, BridgeBio Pharma LLC issued and sold an aggregate of 75,340,907 Series B preferred units at a price of $0.44 per unit, for an aggregate purchase price of approximately $33.1 million. The following table summarizes purchases of Series B preferred units of BridgeBio Pharma LLC by related persons:

Purchaser	Series B preferred units of BridgeBio Pharma LLC	Total Purchase Price
KKR Genetic Disorder L.P.(1)(2)	67,147,585	$29,544,937
Neil Kumar, LLC(3)	1,695,170	$ 745,875
Charles Homcy	282,528	$ 124,312

In June 2017, BridgeBio LLC and BridgeBio Pharma LLC merged in a common control transaction. In connection with this merger transaction, each outstanding Series B preferred unit of BridgeBio LLC was exchanged for one Series B preferred unit of BridgeBio Pharma LLC.

(1) KKR Genetic Disorder L.P., beneficially owns more than 5% of our outstanding units as of December 31, 2018.
(2) James C. Momtazee and Ali J. Satvat, members of our board of directors, are officers of the general partner of KKR Genetic Disorder L.P.
(3) Neil Kumar, our chief executive officer, is the sole member of Neil Kumar, LLC.

Series C Preferred Unit Financing

In June 2017, we entered into the Series C Preferred Unit Purchase Agreement for the issuance of up to 141,155,758 Series C preferred units of BridgeBio Pharma LLC at a price of $0.9656 per unit, for an aggregate purchase price of $136.3 million. The following table summarizes purchases of our Series C preferred units by related persons:

Unitholder	Series C Preferred Units	Total Purchase Price
KKR Genetic Disorder L.P.(1)(2)	36,246,893	$35,000,000

(1) KKR Genetic Disorder L.P. beneficially owns more than 5% of our outstanding units as of December 31, 2018.
(2) James C. Momtazee and Ali J. Satvat, members of our board of directors, are officers of the general partner of KKR Genetic Disorder L.P.

Series D Preferred Unit Financing

In November 2018, we sold an aggregate of 150,955,597 Series D preferred units of BridgeBio Pharma LLC at a purchase price of $1.9823 per unit, for an aggregate purchase price of $299.2 million, pursuant to our Series D Preferred Unit Purchase Agreement. The following table summarizes purchases of our Series D preferred units by related persons:

Unitholder	Series D Preferred Units	Total Purchase Price
KKR Genetic Disorder L.P.(1)(2)	50,446,451	$100,000,000
Viking Global Opportunities Illiquid Investments Sub-Master LP(3)	50,446,451	$100,000,000

(1) KKR Genetic Disorder L.P. beneficially owns more than 5% of our outstanding units as of December 31, 2018.
(2) James C. Momtazee and Ali J. Satvat, members of our board of directors, are officers of the general partner of KKR Genetic Disorder L.P.
(3) Viking Global Opportunities Illiquid Investments Sub-Master LP owns more than 5% of our outstanding units as of December 31, 2018.

Agreements with Stockholders

Registration Rights Agreement

In connection with this offering, pursuant to the Series D Agreement, we intend to enter into a registration rights agreement with each of KKR, Viking and each other holder of 3% or greater of our outstanding equity securities.

Promissory Notes

In May 2016, we issued a full recourse promissory note in the principal amount of $124,312.50 to Dr. Homcy. The full recourse promissory note accrued interest at the rate of 1.82% per annum, with a delinquent rate of 10%. The principal amount of the note, together with all accrued but unpaid interest, is due and payable in full five years from the date of issuance or earlier upon the occurrence of certain triggering events.

In May 2017, we issued a promissory note of $4.0 million to KKR Alternative Credit, Inc., an affiliate of KKR Genetic Disorder L.P., to facilitate the purchase of Series C preferred units by KKR Genetic Disorder L.P. The promissory note bore no interest, or redeemable common units. The promissory note was payable in cash upon the earlier of the six-month anniversary of issuance or the issuance by us of any units. On the closing of the Series C preferred unit financing, the promissory note was converted into 4,142,502 Series C preferred units at the same issuance price of $0.9656 as the purchase price for the other Series C preferred units issued in the Series C preferred unit financing.

Director Relationships

Certain of our directors serve on our board of directors as representatives of entities which beneficially hold 5% or more of our capital stock, as indicated in the table below:

Director	Principal Stockholder
James C. Momtazee	KKR Genetic Disorder L.P.
Ali J. Satvat	KKR Genetic Disorder L.P.

Executive Officer and Director Compensation

We have granted management incentive units to our executive officers and certain of our directors. See the sections titled "Executive and Director Compensation—Outstanding Equity Awards at Fiscal Year End" and "Executive and Director Compensation—Non-Employee Director Compensation" for a description of these options.

Consulting Arrangements

In May 2017, BBS entered into a consulting agreement with our board member, Dr. Homcy. Under the terms of the agreement, Dr. Homcy's duties included providing consulting services in the area of oncology and pipeline matters. Dr. Homcy received an annual retainer of $200,000 for his services and was entitled to reimbursement for expenses incurred in performing his services. During the years ended December 31, 2017 and December 31, 2018, we incurred $0 and $200,000, respectively, for Dr. Homcy's services under the consulting agreement. The consulting agreement expired on May 15, 2018.

In May 2017, BBS entered into a consulting agreement with our Chief Executive Officer, Dr. Kumar. Under the terms of the agreement, Dr. Kumar's duties included providing consulting services in the area of oncology and pipeline matters. Dr. Kumar received an annual retainer payment of $450,000 for his services and was entitled to reimbursement of expenses incurred in performing his services. During the years ended December 31, 2017 and December 31, 2018, we incurred $450,000 and $0, respectively, for Dr. Kumar's services under the consulting agreement. The consulting agreement expired on May 15, 2018.

LLC Payments

In each of April 2016 and 2017, BridgeBio Pharma LLC made a payment of $200,000 to Dr. Homcy for advisory services.

In April 2016, BridgeBio Pharma LLC made a payment of $450,000 to Dr. Kumar for management and oversight services.

Employment Agreements and Change of Control Agreements

See the "Executive and Director Compensation—Agreements with our Executive Officers" section of this prospectus for a further discussion of these arrangements.

Other than as described above under this section titled "Certain Relationships and Related Person Transactions," since January 1, 2016, we have not entered into any transactions, nor are there any currently proposed transactions, between us and a related party where the amount involved exceeds, or would exceed, $120,000, and in which any related person had or will have a direct or indirect material interest.

Limitation of Liability and Indemnification of Officers and Directors

We plan to enter into indemnification agreements with each of our directors and executive officers, the form of which is attached as an exhibit to the registration statement of which this prospectus is a part. The indemnification agreements and our amended and restated certificate of incorporation and amended and restated bylaws require us to indemnify our directors and officers to the fullest extent permitted by Delaware law.

Policies and Procedures for Related Person Transactions

Our audit committee will have the primary responsibility for reviewing and approving or disapproving "related party transactions," which are transactions between us and related persons in which the aggregate amount involved exceeds or may be expected to exceed $120,000 and in which a related person has or will have a direct or indirect material interest. The written charter of our audit committee will provide that our audit committee shall review and approve in advance any related party transaction.

Prior to the completion of this offering, we intend to adopt a formal written policy providing that we are not permitted to enter into any transaction that exceeds $120,000 and in which any related person has a direct or indirect material interest without the consent of our audit committee. In approving or rejecting any such transaction, our audit committee is to consider the relevant facts and circumstances available and deemed relevant to our audit committee, including whether the transaction is on terms no less favorable than terms generally available to an unaffiliated third party under the same or similar circumstances and the extent of the related person's interest in the transaction.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock, as of March 31, 2019 by:

- each person, or group of affiliated persons, known by us to beneficially own more than 5% of our common stock;
- each of our directors;
- each of our named executive officers; and
- all of our executive officers and directors as a group.

The column entitled "Percentage of Shares Beneficially Owned—Before Offering" is based on a total of shares of our common stock outstanding as of March 31, 2019, after giving effect to the Reorganization, including the exchange of all outstanding units of BridgeBio Pharma LLC for shares of common stock of BridgeBio Pharma, Inc. in accordance with the distribution provisions of the LLC Agreement immediately prior to the completion of this offering, assuming an initial public offering price of $ per share, the midpoint of the price range set forth on the cover page of this prospectus. See "Reorganization." The column entitled "Percentage of Shares Beneficially Owned—After Offering" is based on shares of our common stock to be outstanding after this offering, including the shares of our common stock that we are selling in this offering, but not including any additional shares issuable pursuant to the underwriters' option to purchase additional shares or any additional shares issuable upon exercise of outstanding options.

The number of shares beneficially owned by each stockholder is determined under rules issued by the SEC and includes voting or investment power with respect to securities. Under these rules, beneficial ownership includes any shares as to which the individual or entity has sole or shared voting power or investment power. In computing the number of shares beneficially owned by an individual or entity and the percentage ownership of that person, shares of common stock subject to options, warrants, or other rights held by such person that are currently exercisable or will become exercisable within 60 days after March 31, 2019 are considered outstanding, although these shares are not considered outstanding for purposes of computing the percentage ownership of any other person. Unless otherwise indicated, the address of all listed stockholders is 421 Kipling Street, Palo Alto, California 94301. Each of the stockholders listed has sole voting and investment power with respect to the shares beneficially owned by the stockholder unless noted otherwise, subject to community property laws where applicable.

Name of Beneficial Owner	Shares Beneficially Owned	Percentage of Shares Beneficially Owned	
		Before Offering	After Offering
5% Stockholders			
KKR Genetic Disorder L.P.(1)		%	%
Viking Global Opportunities Illiquid Investments Sub-Master LP		%	%
Named Executive Officers and Directors			
Neil Kumar, Ph.D.		%	%
Brian C. Stephenson, Ph.D., CFA			
Uma Sinha, Ph.D.			
Charles Homcy, M.D.			
Frank McCormick, Ph.D.			
Richard H. Scheller, Ph.D.			
Eric Aguiar, M.D.			
James C. Momtazee(1)			
Ali J. Satvat(1)			
All executive officers and directors as a group (11 persons)		%	%

(1) Includes shares of common stock directly owned by KKR Genetic Disorder L.P. KKR Genetic Disorder GP LLC, as the general partner of KKR Genetic Disorder L.P., KKR Management Holdings L.P., as the sole member of KKR Genetic Disorder GP LLC, KKR Management Holdings Corp., as the general partner of KKR Management Holdings L.P., KKR Group Holdings Corp., as the sole shareholder of KKR Management Holdings Corp., KKR & Co. Inc., as the sole shareholder of KKR Group Holdings Corp., KKR Management LLC, as the controlling shareholder of KKR & Co. Inc., and Messrs. Henry R. Kravis and George R. Roberts, as the designated members of KKR Management LLC, may be deemed to be the beneficial owners having shared voting and investment power with respect to the shares described in this footnote. The principal business address of each of the entities and persons identified in this paragraph, except Mr. Roberts, is c/o Kohlberg Kravis Roberts & Co. L.P., 9 West 57th Street, Suite 4200, New York, NY 10019. The principal business address for Mr. Roberts is c/o Kohlberg Kravis Roberts & Co. L.P., 2800 Sand Hill Road, Suite 200, Menlo Park, CA 94025. Each of Messrs. Momtazee and Satvat is a member of our Board of Directors and serves as an executive of Kohlberg Kravis Roberts & Co. L.P. and/or one or more of its affiliates. Each of Messrs. Kravis, Roberts, Momtazee and Satvat disclaims beneficial ownership of the shares held by KKR Genetic Disorder L.P. The principal business address of each of Messrs. Momtazee and Satvat is c/o Kohlberg Kravis Roberts & Co. L.P., 2800 Sand Hill Road, Suite 200, Menlo Park, CA 94025.

DESCRIPTION OF CAPITAL STOCK

The following description of our capital stock and provisions of our amended and restated certificate of incorporation and amended and restated bylaws as they will be in effect immediately prior to the completion of this offering are summaries and are qualified in their entirety by reference to our amended and restated certificate of incorporation and amended and restated bylaws that will be in effect immediately prior to the completion of this offering, the forms of which are filed as exhibits to the registration statement of which this prospectus forms a part. The description of our common stock reflects the completion of the Reorganization, which will occur immediately prior to the completion of this offering. See "Reorganization" for more information concerning the Reorganization.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock. The shares to be issued by us in this offering will be, when issued and paid for, validly issued, fully paid and non-assessable.

Preferred Stock

Upon the consummation of this offering, our board of directors will have the authority, without further action by our stockholders, to issue up to shares of convertible preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our convertible preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of convertible preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. Immediately after consummation of this offering, no shares of convertible preferred stock will be outstanding, and we have no present plan to issue any shares of convertible preferred stock.

Registration Rights

Upon the completion of this offering, the holders of shares of our common stock are entitled to rights with respect to the registration of these securities under the Securities Act. These rights are provided under the terms of the registration rights agreement. The registration rights agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses incurred in connection with registrations under the registration rights agreement will be borne by us, and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Demand Registration Rights

180 days after the effective date of the registration statement for this offering, the holders of our registrable securities are entitled to demand registration rights. Under the terms of our registration rights agreement, we will

be required, upon the request of a holder of at least 10% of our outstanding registrable securities, to file a registration statement and use reasonable best efforts to effect the registration for public resale of these shares and any additional registrable securities requested to be included in such registration by any other holders of our registrable securities.

Short-form Registration Rights

Upon the completion of this offering, the holders of our registrable securities are also entitled to short-form registration rights. Pursuant to our registration rights agreement, if we are eligible to file a registration statement on Form S-3, upon the request of a holder of at least 10% of our outstanding registrable securities, we will be required to use our reasonable best efforts to effect a registration of such shares. We are required to effect up to two registrations in any six-month period pursuant to this provision of the registration rights agreement.

Piggyback Registration Rights

The holders of our registrable securities are entitled to piggyback registration rights. If we register any of our securities either for our own account or for the account of other security holders, the holders of our outstanding registrable securities are entitled to include their shares in the registration. Subject to certain exceptions contained in the registration rights agreement, we and the underwriters may limit the number of shares included in the underwritten offering if the underwriters determine that marketing factors require a limitation of the number of shares to be underwritten.

Indemnification

Our registration rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expenses of Registration

We will pay the registration expenses, subject to certain limited exceptions contained in the registration rights agreement, of the holders of the shares registered pursuant to the demand, short-form and piggyback registration rights described above, including the expenses of one counsel for the selling holders.

Expiration of Registration Rights

The registration rights granted under the registration rights agreement will terminate upon the earliest to occur of: (i) such time after our initial public offering when all registrable securities could be sold under Rule 144 of the Securities Act or a similar exemption without limitation during a three-month period without registration; (ii) the consummation of a transaction or series of transactions in which a person, or a group of persons, acquires from our stockholders, shares representing more than 50% of our outstanding voting stock; and (iii) the consummation of a transaction or series of transactions in which a person, or group of persons, acquires the right to receive the majority of the proceeds in a final liquidation, dissolution or termination, voluntary or involuntary, of the company.

Authorized but Unissued Capital Stock

The Delaware General Corporation Law does not require stockholder approval for any issuance of authorized shares. However, the listing requirements of Nasdaq, which would apply so long as our common stock remains listed on Nasdaq, require stockholder approval of certain issuances equal to or exceeding 20% of the then outstanding voting power or then outstanding number of shares of common stock. These additional shares may be used for a variety of corporate purposes, including future public offerings, to raise additional capital or to facilitate acquisitions.

One of the effects of the existence of unissued and unreserved common stock or preferred stock may be to enable our board of directors to issue shares to persons friendly to current management, which issuance could render more difficult or discourage an attempt to obtain control of our company by means of a merger, tender offer, proxy contest or otherwise, and thereby protect the continuity of our management and possibly deprive our stockholders of opportunities to sell their shares of common stock at prices higher than prevailing market prices.

Anti-Takeover Effects of Provisions of Delaware Law and Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Certain provisions of the Delaware General Corporation Law and of our amended and restated certificate of incorporation and amended and restated bylaws that will become effective upon the completion of this offering could have the effect of delaying, deferring or discouraging another party from acquiring control of us. These provisions, which are summarized below, are expected to discourage certain types of coercive takeover practices and inadequate takeover bids and, as a consequence, they might also inhibit temporary fluctuations in the market price of our common stock that often result from actual or rumored hostile takeover attempts. These provisions are also designed in part to encourage anyone seeking to acquire control of us to first negotiate with our board of directors. These provisions might also have the effect of preventing changes in our management. It is possible that these provisions could make it more difficult to accomplish transactions that stockholders might otherwise deem to be in their best interests. However, we believe that the advantages gained by protecting our ability to negotiate with any unsolicited and potentially unfriendly acquirer outweigh the disadvantages of discouraging such proposals, including those priced above the then-current market value of our common stock, because, among other reasons, the negotiation of such proposals could improve their terms.

Delaware Takeover Statute

Upon completion of this offering, we will be subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder;
- any sale, transfer, lease, pledge, exchange, mortgage or other disposition involving the interested stockholder of 10% or more of the assets of the corporation;
- subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;

- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; or
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Provisions of Our Amended and Restated Certificate of Incorporation and Amended and Restated Bylaws

Our amended and restated certificate of incorporation and amended and restated bylaws to be in effect upon completion of this offering will include a number of provisions that may have the effect of delaying, deferring or discouraging another party from acquiring control of us and encouraging persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non- negotiated takeover attempts. These provisions include the items described below.

Board composition and filling vacancies. Our amended and restated certificate of incorporation provides that directors may be removed only for cause by the affirmative vote of the holders of at least 75% of the shares then entitled to vote at an annual election of directors. Furthermore, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum.

No written consent of stockholders. Our amended and restated certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholder without holding a meeting of stockholders.

Meetings of stockholders. Our bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance notice requirements. Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days or more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. The notice must contain certain information specified in our bylaws.

Amendment to certificate of incorporation and bylaws. As required by the Delaware General Corporation Law, any amendment of our amended and restated certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our amended and restated certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment, and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, directors, limitation of liability and the amendment of our amended and restated certificate of incorporation must be approved by not less than 75% of the outstanding shares entitled to vote on the amendment, and not less than 75% of the outstanding shares of each class entitled to vote thereon as a

class. Our bylaws may be amended by the affirmative vote of a majority vote of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 75% of the outstanding shares entitled to vote on the amendment, or, if the board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated preferred stock. Our amended and restated certificate of incorporation provides for authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to render more difficult or to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of us or our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our amended and restated certificate of incorporation grants our board of directors' broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Limitations of Liability and Indemnification

See "Executive and Director Compensation—Limitation on Liability and Indemnification Matters."

Market Listing

We intend to apply to list our common stock on the Nasdaq Global Market under the symbol "BBIO."

Transfer Agent and Registrar

Upon the completion of this offering, the transfer agent and registrar for our common stock will be .

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following discussion is a summary of the material U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

- a non-resident alien individual;
- a foreign corporation or any other foreign organization taxable as a corporation for U.S. federal income tax purposes; or
- a foreign estate or trust, the income of which is not subject to U.S. federal income tax on a net income basis.

This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons that hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its own tax advisor regarding the tax consequences of acquiring, holding and disposing of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the Code, U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and, all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any such change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein and we have not obtained, nor do we intend to obtain, a ruling from the IRS with respect to the U.S. federal income tax consequences to a non-U.S. holder of the ownership, or disposition, of our common stock. We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset, which generally consists of property held for investment.

This discussion does not address all aspects of U.S. federal income that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances nor does it address any aspects of any U.S. federal tax other than the income tax, U.S. state, local or non-U.S. taxes, the alternative minimum tax, any tax considerations resulting from a non-U.S. holder having a functional currency other than the U.S. dollar, or the Medicare tax on net investment income. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt or governmental organizations;
- financial institutions;
- brokers or dealers in securities;
- regulated investment companies;
- pension plans;
- "controlled foreign corporations," "passive foreign investment companies," and corporations that accumulate earnings to avoid U.S. federal income tax;
- "qualified foreign pension funds," or entities wholly owned by a "qualified foreign pension fund";
- persons deemed to sell our common stock under the constructive sale provisions of the Code;

- persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation; and
- certain U.S. expatriates.

This discussion is for general information only and is not tax advice. Accordingly, all prospective non-U.S. holders of our common stock should consult their own tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock in each non-U.S. holder's individual circumstances.

Distributions on Our Common Stock

Distributions, if any, on our common stock generally will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of capital, up to the non-U.S. holder's tax basis in the common stock. Any distributions in excess of the holder's tax basis will be treated as capital gain, subject to the tax treatment described below in "Gain on Sale or Other Taxable Disposition of Our Common Stock."

Subject to the discussion in the following two paragraphs in this section and the discussions below under "Backup Withholding and Information Reporting" and "Withholding and Information Reporting Requirements—FATCA", dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax described above if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS.

Gain on Sale or Other Taxable Disposition of Our Common Stock

Subject to the discussion below under "Backup Withholding and Information Reporting" and "Withholding and Information Reporting Requirements—FATCA," a non-U.S. holder generally will not be subject to any U.S.

federal income or withholding tax on any gain realized upon such holder's sale or other taxable disposition of shares of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a U.S. trade or business and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed-base maintained by such non-U.S. holder in the United States, in which case the non-U.S. holder generally will be taxed on a net income basis at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code) and, if the non-U.S. holder is a corporation, the branch profits tax described above in "Distributions on Our Common Stock" also may apply;
- the non-U.S. holder is a nonresident alien individual who is present in the United States for 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) on the gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- we are, or have been, at any time during the five-year period preceding such sale of other taxable disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation," unless our common stock is "regularly traded" (as defined by applicable U.S. Treasury regulations) on an established securities market and the non-U.S. holder holds no more than 5% of our outstanding common stock, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. If we are determined to be a U.S. real property holding corporation and the foregoing exception does not apply, then a purchaser may be required to withhold 15% of the proceeds payable to a non-U.S. holder from a sale of our common stock and the non-U.S. holder generally will be taxed on its gain derived from the disposition at the graduated U.S. federal income tax rates applicable to United States persons (as defined in the Code). Generally, a corporation is a U.S. real property holding corporation if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, and we do not anticipate becoming one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above.

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Code) in order to avoid backup withholding at the applicable rate, currently 24%, with respect to dividends on our common stock, generally by providing an applicable IRS Form W-8. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above in "Distributions on Our Common Stock," generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their own tax

advisors regarding the application of the information reporting and backup withholding rules to them. Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is filed with the IRS in a timely manner.

Withholding and Information Reporting Requirements—FATCA

The Foreign Account Tax Compliance Act, or FATCA, generally imposes a U.S. federal withholding tax at a rate of 30% on payments of dividends on, or (subject to the proposed U.S. Treasury regulations discussed below) gross proceeds from the sale or other disposition of, our common stock paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," such foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," such foreign entity identifies certain of its U.S. investors, if any, or (iii) the foreign entity is otherwise exempt under FATCA. Under applicable U.S. Treasury regulations, withholding under FATCA currently applies to payments of dividends on our common stock. While withholding under FATCA would have applied also to payments of gross proceeds from the sale or other disposition of stock on or after January 1, 2019, recently proposed U.S. Treasury regulations eliminate FATCA withholding on payments of gross proceeds entirely. Taxpayers generally may rely on these proposed U.S. Treasury regulations until final U.S. Treasury regulations are issued. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of this withholding tax. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their tax advisors regarding the possible application of withholding under FATCA to their investment in our common stock and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of the 30% withholding tax under FATCA.

SHARES ELIGIBLE FOR FUTURE SALE

Prior to this offering, there has been no public market for shares of our common stock. We cannot predict the effect, if any, that future sales of shares of common stock, or the availability for future sale of shares of common stock, will have on the market price of shares of our common stock prevailing from time to time. The sale of substantial amounts of shares of our common stock in the public market, or the perception that such sales could occur, could harm the prevailing market price of shares of our common stock.

Currently, no shares of our common stock are outstanding. Upon the completion of this offering, we will have a total of shares of our common stock outstanding (or shares of common stock if the underwriters exercise in full their option to purchase additional shares of common stock). Of the outstanding shares, all of the shares sold in this offering will be freely tradable, except that any shares, including shares sold to an entity affiliated with an existing shareholder that may purchase shares in this offering, held by our affiliates, as that term is defined in Rule 144 under the Securities Act, may only be sold in compliance with the limitations described below.

Rule 144

In general, a person who has beneficially owned restricted stock for at least six months would be entitled to sell their securities provided that (i) such person is not deemed to have been one of our affiliates at the time of, or at any time during the 90 days preceding, a sale and (ii) we are subject to the Exchange Act, periodic reporting requirements for at least 90 days before the sale. Persons who have beneficially owned restricted shares for at least six months but who are our affiliates at the time of, or any time during the 90 days preceding, a sale, would be subject to additional restrictions, by which such person would be entitled to sell within any three-month period only a number of securities that does not exceed the greater of either of the following:

- 1% of the number of shares then outstanding, which will equal approximately shares immediately after this offering assuming no exercise of the underwriters' option to purchase additional shares, based on the number of shares outstanding as of December 31, 2018; or
- the average weekly trading volume of our common stock on the Nasdaq Global Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale;

provided, in each case, that we are subject to the Exchange Act periodic reporting requirements for at least 90 days before the sale. Such sales both by affiliates and by non-affiliates must also comply with the manner of sale, current public information and notice provisions of Rule 144.

Rule 701

Rule 701 under the Securities Act, as in effect on the date of this prospectus, permits resales of shares in reliance upon Rule 144 but without compliance with certain restrictions of Rule 144, including the holding period requirement. Most of our employees, executive officers or directors who purchased shares under a written compensatory plan or contract may be entitled to rely on the resale provisions of Rule 701, but all holders of Rule 701 shares are required to wait until 90 days after the date of this prospectus before selling their shares. However, substantially all Rule 701 shares are subject to lock-up agreements as described below and under "Underwriting" included elsewhere in this prospectus and will become eligible for sale upon the expiration of the restrictions set forth in those agreements.

Our amended and restated certificate of incorporation authorizes us to issue additional shares of common stock for the consideration and on the terms and conditions established by our board of directors in its sole discretion. In accordance with the Delaware General Corporation Law and the provisions of our amended and restated certificate of incorporation, we may also issue preferred stock that has designations, preferences, rights, powers and duties that are different from, and may be senior to, those applicable to shares of common stock. See "Description of Capital Stock."

Lock-Up Agreements

We, along with our directors, executive officers and substantially all of our other stockholders have agreed with the underwriters that for a period of 180 days (the restricted period), after the date of this prospectus, subject to specified exceptions, we or they will not offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right or warrant to purchase, lend or otherwise transfer or dispose of, directly or indirectly, any shares of common stock or any securities convertible into or exercisable or exchangeable for shares of common stock, or enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of the common stock. Upon expiration of the "restricted" period, certain of our stockholders will have the right to require us to register their shares under the Securities Act of 1933, as amended, or the Securities Act. See "—Registration Rights" below and "Description of Capital Stock—Registration Rights."

After this offering, certain of our employees, including our executive officers and/or directors, may enter into written trading plans that are intended to comply with Rule 10b5-1 under the Exchange Act. Sales under these trading plans would not be permitted until the expiration of the lock-up agreements relating to the offering described above.

Registration Rights

Upon completion of this offering, certain holders of our securities will be entitled to various rights with respect to registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See the section entitled "Description of Capital Stock—Registration Rights" appearing elsewhere in this prospectus for more information.

Stock Options and Restricted Stock

As soon as practicable after the completion of this offering, we intend to file a Form S-8 registration statement under the Securities Act to register shares of our common stock subject to options and restricted stock outstanding or reserved for issuance under our 2019 Stock Option and Incentive Plan. This registration statement will become effective immediately upon filing, and shares covered by this registration statement will thereupon be eligible for sale in the public markets, subject to vesting restrictions, the lock-up agreements described above and Rule 144 limitations applicable to affiliates. For a more complete discussion of our stock plans, see "Executive and Director Compensation—Employee Benefit and Stock Plans."

UNDERWRITING

We and the underwriters named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. J.P. Morgan Securities LLC, Goldman Sachs & Co. LLC, Jefferies LLC and SVB Leerink LLC are the representatives of the underwriters.

Underwriters	Number of Shares
J.P. Morgan Securities LLC	
Goldman Sachs & Co. LLC	
Jefferies LLC	
SVB Leerink LLC	
KKR Capital Markets LLC	
Piper Jaffray & Co.	
Mizuho Securities USA LLC	
BMO Capital Markets Corp.	
Raymond James & Associates, Inc.	
Total	

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

The underwriters have an option to buy up to an additional shares from the company to cover sales by the underwriters of a greater number of shares than the total number set forth in the table above. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following tables show the per share and total underwriting discounts and commissions to be paid to the underwriters by the company. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase additional shares.

Paid by Us	No Exercise	Full Exercise
Per Share	$	$
Total	$	$

Shares sold by the underwriters to the public will initially be offered at the initial public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to $ per share from the initial public offering price. After the initial offering of the shares, the representatives may change the offering price and the other selling terms. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

The company and its officers, directors, and holders of substantially all of the company's common stock have agreed with the underwriters, subject to certain exceptions, not to (i) offer, sell, contract to sell, pledge, grant any option to purchase, make any short sale or otherwise dispose of any shares of common stock, or any options or warrants to purchase any shares of common stock, or any securities convertible into, exchangeable for or that represent the right to receive shares of common stock, whether now owned or hereinafter acquired, (ii) publicly disclose the intention to make any such offer, sale, pledge or disposition, (iii) engage in any hedging or other transaction that is designed to or that reasonably could be expected to lead to or result in a sale or disposition of such securities or (iv) make any demand for the registration of such securities during the period through the date 180 days after the date of this prospectus, except with the prior written consent of J.P. Morgan Securities LLC and Goldman Sachs & Co. LLC.

The restrictions described in the immediately preceding paragraph do not apply to, among other items, the transfer or disposition of shares of our common stock:

(i) acquired in this offering by holders that are not an officer or director;

(ii) in transactions relating to common stock or other securities acquired in open market transactions after the date of the final prospectus;

(iii) as a *bona fide* gift or gifts;

(iv) to any trust for the direct or indirect benefit of the holder of such common stock;

(v) by will or intestacy;

(vi) to any immediate family member;

(vii) to satisfy tax withholding obligations upon exercise or vesting or the exercise price upon a cashless net exercise, in each case, of share options, equity awards, warrants or other rights to acquire our common stock pursuant to our equity incentive plans described in this prospectus, provided that any filing made pursuant to Section 16(a) of the Exchange Act, shall include a footnote noting the circumstances described in this clause and no other public announcement shall be required or voluntarily made in connection with such transfer;

(viii) if the holder is a corporation, partnership, limited liability company, trust or other business entity, pursuant to a distribution to partners, members or stockholders, subsidiaries or affiliates (as defined in Rule 405 promulgated under the Securities Act) of the holder or to any investment fund or other entity that controls or manages such holder (or is under common control or management with the undersigned);

(ix) by operation of law or pursuant to a court order or settlement agreement related to the distribution of assets in connection with the dissolution of a marriage or civil union;

(x) pursuant to a bona fide third party tender offer, merger, consolidation or other similar transaction made to all holders of our common stock involving a change of control after the completion of this offering that, in each case, has been approved by our board of directors, provided that all of the holders common stock subject to the restrictions in the lock-up that are not so transferred, sold, tendered or otherwise disposed of remain subject to the lock-up, and, provided further that in the event that the tender offer, merger, consolidation or other such transaction is not completed, the common stock owned by such holder shall remain subject to the lock-up agreement;

(xi) in connection with the issuance of shares of our common stock upon the Reorganization; or

(xii) with the prior written consent of J.P. Morgan Securities LLC and Goldman Sachs & Co. LLC on behalf of the underwriters;

provided that, in the case of any transfer or distribution pursuant to clauses (ii) through (v) or (vii), each transferee shall execute a lock-up agreement and in the case of any transfer or distribution pursuant to clauses (iii) through (vii), (viii) and (ix), no filing by any party under the Exchange Act or other public announcement shall be required or shall be made voluntarily in connection with such transfer or distribution (other than a filing on a Form 5 made after the expiration of the restricted period).

Prior to the offering, there has been no public market for the shares. The initial public offering price has been negotiated among the company and the representatives. Among the factors to be considered in determining the initial public offering price of the shares, in addition to prevailing market conditions, will be the company's historical performance, estimates of the business potential and earnings prospects of the company, an assessment of the company's management and the consideration of the above factors in relation to market valuation of companies in related businesses.

An application will be made to quote the common stock on Nasdaq under the symbol "BBIO".

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater number of shares than they are required to purchase in the offering, and a short position represents the amount of such sales that have not been covered by subsequent purchases. A "covered short position" is a short position that is not greater than the amount of additional shares for which the underwriters' option described above may be exercised. The underwriters may cover any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to cover the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option described above. "Naked" short sales are any short sales that create a short position greater than the amount of additional shares for which the option described above may be exercised. The underwriters must cover any such naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of the company's stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. The underwriters are not required to engage in these activities and may end any of these activities at any time. These transactions may be effected on NYSE, NASDAQ NMS or relevant exchange, in the over-the-counter market or otherwise.

European Economic Area

In relation to each Member State of the European Economic Area which has implemented the Prospectus Directive (each, a "Relative Member State") an offer to the public of our common shares may not be made in that Relevant Member State, except that an offer to the public in that Relevant Member State of our common shares may be made at any time under the following exemptions under the Prospectus Directive:

- To any legal entity which is a qualified investor as defined in the Prospectus Directive;
- To fewer than 150 natural or legal persons (other than qualified investors as defined in the Prospectus Directive), subject to obtaining the prior consent of the Representatives for any such offer; or
- In any other circumstances falling within Article 3(2) of the Prospectus Directive;

provided that no such offer or shares of our common stock shall result in a requirement for the publication by us or any Brazilian placement agent of a prospectus pursuant to Article 3 of the Prospectus Directive.

For the purposes of this provision, the expression an "offer to public" in relation to our common shares in any Relevant Member State means the communication in any form and by any means of sufficient information on the terms of the offer and our common shares to be offered so as to enable an investor to decide to purchase our common shares, as the same may be varied in that Member State by any measure implementing the Prospectus Directive in that Member State, the expression "Prospectus Directive" means Directive 2003/71/EC (as

amended), including by Directive 2010/73/EU and includes any relevant implementing measure in the Relevant Member State.

This European Economic Area selling restriction is in addition to any other selling restrictions set out below.

United Kingdom

In the United Kingdom, this prospectus is only addressed to and directed as qualified investors who are (i) investment professionals falling within Article 19(5) of the Financial Services and Markets Act 2000 (Financial Promotion) Order 2005 (the Order); or (ii) high net worth entities and other persons to whom it may lawfully be communicated, falling within Article 49(2)(a) to (d) of the Order (all such persons together being referred to as "relevant persons"). Any investment or investment activity to which this prospectus relates is available only to relevant persons and will only be engaged with relevant persons. Any person who is not a relevant person should not act or relay on this prospectus or any of its contents.

Canada

The securities may be sold in Canada only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions, and Ongoing Registrant Obligations. Any resale of the securities must be made in accordance with an exemption form, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this offering memorandum (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Hong Kong

The shares may not be offered or sold in Hong Kong by means of any document other than (i) in circumstances which do not constitute an offer to the public within the meaning of the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32 of the Laws of Hong Kong) ("Companies (Winding Up and Miscellaneous Provisions) Ordinance") or which do not constitute an invitation to the public within the meaning of the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong) ("Securities and Futures Ordinance"), or (ii) to "professional investors" as defined in the Securities and Futures Ordinance and any rules made thereunder, or (iii) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance, and no advertisement, invitation or document relating to the shares may be issued or may be in the possession of any person for the purpose of issue (in each case whether in Hong Kong or elsewhere), which is directed at, or the contents of which are likely to be accessed or read by, the public in Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" in Hong Kong as defined in the Securities and Futures Ordinance and any rules made thereunder.

Singapore

This prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Singapore other than (i) to an institutional investor (as defined under Section 4A of the Securities and Futures Act, Chapter 289 of Singapore (the "SFA")) under Section 274 of the SFA, (ii) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA, in each case subject to conditions set forth in the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor, the securities (as defined in Section 239(1) of the SFA) of that corporation shall not be transferable for 6 months after that corporation has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer in that corporation's securities pursuant to Section 275(1A) of the SFA, (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32 of the Securities and Futures (Offers of Investments) (Shares and Debentures) Regulations 2005 of Singapore ("Regulation 32")

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is a trust (where the trustee is not an accredited investor (as defined in Section 4A of the SFA)) whose sole purpose is to hold investments and each beneficiary of the trust is an accredited investor, the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferable for 6 months after that trust has acquired the shares under Section 275 of the SFA except: (1) to an institutional investor under Section 274 of the SFA or to a relevant person (as defined in Section 275(2) of the SFA), (2) where such transfer arises from an offer that is made on terms that such rights or interest are acquired at a consideration of not less than S$200,000 (or its equivalent in a foreign currency) for each transaction (whether such amount is to be paid for in cash or by exchange of securities or other assets), (3) where no consideration is or will be given for the transfer, (4) where the transfer is by operation of law, (5) as specified in Section 276(7) of the SFA, or (6) as specified in Regulation 32.

Japan

The securities have not been and will not be registered under the Financial Instruments and Exchange Act of Japan (Act No. 25 of 1948, as amended), or the FIEA. The securities may not be offered or sold, directly or indirectly, in Japan or to or for the benefit of any resident of Japan (including any person resident in Japan or any corporation or other entity organized under the laws of Japan) or to others for reoffering or resale, directly or indirectly, in Japan or to or for the benefit of any resident of Japan, except pursuant to an exemption from the registration requirements of the FIEA and otherwise in compliance with any relevant laws and regulations of Japan.

The company estimates that its share of the total expenses of the offering, excluding underwriting discounts and commissions, will be approximately $.

The company has agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act of 1933.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the issuer and to persons and entities with relationships with the issuer, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively trade securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities and/or instruments of the issuer (directly, as collateral securing other obligations or otherwise) and/or persons and entities with relationships with the issuer. The underwriters and their respective affiliates may also communicate independent investment recommendations, market color or trading ideas and/or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Affiliates of KKR Capital Markets LLC own more than 10% of our common stock. Because KKR Capital Markets LLC is an underwriter for this offering, it is deemed to have a “conflict of interest” within the meaning of FINRA Rule 5121(f)(5)(B). Accordingly, this offering is being made in compliance with the requirements of FINRA Rule 5121. Since KKR Capital Markets LLC is not primarily responsible for managing this offering, pursuant to FINRA Rule 5121, the appointment of a qualified independent underwriter is not necessary. KKR Capital Markets LLC will not confirm sales to discretionary accounts without the prior written approval of the account holder.

LEGAL MATTERS

The validity of the common stock offered hereby will be passed upon for us by Goodwin Procter LLP, San Francisco, California and for the underwriters by Latham & Watkins LLP, Menlo Park, California.

EXPERTS

The combined and consolidated financial statements included in this Prospectus, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report appearing herein. Such combined and consolidated financial statements are included in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 (File Number 333-) under the Securities Act with respect to the common stock we are offering by this prospectus. This prospectus does not contain all of the information included in the registration statement. For further information pertaining to us and our common stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

Upon the closing of the offering, we will be subject to the informational requirements of the Exchange Act and will file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, at the SEC's website at www.sec.gov. We also maintain a website at https://bridgebio.com. Upon completion of the offering, you may access, free of charge, our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and amendment to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

BRIDGEBIO PHARMA LLC
INDEX TO THE COMBINED AND CONSOLIDATED FINANCIAL STATEMENTS

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the members and the Board of Managers of BridgeBio Pharma LLC

Opinion on the Financial Statements

We have audited the accompanying combined and consolidated balance sheets of BridgeBio Pharma LLC, its subsidiaries and controlled entities (the "Company") as of December 31, 2017 and 2018, the related combined and consolidated statements of operations and comprehensive loss, redeemable convertible preferred units, redeemable founder units, redeemable common units, management incentive units, redeemable convertible noncontrolling interests and members' deficit, and cash flows, for each of the two years in the period ended December 31, 2018, and the related notes (collectively referred to as the "financial statements"). In our opinion, the financial statements present fairly, in all material respects, the financial position of the Company as of December 31, 2017 and 2018, and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2018, in conformity with accounting principles generally accepted in the United States of America.

Basis for Opinion

These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on the Company's financial statements based on our audit. We are a public accounting firm registered with the Public Company Accounting Oversight Board (United States) (PCAOB) and are required to be independent with respect to the Company in accordance with the U.S. federal securities laws and the applicable rules and regulations of the Securities and Exchange Commission and the PCAOB.

We conducted our audits in accordance with the standards of the PCAOB and in accordance with auditing standards generally accepted in the United States of America. Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement, whether due to error or fraud. The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. As part of our audits, we are required to obtain an understanding of internal control over financial reporting but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

Our audits included performing procedures to assess the risks of material misstatement of the financial statements, whether due to error or fraud, and performing procedures that respond to those risks. Such procedures included examining, on a test basis, evidence regarding the amounts and disclosures in the financial statements. Our audits also included evaluating the accounting principles used and significant estimates made by management, as well as evaluating the overall presentation of the financial statements. We believe that our audits provides a reasonable basis for our opinion.

/s/ Deloitte & Touche LLP

San Francisco, California
April 15, 2019

We have served as the Company's auditor since 2018.

BRIDGEBIO PHARMA LLC

Combined and Consolidated Balance Sheets
(in thousands, except units and per unit amounts)

	December 31, 2017	December 31, 2018
Assets		
Current assets:		
Cash and cash equivalents	$ 91,995	$ 436,086
Prepaid expenses and other current assets	5,136	9,137
Total current assets	97,131	445,223
Property and equipment, net	440	1,575
PellePharm investment	—	17,050
Other assets	473	1,093
Total assets	$ 98,044	$ 464,941
Liabilities, Redeemable Convertible Preferred Units, Redeemable Founder Units, Redeemable Common Units, Management Incentive Units, Redeemable Convertible Noncontrolling Interests and Members' Deficit		
Current liabilities:		
Accounts payable	$ 1,885	$ 13,509
Accrued compensation and benefits	1,426	4,047
Accrued research and development liabilities	3,129	8,915
Accrued distributions to unitholders	997	997
LEO call option liability	—	3,009
Other accrued liabilities	1,113	2,100
Total current liabilities	8,550	32,577
Term loans, noncurrent	—	54,507
Other liabilities	312	495
Total liabilities	8,862	87,579
Commitments and contingencies (Note 9)		
Redeemable convertible preferred units (Series A, Series B, Series C and Series D); no par value; 257,000,129 and 407,955,726 units authorized as of December 31, 2017 and 2018; 219,406,923 and 407,955,726 units issued and outstanding as of December 31, 2017 and 2018; aggregate liquidation value of $507,032 as of December 31, 2018	143,867	478,865
Redeemable founder units; no par value; 11,420,741 units authorized, issued and outstanding as of December 31, 2017 and 2018; aggregate liquidation value of $6,202 as of December 31, 2018	1,754	1,754
Redeemable common units; no par value; 9,098,522 units authorized as of December 31, 2017 and 2018; 5,856,075 and 7,197,783 units issued and outstanding as of December 31, 2017 and 2018; aggregate liquidation value of $3,910 as of December 31, 2018	1,431	1,619
Management incentive units; no par value; 45,428,102 and 48,695,602 units authorized as of December 31, 2017 and 2018; 9,835,925 and 19,117,628 issued and outstanding as of December 31, 2017 and 2018	226	3,221
Redeemable convertible noncontrolling interests	833	122
Members' deficit:		
Accumulated deficit	(61,427)	(170,580)
Total BridgeBio members' deficit	(61,427)	(170,580)
Noncontrolling interests	2,498	62,361
Total members' deficit	(58,929)	(108,219)
Total liabilities, redeemable convertible preferred units, redeemable founder units, redeemable common units, management incentive units, redeemable convertible noncontrolling interests and members' deficit	$ 98,044	$ 464,941

The accompanying notes are an integral part of these combined and consolidated financial statements.

BRIDGEBIO PHARMA LLC

Combined and Consolidated Statements of Operations and Comprehensive Loss
(in thousands, except units and per unit amounts)

	Year Ended December 31,	
	2017	**2018**
Operating expenses:		
Research and development	$ 30,556	$ 140,073
General and administrative	13,302	43,587
Total operating expenses	43,858	183,660
Loss from operations	(43,858)	(183,660)
Other income (expense), net:		
Interest income	39	2,004
Interest expense	(13)	(2,547)
Gain on deconsolidation of PellePharm	—	19,327
Loss from PellePharm	—	(275)
LEO call option expense	—	(3,009)
Other expense	—	(1,291)
Total other income (expense), net	26	14,209
Net loss and comprehensive loss	(43,832)	(169,451)
Net loss attributable to redeemable convertible noncontrolling interests and noncontrolling interests	13,267	38,702
Net loss and comprehensive loss attributable to BridgeBio	(30,565)	(130,749)
Cumulative returns on redeemable convertible preferred units (Series A, Series B and Series C)	(5,672)	(13,287)
Net loss attributable to redeemable founder units and redeemable common units	$ (36,237)	$ (144,036)
Net loss per unit attributable to redeemable founder unitholders and redeemable common unitholders, basic and diluted	$ (2.18)	$ (8.01)
Total weighted-average redeemable founder units and redeemable common units used in computing net loss per unit, basic and diluted	16,650,073	17,991,781

The accompanying notes are an integral part of these combined and consolidated financial statements.

BRIDGEBIO PHARMA LLC

Combined and Consolidated Statements of Redeemable Convertible Preferred Units, Redeemable Founder Units, Redeemable Common Units, Management Incentive Units, Redeemable Convertible Noncontrolling Interests and Members' Deficit
(in thousands, except units and per unit amounts)

	Redeemable Convertible Preferred Units		Redeemable Founder Units		Redeemable Common Units		Management Incentive Units		Redeemable Convertible Noncontrolling Interests	Accumulated Deficit	Noncontro-lling Interests	Total Members' Deficit
	Units	Amount	Units	Amount	Units	Amount	Units	Amount				
Balances as of January 1, 2017	88,943,092	$ 31,280	11,420,741	$ 1,124	4,514,367	$ 589	3,588,901	$ 26	$ 1,520	$ (18,130)	$ 2,595	$ (15,535)
MyoKardia distributions (Note 13)	—	(1,727)	—	(234)	—	(187)	—	—	—	—	—	—
Issuance and vesting of redeemable common units and associated equity-based compensation	—	—	—	—	1,341,708	341	—	—	—	—	—	—
Issuance and vesting of management incentive units and associated equity-based compensation	—	—	—	—	—	—	6,247,024	200	—	—	—	—
Issuance of Series B redeemable convertible preferred units at $0.44 per unit, net of issuance costs of $0	26,901,279	11,837	—	—	—	—	—	—	—	—	—	—
Settlement of Series B redeemable convertible preferred unit tranche liability on issuance of Series B redeemable convertible preferred units (Note 13)	—	183	—	—	—	—	—	—	—	—	—	—
Issuance of Series C redeemable convertible preferred units at $0.9656 per unit, net of issuance costs of $818	99,420,050	95,182	—	—	—	—	—	—	—	—	—	—
Conversion of promissory notes into Series C redeemable convertible preferred units at $0.9656 per unit	4,142,502	4,000	—	—	—	—	—	—	—	—	—	—
Capital transaction upon Merger (Note 2)	—	2,980	—	864	—	688	—	—	—	(4,532)	—	(4,532)
Repayment of nonrecourse notes	—	132	—	—	—	—	—	—	—	—	—	—
Issuance of noncontrolling interest	—	—	—	—	—	—	—	—	2,839	—	1,444	1,444
Rebalancing adjustment for noncontrolling interest	—	—	—	—	—	—	—	—	(769)	(8,200)	8,969	769
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	(2,757)	(30,565)	(10,510)	(41,075)
Balances as of December 31, 2017	219,406,923	143,867	11,420,741	1,754	5,856,075	1,431	9,835,925	226	833	(61,427)	2,498	(58,929)
Issuance and vesting of redeemable common units and associated equity-based compensation	—	—	—	—	1,341,708	188	—	—	—	—	—	—
Issuance and vesting of management incentive units and associated equity-based compensation	—	—	—	—	—	—	9,281,703	2,995	—	—	—	—
Issuance of Series C redeemable convertible preferred units at $0.9656 per unit, net of issuance costs of $0	37,593,206	36,300	—	—	—	—	—	—	—	—	—	—
Issuance of Series D redeemable convertible preferred units at $1.9823 per unit, net of issuance costs of $541	150,955,597	298,698	—	—	—	—	—	—	—	—	—	—
Issuance of noncontrolling interest	—	—	—	—	—	—	—	—	62,363	—	99,479	99,479
Repurchase of noncontrolling interest	—	—	—	—	—	—	—	—	—	—	(44,234)	(44,234)
Conversion of redeemable noncontrolling interest into nonredeemable noncontrolling interest due to Eidos initial public offering	—	—	—	—	—	—	—	—	(37,318)	—	37,318	37,318
Rebalancing adjustment for noncontrolling interest	—	—	—	—	—	—	—	—	(14,380)	21,596	(7,216)	14,380
Deconsolidation of PellePharm	—	—	—	—	—	—	—	—	1,154	—	688	688
Net loss and comprehensive loss	—	—	—	—	—	—	—	—	(12,530)	(130,749)	(26,172)	(156,921)
Balances as of December 31, 2018	407,955,726	$478,865	11,420,741	$ 1,754	7,197,783	$ 1,619	19,117,628	$ 3,221	$ 122	$ (170,580)	$ 62,361	$(108,219)

The accompanying notes are an integral part of these combined and consolidated financial statements.

BRIDGEBIO PHARMA LLC

Combined and Consolidated Statements of Cash Flows
(in thousands)

	Year Ended December 31,	
	2017	2018
Operating activities		
Net loss	$(43,832)	$(169,451)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	260	245
Equity-based compensation	1,841	6,067
Loss on disposal of property and equipment, net	—	7
Gain on deconsolidation of PellePharm	—	(19,327)
Loss from PellePharm	—	275
Accretion of term loans and convertible promissory notes	—	783
Acquired in-process research and development assets	—	17,922
Shares issued under license agreements	—	190
LEO call option expense	—	3,009
Change in fair value of Eidos financial instruments	—	1,146
Changes in operating assets and liabilities:		
Prepaid expenses and other current assets	(4,301)	(6,100)
Other assets	(92)	(843)
Accounts payable	1,577	16,700
Accrued compensation and benefits	1,131	3,396
Accrued research and development liabilities	2,650	5,785
Other accrued liabilities	10	3,371
Other liabilities	268	182
Net cash used in operating activities	(40,488)	(136,643)
Investing activities		
Decrease in cash and cash equivalents resulting from deconsolidation of PellePharm	—	(2,858)
Cash paid for in-process research and development assets acquired	—	(16,000)
Purchases of property and equipment	(464)	(2,178)
Net cash used in investing activities	(464)	(21,036)
Financing activities		
Proceeds from the issuance of Series B redeemable convertible preferred units, net of issuance costs	11,837	—
Proceeds from the issuance of Series C redeemable convertible preferred units, net of issuance costs	95,182	36,300
Proceeds from the issuance of Series D redeemable convertible preferred units, net of issuance costs	—	298,698
Proceeds from issuance of common stock in connection with the initial public offering of Eidos, net of underwriting discounts and commissions	—	95,536
Proceeds from issuance of promissory notes	4,000	1,000
Proceeds from repayment of nonrecourse notes	132	—
Proceeds from term loans, net of issuance costs	—	56,438
Repayment of term loans	—	(1,097)
Proceeds from third-party investors in redeemable convertible noncontrolling interests	2,839	58,430
MyoKardia distributions (Note 13)	(1,151)	—

	Year Ended December 31, 2017	2018
Proceeds from repayment of the loans received by noncontrolling interest shareholder	—	37
Proceeds from subsidiary stock option exercises	144	440
Repurchase of noncontrolling interest	—	(44,234)
Net cash provided by financing activities	112,983	501,548
Net increase in cash, cash equivalents and restricted cash	72,031	343,869
Cash, cash equivalents and restricted cash at beginning of year	20,345	92,376
Cash, cash equivalents and restricted cash at end of year	$ 92,376	$436,245
Supplemental Disclosures of Cash Flow Information:		
Cash paid for interest	$ —	$ 1,574
Supplemental Disclosures of Non-Cash Investing and Financing Information:		
Conversion of promissory note upon issuance of Series C redeemable convertible preferred units	$ 4,000	$ —
Rebalancing of non-controlling interest due to change in ownership (Note 7)	$ 8,200	$ 21,596
Conversion of promissory note into redeemable convertible noncontrolling interest	$ —	$ 1,005
Settlement of Series B redeemable convertible preferred unit tranche liability	$ 183	$ —
Accrued MyoKardia distributions (Note 13)	$ 997	$ —
Capital transaction upon Merger (Note 2)	$ 4,532	$ —
Conversion of redeemable noncontrolling interest into noncontrolling interest	$ —	$ 37,318
Fair value of redeemable convertible noncontrolling interest issued for acquired in-process research and development assets	$ —	$ 1,922

The accompanying notes are an integral part of these combined and consolidated financial statements.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

1. Organization and Description of Business

BridgeBio Pharma LLC ("BridgeBio") was established to identify and advance transformative medicines to treat patients who suffer from Mendelian diseases, which are diseases that arise from defects in a single gene, and cancers with clear genetic drivers. BridgeBio's pipeline of programs spans early discovery to late stage development. Since inception, BridgeBio has either created wholly-owned subsidiaries or has made investments in certain controlled entities, including partially-owned subsidiaries for which BridgeBio has a majority voting interest and variable interest entities ("VIEs") for which BridgeBio is the primary beneficiary (collectively, the "Company"). BridgeBio is headquartered in Palo Alto, California.

Liquidity and Going Concern

The Company has incurred significant losses and negative cash flows from operations since its inception and has an accumulated deficit of $170.6 million as of December 31, 2018. The Company has cash and cash equivalents of $436.1 million as of December 31, 2018, of which $238.7 million was held by BridgeBio. The remaining cash and cash equivalents were held by the Company's wholly-owned subsidiaries and controlled entities and these funds are designated for specific entity usage, except in limited circumstances.

The Company has historically financed its operations primarily through the sale of its equity securities and, to a lesser extent, debt borrowings. To date, none of the Company's product candidates have been approved for sale and therefore the Company has not generated any revenue from product sales. Management expects operating losses to continue for the foreseeable future. The Company believes that its existing cash and cash equivalents will be sufficient for the Company to continue as a going concern for at least one year from the issuance date of its December 31, 2018 combined and consolidated financial statements.

2. Summary of Significant Accounting Policies

Basis of Presentation and Consolidation

Prior to June 2017, the Company consisted of two separate legal entities, BridgeBio and BridgeBio LLC. Historically, the Company's members have provided funding to both entities, and in June 2017, to consolidate the investments made in both entities, BridgeBio and BridgeBio LLC merged through a transaction under common control (the "Merger"). As part of the Merger, BridgeBio LLC's redeemable convertible Series A preferred units, redeemable convertible Series B preferred units, redeemable founder units and redeemable common units were cancelled and holders of such units were issued the same number of BridgeBio's redeemable convertible Series A preferred units, redeemable convertible Series B preferred units, redeemable founder units and redeemable common units. As a result of the Merger, the Company recorded a capital transaction of $4.5 million to accumulated deficit in June 2017, which represents the difference between the carrying amounts of the cancelled and newly issued units. As a result of the Merger, there was no gain or loss recognized at BridgeBio LLC for tax purposes.

The combined and consolidated financial statements represent the combined balances of BridgeBio and BridgeBio LLC since inception. The combined and consolidated financial statements include the accounts of BridgeBio as well as wholly-owned subsidiaries and controlled entities including partially-owned subsidiaries for which BridgeBio has a majority voting interest under the voting interest model ("VOE") and VIEs for which BridgeBio is the primary beneficiary under the VIE model (collectively, the "consolidated entities"). Ownership interests in entities over which the Company has significant influence, but not a controlling financial interest, are accounted for as equity method investments. The accompanying combined and consolidated financial statements are presented in accordance with generally accepted accounting principles in the United States of America ("GAAP"). All intercompany transactions and balances have been eliminated upon consolidation.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

Ownership interests in consolidated entities that are held by entities other than BridgeBio are reported as redeemable convertible noncontrolling interests and noncontrolling interests in the combined and consolidated balance sheets. Losses attributed to redeemable convertible noncontrolling interests and noncontrolling interests are reported separately in the combined and consolidated statements of operations and comprehensive loss.

Variable Interest Entities and Voting Interest Entities

BridgeBio consolidates those entities in which it has a direct or indirect controlling financial interest based on either the VIE model or the VOE model.

VIEs are entities that, by design, either (i) lack sufficient equity to permit the entity to finance its activities without additional subordinated financial support from other parties; or (ii) have equity investors that do not have the ability to make significant decisions relating to the entity's operations through voting rights, or do not have the obligation to absorb the expected losses, or do not have the right to receive the residual returns of the entity.

The primary beneficiary of a VIE is required to consolidate the assets and liabilities of the VIE. The primary beneficiary is the party that has both (i) the power to direct the activities of the VIE that most significantly impact the VIE's economic performance; and (ii) the obligation to absorb losses or the right to receive benefits from the VIE that could potentially be significant to the VIE through its interest in the VIE.

To assess whether BridgeBio has the power to direct the activities of a VIE that most significantly impact the VIE's economic performance, BridgeBio considers all the facts and circumstances, including its role in establishing the VIE and its ongoing rights and responsibilities. This assessment includes identifying the activities that most significantly impact the VIE's economic performance and identifying which party, if any, has power over those activities. In general, the parties that make the most significant decisions affecting the VIE (management and representation on the Board of Directors) and have the right to unilaterally remove those decision-makers are deemed to have the power to direct the activities of a VIE.

To assess whether BridgeBio has the obligation to absorb losses of the VIE or the right to receive benefits from the VIE that could potentially be significant to the VIE, BridgeBio considers all of its economic interests, which primarily include equity investments in preferred and common stock and issuance of notes that are convertible into preferred stock, that are deemed to be variable interests in the VIE. This assessment requires BridgeBio to apply judgment in determining whether these interests, in the aggregate, are considered potentially significant to the VIE. Factors considered in assessing the significance include: the design of the VIE, including its capitalization structure; subordination of interests; payment priority; relative share of interests held across various classes within the VIE's capital structure; and the reasons why the interests are held by BridgeBio.

At the VIE's inception, BridgeBio determines whether it is the primary beneficiary and if the VIE should be consolidated based on the facts and circumstances. BridgeBio then performs on-going reassessments of the VIE based on reconsideration events and reevaluates whether a change to the consolidation conclusion is required each reporting period. Refer to Note 6.

Entities that do not qualify as a VIE are assessed for consolidation under the VOE model. Under the VOE model, BridgeBio consolidates the entity if it determines that it, directly or indirectly, has greater than 50% of the voting shares and that other equity holders do not have substantive voting, participating or liquidation rights. Refer to Note 6.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

BridgeBio has either created or made investments in the following entities:

Consolidated Entities	Relationship as of December 31, 2018	Date Control First Acquired	Ownership % as of January 1, 2017	Ownership % as of December 31, 2017	Ownership % as of December 31, 2018
TheRas, Inc.	Wholly-owned subsidiary	August 2016	100%	100%	100%
BridgeBio Services, Inc.	Wholly-owned subsidiary	April 2017	—	100%	100%
Origin Biosciences, Inc.	Wholly-owned subsidiary	April 2018	—	—	100%
Fortify Therapeutics, Inc.	Wholly-owned subsidiary	June 2018	—	—	100%
Sub20, Inc.	Wholly-owned subsidiary	June 2018	—	—	100%
Unnamed Entity	Wholly-owned subsidiary	December 2018	—	—	100%
Eidos Therapeutics, Inc.(1)	Partially-owned subsidiary	April 2016	53.8%	79.9%	62.5%
Molecular Skin Therapeutics, Inc.	Controlled VIE	July 2016	80%	56.5%	61.7%
Quartz Therapeutics, Inc.	Controlled VIE	October 2016	100%	89.0%	89.0%
PellePharm, Inc.(2)	VIE	December 2016	52.6%	54.7%	52.1%
Navire Pharma, Inc.	Controlled VIE	February 2017	—	80.0%	78.8%
CoA Therapeutics, Inc.	Controlled VIE	February 2017	—	100%	99.5%
Dermecular Therapeutics, Inc.	Controlled VIE	April 2017	—	86.0%	87.6%
Phoenix Tissue Repair, Inc.	Controlled VIE	July 2017	—	23.0%	56.7%
QED Therapeutics, Inc.	Controlled VIE	January 2018	—	—	94.4%
Adrenas Therapeutics, Inc.	Controlled VIE	January 2018	—	—	90.1%
Orfan Biotech, Inc.	Controlled VIE	January 2018	—	—	85.1%
Ferro Therapeutics, Inc.	Controlled VIE	March 2018	—	—	89.4%
Venthera, Inc.	Controlled VIE	April 2018	—	—	82.0%
Aspa Therapeutics, Inc.	Controlled VIE	June 2018	—	—	92.5%

(1) BridgeBio determined that Eidos Therapeutics, Inc. (“Eidos”) was a controlled VIE as of December 31, 2017 and through its initial public offering in June 2018, at which time it determined that Eidos is no longer a VIE. Subsequent to the Eidos initial public offering and through December 31, 2018, BridgeBio has a majority voting interest in Eidos and consolidates Eidos under the VOE model. Refer to Note 6.

(2) BridgeBio determined that it was the primary beneficiary of PellePharm, Inc. (“PellePharm”) as of December 31, 2017 and through the execution of a series of agreements (the “Leo Agreement”) with LEO Pharma A/S and LEO Spiny Merger Sub, Inc. (“LEO”) in November 2018, at which time BridgeBio determined that it is no longer the primary beneficiary and deconsolidated PellePharm. Refer to Note 6 and Note 8.

Equity Method and Cost Method Investments

The Company utilizes the equity method to account for investments when it possesses the ability to exercise significant influence, but not control, over the operating and financial decisions of the investee. Generally, the ability to exercise significant influence is presumed when the investor possesses more than 20% of the voting interests of the investee. This presumption may be overcome based on specific facts and circumstances that demonstrate that the ability to exercise significant influence is restricted. The Company applies the equity method to investments in common stock and to other investments in entities that have risk and reward characteristics that are substantially similar to an investment in the investee’s common stock.

In applying the equity method, the Company records the investment at cost unless the initial recognition is the result of the deconsolidation of a subsidiary, in which case it is recorded at fair value. The Company subsequently increases or decreases the carrying amount of the investment by its proportionate share of the net earnings or losses and other comprehensive income of the investee based on the Company’s percentage of common stock ownership during the respective reporting period. Payments to investees such as additional investments, loans and expenses incurred on behalf of investees, as well as payments from investees such as

dividends, distributions and repayments of loans are recorded as adjustments in the carrying value of the investment. In the event that net losses of the investee reduce the carrying amount to zero, additional net losses may be recorded if the Company has a cost method investment in the investee, has guaranteed obligations of the investee, or is otherwise committed to provide further financial support for the investee.

The Company utilizes the cost method to account for investments when it does not have significant influence over the investee. Under the cost method, the Company records the investment at cost unless the initial recognition is the result of the deconsolidation of a subsidiary, in which case it is recorded at fair value. The Company recognizes income for any dividends declared from the distribution of the investee's earnings.

As of December 31, 2018, the Company has an equity and cost method investment in PellePharm, which is presented in the combined and consolidated financial statements in a single line item titled "PellePharm Investment." Refer to Note 8 for further discussion on the PellePharm investment.

Under the equity and cost method of accounting, the Company's equity and cost method investments in PellePharm are reviewed for indicators of impairment at each reporting period and are written down to fair value if there is evidence of a loss in value that is other-than-temporary. Factors that may be indicative of an impairment include a series of operating losses of an investee, the absence of an ability to recover the carrying amount of the investment, the inability of the investee to sustain an earnings capacity and a current fair value of an investment that is less than its carrying amount. Indicators that a decline in value may be other-than-temporary include the length of time and the extent to which the estimated fair value or market value has been below the carrying value, the financial condition and the near-term prospects of the investee, the intent and ability of the Company to retain its investment in the investee for a period of time sufficient to allow for any anticipated recovery in market value and general market conditions. The estimation of fair value and whether an other-than-temporary impairment has occurred requires the application of significant judgment and future results may vary from current assumptions. No impairment charge was recognized during the years ended December 31, 2017 and 2018 related to the PellePharm investment.

Use of Estimates

The preparation of combined and consolidated financial statements in conformity with GAAP requires management to make estimates and assumptions that affect the reported amounts of assets, liabilities and disclosure of contingent assets and liabilities at the date of the combined and consolidated financial statements, and the reported amounts of expenses during the reporting period. Significant estimates and assumptions made in the accompanying combined and consolidated financial statements include, but are not limited to, the fair value of the redeemable convertible preferred units, the fair value of the redeemable founder units, the fair value of the redeemable common units, the fair value of the LEO Call Option liability, the fair value of the redeemable convertible preferred unit tranche liability, the valuation of equity-based awards, the valuation of intangible assets, the valuation of equity and cost method investments, income tax uncertainties and accruals for research and development activities. The Company bases its estimates on historical experience and on various other assumptions that are believed to be reasonable. Actual results may differ from those estimates or assumptions.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

Segments

The Company has determined that its chief executive officer is the chief operating decision maker ("CODM"). The Company operates and manages the business as one reporting and one operating segment, which is the business of identifying and advancing transformative medicines to treat patients. The Company's CODM reviews financial information on an aggregate basis for purposes of allocating resources and evaluating financial performance. All of the Company's assets are located in the United States.

Concentration of Credit Risk and Other Risks and Uncertainties

Financial instruments that subject the Company to significant concentrations of credit risk consist primarily of cash, cash equivalents and restricted cash. The Company's cash, cash equivalents and restricted cash are held in financial institutions in the United States. Amounts on deposit may at times exceed federally insured limits. Management believes that the financial institutions are financially sound and, accordingly, minimal credit risk exists with respect to the financial institutions.

The Company is subject to certain risks and uncertainties and believes that changes in any of the following areas could have a material adverse effect on future financial position or results of operations: ability to obtain future financing; regulatory approval and market acceptance of, and reimbursement for, product candidates; performance of third-party clinical research organizations and manufacturers upon which the Company relies; development of sales channels; protection of the Company's intellectual property; litigation or claims against the Company based on intellectual property, patent, product, regulatory or other factors; and the Company's ability to attract and retain employees necessary to support its growth.

The Company is dependent on third-party manufacturers to supply products for research and development activities in its programs. In particular, the Company relies and expects to continue to rely on a small number of manufacturers to supply it with its requirements for the active pharmaceutical ingredients and formulated drugs related to these programs. These programs could be adversely affected by a significant interruption in the supply of active pharmaceutical ingredients and formulated drugs.

Cash, Cash Equivalents and Restricted Cash

The Company considers all highly liquid investments purchased with original maturities of three months or less from the purchase date to be cash equivalents. Cash equivalents consist of amounts invested in money market accounts.

As of December 31, 2017 and 2018, the Company had restricted cash of $0.4 million and $0.2 million, of which $0.2 million at each period end relates to collateral for an operating lease entered into in 2017. Restricted cash is classified in other assets in the accompanying combined and consolidated balance sheets.

The following table provides a reconciliation of cash, cash equivalents and restricted cash reported within the combined and consolidated balance sheets that sum to the total of the amounts shown in the combined and consolidated statements of cash flows:

	December 31,	
	2017	2018
	(in thousands)	
Cash and cash equivalents	$91,995	$436,086
Restricted cash	381	159
Total cash, cash equivalents and restricted cash shown in the combined and consolidated statements of cash flows	$92,376	$436,245

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Notes to Combined and Consolidated Financial Statements

As of December 31, 2017 and 2018, total cash and cash equivalents held by BridgeBio is $74.5 million and $238.7 million. The remaining cash and cash equivalents were held by the Company's wholly-owned subsidiaries and controlled entities and these funds are designated for specific entity usage, except in limited circumstances.

Fair Value Measurements

Assets and liabilities recorded at fair value on a recurring basis in the balance sheets are categorized based upon the level of judgment associated with the inputs used to measure their fair values. Fair value is defined as the exchange price that would be received for an asset or an exit price that would be paid to transfer a liability in the principal or most advantageous market for the asset or liability in an orderly transaction between market participants on the measurement date. Valuation techniques used to measure fair value must maximize the use of observable inputs and minimize the use of unobservable inputs. The authoritative guidance on fair value measurements establishes a three-tier fair value hierarchy for disclosure of fair value measurements as follows:

Level 1—Observable inputs such as unadjusted, quoted prices in active markets for identical assets or liabilities at the measurement date;

Level 2—Inputs (other than quoted prices included in Level 1) are either directly or indirectly observable for the asset or liability. These include quoted prices for similar assets or liabilities in active markets and quoted prices for identical or similar assets or liabilities in markets that are not active; and

Level 3—Unobservable inputs that are supported by little or no market activity and that are significant to the fair value of the assets or liabilities.

To the extent that the valuation is based on models or inputs that are less observable or unobservable in the market, the determination of fair value requires more judgment. Accordingly, the degree of judgment exercised by the Company in determining fair value is greatest for instruments categorized in Level 3. A financial instrument's level within the fair value hierarchy is based on the lowest level of any input that is significant to the fair value measurement.

The carrying amounts reflected in the accompanying combined and consolidated balance sheets for cash and cash equivalents, restricted cash, prepaid expenses and other current assets, accounts payable and accrued expenses approximate their fair values, due to their short-term nature.

The fair value of the Company's outstanding term loans with Hercules, Capital Inc. (see Note 10) is estimated using the net present value of the payments, discounted at an interest rate that is consistent with a market interest rate, which is a Level 2 input. The estimated fair value of the Company's outstanding term loans approximates the carrying amount, as the term loan bears a floating rate that approximates the market interest rate.

Property and Equipment, net

Property and equipment are stated at cost, net of accumulated depreciation and amortization. Depreciation and amortization of property and equipment is calculated using the straight-line method over the estimated useful lives of the respective assets. Maintenance and repairs that do not improve or extend the life of the assets are expensed when incurred. Upon sale or retirement of assets, the cost and accumulated depreciation and amortization are removed from the combined and consolidated balance sheet and any resulting gain or loss is reflected in the combined and consolidated statement of operations in the period realized.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

The Company's estimated useful lives of its property and equipment are as follows:

Furniture and office equipment	3 - 5 years
Lab equipment	3 - 5 years
Leasehold improvements	Shorter of remaining lease term or estimated useful life

Intangible Asset

The identifiable intangible asset consists of an assembled workforce acquired in an asset acquisition in 2016. This intangible asset was amortized on a straight-line basis over its estimated useful life of one year. The straight-line method of amortization represents the Company's best estimate of the distribution of the economic value of the identifiable intangible asset. The intangible asset is carried at cost less accumulated amortization. Amortization is included in research and development expenses. As of December 31, 2017, the assembled workforce intangible asset was fully amortized.

Asset Acquisitions

The Company measures and recognizes asset acquisitions that are not deemed to be business combinations based on the cost to acquire the assets, which includes transaction costs. Goodwill is not recognized in asset acquisitions. In an asset acquisition, the cost allocated to acquire in-process research and development ("IPR&D") with no alternative future use is charged to research and development expense at the acquisition date.

Impairment of Long-Lived Assets

Long-lived assets are reviewed for impairment annually or whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability is measured by comparison of the carrying amount of an asset group to the future net undiscounted cash flows that the assets are expected to generate. If the carrying amount of an asset group exceeds its estimated future cash flows, an impairment charge is recognized in the amount by which the carrying amount of the asset group exceeds the fair value of the asset group. There was no impairment of long-lived assets for any of the periods presented.

Redeemable Convertible Series B Preferred Unit Tranche Liability

The Company has accounted for the freestanding right that its Series B redeemable convertible preferred unit investors have to purchase additional shares of the Company's Series B redeemable convertible preferred units at a fixed price in subsequent closings as a tranche liability, which was recognized at fair value upon issuance. The tranche liability is subject to remeasurement to fair value at each combined and consolidated balance sheet date. Any change in the fair value of the tranche liability is recognized as a component of other income (expense) in the combined and consolidated statements of operations. In April 2017, the tranche liability was settled upon the closing of the Company's Series B redeemable convertible preferred unit financing.

LEO Call Option Liability

On November 19, 2018, PellePharm entered into the LEO Agreement with LEO pursuant to which LEO was granted an exclusive, irrevocable option to acquire PellePharm. The Company has accounted for this option held by LEO to acquire its PellePharm ownership interest (the "LEO Call Option") as a current liability as BridgeBio has the obligation to sell its PellePharm shares to LEO at a pre-determined price if the option is exercised. The

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

LEO Call Option was recorded at fair value upon execution of the LEO Agreement. The LEO Call Option is subject to remeasurement to fair value at each combined and consolidated balance sheet date until the LEO Call Option is either exercised or expires as it does not qualify for equity classification. Any change in the fair value of the LEO Call Option is recognized as a component of other income (expense) in the combined and consolidated statements of operations. Refer to Note 3 and Note 6 for further discussion.

Eidos Embedded Derivative Liability

Eidos determined that the automatic redemption of a convertible promissory note issued in March 2018 into new shares of Eidos preferred stock at 70% of the issuance price upon the closing of a qualified financing is an embedded derivative liability. The embedded derivative liability balance was settled upon the redemption of the convertible promissory notes into redeemable convertible preferred stock of Eidos in March 2018. Refer to Note 3 and Note 6 for further discussion.

Eidos Redeemable Convertible Preferred Stock Tranche Liability

Eidos determined that its obligation to issue additional shares of Eidos redeemable convertible preferred stock upon the achievement of certain milestones or at the option of the holders represents a freestanding financial instrument (the "Eidos Tranche Liability"). The instrument was subject to remeasurement at each combined and consolidated balance sheet date with changes in fair value being recognized as a component of other income (expense) in the statements of operations. The Eidos Tranche Liability balance was reclassified to redeemable convertible preferred stock upon the issuance of the additional shares in May 2018. Refer to Note 3 and Note 6 for further discussion.

Eidos Redeemable Convertible Preferred Stock Warrant Liability

Eidos' redeemable convertible preferred stock warrants (the "Eidos Warrants") required liability classification (the "Eidos Warrant Liability") as the underlying Eidos preferred stock was deemed redeemable. Upon initial recognition, the Eidos Warrants were recorded at the estimated fair value. The Eidos Warrants were subject to remeasurement at each combined and consolidated balance sheet date, with changes in fair value being recognized as a component of other income (expense). The Eidos Warrant Liability was adjusted for changes in fair value until the completion of the Eidos initial public offering (the "Eidos IPO"), at which time the Eidos Warrants were net exercised into shares of Eidos common stock and the related Eidos Warrant Liability was reclassified to Eidos common stock and additional paid-in capital. Refer to Note 3 and Note 6 for further discussion.

Classification of the Redeemable Units and Management Incentive Units

The Company has classified all of its outstanding redeemable convertible Series D preferred units (the "Series D Preferred Units"), redeemable convertible Series C preferred units (the "Series C Preferred Units"), redeemable convertible Series B preferred units (the "Series B Preferred Units") and redeemable convertible Series A preferred units (the "Series A Preferred Units" or, collectively, the "Preferred Units"), as well as its redeemable founder units (the "Founder Units"), redeemable common units (the "Common Units") and management incentive units (the "Management Incentive Units") outside of members' deficit in the accompanying combined and consolidated balance sheets because these units contain certain redemption features that are not solely within the control of the Company.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

Research and Development Expenses

Research and development costs are expensed as incurred. Research and development expenses consist of salaries, benefits and other personnel related costs including equity-based compensation expense, laboratory supplies, preclinical studies, clinical trials and related clinical manufacturing costs, costs related to manufacturing preparations, fees paid to other entities to conduct certain research and development activities on the Company's behalf and allocated facility and other related costs. Non-refundable advance payments for goods or services that will be used or rendered for future research and development activities are deferred and capitalized as prepaid expenses until the related goods are delivered or services are performed.

Accrued Research and Development Liabilities

The Company records accrued liabilities for estimated costs of research and development activities conducted by third-party service providers, which include the conduct of preclinical studies and clinical trials, and contract manufacturing activities. The Company records the estimated costs of research and development activities based upon the estimated amount of services provided but not yet invoiced and includes these costs in accrued research and development liabilities in the combined and consolidated balance sheets and within research and development expense in the combined and consolidated statements of operations. These costs are a significant component of the Company's research and development expenses.

The Company accrues for these costs based on factors such as estimates of the amount of work completed through discussions with internal personnel and external service providers as to the progress or stage of completion of the services and in accordance with agreements established with its third-party service providers for such services. The Company makes significant judgments and estimates in determining the accrued research and development liabilities balance in each reporting period. As actual costs become known, the Company adjusts its accrued estimates. Although the Company does not expect its estimates to be materially different from amounts actually incurred, the status and timing of services performed, the number of patients enrolled in clinical trials and the rate of patient enrollment may vary from its estimates and could result in its reporting amounts that are too high or too low in any particular period. The Company's accrued expenses are dependent, in part, upon the receipt of timely and accurate reporting from clinical research organizations and other third-party service providers. The Company records advance payments to service providers as prepaid assets, which are expensed as the contracted services are performed. To date, there have been no material differences between the Company's accrued costs and actual costs.

Equity-Based Compensation

Equity-based compensation is measured at the grant date for all equity-based awards made to employees and non-employees based on the fair value of the awards and is recognized as expense on a straight-line basis over the requisite service period, which is generally the vesting period. The Company has elected to recognize the actual forfeitures by reducing the equity-based compensation in the same period as the forfeitures occur. The method for how fair value is determined for the awards is described in Note 14. Equity-based compensation for awards made to non-employees was measured as per ASC 505-50 until the Company early adopted Accounting Standards Update ("ASU") *2018-07 Compensation-Stock Compensation (Topic 718)* on January 1, 2017. The Company remeasured its equity-classified non-employee awards for which a measurement date had not been established at their adoption date fair-value based measurement (January 1, 2017) and determined there was no cumulative-effect adjustment to opening accumulated deficit. Subsequent to the adoption of ASU 2018-07, the Company accounts for non-employee awards similar to employee awards.

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BridgeBio has granted Management Incentive Units and Common Units to employees and non-employees. These awards generally have only a service condition and vest over a period of up to five years. The awards have accelerated vesting upon a fundamental transaction (a "Fundamental Transaction") which is defined as (i) a merger, recapitalization or other business combination, (ii) a sale, transfer, exclusive license or disposition of the Company or (iii) a final liquidation, dissolution, winding-up or termination of the Company. BridgeBio's consolidated entities have granted stock options that are exercisable in the underlying entity's equity and have issued restricted stock awards in the underlying entity's equity to employees and non-employees. None of the awards issued by the consolidated entities are issued for BridgeBio members' capital. These awards generally have only a service condition and generally vest over a period of up to four years.

The Company classifies equity-based compensation in its combined and consolidated statements of operations in the same manner in which the award recipients' payroll costs are classified or in which the award recipients' service payments are classified.

Income Taxes

Since BridgeBio is a "pass-through" entity under the United States Internal Revenue Code of 1986, as amended ("the Internal Revenue Code"), the members of the Company are taxed directly on their respective ownership interests in consolidated income and, therefore, no provision or liability for federal income tax has been included in the accompanying combined and consolidated financial statements.

For BridgeBio's consolidated entities, income taxes are accounted for under the asset and liability method. Deferred tax assets and liabilities are recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax base and net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are determined based upon the difference between the consolidated financial statement carrying amounts and the tax basis of assets and liabilities and are measured using the enacted tax rate expected to apply to taxable income in the years in which the differences are expected to be reversed. Deferred tax assets are reduced by a valuation allowance if it is more likely than not that some portion or all of the deferred tax asset will not be realized.

BridgeBio's consolidated entities recognize uncertain income tax positions at the largest amount that is more likely than not to be sustained upon audit by the relevant taxing authority. Changes in recognition or measurement are reflected in the period in which judgment occurs. BridgeBio's consolidated entities' policy is to recognize interest and penalties related to the underpayment of income taxes as a component of the provision for income taxes. To date, there have been no interest or penalties recorded in relation to unrecognized tax benefits.

Defined Contribution Plan

BridgeBio has a defined contribution retirement savings plan under Section 401(k) of the Internal Revenue Code. This plan allows eligible employees to defer a portion of their annual compensation on a pre-tax basis. BridgeBio is authorized to make matching contributions, but has not made such contributions for the years ended December 31, 2017 and 2018.

Comprehensive Loss

Comprehensive loss is defined as a change in equity of a business enterprise during a period, resulting from transactions from non-owner sources. To date, the Company has not had any transactions that are required to be reported in comprehensive loss other than the net loss incurred from operations. Thus, comprehensive loss is the same as net loss for the periods presented.

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Notes to Combined and Consolidated Financial Statements

Emerging Growth Company Status

The Company is an emerging growth company, as defined in the Jumpstart Our Business Startups Act of 2012 (the "JOBS Act"). Under the JOBS Act, emerging growth companies can delay adopting new or revised accounting standards issued subsequent to the enactment of the JOBS Act until such time as those standards apply to private companies. The Company has elected to use this extended transition period for complying with new or revised accounting standards that have different effective dates for public and private companies until the earlier of the date that it (i) is no longer an emerging growth company or (ii) affirmatively and irrevocably opts out of the extended transition period provided in the JOBS Act. As a result, these combined and consolidated financial statements may not be comparable to companies that comply with the new or revised accounting pronouncements as of public company effective dates.

As described in "Recently Adopted Accounting Pronouncements" below, the Company early adopted multiple accounting standards, as the JOBS Act does not preclude an emerging growth company from adopting a new or revised accounting standard earlier than the time that such standard applies to private companies. The Company expects to use the extended transition period for any other new or revised accounting standards during the period in which it remains an emerging growth company.

Net Loss per Unit

The holders of the Company's Preferred Units are entitled to receive distributions, including cumulative returns on their units outstanding, prior and in preference to any distributions on any of the Company's Founder Units and Common Units, which are also entitled to cumulative returns. Cumulative returns for Preferred Units, Common Units and Founder Units no longer accumulate subsequent to the Series D Preferred Unit financing described in Note 13. For the years ended December 31, 2017 and 2018, the Company determined that its Founder Units and Common Units are common stock equivalents.

The numerator for basic net loss per unit is calculated as the net loss adjusted for cumulative returns for Preferred Units for the year ended December 31, 2017 and through the November 2018 Series D issuance date for the year ended December 31, 2018. The denominator for basic net loss per unit is determined as the weighted-average number of Founder Units and Common Units outstanding during the years ended December 31, 2017 and 2018.

In accordance with the two-class method, undistributed earnings are allocated to all participating securities. For the years ended December 31, 2017 and 2018, the Company considers its Preferred Units to be participating securities as they are entitled to participate in undistributed earnings along with Founder Unit and Common Unit members. Management Incentive Units are not participating securities.

Basic net loss per unit is the same as diluted net loss per unit as the inclusion of all potentially dilutive Preferred Units, unvested Common Units, and Management Incentive Units would have been anti-dilutive.

Recently Adopted Accounting Pronouncements

ASU 2015-17 Income Taxes (Topic 740). In November 2015, the FASB issued *ASU 2015-17 Income Taxes (Topic 740): Balance Sheet Classification of Deferred Taxes ("ASU 2015-17")*, which simplifies the presentation of deferred taxes in a classified balance sheet by eliminating the requirement to separate deferred income tax liabilities and assets into current and noncurrent amounts. Instead, ASU 2015-17 requires that all deferred tax liabilities and assets be shown as noncurrent in a classified balance sheet. ASU 2015-17 is effective for fiscal

years beginning after December 15, 2017 and may be applied either prospectively or retrospectively to all periods presented. The Company adopted this guidance on January 1, 2018 retrospective to all periods presented, which did not result in a restatement of its combined and consolidated balance sheet as of December 31, 2017.

ASU 2016-18 Statement of Cash Flows (Topic 230). In November 2016, the FASB issued *ASU 2016-18 Statement of Cash Flows (Topic 230) Restricted Cash—a consensus of the FASB Emerging Issues Task Force ("ASU 2016-18")*, which requires that amounts generally described as restricted cash and restricted cash equivalents should be included with cash and cash equivalents when reconciling the beginning-of-period and end-of-period total amounts shown in the statement of cash flows. ASU 2016-18 is effective for fiscal years beginning after December 15, 2018 and should be applied using a retrospective transition method to each period presented. Early adoption is permitted. The Company early adopted this guidance on January 1, 2017. The adoption of this guidance did not materially impact the Company's combined and consolidated financial statements.

ASU 2016-09 Stock Compensation—Improvements to Employee Share-Based Payment Accounting. In March 2016, the FASB issued *ASU 2016-09, Stock Compensation—Improvements to Employee Share-Based Payment Accounting ("ASU 2016-09")*. ASU 2016-09 was issued to simplify accounting guidance by identifying, evaluating, and improving areas for which cost and complexity can be reduced while maintaining or improving the usefulness of the information provided to users of financial statements. The areas affected by ASU 2016-09 include accounting for income taxes, classification of excess tax benefits in the statement of cash flows, minimum statutory tax withholding requirements, and classification of employee taxes paid in the statement of cash flows when an employer withholds shares for tax-withholding purposes. In addition, under this guidance, an entity can make an accounting policy election to either estimate the number of awards that are expected to vest or account for forfeitures when they occur. ASU 2016-09 is effective for fiscal years beginning after December 15, 2017 and should be applied using a retrospective transition method to each period presented. Early adoption is permitted. Upon early adoption of this guidance on January 1, 2016, the Company changed its policy to account for forfeitures as they occur. The adoption of this guidance did not materially impact the Company's combined and consolidated financial statements.

ASU 2017-01 Business Combinations (Topic 805). In January 2017, the FASB issued *ASU 2017-01, Business Combinations (Topic 805): Clarifying the Definition of a Business ("ASU 2017-01")*. This ASU provides guidance to evaluate whether transactions should be accounted for as acquisitions (or disposals) of assets or businesses. If substantially all of the fair value of the gross assets acquired (or disposed of) is concentrated in a single asset or a group of similar assets, the assets acquired (or disposed of) are not considered a business. This guidance is effective for annual periods beginning after December 15, 2018, with early adoption permitted. The Company early adopted this guidance. As a result of applying this guidance, the Company accounted for its acquisition of PellePharm, Inc. in 2016 as an asset acquisition (see Note 6) and other asset acquisitions (see Note 5).

ASU 2017-09 Compensation—Stock Compensation (Topic 718). In May 2017, the FASB issued *ASU 2017-09, Compensation—Stock Compensation (Topic 718): Scope of Modification Accounting ("ASU 2017-09")*. This ASU provides guidance about which changes to the terms or conditions of a share-based payment award require an entity to apply modification accounting in Topic 718. The guidance is effective for annual and interim periods beginning after December 15, 2017, with early adoption permitted. The Company early adopted this guidance on January 1, 2016. The adoption of this guidance did not have a material impact on the Company's combined and consolidated financial position, results of operations and disclosures.

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ASU 2017-11 Earnings Per Share (Topic 260) Distinguishing Liabilities from Equity (Topic 480) Derivatives and Hedging (Topic 815). In July 2017, FASB issued a two-part *ASU 2017-11, I. Accounting for Certain Financial Instruments with Down Round Features, and II. Replacement of the Indefinite Deferral for Mandatorily Redeemable Financial Instruments of Certain Nonpublic Entities and Certain Mandatorily Redeemable Noncontrolling Interests with a Scope Exception ("ASU 2017-11").* ASU 2017-11 amends guidance in ASC 260, *Earnings Per Share*, ASC 480, *Distinguishing Liabilities from Equity*, and ASC 815, *Derivatives and Hedging.* Part I of this ASU changes the classification analysis of certain equity-linked financial instruments (or embedded features) with down round features and clarifies existing disclosure requirements. Part II does not have an accounting effect. The standard is effective for fiscal years beginning after December 15, 2019 with early adoption permitted. The Company early adopted this guidance effective January 1, 2016. The adoption of this guidance did not have a material impact on the Company's combined and consolidated financial position, results of operations and disclosures.

ASU 2018-07 Compensation-Stock Compensation (Topic 718). In June 2018, the FASB issued *ASU No. 2018-07, Compensation-Stock Compensation (Topic 718): Improvements to Nonemployee Share-Based Payment Accounting ("ASU 2018-07").* ASU 2018-07 is intended to reduce the cost and complexity and to improve financial reporting for nonemployee share-based payments. The ASU expands the scope of Topic 718, (which currently only includes share-based payments to employees) to include share-based payments issued to non-employees for goods or services. Consequently, the accounting for share-based payments to non-employees and employees will be substantially aligned. The standard is effective for fiscal years beginning after December 15, 2019. Early adoption is permitted, but no earlier than a company's adoption date of Topic 606. The Company early adopted this guidance effective January 1, 2017. The adoption of this guidance did not have a material impact on the Company's financial position, results of operations and disclosures.

Recently Issued Accounting Pronouncements Not Yet Adopted

ASU 2016-02 Leases (Topic 842). In February 2016, the FASB issued *ASU 2016-02, Leases ("ASU 2016-02")*, which for operating leases requires the lessee to recognize a right-of-use asset and a lease liability, initially measured at the present value of the lease payments, in its balance sheet. The guidance also requires a lessee to recognize single lease costs, calculated so that the cost of the lease is allocated over the lease term, on a generally straight-line basis. A modified retrospective transition approach is required for leases existing at, or entered into after, the beginning of the earliest comparative period presented in the financial statements, including a number of optional practical expedients that entities may elect to apply. ASU 2016-02 is effective for fiscal years beginning after December 15, 2019 and interim periods within fiscal years beginning after December 15, 2020, with early adoption permitted. The Company has not determined the potential effects of this ASU on its combined and consolidated financial statements.

ASU 2016-15 Statement of Cash Flows (Topic 230) Classification of Certain Cash Receipts and Cash Payments. In August 2016, the FASB issued *ASU 2016-15, Statement of Cash Flows (Topic 230): Classification of Certain Cash Receipts and Cash Payments ("ASU 2016-15")*. The areas affected by ASU 2016-15 are debt prepayment and debt extinguishment costs, settlement of zero-coupon debt instruments or other debt instruments with coupon interest rates that are insignificant in relation to the effective interest rate of the borrowing, contingent consideration payments made after a business combination, proceeds from the settlement of insurance claims, proceeds from the settlement of corporate-owned life insurance policies (including bank-owned life insurance policies), distributions received from equity method investees, beneficial interests in securitization transactions and separately identifiable cash flows and application of the predominance principle. Specifically, under this guidance, cash payments for debt prepayment or debt extinguishment costs will be classified as cash outflows for financing activities. The amendments in ASU 2016-15 are effective for fiscal years beginning after

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December 15, 2018 and interim periods within fiscal years beginning after December 15, 2019. Early adoption is permitted, including adoption in an interim period. If an entity early adopts the amendments in an interim period, any adjustments should be reflected as of the beginning of the fiscal year that includes that interim period. The amendments in ASU 2016-15 will be applied using a retrospective transition method to each period presented. The adoption of ASU 2016-15 is not expected to materially impact the Company's combined and consolidated financial statements.

ASU 2018-13, Fair Value Measurement – Disclosure Framework (Topic 820). In August 2018, the FASB issued *ASU 2018-13, Fair Value Measurement - Disclosure Framework (Topic 820) ("ASU 2018-13").* The updated guidance improves the disclosure requirements on fair value measurements and is effective for fiscal years, and interim periods within those fiscal years, beginning after December 15, 2019. Early adoption is permitted upon issuance of the standard for disclosures modified or removed with a delay of adoption of the additional disclosures until their effective date. The adoption of ASU 2018-13 is not expected to materially impact the Company's combined and consolidated financial statements.

3. Fair Value Measurement

The following table presents information about the Company's financial assets and liabilities that are measured at fair value on a recurring basis and indicates the fair value hierarchy of the valuation:

	December 31, 2017			
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Assets:				
Money market funds	$ 200	$ 200	$ —	$ —
Total assets	$ 200	$ 200	$ —	$ —

	December 31, 2018			
	Total	Level 1	Level 2	Level 3
	(in thousands)			
Assets:				
Money market funds	$395,780	$395,780	$ —	$ —
Total assets	$395,780	$395,780	$ —	$ —
Liabilities:				
LEO Call Option liability	$ 3,009	$ —	$ —	$3,009
Total liabilities	$ 3,009	$ —	$ —	$3,009

There were no transfers between Level 1, Level 2 or Level 3 during the years ended December 31, 2017 and 2018.

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Series B Preferred Unit Tranche Liability

The Company's Series B Preferred Unit tranche liability (see Note 13) contains unobservable inputs that reflect management's own assumptions in which there is little, if any, market activity for at the measurement date. Accordingly, the Company estimated the fair value of the tranche liability using a Black-Scholes option pricing model with the following assumptions:

	Year Ended December 31, 2017
Expected term (in years)	0.3
Expected volatility	43.1%
Risk-free interest rate	0.51%
Dividend yield	—

The following table sets forth a summary of the changes in the estimated fair value of the Company's Series B Preferred Units tranche liability:

	Total (in thousands)
Balance as of January 1, 2017	$ 183
Settlement of the Series B Preferred Units tranche liability in 2017	(183)
Balance as of December 31, 2017	$ —

LEO Call Option Liability

The valuation of the LEO Call Option (see Note 6) contains unobservable inputs that reflect the management's own assumptions for which there is little, if any, market activity at the measurement date. Accordingly, the LEO Call Option liability is remeasured to fair value on a recurring basis using unobservable inputs that are classified as Level 3 inputs.

The Company estimated the fair value of the LEO Call Option by estimating the fair value of various clinical, regulatory, and sales milestones based on the estimated risk and probability of achievement of each milestone, and allocated the value using a Black-Scholes option pricing model with the following assumptions:

	Year Ended December 31, 2018
Probability of milestone achievement	12.0%-84.0%
Discount rate	2.7%-11.0%
Expected term (in years)	0.58-4.38
Expected volatility	67.0%-79.0%
Risk-free interest rate	2.51%-2.78%
Dividend yield	—

The following table sets forth a summary of the changes in the estimated fair value of the LEO Call Option:

	Total (in thousands)
Balance as of January 1, 2018	$ —
Initial fair value upon execution of the Leo Agreement in November 2018	1,879
Change in fair value upon remeasurement recognized in other income (expense)	1,130
Balance as of December 31, 2018	$ 3,009

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Eidos Embedded Derivative Liability

The convertible promissory notes issued by the Company to a minority stockholder of Eidos in March 2018 for $1.0 million contain a redemption feature that was determined to be an embedded derivative requiring bifurcation and separate accounting on issuance (see Note 6). The fair value of the derivative was determined using an income approach that identified the cash flows utilizing a "with-and-without" valuation methodology. The inputs used to determine the estimated fair value of the derivative instrument were based primarily on the probability and timing of an underlying event triggering the redemption.

The following table sets forth a summary of the changes in the fair value of the Eidos embedded derivative liability:

	Total (in thousands)
Balance as of January 1, 2018	$ —
Initial fair value of the Eidos embedded derivative liability issued with the convertible promissory notes	642
Change in fair value upon remeasurement recognized in other income (expense)	—
Settlement of the Eidos embedded derivative liability	(642)
Balance as of December 31, 2018	$ —

The embedded derivative liability balance was settled upon the redemption of convertible promissory notes into redeemable convertible preferred stock of Eidos in March 2018.

Eidos Redeemable Convertible Preferred Stock Tranche Liability

In March 2018, Eidos entered into the Eidos Series B Preferred Stock Purchase Agreement for issuance of shares of Eidos Series B redeemable convertible preferred stock in two closings (see Note 6). The Eidos Tranche Liability related to the obligation of Eidos to issue additional shares. The Eidos Tranche Liability was recorded at fair value and the change in fair value upon remeasurement is recognized as a component of other income (expense) in the combined and consolidated statements of operations. Eidos estimated the initial fair value using a Black-Scholes option pricing model using the following assumptions: a term of 0.08 years, a risk-free rate of 1.63%, a volatility of 36.4%, and a dividend yield of 0.0%.

Upon the second closing in May 2018, the related Eidos Tranche Liability was remeasured using a probability-weighted expected return method (PWERM). The PWERM included probabilities of three scenarios, including an Eidos initial public offering occurring in June 2018. The scenarios were weighted based on Eidos' estimate of each event occurring in deriving the estimated fair value.

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The following table sets forth a summary of the changes in the fair value of the Eidos Tranche Liability:

	Total (in thousands)
Balance as of January 1, 2018	$ —
Initial fair value of the Eidos Tranche Liability on issuance of Eidos Series B redeemable convertible preferred stock	49
Change in fair value upon remeasurement recognized in other income (expense)	467
Settlement of the Eidos Tranche Liability	(516)
Balance as of December 31, 2018	$ —

The Eidos Tranche Liability balance was reclassified to redeemable convertible preferred stock upon the second closing in May 2018.

Eidos Redeemable Convertible Preferred Stock Warrant Liability

The fair value of the Eidos Warrant Liability (see Note 6) is based on significant inputs not observed in the market and thus represents a Level 3 measurement. Eidos estimated the fair value of the Eidos Warrant Liability using a PWERM that included probabilities of three scenarios, including an Eidos initial public offering occurring in June 2018. The scenarios were weighted based on Eidos' estimate of each event occurring in deriving the estimated fair value. The Eidos Warrant Liability was remeasured upon the Eidos IPO using the value of the underlying share based on the Eidos IPO price less the warrant strike price.

The following table sets forth a summary of the changes in the fair value of the Eidos Warrant Liability:

	Total (in thousands)
Balance as of January 1, 2018	$ —
Initial fair value of the Eidos Warrant Liability	88
Change in fair value upon remeasurement recognized in other income (expense)	263
Settlement of the Eidos Warrant Liability on Eidos IPO	(351)
Balance as of December 31, 2018	$ —

In the combined and consolidated financial statements, the issuance of redeemable convertible preferred stock of Eidos to third parties is presented as the issuance of redeemable noncontrolling interest. Upon the Eidos IPO in June 2018, all outstanding shares of Eidos' redeemable convertible preferred stock were converted into shares of common stock of Eidos. This transaction is reflected as conversion of redeemable noncontrolling interest into noncontrolling interest. The net exercise of the Eidos Warrants upon the Eidos IPO is presented as the issuance of noncontrolling interest. See Note 7 for details.

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4. Balance Sheet Components

Prepaid Expenses and Other Current Assets

Prepaid expenses and other current assets consist of the following:

	December 31,	
	2017	2018
	(in thousands)	
Prepaid clinical and research related expenses	$4,247	$7,087
Other current assets	889	2,050
Total prepaid expenses and other current assets	$5,136	$9,137

Property and Equipment, Net

Property and equipment, net, consists of the following:

	December 31,	
	2017	2018
	(in thousands)	
Furniture and office equipment	$ 89	$ 635
Lab equipment	298	1,020
Leasehold improvements	80	145
Construction in progress	—	6
Total property and equipment, gross	467	1,806
Less: accumulated depreciation and amortization	(27)	(231)
Total property and equipment, net	$440	$1,575

Depreciation and amortization expense for property and equipment was $27,000 and $0.2 million for the years ended December 31, 2017 and 2018.

Other Accrued Liabilities

Other accrued liabilities consist of the following:

	December 31,	
	2017	2018
	(in thousands)	
Accrued professional services	$ 318	$ 772
Accrued other liabilities	795	1,328
Total other accrued liabilities	$1,113	$2,100

5. Asset Acquisitions

Origin Biosciences, Inc. (“Origin”) Asset Acquisition

In June 2018, Origin entered into an Asset Purchase Agreement with Alexion Pharma Holding Unlimited Company (“Alexion”) to acquire intellectually property rights, including patent rights, know-how, and contracts, related to the ALXN1101 molecule. As consideration, Origin made an upfront cash payment of $1.0 million. There were no material direct transaction costs related to the transaction.

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Origin accounted for the transaction as an asset acquisition as substantially all of the estimated fair value of the gross assets acquired was concentrated in a single identified asset, IPR&D, thus satisfying the requirements of the screen test in ASU 2017-01. The assets acquired and liabilities assumed in the transaction were measured based on their fair values. The fair value of the IPR&D acquired was $1.0 million and was charged to research and development expense as it had no alternative future use at the time of the acquisition. If certain substantive milestones are met in the future, Origin could be required to pay up to $18.8 million if Origin receives a priority review voucher from the Food and Drug Administration, $3.0 million in regulatory milestone payments, $17.0 million in sales milestone payments, and pay royalties of up to low double-digit percentages on future net sales, if any.

QED Therapeutics, Inc. ("QED") Asset Acquisition

In January 2018, QED entered into a License Agreement with Novartis International Pharmaceutical, Inc. ("Novartis"), pursuant to which QED acquired certain intellectual property rights, including patents and know-how, related to BBP-831 for the treatment of patients with FGFR-driven diseases. As consideration for the License Agreement, QED made an upfront cash payment of $15.0 million and issued 2,941,176 shares of QED Series A Preferred Stock to Novartis. There were no material direct transaction costs related to the transaction. The fair value of the QED Series A Preferred Stock was valued by a third-party specialist at $0.59 per share or a total fair value of shares issued of $1.7 million.

QED accounted for the transaction as an asset acquisition as substantially all of the estimated fair value of the gross assets acquired was concentrated in a single identified asset, IPR&D, thus satisfying the requirements of the screen test in ASU 2017-01. The assets acquired and liabilities assumed in the transaction were measured based on their fair values. The fair value of the IPR&D acquired was $16.7 million and was charged to research and development expense as it had no alternative future use at the time of the acquisition. If certain substantive milestones are met in the future, QED could be required to pay up to $60.0 million in regulatory milestone payments, $35.0 million in sales milestone payments, and pay royalties of up to low double-digit percentages on future net sales, if any.

Phoenix Tissue Repair, Inc. ("PTR") Asset Acquisition

In July 2017, PTR entered into the Contribution Agreement and Asset Purchase Agreement with Shire Human Genetic Therapies, Inc. and its subsidiary Lotus Tissue Repair, Inc. to acquire the right, title, and interest in certain intellectual property, research program assets, and contracts relating to recombinant human collagen type VII. As consideration, PTR made an upfront cash payment of $1.5 million and issued 10,019,900 shares of PTR common stock valued at a nominal fair value at issuance. There were no material direct transaction costs related to the transaction.

PTR accounted for the transaction as an asset acquisition as substantially all of the estimated fair value of the gross assets acquired was concentrated in a single identified asset, IPR&D, thus satisfying the requirements of the screen test in ASU 2017-01. The assets acquired and liabilities assumed in the transaction were measured based on their fair values. The fair value of the IPR&D acquired was $1.5 million and was charged to research and development expense as it had no alternative future use at the time of the acquisition. If certain substantive milestones are met in the future, PTR could be required to pay up to $27.0 million in regulatory milestone payments, $60.0 million in sales milestone payments, and pay royalties of up to low single-digit percentages on future net sales, if any.

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6. Variable Interest Entities and Voting Interest Model

The entities consolidated by BridgeBio are comprised of wholly-owned subsidiaries and partially-owned entities consolidated under the VOE model and VIEs for which BridgeBio is the primary beneficiary under the VIE model. The results of operations of the consolidated entities are included within the BridgeBio combined and consolidated financial statements for the years ended December 31, 2017 and 2018. As of December 31, 2017 and 2018, there were no significant restrictions on the VIE assets or liabilities. For VIEs, BridgeBio calculates the maximum exposure to loss to be equal to the amount invested in the equity of the VIE and the amount of outstanding convertible notes.

The below listed partially-owned entities were determined to be under BridgeBio's control as of December 31, 2018, with the exception of PellePharm, Inc. as discussed in Note 8. At each reporting period, the Company reassesses whether it has a majority voting interest for entities consolidated under the VOE model and whether it remains the primary beneficiary for VIEs consolidated under the VIE model.

Eidos

Eidos is a clinical stage biopharmaceutical company focused on the development of BBP-265 to address the large and growing unmet need in diseases caused by transthyretin amyloidosis. In April 2016, the Company initially invested $1.0 million and determined that its investment in Eidos represented a variable interest. At that time, Eidos did not have sufficient resources to carry out its principal activities without additional financial support. BridgeBio was determined to be the primary beneficiary of Eidos as it controlled the activities that most significantly impacted Eidos' economic performance, controlled the most significant decisions affecting Eidos through its representation within management and Eidos' Board of Directors, and BridgeBio had a majority ownership interest.

In February 2018, BridgeBio entered into a note and warrant purchase agreement with Eidos, pursuant to which Eidos issued a convertible promissory note (the "Eidos Note") with the principal amount of $10.0 million and a warrant to purchase a number of shares of preferred stock equal to $4.0 million at the price paid by investors in the next equity financing (the "Eidos Warrant"). In March 2018, BridgeBio transferred 10% or $1.0 million of its interests in the Eidos Note and the Eidos Warrant to the minority stockholder of Eidos. In March 2018, the Eidos Note was redeemed into shares of Series B redeemable convertible preferred stock of Eidos at a 30% discount to the price paid by other investors.

In March 2018, Eidos entered into the Eidos Series B Preferred Stock Purchase Agreement for issuance of shares of Eidos Series B redeemable convertible preferred stock in two closings. As part of the March 2018 closing, Eidos also issued a freestanding tranche liability related to the obligation of Eidos to issue additional shares and the right to request investors to purchase additional shares. The tranche liability was recorded at fair value and remeasured through the settlement date in May 2018. In May 2018, BridgeBio contributed $11.2 million into Eidos in exchange for shares of Series B redeemable convertible preferred stock.

In June 2018, Eidos completed its initial public offering. All redeemable convertible preferred stock of Eidos was converted into common stock at the closing of the Eidos IPO. As part of the Eidos IPO, BridgeBio purchased common stock of $17.0 million. The Eidos Warrant was also net exercised upon the completion of the Eidos IPO.

In December 2018, BridgeBio purchased common stock of Eidos for $44.2 million from certain investors and Eidos founders, which resulted in BridgeBio owning 62.5% of Eidos as of December 31, 2018.

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From the date of BridgeBio's initial investment until the Eidos IPO on June 22, 2018, Eidos was determined to be a VIE and BridgeBio consolidated Eidos as the primary beneficiary. Subsequent to the Eidos IPO, BridgeBio determined that Eidos was no longer a VIE due to it having sufficient equity at risk to finance its activities without additional subordinated financial support. From June 22, 2018 through December 31, 2018, BridgeBio determined that it held greater than 50% of the voting shares of Eidos and there were no other parties with substantive participating, liquidation or kick-out rights. BridgeBio consolidated Eidos under the VOE model as of December 31, 2018.

PellePharm, Inc. ("PellePharm")

PellePharm is a clinical stage biopharmaceutical company developing BBP-009, a topical gel formulation of patidegib, a hedgehog inhibitor, for the treatment of Gorlin Syndrome and High-Frequency Basal Cell Carcinoma. In July 2015, BridgeBio made an initial investment of $4.5 million in PellePharm and in a series of transactions through December 2016, the Company increased its ownership interest to greater than 50%. BridgeBio determined that its initial investment in PellePharm represented a variable interest, but that BridgeBio was not the primary beneficiary until December 2016.

In December 2016, upon BridgeBio's additional investment in PellePharm, BridgeBio determined that consolidation of PellePharm was appropriate. At that time, BridgeBio was determined to be the primary beneficiary as it controlled the activities that most significantly impacted PellePharm's economic performance, controlled the most significant decisions affecting PellePharm through its representation within management and on PellePharm's Board of Directors, and BridgeBio had a majority ownership interest. The Company accounted for the transaction as an asset acquisition as substantially all of the estimated fair value of the gross assets acquired was concentrated in a single identified asset, IPR&D, thus satisfying the requirements of the screen test in ASU 2017-01. The assets acquired and liabilities assumed in the transaction were measured based on their fair values. The fair value of the IPR&D acquired was charged to research and development expense as it had no alternative future use at the time of the acquisition. The assembled workforce acquired was amortized over its estimated economic life of one year. During the year ended December 31, 2017, the Company recorded amortization expense in research and development expense related to the assembled workforce of $0.2 million and the asset was fully amortized as of December 31, 2017.

In May 2018, BridgeBio increased its ownership of PellePharm through the purchase of additional Series B shares for $4.0 million. In June 2018, BridgeBio contributed an additional $1.5 million through the purchase of Series C redeemable convertible preferred stock of PellePharm.

On November 19, 2018, PellePharm entered into the LEO Agreement with LEO, pursuant to which LEO was granted an exclusive, irrevocable option to acquire PellePharm. The LEO Call Option is exercisable by LEO on or before the occurrence of certain events relating to PellePharm's clinical development programs and no later than July 30, 2021. As consideration for the option, LEO agreed to pay PellePharm exclusivity payments totaling $27.9 million. LEO also purchased PellePharm common stock in the amount of $5.1 million. In addition, LEO may pay additional exclusivity payments to PellePharm in an amount not to exceed $37.0 million under certain circumstances. LEO is not a related party to or de facto agent of BridgeBio.

The Company accounts for the LEO Call Option as a current liability in its combined and consolidated financial statements because BridgeBio is obligated to sell its shares in PellePharm to LEO at a pre-determined price, if the option is exercised. As discussed in Note 3, the fair value of the LEO Call Option on issuance was $1.9 million. The Company will remeasure the LEO Call Option to fair value at each subsequent combined and consolidated balance sheet date until the LEO Call Option is either exercised or expires.

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The date the LEO Agreement was entered into was determined to be a VIE reconsideration event. Based on the Company's assessment, BridgeBio concluded that PellePharm remains a VIE after the reconsideration event as it does not have sufficient equity at risk to finance its activities without additional subordinated financial support. However, based on changes to PellePharm's governance structure and Board of Directors composition as a result of the LEO Agreement, BridgeBio is no longer the primary beneficiary as it no longer has the power over the key decisions that most significantly impact PellePharm's economic performance. Accordingly, BridgeBio deconsolidated PellePharm on November 19, 2018 (see Note 8). Through December 31, 2017 and 2018, BridgeBio has contributed $19.4 million and $25.0 million, respectively, to PellePharm in exchange for shares of redeemable convertible preferred stock. After the deconsolidation in November 2018, PellePharm is considered a related party of BridgeBio.

Consolidated VIEs

The following entities are VIEs for which BridgeBio was determined to be the primary beneficiary at the time of its initial investment in the VIE and through December 31, 2018. For each entity, the initial investment was determined to represent a variable interest as, at that time, the entity did not have sufficient resources to carry out its principal activities without additional financial support. BridgeBio was determined to be the primary beneficiary of each entity as it controlled the activities that most significantly impact the entity's economic performance and controlled the most significant decisions affecting the entity through its representation within management and the entity's board of directors. BridgeBio also had a majority ownership interest in the following entities as of December 31, 2017 and 2018 with exception of a 23% ownership of Phoenix Tissue Repair, Inc. as of December 31, 2017.

Molecular Skin Therapeutics, Inc. ("MoST") is a biopharmaceutical company focused on developing BBP-561, a series of topical KLK5/7 inhibitors, for the treatment of Netherton Syndrome. BridgeBio made investments in MoST of $1.5 million in 2017 and $1.2 million in 2018 in exchange for shares of redeemable convertible preferred stock.

Quartz Therapeutics, Inc. ("Quartz") is a biopharmaceutical company focused on the development of effective therapies for patients suffering from RAS-driven cancers. BridgeBio made investments in Quartz of $4.0 million in 2017 in exchange for shares of redeemable convertible preferred stock. BridgeBio issued convertible notes to Quartz in 2018 totaling $1.1 million that are outstanding as of December 31, 2018.

Navire Pharma, Inc. ("Navire") is a biopharmaceutical company advancing the Company's BBP-398 discovery program for small molecule inhibitors of SHP2 for the potential treatment of cancers driven by hyperactive receptor tyrosine kinase, or MAPK signaling. BridgeBio made investments in Navire of $3.2 million in 2017 and $6.8 million in 2018 in exchange for shares of redeemable convertible preferred stock.

CoA Therapeutics, Inc. ("CoA") is a biopharmaceutical company focused on the development of BBP-671, an oral small molecule, for the treatment of Pantothenate Kinase Associated Neurodegeneration, or PKAN. BridgeBio made investments in CoA of $1.5 million in 2017 and $7.0 million in 2018 in exchange for shares of redeemable convertible preferred stock.

Dermecular Therapeutics, Inc. ("Dermecular") is a biopharmaceutical company focused on the development of BBP-321, an oral S1P lyase inhibitor, for the treatment of Darier Disease and Hailey-Hailey Disease. BridgeBio made investments in Dermecular of $4.5 million in 2017 and $0.7 million in 2018 in exchange for shares of redeemable convertible preferred stock.

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PTR is a biopharmaceutical company focused on developing BBP-589, an IV-administered recombinant collagen type VII, protein replacement therapy, for the treatment of recessive dystrophic epidermolysis bullosa. BridgeBio made investments in PTR of $3.0 million in 2017 and $10.5 million in 2018 in exchange for shares of redeemable convertible preferred stock.

Adrenas Therapeutics, Inc. (“Adrenas”) is a biopharmaceutical company focused on developing BBP-631, an adeno-associated virus, gene transfer product candidate, for the treatment of congenital adrenal hyperplasia, caused by 21-hydroxylase deficiency. BridgeBio made investments in Adrenas of $13.4 million in 2018 in exchange for shares of redeemable convertible preferred stock.

QED is a biopharmaceutical company focused on developing infigratinib, an oral FGFR1-3 selective tyrosine kinase inhibitor, for the treatment of FGFR-driven cancers. BridgeBio made investments in QED of $50.0 million in 2018 in exchange for shares of redeemable convertible preferred stock.

Orfan Biotech, Inc. (“Orfan”) is a biopharmaceutical company focused on developing BBP-711, a series of oral small molecule inhibitors of glycolate oxidase, for the treatment of primary hyperoxaluria and recurrent kidney stone disease. BridgeBio made investments in Orfan of $3.0 million in 2018 in exchange for shares of redeemable convertible preferred stock.

Ferro Therapeutics, Inc. (“Ferro”) is a biopharmaceutical company focused on developing BBP-954 for irreversible inhibitors of glutathione peroxidase 4, for the treatment of solid and hematological cancers. BridgeBio made investments in Ferro of $3.0 million in 2018 in exchange for shares of redeemable convertible preferred stock.

Venthera, Inc. (“Venthera”) is a biopharmaceutical company focused on developing BBP-681, a transdermal PI3K inhibitor, for the treatment of cutaneous venous and lymphatic malformations. BridgeBio made investments in Venthera of $5.5 million in 2018 in exchange for shares of redeemable convertible preferred stock.

Aspa Therapeutics, Inc. (“Aspa”) is a biopharmaceutical company focused on developing BBP-812, an adeno-associated virus, gene transfer therapy, for the treatment of Canavan Disease. BridgeBio made investments in Aspa of $8.0 million in 2018 in exchange for shares of redeemable convertible preferred stock.

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The following table provides the assets and liabilities for all consolidated VIEs as of December 31, 2017:

	Dermecular	Eidos	MoST	Navire	PellePharm	PTR	Quartz	Total
	(in thousands)							
Assets:								
Current assets:								
Cash and cash equivalents	$ 3,986	$5,497	$ 211	$ 512	$ 2,238	$342	$ 994	$13,780
Prepaid expenses and other current assets	2	484	113	7	4,058	1	38	4,703
Total current assets	3,988	5,981	324	519	6,296	343	1,032	18,483
Property and equipment, net	—	114	—	3	—	—	287	404
Other assets	—	180	—	—	200	1	—	381
Total assets	$ 3,988	$6,275	$ 324	$ 522	$ 6,496	$344	$1,319	$19,268
Liabilities:								
Current liabilities:								
Accounts payable	$ 56	$ 564	$ 14	$ 2	$ 514	$ 40	$ 118	$ 1,308
Accrued compensation and benefits	—	433	—	80	288	—	66	867
Accrued research and development liabilities	118	563	—	833	1,570	—	—	3,084
Other accrued liabilities	127	305	8	14	351	9	18	832
Total current liabilities	301	1,865	22	929	2,723	49	202	6,091
Other liabilities	—	273	—	24	—	—	—	297
Total liabilities	$ 301	$2,138	$ 22	$ 953	$ 2,723	$ 49	$ 202	$ 6,388

The following table provides the assets and liabilities for all consolidated VIEs as of December 31, 2018:

	Adrenas	Aspa	PTR	QED	Venthera	All Other	Total
	(in thousands)						
Assets:							
Current assets:							
Cash and cash equivalents	$ 3,046	$4,259	$6,934	$ 8,630	$ 2,913	$ 6,713	$32,495
Prepaid expenses and other current assets	665	1,722	28	3,240	—	321	5,976
Total current assets	3,711	5,981	6,962	11,870	2,913	7,034	38,471
Property and equipment, net	584	129	88	181	—	277	1,259
Other assets	7	—	41	—	—	28	76
Total assets	$ 4,302	$6,110	$7,091	$12,051	$ 2,913	$ 7,339	$39,806
Liabilities:							
Current liabilities:							
Accounts payable	$ 1,876	$1,187	$ 621	$ 3,537	$ 333	$ 1,737	$ 9,291
Accrued compensation and benefits	377	30	287	1,392	—	467	2,553
Accrued research and development liabilities	227	728	—	4,390	—	1,251	6,596
Other accrued liabilities	28	32	8	229	9	82	388
Total current liabilities	2,508	1,977	916	9,548	342	3,537	18,828
Other liabilities	—	—	—	150	—	29	179
Total liabilities	$ 2,508	$1,977	$ 916	$ 9,698	$ 342	$ 3,566	$19,007

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VIEs included in the "All Other" category of the above table are not significant individually for separate presentation. Going forward, BridgeBio may not provide any further investment in certain of these VIEs.

7. Noncontrolling Interests

As of December 31, 2017 and 2018, the Company has both redeemable convertible noncontrolling interests and noncontrolling interests in consolidated partially-owned entities, for which BridgeBio has a majority voting interest under the VOE model and for which BridgeBio is the primary beneficiary under the VIE model. These balances are reported as separate components outside members' deficit and as part of members' deficit, respectively, in "Redeemable convertible noncontrolling interests" and "Noncontrolling interests" in the combined and consolidated balance sheets.

Upon the Eidos IPO in June 2018, all outstanding shares of Eidos' redeemable convertible preferred stock were converted into shares of common stock of Eidos. This transaction is reflected as conversion of redeemable noncontrolling interest into noncontrolling interest in the table below. The net exercise of the Eidos Warrants upon the Eidos IPO is presented as the issuance of noncontrolling interest in the table below.

The following table provides a rollforward of the redeemable convertible noncontrolling interests balance, as follows:

	Eidos	Orfan	PellePharm	QED	Total
			(in thousands)		
Balance as of January 1, 2017	$ 6	—	$ 1,514	—	$ 1,520
Issuance of redeemable convertible noncontrolling interest	—	—	2,839	—	2,839
Net loss attributable to redeemable convertible noncontrolling interest	(27)	—	(2,730)	—	(2,757)
Rebalancing due to change in ownership	26	—	(795)	—	(769)
Balance as of December 31, 2017	5	—	828	—	833
Issuance of redeemable convertible noncontrolling interest	51,012	187	9,429	1,735	62,363
Net loss attributable to redeemable convertible noncontrolling interest	(1,411)	(263)	(6,181)	(4,675)	(12,530)
Rebalancing due to change in ownership	(12,288)	84	(5,230)	3,054	(14,380)
Deconsolidation of PellePharm	—	—	1,154	—	1,154
Conversion of redeemable convertible noncontrolling interest to noncontrolling interest	(37,318)	—	—	—	(37,318)
Balance as of December 31, 2018	$ —	$ 8	$ —	$ 114	$ 122

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The following table provides a rollforward of the noncontrolling interests balance:

	Adrenas	Aspa	Eidos	PellePharm	PTR	Venthera	All Other	Total
				(in thousands)				
Balance as of January 1, 2017	$ —	$ —	$ 605	$ 1,990	$ —	$ —	$ —	$ 2,595
Issuance of noncontrolling interest	—	—	1,218	181	1	—	44	1,444
Rebalancing due to change in ownership	—	—	2,157	2,272	2,242	—	2,298	8,969
Net loss attributable to noncontrolling interest	—	—	(3,214)	(3,560)	(2,016)	—	(1,720)	(10,510)
Balance as of December 31, 2017	—	—	766	883	227	—	622	2,498
Issuance of noncontrolling interest	5	7	98,765	239	7	14	442	99,479
Rebalancing due to change in ownership	1,760	654	(20,973)	2,731	5,210	1,047	2,355	(7,216)
Net loss attributable to noncontrolling interest	(1,548)	(416)	(13,457)	(4,541)	(2,716)	(612)	(2,882)	(26,172)
Deconsolidation of PellePharm	—	—	—	688	—	—	—	688
Conversion of redeemable convertible noncontrolling interest to noncontrolling interest	—	—	37,318	—	—	—	—	37,318
Repurchase of redeemable noncontrolling interest	—	—	(44,234)	—	—	—	—	(44,234)
Balance as of December 31, 2018	$ 217	$ 245	$ 58,185	$ —	$ 2,728	$ 449	$ 537	$ 62,361

8. PellePharm Deconsolidation

As a result of the deconsolidation of PellePharm in November 2018 (see Note 6), BridgeBio recorded a gain of $19.3 million primarily related to the remeasurement of its common stock and preferred stock investment in PellePharm to its estimated fair value of $17.3 million. The gain is included in the accompanying combined and consolidated statement of operations for the year ended December 31, 2018. The Company concluded that the deconsolidation of PellePharm did not qualify for presentation as discontinued operations.

The valuation technique used to measure the fair value of the retained investment in the PellePharm's common stock and preferred stock is the PWERM, which was based on the expected proceeds from either the acquisition of PellePharm by LEO or LEO not exercising its option to acquire PellePharm during the option period. As of the deconsolidation date, BridgeBio holds 8.0% of the outstanding PellePharm common stock and 61.9% of the outstanding PellePharm preferred stock. BridgeBio also has continuing involvement and significant influence in PellePharm through its participation on the PellePharm Board of Directors. The carrying amount of BridgeBio's investment in PellePharm in the combined and consolidated balance sheets represents its maximum loss exposure related to its VIE investment in PellePharm.

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As of the deconsolidation date, BridgeBio's investment in PellePharm had a fair value of $17.3 million, which is comprised of $0.5 million in PellePharm common stock that is accounted for as an equity method investment and $16.8 million in PellePharm preferred stock that is accounted as a cost method investment.

The following represents the amounts related to the PellePharm deconsolidation accounting:

	Amount (in thousands)
Working capital[1] (excluding cash and cash equivalents)	$ 6,134
Term loan	1,359
Property and equipment, net	(791)
Carrying value of noncontrolling interest	(688)
Carrying value of redeemable convertible noncontrolling interest	(1,154)
Fair value of interest retained by BridgeBio	17,325
Gain on deconsolidation of PellePharm	(19,327)
Decrease in cash and cash equivalents resulting from the deconsolidation of PellePharm	$ 2,858

(1) Working capital is defined as current assets less current liabilities.

After the deconsolidation of PellePharm in November 2018, BridgeBio accounted for its retained common stock investment as an equity method investment. BridgeBio's common stock investment valued at $0.5 million upon deconsolidation was compared to BridgeBio's percentage of underlying equity in net assets of PellePharm. BridgeBio concluded that there was no material basis difference.

Through December 31, 2018, BridgeBio's share of PellePharm's net losses amounted to $0.3 million based on its percentage of common stock ownership in PellePharm. As of December 31, 2018, the aggregate carrying amount for the Company's equity method investment in PellePharm is $0.2 million. As of December 31, 2018, the aggregate carrying amount for the Company's cost method investment in PellePharm is $16.8 million. The aggregate carrying amount of the PellePharm investment is presented as a separate line item in the combined and consolidated balance sheet as of December 31, 2018. The Company did not recognize an impairment related to its PellePharm investment during the year ended December 31, 2018.

9. Commitments and Contingencies

Operating Lease Commitments

The Company leases office space under noncancelable operating leases that have terms expiring through April 2023. In March 2017, BridgeBio entered into a three-year agreement to rent 3,900 square feet of office space in Palo Alto, California. The aggregate rent expense under the lease is $1.1 million.

In November 2017, Eidos entered into a five-year agreement to rent 4,659 square feet of office space in San Francisco, California. The aggregate rent expense under the lease is $1.7 million.

In January 2018, PellePharm entered into a five-year agreement to rent 4,484 square feet of office space in San Francisco, California. The aggregate rent expense under the lease is $1.7 million.

In January 2018, PTR entered into a sixty-three-month agreement to rent 2,460 square feet of office space in Boston, Massachusetts. The aggregate rent expense under the lease is $1.1 million.

In February 2018, QED entered into a thirty-seven-month agreement to rent 1,944 square feet of office space in San Francisco, California. The aggregate rent expense under the lease is $0.6 million. In October 2018,

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QED entered into a thirty-four-month agreement to rent 10,000 square feet of office space in San Francisco, California. The aggregate rent expense under the lease is $2.6 million.

The Company recognizes rent expense on a straight-line basis over the noncancelable lease period and records the difference between cash payments and the recognition of rent expense as a deferred rent liability. Where leases contain escalation clauses, rent abatements and/or concessions, such as rent holidays and landlord or tenant incentives or allowances, the Company applies them in the determination of straight-line rent expense over the lease period.

As of December 31, 2018, future minimum lease payments for all noncancelable operating leases with remaining lease terms in excess of one year, are as follows:

Year Ending December 31:	Amount (in thousands)
2019	$ 1,924
2020	1,759
2021	1,333
2022	597
2023	98
Total future minimum lease payments	$ 5,711

Total rent expense for the years ending December 31, 2017 and 2018 was $0.4 million and $1.5 million, respectively.

Other Research and Development Agreements

The Company may also enter into contracts in the normal course of business with clinical research organizations for clinical trials, with contract manufacturing organizations for clinical supplies and with other vendors for preclinical studies, supplies and other services and products for operating purposes. These contracts generally provide for termination on notice, with the exception of potential termination charges related to one of the Company's contract manufacturing agreements in the event that certain minimum purchase volumes are not met. As of December 31, 2017 and 2018, there were no amounts accrued related to termination charges for minimum purchase volumes not being met.

Indemnification

In the ordinary course of business, the Company may provide indemnifications of varying scope and terms to vendors, lessors, business partners, board members, officers and other parties with respect to certain matters, including, but not limited to, losses arising out of breach of such agreements, services to be provided by the Company, negligence or willful misconduct of the Company, violations of law by the Company, or intellectual property infringement claims made by third parties. In addition, the Company has entered into indemnification agreements with directors and certain officers and employees that will require the Company, among other things, to indemnify them against certain liabilities that may arise by reason of their status or service as directors, officers or employees. No demands have been made upon the Company to provide indemnification under such agreements, and thus, there are no claims that the Company is aware of that could have a material effect on the Company's combined and consolidated balance sheets, statements of operations and comprehensive loss, or statements of cash flows.

The Company also maintains director and officer insurance, which may cover certain liabilities arising from its obligation to indemnify the Company's directors. To date, the Company has not incurred any material costs and has not accrued any liabilities in the combined and consolidated financial statements as a result of these provisions.

Contingencies

On December 31, 2018, Children Hospital Research Center at Oakland ("CHRCO") filed, and as of April 15, 2019 has not yet served, a civil complaint against Dr. Ervin Epstein, Co-Founder and Chief Medical Officer of PellePharm and PellePharm in the Northern District of California. CHRCO asserts four causes of action against Dr. Epstein (conversion, breach of contract, breach of the implied covenant of good faith and fair dealing, and specific performance), and one related cause of action against PellePharm (constructive trust). All five causes of action are generally directed to a set of accusations relating to Dr. Epstein's prior employment at CHRCO. Dr. Epstein and PellePharm dispute all of CHRCO's allegations and believe they lack merit and they intend to contest the case vigorously. No responsive pleading is required at this time, nor has Dr. Epstein or PellePharm provided one.

From time to time, the Company may become involved in legal proceedings arising in the ordinary course of business. The Company is unable to predict the outcome of these matters or the ultimate legal and financial liability, and at this time cannot reasonably estimate the possible loss or range of loss and accordingly has not accrued a related liability.

10. Hercules Term Loan

Hercules Loan and Security Agreement

In June 2018, the Company executed a Loan and Security Agreement with Hercules Capital, Inc. ("Hercules"), under which the Company borrowed $35.0 million. The term of the loan was approximately 42 months, with a maturity date of January 1, 2022 (the "Maturity Date"). No principal payments were due during an interest-only period, commencing on the initial borrowing date and continuing through July 1, 2020 (the "Amortization Date"). The outstanding balance of the loan was to be repaid monthly beginning on the Amortization Date and extending through the Maturity Date. The term loan bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 4.35% and (ii) 9.35% (9.85% as of December 31, 2018 based on the prime rate as of that date), payable monthly.

In December 2018, the Company executed the First Amendment to the Loan and Security Agreement, whereby the Company borrowed an additional $20.0 million to increase the total principal balance outstanding to $55.0 million (the "Amended Hercules Term Loan"). Upon draw of the additional $20.0 million, the interest-only period on the entire facility was extended until January 1, 2021 (the "Amended Amortization Date"). The outstanding balance of the original loan of $35.0 million and the additional borrowing of $20.0 million is to be repaid monthly beginning on the Amended Amortization Date and extending through July 1, 2022 (the "Amended Maturity Date"). The additional $20.0 million loan bears interest at a floating rate equal to the greater of: (i) the prime rate as reported in the Wall Street Journal plus 3.35% and (ii) 9.10% (9.10% as of December 31, 2018), payable monthly.

On the earliest to occur of (i) the Amended Maturity Date, (ii) the date the Company prepays the outstanding principal amount of the Amended Hercules Term Loan or (iii) the date the outstanding principal amount of the Amended Hercules Term Loan otherwise becomes due, the Company will owe Hercules an end of term charge equal to 6.35% of the principal amount of the original $35.0 million term loan, or $2.2 million, and 5.75% of the principal amount of the incremental $20.0 million term loan, or $1.2 million. These amounts will be accrued over the term of the loan using the effective-interest method.

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Effective the first fiscal quarter following the completion by the Company of an initial public offering ("IPO") of its shares on a United States-based national exchange with total net proceeds of no less than $175.0 million, the Company shall receive: (i) a further six month interest-only extension to July 1, 2021, (ii) a further six month maturity extension to January 1, 2023, (iii) a reduction of 0.5% on the then effective interest rate on the entire facility, and (iv) the option to pay up to 1.5% of scheduled cash pay interest on the entire facility as payment in kind ("PIK Interest"), with such cash pay interest paid as PIK Interest at a 1:1.2 ratio. All PIK Interest shall be capitalized and added to the outstanding principal balance under the Amended Hercules Term Loan, which shall then accrue further cash interest and fees pursuant to the terms of the Amended Hercules Term Loan. There are no material embedded features requiring bifurcation.

During the year ended December 31, 2018, the Company recognized interest expense related to the Amended Hercules Term Loan of $2.4 million, of which $0.5 million relates to amortization of debt discount.

The Amended Hercules Term Loan contains customary representations and warranties, events of default, and affirmative and negative covenants for a term loan facility of this size and type. However, Hercules imposes no liquidity covenants on the Company and Hercules cannot limit or restrict the Company's ability to dispose of assets, make investments, or make acquisitions. As pledged collateral for its obligations under the Amended Hercules Term Loan, the Company granted Hercules a security interest in all assets or personal property of the Company, including all equity interests owned or hereafter acquired by the Company. Further, at Hercules' sole discretion the Company must make a mandatory prepayment equal to 75% of net cash proceeds received from the sale or licensing of any pledged or collateral assets, including intellectual property, of a consolidated entity owned by the Company, or the repurchase or redemption of any pledged collateral by certain specified operating companies. None of the Company's consolidated entities are a party to, nor provide any credit support or other security in connection with the Amended Hercules Term Loan.

The term loans balance is as follows:

	December 31, 2018 (in thousands)
Principal value of term loans	$ 55,000
Net of debt issuance costs and debt accretion	(493)
Term loans, noncurrent	$ 54,507

Future minimum payments of principal and estimated payments of interest on the Company's outstanding variable rate borrowings as of December 31, 2018 are as follows:

Year Ending December 31:	(in thousands)
2019	$ 5,200
2020	5,355
2021	37,575
2022	25,292
Total future payments	73,422
Less amounts representing interest	(15,049)
Less final end of term payment	(3,373)
Total principal amount of term loan payments	$ 55,000

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11. License Agreements

Stanford License Agreement

In April 2016, Eidos entered into a license agreement with the Board of Trustees of the Leland Stanford Junior University ("Stanford University") relating to Eidos' drug discovery and development initiatives. Under this agreement, Eidos has been granted certain worldwide exclusive licenses to make, use and sell products that are covered by licensed patent rights. In March 2017, Eidos paid a license fee of $10,000, which was recorded as research and development expense during the year ended December 31, 2017, as the acquired assets did not have any alternative future use. In August 2016, Eidos issued 56,809 shares of common stock valued at a nominal fair value at issuance. Eidos may also be required to make future payments of up to approximately $1.0 million to Stanford University upon achievement of specific intellectual property, clinical and regulatory milestone events, and pay royalties of up to low single-digit percentages on future net sales, if any. In addition, Eidos is obligated to pay Stanford University a percentage of non-royalty revenue received by Eidos from its sublicensees, with the amount owed decreasing annually for three years based on when the applicable sublicense agreement is executed. During the years ended December 31, 2017 and 2018, Eidos recognized research and development expense of less than $0.1 million and $0.3 million, respectively, in connection with this agreement.

The University of Texas License Agreement

In March 2017, Navire entered into a collaboration and license agreement with The Board of Regents of The University of Texas System ("Board of Regents") and The University of Texas M.D. Anderson Cancer Center ("MD Anderson" and collectively "University of Texas") relating to Navire's drug discovery and development initiatives. Under this agreement, Navire and the University of Texas will carry out the development, manufacture and commercialization of licensed product under exclusive licenses granted by the University of Texas. In partial consideration for the exclusive license grant, the Company issued the Board of Regents shares of common stock of Navire valued at $0.3 million at issuance pursuant to a stock purchase agreement entered into simultaneously. In addition, Navire is required to make additional payments based on achievement of a milestone event by March 31, 2018 (this was not achieved) as well as obtaining certain development milestones and specific market capitalization thresholds of Navire.

If commercial sales of a licensed product commence, the Company will pay MD Anderson royalties at percentage rates ranging in the low single digits on net sales of licensed products. The Company may offset payments made to third parties to obtain rights needed for the commercialization of a licensed product against royalties payable to MD Anderson provided that such expenses in a given year may not be credited against more than a specified percentage of the royalties in such year and subject to a minimum floor in the low single digits. The Company's obligation to pay royalties continues on a country-by-country basis until the expiration of all licensed patent rights covering licensed products in such country. During the years ended December 31, 2017 and 2018, Navire recognized research and development expense of $2.2 million and $4.4 million, respectively, in connection with this agreement.

The Regents of the University of California License Agreement

In September 2016, TheRas, Inc. ("TheRas") entered into a license agreement with The Regents of the University of California ("UCSF") relating to TheRas' drug discovery and development initiatives. Under this agreement, TheRas has been granted certain worldwide exclusive licenses to use the licensed compounds (the "UCSF License"). In connection with the UCSF License and subsequent amendments, the Company paid issuance fees totaling $0.3 million. In addition, under the terms of the UCSF License, the Company is required to pay to UCSF certain annual license maintenance fees unless the Company is selling or otherwise exploiting

licensed products or services and paying royalties to UCSF on net sales for such licensed products or services. With respect to such royalty obligations, the Company agreed to pay UCSF low single-digit tiered royalties on annual net sales of licensed products and services, with a minimum royalty requirement of $0.1 million. The Company's obligation to pay royalties continues on a country-by-country basis until the expiration of all licensed patent rights covering licensed products in such country. In addition, the Company is obligated to make contingent milestone payments totaling up to $22.4 million upon the achievement of certain clinical or regulatory milestones. In the event that the Company sublicenses the patent rights, UCSF is also entitled to receive a percentage of the sublicensing income received by the Company. During the years ended December 31, 2017 and 2018, TheRas recognized research and development expense of $0.2 million and $0.1 million, respectively, in connection with this agreement.

St. Jude License Agreement

In April 2017, CoA entered into a license agreement with St. Jude Children's Research Hospital, Inc., ("St. Jude") relating to the CoA's drug discovery and development initiatives. Under this agreement, CoA has been granted a worldwide exclusive license to use a licensed compound. CoA paid for certain costs and an upfront license fee of $0.1 million in April 2017, which were recorded as research and development expense. Under the license agreement, CoA may also be required to make future payments of up to approximately $4.6 million upon achievement of specific intellectual property, clinical and regulatory milestone events, as well as pay royalties on future net sales, if any. During the years ended December 31, 2017 and 2018, CoA recognized research and development expense of $0.4 million and $0.6 million, respectively, in connection with this agreement.

K-Gen License Agreement

In March 2018, Ferro entered into a license agreement with K-Gen, Inc. ("K-Gen") relating to Ferro's drug discovery and development initiatives. Under this agreement, Ferro has been granted certain worldwide exclusive licenses to use the licensed compounds. Upon execution of the agreement, Ferro made an upfront payment of $0.8 million to K-Gen and is required to pay mid single-digit royalties on future net sales, if any. In addition, Ferro is obligated to pay K-Gen a percentage of non-royalty revenue received by Ferro from its sublicensees. During the year ended December 31, 2018, Ferro recognized research and development expense of $0.8 million in connection with this agreement.

Memorial Sloan Kettering Cancer Center License Agreement

In April 2018, Venthera entered into a license agreement with Memorial Sloan Kettering Cancer Center ("MSK") relating to Venthera's drug discovery and development initiatives. Under this agreement, Venthera has been granted certain worldwide exclusive licenses to use the licensed products. Upon execution of the agreement, Venthera made an upfront payment and issued 76,934 shares of Venthera's common stock to MSK. Venthera may be required to make future payments of up to $10.0 million upon achievement of specific intellectual property, clinical and regulatory milestone events, as well as pay low single-digit royalties on future net sales, if any, and a nominal annual license maintenance fee in each year before the first commercial sale of any licensed product. In addition, Venthera is obligated to pay MSK a percentage of non-royalty revenue received by Venthera from its sublicensees, with the amount owed decreasing annually for three years based on when the applicable sublicense agreement is executed. During the year ended December 31, 2018, Venthera recognized a nominal research and development expense and general and administrative expense in connection with this agreement.

University of Massachusetts License Agreement

In April 2018, Aspa entered into a license agreement with the University of Massachusetts ("UM") relating to Aspa's drug discovery and development initiatives. Under this agreement, Aspa has been granted certain worldwide exclusive licenses to use the licensed compounds.

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Aspa may be required to make future payments of up to $4.8 million upon achievement of specific intellectual property, clinical and regulatory milestone events, as well as pay mid single-digit royalties on future net sales, if any. During the year ended December 31, 2018, Aspa recognized research and development expense of $0.8 million in connection with this agreement.

NeuroVive License Agreement

In June 2018, Fortify Therapeutics, Inc. ("Fortify") entered into a license agreement with NeuroVive Pharmaceutical AB ("NeuroVive") relating to Fortify's drug discovery and development initiatives. Under this agreement, Fortify has been granted certain worldwide exclusive licenses to use the licensed compounds. Upon execution of the agreement and during 2018, Fortify made payments of $0.2 million. Fortify may be required to reimburse NeuroVive for certain expenses and to make future payments of up to approximately $6.0 million upon achievement of specific preclinical, clinical and regulatory milestone events, as well as pay mid-to-high single-digit royalties on future net sales, if any. During the year ended December 31, 2018, Fortify recognized research and development expense of $0.2 million in connection with this agreement.

Life License Agreement

In August 2018, Adrenas entered into a license agreement with Life Technologies Corporation ("Life") relating to Adrenas' drug discovery and development initiatives. Under this agreement, Adrenas has been granted certain worldwide non-exclusive licenses to use the licensed compounds. Upon execution of the agreement, Adrenas made a nominal upfront payment and may be required to make future payments upon achievement of licensing of certain products. During the year ended December 31, 2018, BridgeBio recognized a nominal research and development expense in connection with this agreement.

In November 2018, BridgeBio entered into a commercial license agreement with Life relating to the Company's drug discovery and development initiatives. Under this agreement, BridgeBio has been granted certain worldwide non-exclusive licenses to use certain cell lines to produce licensed products. Upon execution of the agreement, BridgeBio paid an initial license fee and may be required to pay additional license fees to Life upon licensing additional licensed products.

Unnamed Entity License Agreement

In December 2018, the Company's Unnamed Entity entered into a license agreement relating to the Unnamed Entity's drug discovery and development initiatives. Under this agreement, the Unnamed Entity has been granted certain worldwide exclusive licenses to use the licensed compounds. Upon execution of this agreement, the Unnamed Entity made an upfront payment of $0.5 million. If certain substantive milestones are met in the future, the Unnamed Entity may be required to make up to $13.3 million in clinical and regulatory milestone payments, $80.0 million in sales milestone payments, and pay royalties of up to the mid single-digit percentages on future net sales, if any. During the year ended December 31, 2018, the Unnamed Entity recognized research and development expense of $0.5 million in connection with this agreement.

Other License and Collaboration Agreements

In addition to the agreements described above, the Company has also entered into other license and collaboration agreements with various institutions and business entities on terms similar to those described above, none of which are material individually or in the aggregate.

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12. Related Party Transactions

Nonrecourse Notes

In 2016 and 2017 the Company entered into nonrecourse notes (the "Notes") with two founders. The Notes were issued to facilitate the purchase of Series B Preferred Units by two founders. The principal amount of the Notes was $0.3 million and mature in May 2021. The Notes were accounted for as an option for which the Company recognized equity-based compensation expense on issuance. The repayment of the Notes is recorded as an addition to the Series B Preferred Units balance as payments are received. As of December 31, 2017 and 2018, the Notes had an outstanding balance of $0.2 million and were subsequently paid in full in February 2019.

Promissory Note

In May 2017, the Company issued a promissory note of $4.0 million to KKR Alternative Credit, Inc. to facilitate the purchase of Series C Preferred Units. The promissory note bore no interest and was not contractually convertible into Preferred Units, Founder Units, or Common Units. The promissory note was payable in cash upon the earlier of the six-month anniversary of issuance or the issuance by the Company of any units. In August 2017, upon the initial closing of the Series C Preferred Units financing, the promissory note was converted into 4,142,502 Series C Preferred Units at the same issuance price of $0.9656 as the purchase price for the other investors in Series C Preferred Units financing.

Consulting Agreement

During 2017, the Company and a founder entered into a consulting agreement in which the Company agreed to pay $0.2 million per year in exchange for consulting services. During 2017, the Company entered into a consulting agreement with its chief executive officer in which the Company paid $0.5 million in exchange for consulting services during 2017.

13. Redeemable Convertible Preferred Units, Founder Units, Common Units and Management Incentive Units

Series B Preferred Units Financing

In March 2016, BridgeBio entered into the Series B Preferred Units Purchase Agreement, (the "Series B Agreement"), for the issuance of up to 75,340,907 Series B Preferred Units in several closings at a price of $0.44 per unit. In March 2016, BridgeBio LLC issued and sold an aggregate of 15,568,183 Series B preferred units at a price of $0.44 per unit, for an aggregate purchase price of approximately $6.9 million.

According to the terms of the Series B Agreement, BridgeBio in future closings is required to issue the remaining 68,406,108 Series B Preferred Units at the same fixed price as the initial closing and the Series B investors are required to purchase the remaining Series B Preferred Units. On issuance, BridgeBio determined that the obligation to issue the remaining 68,406,108 units of its Series B Preferred Units is a tranche liability that should be accounted for as a separate freestanding financial instrument and remeasured to fair value at each subsequent reporting period until settlement or expiration. The Series B Preferred Units tranche liability was recorded on issuance in March 2016 at a fair value of $0.9 million. During the year ended December 31, 2016, additional closings of BridgeBio's Series B Preferred Units occurred resulting in the Series B Preferred Units tranche liability amounting to $0.2 million as of December 31, 2016.

In April 2017, BridgeBio settled the Series B Preferred Units tranche liability when it issued the remaining 26,901,279 Series B Preferred Units for aggregate proceeds of $11.8 million, which resulted in the Series B Preferred Units tranche liability being extinguished.

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Notes to Combined and Consolidated Financial Statements

Series C Preferred Units Financing

In June 2017, BridgeBio entered into the Series C Preferred Units Purchase Agreement (the "Series C Agreement") for the issuance of up to 141,155,758 Series C Preferred Units at a price of $0.9656 per unit. Between August 2017 and December 2017, BridgeBio issued 99,420,050 Series C Preferred Units at a price of $0.9656 per unit for net proceeds of $95.2 million. As discussed in Note 12, BridgeBio issued 4,142,502 Series C Preferred Units upon the conversion of a $4.0 million promissory note.

As of December 31, 2017, the purchasers of Series C Preferred Units had a non-transferable right, but not an obligation ("Capital Commitment") to purchase up to an additional 37,593,206 Series C Preferred Units at the same terms as the initial closing. BridgeBio determined that the Capital Commitment was not a freestanding instrument and was not required to be bifurcated as an embedded derivative. In April 2018, BridgeBio issued 37,593,206 Series C Preferred Units at a price of $0.9656 per unit for net proceeds of $36.3 million.

Series D Preferred Units Financing

In November 2018, BridgeBio entered into the Series D Preferred Unit Purchase Agreement (the "Series D Agreement") for the issuance of up to 150,955,597 Series D Preferred Units at a price of $1.9823 per unit. In November 2018 and December 2018, BridgeBio issued 150,955,597 Series D Preferred Units at a price of $1.9823 per unit for net proceeds of $298.7 million (net of $0.5 million in issuance costs) and executed its Fourth Amended and Restated Limited Liability Company Agreement (the "LLC Agreement") to create such new membership interests. The terms of Series D Preferred Units are similar to those of Series C Preferred Units, with the exception of distribution provisions as discussed below. Series D Preferred Units have the first priority up to the Series D Preferred Unit value of $1.9823 per unit. In additional, the LLC Agreement was amended such that cumulative returns for all previously issued Preferred Units, Common Units and Founder Units would no longer accumulate.

As a result of the execution of the LLC Agreement in November 2018, BridgeBio concluded that the terms and conditions related to the Series C Preferred Units, Series B Preferred Units, Series A Preferred Units, and Founder Units were amended. BridgeBio performed a qualitative assessment as to whether a modification of extinguishment of the units had occurred under the accounting literature as a result of this amendment and concluded that that the terms and conditions had not substantively changed. In addition, BridgeBio also performed a supplemental assessment by performing a valuation of the units before and after the execution of the LLC Agreement. BridgeBio concluded that the fair value of the Series C Preferred Units, Series B Preferred Units, Series A Preferred Units, and Founder Units had declined by less than ten percent. Consistent with the conclusions reached under the qualitative approach and the supplemental fair value assessment, the amendment was accounted for as a modification in accordance with the accounting literature. As there was a negative incremental change in fair value for the Series C Preferred Units, Series B Preferred Units, Series A Preferred Units, and Founder Units, no adjustment to the carrying value of the units was recorded for the year ended December 31, 2018.

The pre and post Series D issuance valuations were performed by a third-party specialist utilizing a PWERM, which included a scenario-based analysis that estimated the value per unit based on the probability-weighted present value of expected future investment returns, considering each of the possible outcomes available, as well as the economic and control rights of each unit type. Refer to Note 14 for discussion of the accounting treatment for the Common Units and Management Incentive Units related to the amended terms and conditions.

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Redeemable Convertible Preferred Units, Founder Units, Common Units and Management Incentive Units

As of December 31, 2018, the LLC Agreement provided for the issuance of Series A Preferred Units, Series B Preferred Units, Series C Preferred Units, Series D Preferred Units, Founder Units, Common Units and Management Incentive Units.

Outstanding Preferred Units, Founder Units and Common Units consist of the following:

	Units Issued and Outstanding	Original Issue Price Per Unit	Carrying Value	Liquidation Preference
	(in thousands, except unit and per unit amounts)			
Series A Preferred Units	24,935,281	$ 0.2627	$ 4,919	$ 12,625
Series B Preferred Units	90,909,090	$ 0.4400	39,766	43,905
Series C Preferred Units	103,562,552	$ 0.9656	99,182	101,676
Total Preferred Units as of December 31, 2017	219,406,923		143,867	158,206
Founder Units	11,420,741	$ —	1,754	5,783
Common Units	5,856,075	$ —	1,431	2,966
Total outstanding units as of December 31, 2017	236,683,739		$147,052	$ 166,955

	Units Issued and Outstanding	Original Issue Price Per Unit	Carrying Value	Liquidation Preference
	(in thousands, except unit and per unit amounts)			
Series A Preferred Units	24,935,281	$ 0.2627	$ 4,919	$ 13,542
Series B Preferred Units	90,909,090	$ 0.4400	39,766	47,096
Series C Preferred Units	141,155,758	$ 0.9656	135,482	147,155
Series D Preferred Units	150,955,597	$ 1.9823	298,698	299,239
Total Preferred Units as of December 31, 2018	407,955,726		478,865	507,032
Founder Units	11,420,741	$ —	1,754	6,202
Common Units	7,197,783	$ —	1,619	3,910
Total outstanding units as of December 31, 2018	426,574,250		$482,238	$ 517,144

As of December 31, 2017 and 2018, BridgeBio has classified all of its outstanding Preferred Units, Founder Units, Common Units, and Management Incentive Units outside of members' deficit in the accompanying combined and consolidated financial statements because these units contain certain redemption features that are not solely within the control of BridgeBio. Specifically, in the event an IPO does not take place by a pre-defined date, the majority preferred unitholders could force a "liquidation event" that is not solely within BridgeBio's control. As of December 31, 2017 and 2018, the Company did not adjust the carrying values of the Preferred Units, Founder Units and Common Units to their deemed liquidation values of such units since a liquidation event was not probable as of the combined and consolidated balance sheet dates. Subsequent adjustments to increase or decrease the carrying values to the ultimate liquidation values will be made if and when it becomes probable that such a liquidation event will occur.

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The significant rights, preferences and privileges of the Preferred Units, Founder Units, Common Units and Management Incentive Units are as follows:

Voting

Preferred Unit members do not have any voting rights, other than specified consent rights as set forth in the LLC Agreement. Except as described below, management of BridgeBio is delegated to the board of BridgeBio. The board consists of seven managers: the Company's chief executive officer (the "Founder Manager"), two individuals designated by the holders of a majority of the Series B Preferred Units, two individuals designated by certain holders of the Series D Preferred Units, an individual designated by the Founder Manager, and an independent manager to be designated by any then-serving manager and approved by majority vote of the then-serving managers.

Prior written approval of holders of a majority of the outstanding Preferred Units (other than the Series A Preferred Units) is required for the Company to perform the following, with certain exceptions: issue any new series of units with rights, preferences or privileges senior to or pari passu with any of the Preferred Units, amend any existing unit in a manner that would make such units pari passu or senior to any existing Preferred Unit, amend the Certificate of Formation or the LLC Agreement in a manner adverse to the powers, preferences or rights of the Preferred Units, enter into a Fundamental Transaction, redeem or repurchase any existing Preferred Unit (other than repurchases in connection with the cessation of employment), change the number of managers constituting the board, incur indebtedness in excess of $100,000,000, adopt or amend equity incentive plans, enter into certain transactions between the Company or its subsidiaries and any member (or affiliate of a member) of the Company, or cause the Company to have to register as an investment company or investment adviser within the meaning of the Investment Company Act and Investment Advisers Act, respectively.

Prior written approval of holders of a majority of the outstanding Series D Preferred Units is required for the Company to amend the Certification of Formation or LLC Agreement in a manner adverse to the Series D Preferred Units, issue Series D Preferred Units other than pursuant to the Series D Agreement, waive the treatment of a transaction as a Fundamental Transaction with respect to the Series D Preferred Units or consummate an underwritten IPO other than a qualifying IPO per the terms of the LLC Agreement. The approval of holders of a majority of the outstanding Series C Preferred Units is required to amend the Certification of Formation or LLC Agreement in a manner adverse to the Series C Preferred Units or to issue additional Series C Preferred Units. The approval of holders of a majority of the outstanding Series B Preferred Units is required to amend the Certification of Formation or LLC Agreement in a manner adverse to the Series B Preferred Units or to issue additional Series B Preferred Units.

Conversion

There are no voluntary conversion features for the Preferred Units.

The board of BridgeBio may consummate an IPO and upon the approval of the majority of preferred members (and holders of a majority of the Series D Preferred Units if such IPO is not a qualifying IPO per the terms of the LLC Agreement), each Preferred Unit will be mandatorily convertible into common stock or other securities of the corporation used to effect the IPO (the "IPO Corporation"). In connection with any such transaction, unless the Company continues as a holding company for the IPO Corporation, the members shall receive, in exchange for their respective units, either (x) shares of common stock or other equity interests of the IPO Corporation which are of the type offered and sold to the public in such IPO and have substantially the same relative economic interest in such corporate or other entity, or (y) equity interests of a holding company or

companies which, together with any remaining interests in the Company and any securities received in the IPO Corporation, have substantially the same relative economic interest if each member receives in exchange for its units (of any class) an amount of the common stock or other equity securities of such IPO Corporation having a fair market value equal to the amount that would have been distributed to such member pursuant to distribution provisions of the LLC Agreement (determined by the valuation of the capital stock of the IPO Corporation based on the offering price to the public in the IPO), or, if for less than all of the units in accordance with clause (y) above, the Implied Equity Value. Implied Equity Value is defined on any date of determination as the amount of distributions that would be received by a member with respect to such units, as applicable, following (a) a hypothetical sale of all of the Company's assets at the implied gross value and (b) a distribution by the Company of all net proceeds from such hypothetical sale to the members in accordance with the distribution rights stated below.

If, at any time following March 26, 2021, an IPO Corporation has not consummated an IPO, then the Majority Preferred Members may seek to cause the Company or an IPO Corporation to effect (a) an IPO in respect of the Company under the Securities Act by delivering written notice to the board, (b) a merger, sale, reorganization or recapitalization of the Company that would result in a Fundamental Transaction, by delivering written notice to the board or (c) in consultation with the board, a fully auctioned merger, sale, reorganization or recapitalization that would result in the sale of one or more entities in which the Company owns an equity interest.

Distributions

BridgeBio's board has the authority to determine the amount, if any, of proceeds available for distribution to the unitholders and such amount would be distributed in accordance with the following priorities pursuant to the LLC Agreement:

- First, to the Series D members, pro rata among them in proportion to the amounts due to each member, an amount with respect to each Series D unit, until aggregate distributions are equal to the Series D unit value of $1.9823 per unit;
- Second, to the Series C Preferred Unit members and the Series B Preferred Unit members, pro rata among them in proportion to the amounts due to such member with respect to such distributions, until the aggregate distributions are equal to the Series C unit value and Series B unit value, respectively. The Series C unit value is $0.9656 per unit plus an amount between $0.0477 and $0.1014 based on the issuance date of the unit. The Series B unit value is $0.44 per unit plus an amount between $0.0575 and $0.1044 based on the issuance date of the unit.
- Third, to the Series A Preferred Unit members, pro rata among them in proportion to the amounts due to such member with respect to such distributions until the aggregate distributions are equal to the Series A unit amount of $0.44 per unit plus an amount between $0.1026 and $0.1044 based on the issuance date of the unit;
- Fourth, to the Founder Unit members and the Common Unit members pro rata among them in proportion to the amounts due to such member with respect to such distributions until the aggregate distributions are equal to the unit amount of $0.44 per Founder Unit and Common Unit plus an amount between $0.1026 and $0.1044 based on the issuance date of the unit.
- Fifth, to the non-Series D Preferred Unit members pro rata in proportion to their non-Series D percentage interests, provided that: (a) no Series C member will share in any subsequent distributions once the aggregate distributions made to all Series C units are equal to $339.5 million; (b) no Series B member will share in any subsequent distributions once the aggregate distributions made to all Series B

units are equal to $170.9 million; (c) no Series A member will share in any subsequent distributions once the aggregate distributions made to all Series A units are equal to $47.5 million; (d) no Founder Unit member will share in any distribution once the aggregate distributions made to all Founder Units are equal to $21.8 million; (e) no Common Unit member will share in any distribution once the aggregate distributions made to all Common Units are equal to the $17.3 million; and (f) no Management Incentive Unit member will share in any distribution once the aggregate distributions made to all Management Incentive Units are equal to $103.0 million; provided further that no member will share in any distribution with respect to any Management Incentive Unit until after the point at which the aggregate distributions to all units exceed the amount of such Management Incentive Unit participation threshold; and

- Sixth, to the members pro rata in proportion to their percentage interests; provided that no member will share in any distribution with respect to any Management Incentive Unit until after the point at which the aggregate distributions previously and currently made to all units exceed the amount of the Management Incentive Unit participation threshold.

Unit values are based on issuance date of the underlying unit and reflect the cumulative returns for such unit that have accrued through to the date of the LLC Agreement and shall no longer accumulate subsequent to such agreement.

Liquidation

In the event of any liquidation, dissolution, or winding-up of BridgeBio, the assets of BridgeBio will be distributed in accordance with the same order of priority as distributions (discussed above), but first to the creditors of BridgeBio in satisfaction of BridgeBio's liabilities.

Founder Units

Founder Unit members do not have any voting rights. Founder Units issued are not subject to any vesting conditions.

Common Units

Common Units do not have any voting rights. Common Units are generally subject to vesting over a period of up to five years as discussed in Note 14.

Management Incentive Units

Management Incentive Units do not have any voting rights. Management Incentive Units are generally subject to vesting over a period of up to five years as discussed in Note 14.

MyoKardia Distribution

In April 2015, the Company acquired an interest in MyoKardia, Inc. for $1.0 million. This investment was subsequently disposed of in 2016 and the Company recognized a gain on disposal of $1.2 million in the year ended December 31, 2016. Prior to the execution of the Merger described in Note 2, the Company distributed the $1.2 million to its members in proportion to the number of units then outstanding. Pursuant to the Merger terms, the Company was required to distribute the remaining proceeds of $1.0 million. This liability is included in accrued distributions to unitholders in the combined and consolidated balance sheets as of December 31, 2017 and 2018. The accrued distributions were paid to unitholders in February 2019.

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14. Equity-Based Compensation

The Company recorded equity-based compensation in the following expense categories in its combined and consolidated statements of operations for employees and non-employees:

	December 31, 2017			
	BridgeBio	Eidos	Other	Total
	(in thousands)			
Research and development	$ —	$ 519	$ 7	$ 526
General and administrative	541	629	145	1,315
Total equity-based compensation	$ 541	$1,148	$152	$1,841

	December 31, 2018			
	BridgeBio	Eidos	Other	Total
	(in thousands)			
Research and development	$ —	$1,325	$186	$1,511
General and administrative	3,183	1,201	172	4,556
Total equity-based compensation	$ 3,183	$2,526	$358	$6,067

For the years ended December 31, 2017 and 2018, total BridgeBio equity-based compensation from Common Units was $0.3 million and $0.3 million, and from Management Incentive Units was $0.2 million and $2.9 million, respectively.

As a result of the execution of the LLC Agreement in November 2018 discussed in Note 13, BridgeBio concluded that all issued and outstanding Common Units and Management Incentive Units were modified. For Common Units, there was a decrease in fair value and no adjustment to the equity-based compensation expense was recorded in the combined and consolidated statement of operations for the year ended December 31, 2018. For Management Incentive Units, the modification resulted in an increase in the fair value of $0.09 per outstanding unit and resulted in the recognition of incremental equity-based compensation expense of $1.6 million in 2018 and incremental future equity-based compensation expense of $2.7 million to be recognized over the remaining vesting period of the Management Incentive Units. There were no changes to the vesting terms or classification of the Common Units of Management Incentive Units as a result of the modification.

BridgeBio Common Units and Management Incentive Units

BridgeBio's Second Amended and Restated Limited Liability Company Agreement, Third Amended and Restated Limited Liability Company Agreement and LLC Agreement provided for the issuance of Management Incentive Units and Common Units to employees and non-employees. During 2017 and 2018, BridgeBio issued Management Incentive Units and Common Units based on the approval of the board of BridgeBio for each grant date.

Under the terms of the Management Incentive Units' agreements, the vesting schedule is typically 1/60th of the total number of Management Incentive Units, which vest on each monthly anniversary of the vesting commencement date, subject to continued service to BridgeBio. If a Fundamental Transaction takes place, the remaining vesting related to the Management Incentive Units and Common Units will accelerate. Under the terms of the Common Units' agreements, the vesting schedule is typically between two and five years with vesting taking place on each monthly anniversary of the vesting commencement date, subject to continued service to BridgeBio through the applicable vesting date.

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No distributions can be made to the holders of Management Incentive Units until the aggregate distributions made to other members (Preferred Unit, Founder Unit and Common Unit members) exceed the Management Incentive Units' participation threshold. BridgeBio has determined that the underlying terms and intended purpose of the Management Incentive Units and Common Units are more akin to an equity-based compensation for employees and non-employees than a performance bonus or profit-sharing arrangement.

The estimated grant-date fair value of each Common Unit and Management Incentive Unit award was calculated using the Black-Scholes option pricing model, based on assumptions as follows:

	Year Ended December 31,	
	2017	2018
Expected term (in years)	1.5	0.75-1.5
Expected volatility	45.0%	40.0%-49.0%
Risk-free interest rate	1.70%	1.70%-2.56%
Dividend yield	—	—

The fair value of each Common Unit and Management Incentive Unit award was determined using the methods and assumptions discussed below. Each of these inputs is subjective and generally requires significant judgement and estimation.

Fair value of Management Incentive Units and Common Units—Because there is no public market for BridgeBio's units as BridgeBio is a private company, BridgeBio's board has determined the fair value of Common Units and Management Incentive Units by considering a number of objective and subjective factors, including having contemporaneous and retrospective valuations of its equity performed by a third-party valuation specialist, valuations of comparable peer public companies, sales of BridgeBio's redeemable convertible preferred units, operating and financial performance, the lack of liquidity of BridgeBio's units and general and industry-specific economic outlook.

Expected term—The expected term is based on BridgeBio's expectations with regard to an exit strategy such as an IPO or liquidation event.

Expected volatility—BridgeBio has been a private company and lacks company-specific historical and implied volatility information. Therefore, it estimates its expected share volatility based on the historical volatility of a set of publicly traded peer companies and expects to continue to do so until such time as it has adequate historical data regarding the volatility of its own traded share price.

Risk-free interest rate—The risk-free interest rate is determined by reference to the United States Treasury yield curve in effect at the time of grant of the award for time periods approximately equal to the expected term of the award.

Expected dividend—The dividend yield was assumed to be immaterial based on future distribution expectations throughout the expected term.

Each of the above inputs is subjective and generally requires significant judgement and estimation.

BRIDGEBIO PHARMA LLC

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The following table summarizes BridgeBio's authorized Common Units activity:

	Number of Authorized Units
Balance as of January 1, 2017	9,098,522
Granted	2,390,000
Cancelled	(2,390,000)
Balance as of December 31, 2017	9,098,522
Granted	—
Cancelled	—
Balance as of December 31, 2018	9,098,522

The following table summarizes BridgeBio's Common Units activity:

	Number of Common Units Outstanding	Weighted-Average Grant Date Fair Value
Balance as of January 1, 2017	4,514,367	$ 0.08
Vested	1,341,708	$ 0.08
Balance as of December 31, 2017	5,856,075	$ 0.08
Vested	1,341,708	$ 0.08
Balance as of December 31, 2018	7,197,783	$ 0.08

As of December 31, 2018, there were 1,900,739 unvested Common Units and total unrecognized compensation related to the unvested Common Units was $0.1 million, which the Company expects to be recognized over a weighted-average period 1.3 years. All unvested Common Units as of December 31, 2018 will vest through May 2020.

The following table summarizes BridgeBio's authorized Management Incentive Units activity:

	Number of Authorized Units
Balance as of January 1, 2017	24,081,718
Authorized and granted	21,346,384
Balance as of December 31, 2017	45,428,102
Authorized and granted	3,275,000
Cancelled	(7,500)
Balance as of December 31, 2018	48,695,602

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The following table summarizes BridgeBio's Management Incentive Units activity:

	Number of Management Incentive Units Outstanding	Weighted-Average Grant Date Fair Value
Balance as of January 1, 2017	3,588,901	$ 0.03
Vested	6,247,024	$ 0.06
Balance as of December 31, 2017	9,835,925	$ 0.05
Vested	9,281,703	$ 0.11
Balance as of December 31, 2018	19,117,628	$ 0.08

As of December 31, 2018, there were 29,577,974 unvested Management Incentive Units and unrecognized compensation related to the unvested Management Incentive Units was $8.8 million, which the Company expects to recognize over a weighted-average period of 3.9 years. All unvested Management Incentive Units as of December 31, 2018 will vest through October 2023.

Eidos

2016 Equity Incentive Plan

In April 2016, Eidos established its 2016 Equity Incentive Plan (the "Eidos 2016 Plan"), which provides for the granting of equity awards to employees and consultants of Eidos. Awards granted under the Eidos 2016 Plan may be either incentive stock options ("ISOs"), nonqualified stock options ("NSOs") or restricted stock awards. ISOs may be granted only to Eidos employees (including officers and directors who are also employees). NSOs may be granted to Eidos employees and consultants. The exercise price of an ISO and NSO shall not be less than 100% of the estimated fair value of the shares on the date of grant, as determined by the Eidos Board of Directors. The exercise price of an ISO granted to an employee who at the time of grant is a 10% stockholder shall not be less than 110% of the estimated fair value of the shares on the date of grant, as determined by the Eidos Board of Directors. To date, ISOs and NSOs have a term of ten years and generally vest over a four-year period with annual cliff vesting and the balance monthly over 36 months. Upon completion of the Eidos IPO, the remaining shares available for issuance under the Eidos 2016 Plan were retired.

Amended and Restated 2018 Stock Option and Incentive Plan

In May 2018, the Eidos Board of Directors and stockholders approved the Amended and Restated 2018 Stock Option and Incentive Plan (the "Eidos 2018 Plan"), to replace the Eidos 2016 Plan. The Eidos 2018 Plan became effective upon the Eidos IPO and is administered by the Eidos Board of Directors or an appointed committee, which determines the types of awards to be granted, including the number of shares subject to the awards, the exercise price and the vesting schedule. Under the Eidos 2018 Plan, 598,000 shares of Eidos' common stock have been initially reserved for the issuance of stock options, restricted stock units and other awards to employees, directors and consultants. Options granted under the Eidos 2018 Plan expire no later than 10 years from the date of grant. The exercise price of each option may not be less than 100% of the fair market value of the common stock at the date of grant. Options may be granted to stockholders possessing more than 10% of the total combined voting power of all classes of stocks of Eidos at an exercise price at least 110% of the fair value of the common stock at the date of grant and the options are not exercisable after the expiration of 10 years from the date of grant. Employee stock options generally vest 25% upon one year of continued service to Eidos, with the remainder in monthly increments over three additional years. Upon adoption of the Eidos 2018 Plan, no additional stock awards will be issued under the Eidos 2016 Plan. Options granted under the Eidos 2016

Plan that were outstanding on the date the Eidos 2018 Plan became effective remain subject to the terms of the Eidos 2016 Plan. In December 2018, the Eidos Board of Directors approved an increase in the number of shares reserved under the Eidos 2018 Plan by 700,000 shares. As of December 31, 2018, Eidos has reserved 1,298,000 shares of common stock for issuance under the 2018 Plan, of which the 700,000 shares subject to the December 2018 increase remain subject to stockholder approval.

Employee Stock Purchase Plan

In May 2018, the Eidos Board of Directors and stockholders approved the 2018 Employee Stock Purchase Plan (the "Eidos 2018 ESPP"), which became effective upon the Eidos IPO. The Eidos 2018 ESPP is intended to qualify as an employee stock purchase plan under Section 423 of the Internal Revenue Code of 1986, as amended, and is administered by the Eidos Board of Directors and the Compensation Committee of the Eidos Board of Directors. Under the Eidos 2018 ESPP, 143,520 shares of Eidos' common stock have been initially reserved for employee purchases of Eidos' common stock. The Eidos 2018 ESPP allows eligible employees to purchase shares of Eidos' common stock at a discount through payroll deductions of up to 20% of their eligible compensation. At the end of each offering period, employees are able to purchase shares at 85% of the lower of the fair market value of Eidos' common stock at the beginning of the offering period or at the end of each applicable purchase period. The first purchase period commenced upon the completion of the Eidos IPO and ended on November 30, 2018.

The fair value of the rights granted under the Eidos 2018 ESPP was calculated using the Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31, 2018
Expected term (in years)	0.48
Expected volatility	70.4%
Risk-free interest rate	1.50%
Dividend yield	—

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

Stock Options

Activity under the Eidos equity incentive plans is set forth below:

	Options Available for Grant	Options Outstanding	Weighted-Average Exercise Price per Option	Weighted-Average Remaining Contractual Life (years)	Aggregate Intrinsic Value
	(in thousands, except per share and per share data)				
Outstanding as of January 1, 2017	643,922	30,068	$ 0.15	9.62	$ —
Additional authorized	1,495,000	—	—		
Granted	(1,467,928)	1,467,928	0.55		
Exercised	—	(651,830)	0.48		
Outstanding as of December 31, 2017	670,994	846,166	$ 0.59	9.97	$ 4,384
Granted	(399,074)	399,074	5.03		
Cancelled	321,916	(321,916)	0.59		
Retired	(593,836)	—	—		
Additional authorized	1,298,000	—	—		
Granted	(696,364)	696,364	15.45		
Exercised	—	(184,871)	1.48		
Exercised options repurchased	40,366	—	0.33		
Cancelled	105,055	(105,055)	13.67		
Outstanding as of December 31, 2018	747,057	1,329,762	$ 8.55	9.40	$ 6,928
Vested and expected to vest as of December 31, 2018		1,329,762	$ 8.55	9.40	$ 6,928
Exercisable as of December 31, 2018		161,208	$ 1.34	8.96	$ 2,002

Aggregate intrinsic value represents the difference between Eidos' estimated fair value of its common stock and the exercise price of outstanding in–the–money options. The total intrinsic value of options exercised was $2.9 million and $0.9 million for the years ended December 31, 2017 and 2018, respectively.

The total fair value of shares vested during the years ended December 31, 2017 and 2018 was $0.5 million and $2.5 million, respectively.

Stock Options Valuation

The fair value of Eidos' shares of common stock underlying its stock options has historically been determined by Eidos' Board of Directors prior to the Eidos IPO. Because there had been no public market for Eidos' common stock, Eidos' Board of Directors had determined fair value of the common stock at the time of grant of the option by considering a number of objective and subjective factors including important developments in Eidos' operations, valuations performed by an independent third-party, sales of redeemable convertible preferred stock, actual operating results and financial performance, the conditions in the biotechnology industry and the economy in general, the stock price performance and volatility of comparable public companies, and the lack of liquidity of Eidos' common stock, among other factors. For stock options granted after the completion of the Eidos IPO, Eidos determines the fair value of each share of underlying common stock based on the closing price of Eidos' common stock as reported on the date of grant.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

The determination of the fair value of equity-based payment awards on the date of grant is affected by the stock price, as well as assumptions regarding a number of complex and subjective variables. These variables include expected stock price volatility over the term of the awards, actual and projected employee/consultant stock option exercise behaviors, risk-free interest rates, and expected dividends. Estimating the fair value of equity-settled awards as of the grant date using valuation models, such as the Black-Scholes option pricing model, is affected by assumptions regarding a number of complex variables. These inputs include:

Expected term—The expected term represents the period that the stock-based awards are expected to be outstanding. Since Eidos does not have a long trading history for its common stock, the expected term is estimated based on the average expected term for comparable publicly traded biopharmaceutical companies. The comparable companies were chosen based on their similar size, stage in the life cycle or area of specialty. For non-employees, the term is the remaining contractual term of the option.

Expected volatility—Since Eidos does not have a long trading history for its common stock, the expected volatility is estimated based on the average volatility for comparable publicly traded biopharmaceutical companies over a period equal to the expected term of the stock option grants. The comparable companies were chosen based on their similar size, stage in the life cycle or area of specialty.

Risk-free interest rate—The risk-free interest rate is based on the United States Treasury zero coupon issues in effect at the time of grant for periods corresponding with the expected term of option.

Expected dividend—Eidos has never paid dividends on its common stock and has no plans to pay dividends on its common stock. Therefore, Eidos used an expected dividend yield of zero.

The fair value of employee and non-employee director stock option awards was estimated at the date of grant using a Black-Scholes option-pricing model with the following assumptions:

	Year Ended December 31, 2017		Year Ended December 31, 2018	
	Employee	Non-employee	Employee	Non-employee
Expected term (in years)	5.83	9.66	6.08	9.20
Expected volatility	68.4%	80.1%	72.0%	73.9%
Risk-free interest rate	2.27%	2.41%	2.87%	2.66%
Dividend yield	—	—	—	—

The weighted average fair value of share-based awards granted to employees during the years ended December 31, 2017 and 2018 was $4.79 per share and $8.46 per share, respectively.

During the years ended December 31, 2017 and 2018, Eidos granted 569,252 and 35,880 shares, respectively, to non-employee consultants. Eidos recognized stock-based compensation expense for non-employee awards during the years ended December 31, 2017 and 2018 of $0.7 million and $1.7 million, respectively.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

Restricted Stock

In December 2017, Eidos issued 390,546 shares of common stock for no consideration to the founders pursuant to Eidos' Series Seed Preferred Stock Purchase Agreement and license agreement in connection with certain anti-dilution rights held by these parties. If the shares issued under the license agreement represent less than 1% of the shares issued and outstanding of common stock on an as-converted basis, Eidos will issue additional common stock to the founders and Stanford University. Eidos has the right to repurchase the common stock at the fair value per share on the date of repurchase; this repurchase right lapses as the shares vest. The shares cliff vest 25% after one year and vest monthly thereafter over 36 months. As of December 31, 2017 and 2018, 390,546 and 268,504 shares remain subject to repurchase.

Eidos recognizes stock-based compensation expense upon the approval of these awards by the Eidos Board of Directors in September 2017 as vesting provisions are not considered substantive due to the fair value repurchase right. Stock-based compensation expense related to the restricted stock is recognized based on the fair value of the stock on the approval date using the Black-Scholes pricing model. During the years ended December 31, 2017 and 2018, Eidos recognized expense related to these awards of $0.2 million and nil, respectively.

Equity-Based Compensation

As of December 31, 2018, there was $10.8 million of total unrecognized compensation cost related to unvested equity-based compensation arrangements under the Eidos 2016 Plan and Eidos 2018 Plan. The unrecognized equity-based compensation cost is expected to be recognized over a weighted-average period 3.3 years.

15. Income Taxes

BridgeBio is a "pass-through" entity under the Code and the members are taxed directly on their respective ownership interests in the combined and consolidated income. Therefore, no provision or liability for federal income tax has been included in the accompanying combined and consolidated financial statements related to BridgeBio.

For the Company's consolidated entities, income taxes are accounted for in accordance with authoritative guidance, which requires the use of the asset and liability method. Under this method, deferred income tax assets and liabilities are determined based upon the difference between the consolidated financial statement carrying amounts and the tax basis of assets and liabilities and are measured using the enacted tax rate expected to apply to taxable income in the years in which the differences are expected to be reversed.

The following table presents the components of net loss before income taxes:

	December 31,	
	2017	2018
	(in thousands)	
Domestic	$43,832	$169,451
Foreign	—	—
Total loss before income taxes	$43,832	$169,451

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

The following table presents a reconciliation of the statutory federal rate and the Company's effective tax rate:

	Year Ended December 31,	
	2017	2018
Tax at statutory federal rate	34.0%	21.0%
State income taxes, net of federal benefit	—	—
Change in valuation allowance	(16.4)	(20.2)
Other	(1.7)	(0.8)
Impact of tax reform	(15.9)	—
Effective income tax rate	— %	— %

Deferred income taxes reflect the net tax effects of temporary differences between the carrying amounts of assets and liabilities for financial reporting purposes and the amounts used for income tax purposes. The following table presents the significant components of the Company's deferred tax assets and liabilities for the periods presented:

	December 31,	
	2017	2018
	(in thousands)	
Deferred tax assets:		
Net operating loss carry-forwards	$ 14,590	$ 40,896
Amortization	1,501	4,424
Accruals and reserves	762	434
Equity-based compensation	412	268
Tax credits	649	3,728
Other	—	23
Gross deferred tax assets	17,914	49,773
Less valuation allowance	(15,914)	(49,755)
Deferred tax assets, net of valuation allowance	2,000	18
Deferred tax liabilities:		
Fixed assets	(4)	(18)
Other	(12)	—
Federal benefit of state	(909)	—
Prepaid expenses	(1,075)	—
Deferred tax liabilities	(2,000)	(18)
Net deferred tax assets	$ —	$ —

As of December 31, 2018, the Company has net operating loss carryforwards available to reduce future taxable income, if any, for federal and California state income tax purposes of approximately $157.5 million and $101.8 million. The net operating losses will begin to expire in 2033.

As of December 31, 2018, the Company has federal research and development credit carryforwards of $4.2 million, which will expire beginning in 2033 if not utilized. As of December 31, 2018, the Company has

California research and development tax credit carryforwards of $0.8 million. The California research and development tax credits have no expiration date.

A valuation allowance is provided for deferred tax assets where the recoverability of the assets is uncertain. The determination to provide a valuation allowance is dependent upon the assessment of whether it is more likely than not that sufficient future taxable income will be generated to utilize the deferred tax assets. Based on the weight of the available evidence, which includes the Company's historical operating losses and forecast of future losses, the Company provided a full valuation allowance against the deferred tax assets resulting from the tax loss and credits carried forward.

Utilization of the net operating loss and credit carryforwards may be subject to a substantial annual limitation due to an ownership change limitation as provided by section 382 of the Internal Revenue Code of 1986, as amended, and similar state provisions. The annual limitation may result in the expiration of net operating losses and credits before utilization. In the event that the Company had a change of ownership, utilization of the net operating loss and tax credit carryforwards may be restricted.

A reconciliation of the beginning and ending amount of unrecognized tax benefits is as follows:

	As of December 31,	
	2017	2018
	(in thousands)	
Balance at the beginning of the year	$ 37	$ 296
Reversal of prior year positions	—	(42)
Additions based on tax positions related to current year	259	928
Balance at the end of the year	$ 296	$ 1,182

As of December 31, 2018, the Company has not recorded interest and penalties associated with its unrecognized tax benefits.

The Company's unrecognized gross tax benefits would not reduce the annual effective tax rate if recognized because it has recorded a full valuation allowance on its deferred tax assets. The Company does not foresee any material changes to the gross unrecognized tax benefit within the next twelve months. The Company's policy is to recognize interest and penalties related to income tax matters in income tax expense.

The Company files federal, California and Massachusetts income tax returns. The Company currently has no federal or state tax examinations in progress. All years are open for examination by federal and state authorities.

In December 2017, the United States government enacted comprehensive tax legislation commonly referred to as the Tax Cuts and Jobs Act (the "Tax Act") and the new legislation contains several key provisions, including a reduction of the federal corporate income tax rate to 21% effective January 1, 2018. The Company is required to recognize the effect of the tax law changes in the period of enactment, such as remeasuring its United States deferred tax assets and liabilities as well as its valuation allowance against its net United States deferred tax assets. In December 2017, the U.S. Securities and Exchange Commission staff issued Staff Accounting Bulletin No. 118 ("SAB 118"), which allowed the Company to record provisional amounts during a measurement period not to extend beyond one year of the enactment date. During the fourth quarter of 2018, the Company completed its accounting for the Tax Act as summarized below.

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

Due to the change in the statutory tax rate from the Tax Act, the Company remeasured its federal deferred tax assets as of December 31, 2017 to reflect the reduced rate that will apply in future periods when these deferred taxes are settled or realized. The result was a decrease of $6.8 million to deferred tax assets. No adjustments were made to the provisional estimates recorded.

The Company determined the one-time transition tax would not be applicable given the Company's facts and circumstances. The one-time transition tax would be based on total post-1986 foreign earnings and profits that were previously deferred from United States income tax. The applicable tax rate is based on the amount of those post-1986 earnings that is held in cash and other specified assets (the "cash position"). BridgeBio does not have any foreign earnings and profits and thus the Company would not have any transition tax liability. The Company's position has not changed.

The Tax Act contains various provisions that went into effect as of January 1, 2018. The Company has analyzed all provisions enacted as of January 1, 2018 and determined that the newly enacted provisions do not materially impact the Company. The Company will continue to monitor all provisions for applicability in future periods.

16. Net Loss per Unit

The following table sets forth the calculation of basic and diluted net loss per unit:

	Year Ended December 31,	
	2017	2018
	(in thousands, except unit and per unit data)	
Numerator:		
Net loss attributable to BridgeBio	$ (30,565)	$ (130,749)
Cumulative returns on redeemable convertible preferred units (Series A, Series B and Series C)	(5,672)	(13,287)
Net loss attributable to Founder Units and Common Units	$ (36,237)	$ (144,036)
Denominator:		
Total weighted-average Founder Units and Common Units used in computing net loss per unit, basic and diluted	16,650,073	17,991,781
Net Loss per Unit:		
Net loss attributable to Founder Units and Common Units, basic and diluted	$ (2.18)	$ (8.01)

The following outstanding units were excluded from the computation of the diluted net loss per unit for the periods presented because their effect would have been anti-dilutive.

	Year Ended December 31,	
	2017	2018
Preferred Units	219,406,923	407,955,726
Management Incentive Units	45,428,102	48,695,602
Unvested Common Units	3,242,447	1,900,739
Total	268,077,472	458,552,067

BRIDGEBIO PHARMA LLC

Notes to Combined and Consolidated Financial Statements

17. Subsequent Events

Subsequent events through April 15, 2019, the date on which the combined and consolidated financial statements were available to be issued, were evaluated by the Company to determine the need, if any, for recognition or disclosure in its combined and consolidated financial statements.

Management Incentive Unit grants

Subsequent to December 31, 2018, the Company has granted 24,111,064 Management Incentive Units.

Significant financing events in relation to controlled VIEs

Subsequent to December 31, 2018, BridgeBio made additional investments in QED of $20.0 million, Quartz of $0.1 million, CoA of $5.1 million, Orfan of $1.5 million, Ferro of $1.5 million, Aspa of $8.0 million, Adrenas of $8.0 million, and Navire of $4.5 million.

Lease Agreements

In March 2019, Adrenas entered into a five-year agreement to rent 11,376 square feet of office space in Raleigh, North Carolina. The aggregate rent expense under the lease is $2.4 million. The lease provides for a tenant improvement allowance for up to $0.9 million. Upon signing the lease, Adrenas agreed to deliver the landlord two unconditional, irrevocable, transferrable letters of credit in the total amount of $0.4 million.

In March 2019, Eidos entered into an amendment to the lease dated November 2017. In connection with the amendment Eidos will rent 10,552 square feet of office space. The amended lease term is for 87 months and has $6.4 million of payments under this lease.

shares

Common stock

Prospectus

J.P. Morgan	**Goldman Sachs & Co. LLC**	**Jefferies**	**SVB Leerink**	**KKR**
Piper Jaffray	**Mizuho Securities**	**BMO Capital Markets**	**Raymond James**	

, 2019

PART II
INFORMATION NOT REQUIRED IN PROSPECTUS

Item 13. Other Expenses of Issuance and Distribution.

The following table sets forth all expenses, other than the underwriting discounts and commissions, payable by BridgeBio Pharma, Inc., or the Company or the Registrant, in connection with the sale of the common stock being registered. All the amounts shown are estimates except the SEC registration fee and the FINRA filing fee.

	Amount Paid or to be Paid
SEC registration fee	$ *
FINRA filing fee	*
Nasdaq initial listing fee	*
Legal fees and expenses	*
Accountants' fees and expenses	*
Printing expenses	*
Transfer and registrar fee	*
Miscellaneous	*
Total	$ *

* To be provided by amendment

Item 14. Indemnification of directors and officers

As permitted by Section 102 of the Delaware General Corporation Law, we have adopted provisions in our amended and restated certificate of incorporation and amended and restated bylaws that limit or eliminate the personal liability of our directors for a breach of their fiduciary duty of care as a director. The duty of care generally requires that, when acting on behalf of the corporation, directors exercise an informed business judgment based on all material information reasonably available to them. Consequently, a director will not be personally liable to us or our stockholders for monetary damages for breach of fiduciary duty as a director, except for liability for:

- any breach of the director's duty of loyalty to us or our stockholders;
- any act or omission not in good faith or that involves intentional misconduct or a knowing violation of law;
- any act related to unlawful stock repurchases, redemptions or other distributions or payment of dividends; or
- any transaction from which the director derived an improper personal benefit.

These limitations of liability do not affect the availability of equitable remedies such as injunctive relief or rescission. Our amended and restated certificate of incorporation also authorizes us to indemnify our officers, directors and other agents to the fullest extent permitted under Delaware law.

Section 145 of the Delaware General Corporation Law permits a corporation to include in its charter documents, and in agreements between the corporation and its directors and officers, provisions expanding the scope of indemnification beyond that specifically provided by the current law.

Section 145(a) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative (other than an action by or in

the right of the corporation), because he or she is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees), judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with such action, suit or proceeding, if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation and, with respect to any criminal action or proceeding, had no reasonable cause to believe his or her conduct was unlawful.

Section 145(b) of the Delaware General Corporation Law provides, in general, that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action or suit by or in the right of the corporation to procure a judgment in its favor because the person is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses (including attorneys' fees) actually and reasonably incurred by the person in connection with the defense or settlement of such action or suit if he or she acted in good faith and in a manner he or she reasonably believed to be in or not opposed to the best interests of the corporation, except that no indemnification shall be made with respect to any claim, issue or matter as to which he or she shall have been adjudged to be liable to the corporation unless and only to the extent that the Court of Chancery or other adjudicating court determines that, despite the adjudication of liability but in view of all of the circumstances of the case, he or she is fairly and reasonably entitled to indemnity for such expenses which the Court of Chancery or other adjudicating court shall deem proper.

Section 145(g) of the Delaware General Corporation Law provides, in general, that a corporation may purchase and maintain insurance on behalf of any person who is or was a director, officer, employee or agent of the corporation, or is or was serving at the request of the corporation as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise against any liability asserted against such person and incurred by such person in any such capacity, or arising out of his or her status as such, whether or not the corporation would have the power to indemnify the person against such liability under Section 145 of the Delaware General Corporation Law.

The Company's amended and restated certificate of incorporation, which will become effective upon completion of the offering, provides for the indemnification of directors to the fullest extent permissible under Delaware law.

The Company's amended and restated bylaws, which will become effective upon completion of the offering, provide for the indemnification of officers, directors and third parties acting on the Company's behalf if such persons act in good faith and in a manner reasonably believed to be in and not opposed to the Company's best interest, and, with respect to any criminal action or proceeding, such indemnified party had no reason to believe his or her conduct was unlawful.

The Company is entering into indemnification agreements with each of its directors and executive officers, in addition to the indemnification provisions provided for in its charter documents, and the Company intends to enter into indemnification agreements with any new directors and executive officers in the future. These agreements will provide that we will indemnify each of our directors and executive officers, and such entities to the fullest extent permitted by law.

The underwriting agreement (to be filed as Exhibit 1.1 hereto) will provide for indemnification by the underwriters of the Company, and its executive officers and directors, and indemnification of the underwriters by the Company for certain liabilities, including liabilities arising under the Securities Act of 1933, as amended, in connection with matters specifically provided in writing by the underwriters for inclusion in the registration statement.

The Company intends to purchase and maintain insurance on behalf of any person who is or was a director or officer against any loss arising from any claim asserted against him or her and incurred by him or her in that capacity, subject to certain exclusions and limits of the amount of coverage.

Item 15. Recent Sales of Unregistered Securities.

Set forth below is information regarding securities we have issued within the past three years that were not registered under the Securities Act. Amounts below do not give effect to the Reorganization.

(a) Private Placements of Convertible Preferred Stock

Between March 2016 and May 2017, we issued 75,340,907 Series B preferred units in several closings at a price of $0.44 per unit to seven accredited investors for aggregate gross proceeds of approximately $33.1 million. The Series B preferred units will be exchanged for an aggregate of shares of common stock in connection with the Reorganization.

In June 2017, in connection with the merger transaction with BridgeBio LLC, we issued (i) 2,390,000 common units to six accredited investors, (ii) 3,000,000 founder units to six accredited investors, (iii) 6,550,000 Series A preferred units to seven accredited investors and (iv) 15,568,183 Series B preferred units to seven accredited investors, in each case in exchange for the same number of corresponding units in BridgeBio LLC held by such investors. The above units will be exchanged for an aggregate of shares of common stock in connection with the Reorganization.

Between August 2017 and March 2018, we issued 141,155,758 Series C preferred units in several closings at a price of $0.9656 per unit to seven accredited investors for aggregate gross proceeds of approximately $136.3 million. As part of the Series C preferred unit transaction, we issued to one accredited investor an aggregate of 4,142,502 Series C preferred units, in exchange for cancellation of an aggregate of approximately $4.0 million of outstanding indebtedness under a convertible promissory note we had previously issued. The Series C preferred units will be exchanged for an aggregate of shares of common stock in connection with the Reorganization.

In November and December 2018, we issued 150,955,597 Series D preferred units at a purchase price of $1.9823 per unit to 10 accredited investors for aggregate gross proceeds of approximately $299.2 million. The Series D preferred units will be exchanged for an aggregate of shares of common stock in connection with the Reorganization.

No underwriters were involved in the foregoing sales of securities. Unless otherwise stated, the sales of securities described above were deemed to be exempt from registration pursuant to Section 4(a)(2) of the Securities Act, including Regulation D and Rule 506 promulgated thereunder, as transactions by an issuer not involving a public offering. All of the purchasers in these transactions represented to us in connection with their purchase that they were acquiring the securities for investment and not distribution, that they could bear the risks of the investment and could hold the securities for an indefinite period of time. Such purchasers received written disclosures that the securities had not been registered under the Securities Act and that any resale must be made pursuant to a registration or an available exemption from such registration. All of the foregoing securities are deemed restricted securities for the purposes of the Securities Act.

(b) Grants

Through April 12, 2019, we have granted an aggregate of 62,806,666 management incentive units, with a grant date fair value ranging from $0.02 to $1.11 per unit, to employees, directors and consultants.

No underwriters were involved in the foregoing issuances of securities. The offers, sales and issuances of the securities described above were deemed to be exempt from registration under the Securities Act in reliance upon

Rule 701 or Section 4(a)(2) of the Securities Act. The offers, sales and issuances of the securities that were deemed to be exempt in reliance on Rule 701 were transactions under compensatory benefit plans and contracts relating to compensation as provided under Rule 701. The offers, sales and issuances of the securities that were deemed to be exempt in reliance upon Section 4(a)(2) were each transactions not involving any public offering, and all recipients of these securities were accredited investors within the meaning of Rule 501 of Regulation D of the Securities Act who were acquiring the applicable securities for investment and not distribution and had represented that they could bear the risks of the investment. Each of the recipients of securities in these transactions had adequate access, through employment, business or other relationships, to information about us.

Item 16. Exhibits and Financial Statement Schedules.

(a) Exhibits

Exhibit Number	Description
1.1*	Form of Underwriting Agreement.
3.1*	Amended and Restated Certificate of Incorporation of the Registrant, as currently in effect.
3.2*	Form of Amended and Restated Certificate of Incorporation of the Registrant, to be in effect immediately prior to completion of this offering.
3.3*	Bylaws of the Registrant, as currently in effect.
3.4*	Form of Amended and Restated Bylaws of the Registrant, to be in effect immediately prior to completion of this offering.
4.1*	Specimen Common Stock Certificate.
4.2	Fourth Amended and Restated Limited Liability Company Agreement, dated November 20, 2018, by and among BridgeBio Pharma LLC and its members.
4.3	Form of Registration Rights Agreement, among the Registrant and certain of its shareholders, to be in effect immediately prior to completion of this offering.
5.1*	Opinion of Goodwin Procter LLP.
10.1*	2019 Stock Option and Incentive Plan and form of award agreements thereunder.
10.2*	2019 Employee Stock Purchase Plan.
10.3*	Senior Executive Cash Incentive Bonus Plan.
10.4*	Form of Indemnification Agreement, between the Registrant and each of its directors.
10.5*	Form of Indemnification Agreement, between the Registrant and each of its executive officers.
10.6	Loan and Security Agreement, between the Registrant and Hercules Capital, Inc., dated as of June 19, 2018.
10.7	First Amendment to the Loan and Security Agreement, between the Registrant and Hercules Capital, Inc., dated as of December 28, 2018.
10.8	Lease Agreement, between the Registrant and Michael J. Harbour, dated as of March 23, 2017.
10.9†	Exclusive (Equity) Agreement, by and between Eidos Therapeutics, Inc. and the Board of Trustees of the Leland Stanford Junior University, effective as of April 10, 2016, as amended by Amendment No. 1 effective September 25, 2017.
10.10†	License Agreement, between QED Therapeutics, Inc. and Novartis International Pharmaceutical Ltd., dated as of January 29, 2018.
10.11†	Asset Purchase Agreement, among BridgeBio Pharma LLC, Origin Biosciences, Inc., and Alexion Pharma Holding Unlimited Company, dated as of June 7, 2018.
10.12†	Option Agreement, among PellePharm, Inc., Leo Pharma A/S and Leo Spiny Merger Sub, Inc., dated as of November 19, 2018, as amended on March 13, 2019.
10.13†	Asset Purchase Agreement, among Phoenix Tissue Repair, Inc., Shire Human Genetic Therapies, Inc., and Lotus Tissue Repair, Inc., dated as of July 21, 2017.

Exhibit Number	Description
10.14†	Exclusive License Agreement, between The Regents of the University of California and TheRas, Inc., dated September 28, 2016, as amended by First Amendment effective January 10, 2017, Second Amendment effective August 10, 2017 and Third Amendment effective September 7, 2018.
10.15†	Collaboration and License Agreement, between Navire Pharma, Inc. (formerly known as PTP Pharmaceuticals, Inc.) and the Board of Regents of the University of Texas System and The University of Texas M.D. Anderson Cancer Center, dated March 3, 2017, as amended by Amendment No. 1 dated July 10, 2017.
10.16†	Exclusive Patent License Agreement, between The Frederick National Laboratory for Cancer Research, operated by Leidos Biomedical Research, Inc., under sponsorship from the National Cancer Institute, and TheRas, Inc., dated December 14, 2018.
10.17*†	Cell Line License Agreement, by and between Life Technologies Corporation and BridgeBio Services, Inc., effective as of November 15, 2018.
21*	List of Subsidiaries of the Registrant.
23.1*	Consent of Deloitte & Touche LLP independent registered public accounting firm.
23.2*	Consent of Goodwin Procter LLP (included in Exhibit 5.1).
24*	Power of Attorney (included on signature page).

* To be filed by amendment.
† Certain confidential portions (indicated by brackets and asterisks) have been omitted from this exhibit.

(b) Financial Statement Schedules

All schedules have been omitted because they are not required or because the required information is given in the financial statements or notes to those statements.

Item 17. Undertakings.

Insofar as indemnification for liabilities arising under the Securities Act of 1933, as amended, may be permitted to directors, officers and controlling persons of the Registrant pursuant to the foregoing provisions, or otherwise, the Registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Securities Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the Registrant of expenses incurred or paid by a director, officer or controlling person of the Registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the Registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Securities Act of 1933 and will be governed by the final adjudication of such issue.

The undersigned Registrant hereby undertakes that:

(a) The undersigned Registrant will provide to the underwriters at the closing specified in the underwriting agreement certificates in such denominations and registered in such names as required by the underwriters to permit prompt delivery to each purchaser.

(b) For purposes of determining any liability under the Securities Act, the information omitted from the form of prospectus filed as part of this registration statement in reliance upon Rule 430A and contained in a form of prospectus filed by the Registrant pursuant to Rule 424(b)(1) or (4) or 497(h) under the Securities Act shall be deemed to be part of this registration statement as of the time it was declared effective.

(c) For the purpose of determining any liability under the Securities Act, each post-effective amendment that contains a form of prospectus shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

SIGNATURES

Pursuant to the requirements of the Securities Act of 1933, as amended, the Registrant has duly caused this registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the city of Palo Alto, California on , 2019.

BRIDGEBIO PHARMA HOLDINGS INC.

By: Neil Kumar, Ph.D.
Chief Executive Officer

POWER OF ATTORNEY

KNOW ALL PERSONS BY THESE PRESENTS, that each person whose signature appears below constitutes and appoints Neil Kumar and Brian C. Stephenson his true and lawful attorney-in-fact and agent with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments (including post-effective amendments) to this registration statement, and to sign any registration statement for the same offering covered by the registration statement that is to be effective upon filing pursuant to Rule 462(b) promulgated under the Securities Act, and all post-effective amendments thereto, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorney-in-fact and agent, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he or she might or could do in person, hereby ratifying and confirming that all said attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities Act of 1933, as amended, this registration statement has been signed by the following persons in the capacities and on the dates indicated.

Name	Title	Date
Neil Kumar, Ph.D.	Chief Executive Officer, Director (Principal Executive Officer)	, 2019
Brian C. Stephenson, Ph.D., CFA	Chief Financial Officer (Principal Financial and Accounting Officer)	, 2019
Eric Aguiar, M.D.	Director	, 2019
Charles Homcy, M.D.	Director	, 2019
James C. Momtazee	Director	, 2019
Ali J. Satvat	Director	, 2019
Richard H. Scheller, Ph.D.	Director	, 2019

Exhibit 4.2

FOURTH AMENDED AND RESTATED

LIMITED LIABILITY COMPANY

AGREEMENT

OF

BRIDGEBIO PHARMA LLC

a Delaware Limited Liability Company

Dated as of November 20, 2018

MEMBERSHIP INTERESTS IN BRIDGEBIO PHARMA LLC, A DELAWARE LIMITED LIABILITY COMPANY, HAVE NOT BEEN REGISTERED UNDER THE UNITED STATES SECURITIES ACT OF 1933, AS AMENDED, THE SECURITIES LAWS OF ANY STATE OF THE UNITED STATES OR ANY OTHER APPLICABLE SECURITIES LAWS AND HAVE NOT OTHERWISE BEEN REGISTERED WITH OR QUALIFIED BY THE SECURITIES AND EXCHANGE COMMISSION OR ANY SECURITIES REGULATORY AUTHORITY OF ANY STATE OR ANY OTHER JURISDICTION. THE MEMBERSHIP INTERESTS ARE BEING SOLD IN RELIANCE UPON EXEMPTIONS FROM SUCH REGISTRATION OR QUALIFICATION REQUIREMENTS. THE MEMBERSHIP INTERESTS MUST BE ACQUIRED FOR INVESTMENT ONLY AND CANNOT BE SOLD, PLEDGED, HYPOTHECATED, TRANSFERRED, ASSIGNED OR OTHERWISE DISPOSED OF AT ANY TIME EXCEPT IN COMPLIANCE WITH (i) THE RESTRICTIONS ON TRANSFERABILITY CONTAINED IN THIS LIMITED LIABILITY COMPANY AGREEMENT OF BRIDGEBIO PHARMA LLC, AND (ii) APPLICABLE FEDERAL, STATE AND OTHER SECURITIES LAWS. THEREFORE, PURCHASERS OF THE MEMBERSHIP INTERESTS WILL BE REQUIRED TO BEAR THE RISK OF THEIR INVESTMENT FOR AN INDEFINITE PERIOD OF TIME.

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FOURTH AMENDED AND RESTATED
LIMITED LIABILITY COMPANY AGREEMENT
OF
BRIDGEBIO PHARMA LLC

This **FOURTH AMENDED AND RESTATED LIMITED LIABILITY COMPANY AGREEMENT** (the "**Agreement**") of BridgeBio Pharma LLC, a Delaware limited liability company (the "**Company**"), is made and entered into as of November 20, 2018 (the "**Effective Date**"), by and among KKR Genetic Disorder L.P., a Delaware limited partnership (together with its successors and assigns, the "**KKR Member**" or "**KKR**"), each Person listed on Exhibit A hereto as of the Effective Date as a New Member (the "**New Members**"), each Person listed on Exhibit A hereto as of the Effective Date as an Existing Member (the "**Existing Members**"), and each Additional Member and Substitute Member from time to time admitted in accordance with this Agreement, in each case for so long such party remains a Member of the Company. The Company is organized under the Delaware Limited Liability Company Act, 6 Del.C. § 18-101, et seq. (as amended from time to time, the "**Act**").

RECITALS

WHEREAS, the Company was formed as a Delaware limited liability company pursuant to a Certificate of Formation filed with the Secretary of State of the State of Delaware on March 9, 2016 in accordance with the Act;

WHEREAS, the Company has been governed by that certain Third Amended and Restated Limited Liability Company Agreement of the Company dated as of August 15, 2017 (as amended, the "**Prior Agreement**");

WHEREAS, the Existing Members are the Members of the Company pursuant to the terms of the Prior Agreement, and own Founder Units, Common Units, Series A Preferred Units, Series B Preferred Units and Series C Preferred Units of the Company, in each case as set forth next to the name of such Person on Exhibit A hereto;

WHEREAS, the New Members and certain Existing Members have entered into a Series D Preferred Unit Purchase Agreement with the Company, dated as of November 20, 2018, pursuant to which the New Members and such Existing Members are purchasing newly issued Series D Preferred Units from the Company (as amended in accordance therewith, the "**Purchase Agreement**");

WHEREAS, the parties hereto desire to (a) continue the Company as a limited liability company in accordance with the Act, (b) admit the New Members as Members to the Company, (c) maintain the Existing Members as Members of the Company, (d) create new Interests in the Company and amend the existing Interests in the Company as set forth herein, and (e) provide for the management and operation of the Company on new terms, all as set forth in this Agreement; and

WHEREAS, the parties desire to amend and restate the Prior Agreement in its entirety as set forth in this Agreement.

NOW, THEREFORE, in consideration of the mutual covenants and promises contained herein and for other good and valuable consideration the receipt and adequacy of which are hereby acknowledged, the parties hereto agree as follows:

ARTICLE 1.
ORGANIZATIONAL MATTERS

1.1 **Continuation**. Upon the filing of the Certificate of Formation of the Company (the "**Certificate**") with the Secretary of State of the State of Delaware on March 9, 2016, the Company was formed as a limited liability company under the Act for the purposes and upon the terms and conditions hereinafter set forth. The rights and obligations of the Members and the administration and termination of the Company shall be governed by this Agreement and the Act. This Agreement shall be considered the "Limited Liability Company Agreement" of the Company within the meaning of Section 18-101(7) of the Act. To the extent this Agreement is inconsistent in any respect with any non-mandatory provisions of the Act, this Agreement shall control. Upon the Effective Date: (a) each Existing Member shall continue as a Member of the Company; (b) each of the parties to this Agreement hereby approves for all purposes, (i) the transactions contemplated pursuant to the Purchase Agreement, and (ii) the adoption of this Agreement, amending and restating the Prior Agreement in its entirety as set forth in this Agreement, and the creation of the Series D Preferred Units with rights, preferences or privileges senior to the other Units, as set forth in this Agreement and the changes to the rights, preferences or privileges of the Founder Units, the Common Units, the Series A Preferred Units, the Series B Preferred Units and the Series C Preferred Units and waives all rights of rights of first refusal, co-sale rights or similar rights, in connection therewith; and (c) the New Members are admitted to the Company as Members with effect on the Effective Date. This Agreement amends, restates and replaces in its entirety the Prior Agreement on and as of the Effective Date.

1.2 **Name**. The name of the Company shall be "BridgeBio Pharma LLC". The Company may also conduct business at the same time under one or more fictitious names, as determined by the Board. The Board may change the name of the Company, from time to time, in accordance with applicable law.

1.3 **Principal Place of Business; Other Places of Business**. The principal place of business of the Company shall be located at a place within or outside the State of Delaware as the Board may from time to time designate. The Company may maintain offices and places of business at such other place or places within or outside the State of Delaware as the Board deems advisable. The principal place of business of the Company as of the Effective Date shall be 421 Kipling Street, Palo Alto, California 94301.

1.4 **Business Purpose**. Subject to the provisions of this Agreement, the Company may (a) carry on any lawful business, purpose or activity permitted to be carried on by limited liability companies under the Act, (b) exercise all rights and powers granted to the Company under this Agreement and any other agreements contemplated hereby, as the same may be amended from time to time and (c) engage in any other lawful acts or activities incidental or ancillary thereto as the Board deems necessary or advisable for which limited liability companies may be organized under the Act.

1.5 **Certificate of Formation; Filings**. The Certificate was previously filed with the Delaware Secretary of State as required by the Act. The Board may cause to be executed and filed any amendments to the Certificate from time to time as the Board shall deem necessary or advisable. The Board may also cause to be made, on behalf of the Company, such additional filings and recordings as the Board shall deem necessary or advisable.

1.6 **Designated Agent for Service of Process**. The Company shall continuously maintain a registered office and a designated and duly qualified registered agent for service of process on the Company in the State of Delaware. As of the Effective Date: (a) the address of the registered office of the Company in the State of Delaware is The Corporation Trust Company, 1209 Orange Street, Wilmington, Delaware 19801; and (b) the Company's registered agent for service of process at such address is The Corporation Trust Company. Such office and agent may be changed from time to time by the Board.

1.7 **Term**. The term of the Company commenced on the date that the Certificate was filed with the Delaware Secretary of State, and shall continue until the Company is dissolved in accordance with this Agreement. Notwithstanding the dissolution of the Company, the existence of the Company shall continue until termination pursuant to this Agreement.

1.8 **Partnership Status for Income Tax Purposes**. It is the intent of the Members that the Company shall be classified as a "partnership" for federal, state and, if applicable, local income tax purposes. Such characterization is solely for such tax purposes and does not create or imply a general partnership among the Members for state law or any other purpose.

1.9 **Certain Operational Matters**. (a) Without the prior written consent of each of KKR and Viking, the Company shall not have any operating activities and shall not enter into any agreement or undertake any other activity (including making any portfolio investment) that is reasonably expected to cause the Company to realize Non-Qualifying Income after the Effective Date. Without limiting the foregoing, the Company will not invest in any disregarded or "pass through" entity without the prior written consent of each of KKR and Viking. The Company shall use best efforts to structure and manage its operations after the Effective Date in a manner which will minimize the likelihood of any Non-US Member realizing ECI, any Tax-Exempt Member realizing UBTI or any Section 892 Member realizing CAI with respect to the Company or its investments, provided that the obligation to use such efforts will be deemed satisfied with respect to any arrangement described in Section 1.9(b) or Section 1.9(c), and provided, further, that realization of ECI by any Non-US Member, UBTI by any Tax-Exempt Member or CAI by any Section 892 Member will not create a presumption that the Company has breached this Agreement.

(b) Notwithstanding anything in this Agreement to the contrary, in the event that a proposed investment consists of equity in a disregarded or "pass through" entity for tax purposes or may otherwise cause the Company to realize ECI, UBTI, CAI or Non-Qualifying Income, and each of KKR and Viking consents to the making of such investment, the Company shall be deemed to have satisfied its undertaking set forth in Section 1.9(a) with respect to any such portfolio investment if it provides all Members with the opportunity (or the requirement) to contribute capital with respect to such portfolio investment through another partnership or vehicle owned by the Members of the Company, provided that, in any case, the arrangements relating to such alternative investment structure shall be consistent in all material respects with the economic arrangements of the Members contemplated by this Agreement.

(c) Notwithstanding anything in this Agreement to the contrary, in the event the Company incurs indebtedness and the Majority Preferred Members consent to the incurrence of such indebtedness, the Company shall be deemed to have satisfied its undertaking set forth in Section 1.9(a) with respect to such indebtedness (and the use of proceeds from such indebtedness to fund investments made by the Company). If any Tax-Exempt Member notifies the Company that it would prefer to be excluded from participation in respect of such indebtedness (and any investments made with the proceeds of such indebtedness), then with the approval of the Majority Preferred Members, including KKR and Viking, with respect to such Tax-Exempt Member, the Board, in its sole discretion, may take such actions as it determines are reasonably necessary with the intent that any such borrowing (and the related interest expense) shall not be allocated to such Tax-Exempt Member (including making such adjustments, as the Board determines reasonably necessary, to the distribution provisions under Article 4 to prevent such Tax-Exempt Member from (x) bearing the cost of any interest or principal payments in respect of such borrowing or (y) participating in income, gain or loss realized by the Company in respect of any investments (or portions thereof) made with proceeds from such borrowing). Each Member acknowledges and agrees that (i) the Company is not providing the Members with tax advice regarding the structure or actions described in this Section 1.9(c), (ii) each Member is relying on its own tax advisor with respect to the likelihood that such Member incurs UBTI as a result of the Company borrowing money in accordance with this Agreement, and (iii) neither the Company nor any other Member will have any liability to any Member or any of its officers, directors, employees, managers, members, partners, investors, affiliates, advisors or other persons if such Member or any such person incurs UBTI as a result of, or in connection with, the Company borrowing money in accordance with this Agreement (including from using the proceeds from such borrowing to fund investments made by the Company) or any decision made by the Company or the Board whether to adjust (or not adjust) such Member's distribution rights or allocations in connection therewith.

ARTICLE 2.
DEFINITIONS

2.1 **Definitions**. Capitalized words and phrases used and not otherwise defined in this Agreement shall have the following meanings:

"**Act**" is defined in the Preamble.

"**Actions**" is defined in Section 6.8.1.

"**Additional Members**" is defined in Section 3.4.

"**Adjusted Capital Account**" means, with respect to any Member, the balance in such Member's Capital Account as of the end of the relevant Fiscal Year or other period, after giving effect to the following adjustments:

(a) Add to such Capital Account the following items:

(i) The amount, if any, that such Member is obligated to contribute to the Company upon liquidation of such Member's Interest; and

(ii) The amount that such Member is obligated to restore or is deemed to be obligated to restore pursuant to Regulations Section 1.704-1(b)(2)(ii)(c) or the penultimate sentence of each of Regulations Sections 1.704-2(g)(1) and 1.704-2(i)(5); and

(b) Subtract from such Capital Account such Member's share of the items described in Regulations Sections 1.704-1(b)(2)(ii)(d)(4), (5) and (6).

The foregoing definition of Adjusted Capital Account is intended to comply with the provisions of Regulations Section 1.704-1(b)(2)(ii)(d) and shall be interpreted consistently therewith.

"**Adjusted Capital Account Deficit**" means, with respect to any Member, the negative balance, if any, in such Member's Adjusted Capital Account.

"**Affiliate**" means, with reference to a specified Person, a Person that directly, or indirectly through one or more intermediaries, Controls, is Controlled by, or is under common Control with, the specified Person, including, without limitation, any general partner, managing member, officer or director of such Person or any venture capital, private equity or other investment fund or account now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company or investment advisor with, such Person, and the term "Affiliated" shall have the correlative meaning. The Company and its Affiliates shall not be considered Affiliates of the KKR Member or of any of the KKR Member's Affiliates for purposes of this Agreement.

"**Affiliate Transfer**" means (i) a transfer of Units by a Member to a wholly-owned Affiliate of such Member (excluding any operating or portfolio company) where such Member retains ultimate control over the disposition and voting of such Units and over the disposition and voting of such Affiliate and any interests therein, (ii) a transfer of Units by a Member to an Affiliated venture capital, private equity or other investment fund or an Affiliated investment vehicle (but, for the avoidance of doubt, excluding any portfolio company), in each case that is managed or controlled by or under common control with the Member or an Affiliate of the Member that also manages or controls the Member, and where the Member or an Affiliate of the Member that also manages or controls the Member or is under common control with the Member retains ultimate control over the disposition and voting of such Units and over the disposition and voting of such Affiliated venture capital, private equity or other investment fund or an Affiliated investment vehicle, (iii) a transfer of Units by a Member to a wholly-owned subsidiary (excluding any such subsidiary which is an operating or portfolio company of a venture capital, private equity or other investment fund) of any direct or indirect parent company that wholly-owns such transferring Member and (iv) if approved in advance by the Board and the Majority Preferred Members in their sole discretion, a transfer of Units by a Member to any other Affiliate of such Member.

"**Agreement**" is defined in the Preamble.

"**AIG**" is defined in Section 6.1.4.

"**Aisling**" is defined in Section 6.1.4.

"**Assignee**" means any Person: (a) to whom a Member (or Assignee thereof) Transfers all or any part of its Interest in accordance with the terms of this Agreement, and (b) who has not been admitted to the Company as a Substitute Member pursuant to Section 7.5 of this Agreement.

"**Bribery Legislation**" means any and all of the following; the UK Bribery Act of 2010; any legislation implemented pursuant to the Organization For Economic Co-operation and Development Convention on Combating Bribery of Foreign Public Officials in International Business Transactions; and any other laws or regulations prohibiting the bribery of government officials, or private persons in any jurisdiction in which the Company or the Controlled Platform Companies, operate, or conduct any business, or financial transactions.

"**Board**" is defined in Section 6.1.1.

"**Business Day**" means any day other than Saturday, Sunday or another day on which commercial banks in New York, New York are authorized or required by law to close.

"**CAI**" means items of income from commercial activities within the meaning of Section 892(a)(2)(A)(i) of the Code.

"**Call Notice**" is defined in Section 3.9.6.

"**Call Option**" is defined in Section 3.9.6.

"**Call Right Units**" is defined in Section 3.9.6.

"**Capital Account**" means the capital account maintained for each Member on the Company's books and records in accordance with the following provisions:

(a) To each Member's Capital Account there shall be added (i) such Member's Capital Contributions, (ii) such Member's allocable share of Net Profits and any items in the nature of income or gain that are specially allocated to such Member pursuant to Article 5 or other provisions of this Agreement, and (iii) the amount of any Company liabilities assumed by such Member or which are secured by any property distributed to such Member.

(b) From each Member's Capital Account there shall be subtracted (i) the amount of (A) cash and (B) the Gross Asset Value of any Company Assets (other than cash) distributed to such Member pursuant to any provision of this Agreement, (ii) such Member's allocable share of Net Losses and any other items in the nature of expenses or losses that are specially allocated to such Member pursuant to Article 5 or other provisions of this Agreement, and (iii) liabilities of such Member assumed by the Company or which are secured by any property contributed by such Member to the Company.

(c) In the event any Interest is Transferred in accordance with the terms of this Agreement, the transferee shall succeed to the Capital Account of the transferor to the extent it relates to the Transferred Interest.

(d) In determining the amount of any liability for purposes of subparagraphs (a) and (b) of this definition, there shall be taken into account Code Section 752(c) and any other applicable provisions of the Code and Regulations.

(e) The foregoing provisions and the other provisions of this Agreement relating to the maintenance of Capital Accounts are intended to comply with Regulations Sections 1.704-1(b) and 1.704-2 and shall be interpreted and applied in a manner consistent with such Regulations. In the event that the Board shall determine that it is prudent to modify the manner in which the Capital Accounts, or any additions thereto or subtractions therefrom, are computed in order to comply with such Regulations, the Board may make such modification, *provided* that it is not likely to have a material effect on the amounts distributable to any Member pursuant to Article 5 hereof upon the dissolution of the Company.

"**Capital Contributions**" means: (a) with respect to any Member and any Units, the total amount of cash and the initial Gross Asset Value of property (other than cash) contributed to the capital of the Company by such Member in respect of such Units (net of any liabilities (i) secured by such property or to which such property is otherwise subject or (ii) assumed by the Company or any consolidated Platform Company thereof, in each case in connection with such contribution), whether as an initial Capital Contribution or as an additional Capital Contribution; or (b) where the context requires, any such contribution individually.

"**Cash Available for Distribution**" means, as of a specified date and subject to the requirements of any material agreements of the Company, all unrestricted Company cash and cash equivalents then on hand that the Board in good faith determines are available for distribution (which may exclude, among other things, amounts the Board determines should be used for (a) payments in connection with any loan to the Company or any other loan secured by a Lien on any Company Assets, (b) payments in connection with any other Company liabilities, and (c) the restoration, increase or creation of reserves).

"**Cash Items**" include these items (unless the Company deals or trades in any such item): cash; coins; paper currency; demand deposits with banks; checks; bank drafts; money orders; travelers checks (unless purchased in expectation of profit or marketed as an investment); and shares held for cash-management purposes in a U.S. money market fund registered under the Investment Company Act intended to maintain a stable net asset value of $1.00 per share. An item listed above may not constitute a "Cash Item" if the Company deals or trades in that item.

"**Certificate**" is defined in Section 1.1.

"**Claim**" is defined in Section 6.8.9.

"**Co-Sale Acceptance Notice**" is defined in Section 7.10.1.

"**Co-Sale Interests**" is defined in Section 7.10.1.

"**Co-Sale Offeree**" is defined in Section 7.10.1.

"**Code**" means the United States Internal Revenue Code of 1986, as amended.

"**Common Member**" means any Member who holds Common Units.

"**Common Unit Cap**" means $17,338,177 (as adjusted for any splits, subdivisions, combinations or the like).

"**Common Units**" means the Units designated as Common Units having the rights to receive distributions and allocations of Net Profits and Net Losses (and items thereof) of the Company as set forth for such Units herein, which Units are issued to the Persons designated as Common Members in the amounts set forth opposite such Member's name as such Member's Common Units on Exhibit A attached hereto or in the books and records of the Company, as amended or supplemented from time to time.

"**Company**" is defined in the Preamble.

"**Company Assets**" means all direct and indirect interests in real and personal property owned by the Company from time to time, and shall include both tangible and intangible property (including cash).

"**Company Minimum Gain**" has the meaning set forth in Regulations Sections 1.704-2(b)(2) and 1.704-2(d)(1) for the phrase "partnership minimum gain."

"**Company Sale Initiation Notice**" is defined in Section 7.12.1.

"**Control**" (including as used in the terms "Controlling," "Controlled by" and "under common Control with") means possession, directly or indirectly, of (a) more than 50% of the securities or other ownership interests in a Person or the voting power of a Person or (b) the power to direct or cause the direction of management or policies of a Person (whether through ownership of voting securities, by agreement or otherwise).

"**Deciding Members**" is defined in Section 6.1.1(a)(v).

"**Depreciation**" means, for each Fiscal Year or other period, an amount equal to the depreciation, amortization or other cost recovery deduction allowable for federal income tax purposes with respect to an asset for such Fiscal Year or other period, except that if the Gross Asset Value of an asset differs from its adjusted basis for federal income tax purposes at the beginning of such Fiscal Year or other period, Depreciation shall be an amount that bears the same ratio to such beginning Gross Asset Value as the federal income tax depreciation, amortization or other cost recovery deduction for such Fiscal Year or other period bears to such beginning adjusted tax basis; *provided, however,* that if the federal income tax depreciation, amortization or other cost recovery deduction for such Fiscal Year or other period is zero, Depreciation shall be determined with reference to such beginning Gross Asset Value using any method selected by the Board.

"**ECI**" means items of income that, if realized by a Non-U.S. Member, would be treated as effectively connected with the conduct of a "trade or business within the United States" (within the meaning of Section 864(b) of the Code).

"**Effective Date**" is defined in the Preamble.

"**Election Notice**" is defined in Section 3.11.1.

"**Election Period**" is defined in Section 7.9.1.

"**Estate Planning Transfer**" means a Transfer of Units by a Member that is an individual for *bona fide* estate planning purposes for the benefit of their spouse or direct or indirect descendants where such Member retains ultimate control over the disposition and voting of such Units prior to death, and where such Member and such Units remains subject to the terms of this Agreement that would otherwise be applicable to such Member and such Units prior to death.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended from time to time, and the rules and regulations promulgated pursuant thereto.

"**Existing Members**" is defined in the Preamble.

"**FCPA**" means the Foreign Corrupt Practices Act of 1977, as amended.

"**Fiscal Year**" is defined in Section 9.3.

"**Founder/Common Unit Amount**" means $0.44 per Founder Unit or Common Unit, as applicable, which amount shall be the same for all Common Units or Founder Units, plus (i) $0.1044 if such Unit was issued on March 11, 2016 and (ii) $0.1026 if such Unit was issued on March 26, 2016 (in each case, as adjusted for any splits, subdivisions, combinations or the like), which for the immediately preceding clauses (i) and (ii) reflect the accruals for such Founder Units or Common Units, as the case may be, which have accrued through the date hereof pursuant to Section 4.1.2(f) of the Prior Agreement and shall no longer accrue pursuant to this Agreement.

"**Founder Manager**" is defined in Section 6.1.1(a)(ii).

"**Founder Member**" means any Member who holds Founder Units.

"**Founder Unit Cap**" means $21,763,406 (as adjusted for any splits, subdivisions, combinations or the like).

"**Founder Units**" means the Units designated as Founder Units having the rights to receive distributions and allocations of Net Profits and Net Losses (and items thereof) of the Company as set forth for such Units herein, which Units are issued to the Persons designated as Founder Members in the amounts set forth opposite such Member's name as such Member's Founder Units on Exhibit A attached hereto or in the books and records of the Company, as amended or supplemented from time to time.

"**Founders**" is defined in Section 3.9.3.

"**Fully Exercising Member**" is defined in Section 3.11.1.

"**Fully Diluted Capitalization**" means a number of Units equal to all of the then outstanding Units (whether Vested Units or Unvested Units).

"**Fundamental Transaction**" means (i) the acquisition by any Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) whether by way of merger, recapitalization, consolidation or other business combination or purchase of beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of (a) a majority of the outstanding Units, Membership Interests or Percentage Interests (in each case excluding any Unvested Units that would not become Vested Units as a result of such transaction, whether pursuant to the terms of such Unvested Units, by Board action or otherwise), or (b) the right to receive at least a majority of the proceeds in a final liquidation, dissolution, winding-up or termination, voluntary or involuntary, of the Company, (ii) a sale, transfer, exclusive license or other disposition, in a single transaction or in a related series of transactions, of all or substantially all of the assets of the Company including the Platform Companies (on a consolidated basis) to any Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) (other than the Company and its wholly-owned Affiliates), or (iii) a final liquidation, dissolution, winding-up or termination, voluntary or involuntary, of the Company; provided, however, the Company's sale of any class of Units in a bona fide financing transaction conducted in accordance with this Agreement shall not constitute a Fundamental Transaction; provided, further, that a transaction with the sole purpose of adopting a holding company structure or to change its domicile shall not constitute a Fundamental Transaction. For the avoidance of doubt, a conversion of the Company pursuant to Section 7.11 shall not constitute a Fundamental Transaction unless it otherwise also has the results specified in clause (i) or (ii) of this definition.

"**Gross Asset Value**" means, with respect to any asset, the asset's adjusted basis for federal income tax purposes, except as follows:

(a) The initial Gross Asset Value of any asset contributed by a Member to the Company shall be the gross fair market value of such asset, as determined by the Board.

(b) The Gross Asset Values of all Company Assets immediately prior to the occurrence of any event described in subparagraphs (i) through (vi) below shall be adjusted to equal their respective gross fair market values, as determined by the Board, as of the following times:

(i) the acquisition of an Interest in the Company by a new Member or the acquisition of an additional Interest in the Company by an existing Member, in either case, in exchange for more than a de minimis Capital Contribution, if the Board determines that such adjustment is necessary or appropriate to reflect the relative Interests of the Members in the Company;

(ii) the distribution by the Company to a Member of more than a de minimis amount of Company Assets as consideration for an Interest in the Company, if the Board determines that such adjustment is necessary or appropriate to reflect the relative Interests of the Members in the Company;

(iii) the liquidation or dissolution of the Company within the meaning of Regulations Section 1.704-1(b)(2)(ii)(g);

(iv) the grant of an Interest in the Company (other than a de minimis interest) as consideration for the provision of services to or for the benefit of the Company by an existing Member acting in a member capacity, or by a new Member acting in a member capacity or in anticipation of becoming a Member of the Company, if the Board determines that such adjustment is necessary or appropriate to reflect the relative Interests of the Members in the Company;

(v) the issuance by the Company of a noncompensatory option (other than an option for a de minimis interest in the Company) as described in Regulations Section 1.704-1(b)(2)(iv)(f)(5)(iv); and

(vi) at such other times as the Board shall determine necessary or advisable in order to comply with Regulations Sections 1.704-1(b) and 1.704-2.

(c) The Gross Asset Value of any Company Asset distributed to a Member shall be the gross fair market value of such asset on the date of distribution as determined by the Board.

(d) The Gross Asset Values of Company Assets shall be increased (or decreased) to reflect any adjustments to the adjusted basis of such assets pursuant to Code Section 734(b) or Code Section 743(b), but only to the extent that such adjustments are taken into account in determining Capital Accounts pursuant to Regulations Section 1.704-1(b)(2)(iv)(m); *provided, however,* that Gross Asset Values shall not be adjusted pursuant to this subparagraph (d) to the extent that an adjustment pursuant to subparagraph (b) above is made in connection with a transaction that would otherwise result in an adjustment pursuant to this subparagraph (d).

(e) If the Gross Asset Value of a Company Asset has been determined or adjusted pursuant to subparagraph (a), subparagraph (b) or subparagraph (d) above, such Gross Asset Value shall thereafter be adjusted by the Depreciation taken into account with respect to such Company Asset for purposes of computing Net Profits and Net Losses.

"**Hillhouse**" is defined in Section 6.1.4(b).

"**Implied Equity Value**" means with respect to any Units (excluding any Unvested Units unless otherwise provided by Section 3.9 or Section 7.8.3) on any date of determination, the amount of distributions that would be received by a Member with respect to such Units, as applicable, following (a) a hypothetical sale of all of the Company's assets at the Implied Gross Value and (b) a distribution by the Company of all net proceeds from such hypothetical sale to the Members in accordance with Section 4.2 of this Agreement.

"**Implied Gross Value**" means the gross value of the aggregate assets (net of liabilities) of the Company determined by the Board in good faith based on the valuation of the Company assuming a sale of all Units of the Company at the valuation implied by the applicable Take-Along Transaction.

"**Indemnitee**" is defined in Section 6.8.1.

"**Independent Financial Advisor**" is defined in Section 7.12.1(a)(i).

"**Independent Manager**" is defined in Section 6.1.1(a)(iii).

"**Insider Purchaser**" is defined in Section 3.11.1.

"**Interest**" has the meaning given in the definition of "Membership Interest."

"**Investment Advisers Act**" means the Investment Advisers Act of 1940, as amended, and the rules and regulations promulgated thereunder.

"**Investment Company Act**" means the Investment Company Act of 1940, as amended, and the rules and regulations promulgated thereunder.

"**IPO**" means an initial public offering of interests in the Company (or the IPO Corporation) pursuant to an effective registration statement under the Securities Act.

"**IPO Corporation**" is defined in Section 7.11.1.

"**IPO Initiation Notice**" is defined in Section 7.12.2.

"**Issuance Notice**" is defined in Section 3.11.1.

"**KKR Member**" or "**KKR**" is defined in the Preamble.

"**Liabilities**" is defined in Section 6.8.1.

"**Lien**" means any mortgage, pledge, lien, charge, security interest or other encumbrance; *provided* that Lien shall not include any mortgage, pledge, lien, charge, security interest or other encumbrance (i) arising from this Agreement or the Purchase Agreement, (ii) arising from the Securities Act and rules and regulations of the SEC promulgated thereunder and all applicable state securities and "blue sky" laws and (iii) existing prior to August 15, 2017.

"**Liquidator**" is defined in Section 8.5.1.

"**Majority Preferred Members**" means Members holding a majority of the outstanding Series D Preferred Units, Series C Preferred Units and Series B Preferred Units (taken together as a single class on a number of Units outstanding basis).

"**Management Incentive Member**" means any Member who holds Management Incentive Units.

"**Management Incentive Unit Cap**" means $103,010,242 (as adjusted for any splits, subdivisions, combinations or the like).

"**Management Incentive Units**" means the Units designated as Management Incentive Units having the rights to receive distributions and allocations of Net Profits and Net Losses (and items thereof) of the Company as set forth for such Units herein, which Units are issued to the Persons designated as Management Incentive Members in the amounts set forth opposite such Member's name as such Member's Management Incentive Units on Exhibit A attached hereto or in the books and records of the Company, as amended or supplemented from time to time. Each Member intends that any Management Incentive Units will represent "profits interests," as that term is defined in Revenue Procedure 93-27, 1993-2 C.B. 343, as clarified by Revenue Procedure 2001-43, 2001-2 C.B. 191.

"Management Pool" means the aggregate number of Management Incentive Units that are both (i) reserved and unissued, and (ii) issued and outstanding. As of the Effective Date, 75,613,233 Management Incentive Units are included in the Management Pool.

"**Manager**" is defined in Section 6.1.1(a).

"**Maximum Series D Preferred Units**" is defined in Section 9.1.3.

"**Member Minimum Gain**" means an amount, with respect to each Member Nonrecourse Debt, equal to the Company Minimum Gain that would result if such Member Nonrecourse Debt were treated as a Nonrecourse Liability, determined in accordance with Regulations Section 1.704-2(i) with respect to "partner nonrecourse debt minimum gain."

"**Member Nonrecourse Debt**" has the meaning set forth in Regulations Section 1.704-2(b)(4) for the phrase "partner nonrecourse debt."

"**Member Nonrecourse Deductions**" has the meaning set forth in Regulations Section 1.704-2(i) for the phrase "partner nonrecourse deductions."

"**Members**" means the Persons from time to time owning Units, including any Substitute Members and any Additional Members, in each case for so long as such Person continues to own any Units. Each Member is referred to individually as a "**Member**." For purposes of the Act, the Members of the Company shall constitute a single class or group of members.

"**Membership Interest**" or "**Interest**" means the entire equity ownership interest of a Member in the Company at any particular time, including the Member's Units, any and all rights to vote and otherwise participate in the Company's affairs, and the rights to any and all benefits to which a Member may be entitled as provided in this Agreement, together with the obligations of such Member to comply with all of the terms and provisions of this Agreement.

"**Net Profits**" or "**Net Losses**" means, for each Fiscal Year or other period, an amount equal to the Company's taxable income or loss for such Fiscal Year or period determined in accordance with Code Section 703(a) (for this purpose, all items of income, gain, loss, deduction or credit required to be stated separately pursuant to Code Section 703(a)(1) shall be included in taxable income or loss), with the following adjustments:

(a) Any income of the Company that is exempt from federal income tax and not otherwise taken into account in computing Net Profits or Net Losses pursuant to this definition of Net Profits and Net Losses shall increase the amount of such income and/or decrease the amount of such loss;

(b) Any expenditure of the Company described in Code Section 705(a)(2)(B) or treated as Code Section 705(a)(2)(B) expenditures pursuant to Regulations Section 1.704-1(b)(2)(iv)(i), and not otherwise taken into account in computing Net Profits or Net Losses pursuant to this definition of Net Profits and Net Losses, shall decrease the amount of such income and/or increase the amount of such loss;

(c) Gain or loss resulting from any disposition of Company Assets where such gain or loss is recognized for federal income tax purposes shall be computed by reference to the Gross Asset Value of the Company Assets disposed of, notwithstanding that the adjusted tax basis of such Company Assets differs from its Gross Asset Value;

(d) In lieu of the depreciation, amortization and other cost recovery deductions taken into account in computing such income or loss, there shall be taken into account Depreciation for such Fiscal Year or other period;

(e) To the extent an adjustment to the adjusted tax basis of any asset included in Company Assets pursuant to Code Section 734(b) or Code Section 743(b) is required pursuant to Regulations Section 1.704-1(b)(2)(iv)(m) to be taken into account in determining Capital Accounts as a result of a distribution other than in liquidation of a Member's Interest, the amount of such adjustment shall be treated as an item of gain (if the adjustment increases the basis of the asset) or loss (if the adjustment decreases the basis of the asset) from the disposition of the asset and shall be taken into account for the purposes of computing Net Profits and Net Losses;

(f) If the Gross Asset Value of any Company Asset is adjusted in accordance with subparagraph (b) or subparagraph (c) of the definition of "Gross Asset Value" above, the amount of such adjustment shall be taken into account in the taxable year of such adjustment as gain or loss from the disposition of such asset for purposes of computing Net Profits or Net Losses; and

(g) Notwithstanding any other provision of this definition of Net Profits and Net Losses, any items that are specially allocated pursuant to Sections 5.2 and 5.4.2 hereof shall not be taken into account in computing Net Profits or Net Losses. The amounts of the items of Company income, gain, loss or deduction available to be specially allocated pursuant to Sections 5.2 and 5.4.2 hereof shall be determined by applying rules analogous to those set forth in this definition of Net Profits and Net Losses.

"**New Members**" is defined in the Preamble.

"**No-Fault Termination**" with respect to any Member holding Unvested Units (or that held forfeited Unvested Units) means that the Company or its Affiliates have terminated such Member's employment with the Company and its Affiliates and none of the following was the reason provided to such Member for such termination: (i) such Member has had a criminal conviction for, or admission by consent (including, without limitation, a plea of no contest or *nolo contendere* by such Member) to any felony (or its equivalent in any non-U.S. jurisdiction); (ii) a final non-appealable judgment by a court of competent jurisdiction that such Member has

engaged in any conduct that constitutes a breach of fiduciary obligations to the Company in such Member's employee capacity; (iii) such Member has been convicted for or pled *nolo contendere* to fraud, embezzlement or any crime involving moral turpitude (conduct that is considered contrary to community standards of justice, honesty or good morals); (iv) such Member has engaged in conduct that involves a violation of law that has had or would reasonably be expected to have a material adverse effect on the Company or any of its Affiliates; or (v) such Member has repeatedly failed to follow the lawful directions of the Board given to such Member in its employee capacity and has received written notice from the Company or any Affiliate thereof with specific details of such failure and an opportunity to cure such failure.

"**Non-D Percentage Interest**" means, with respect to a Member as of any date of determination, a fraction expressed as a percentage, the numerator of which is the aggregate number of Vested Units (excluding all Series D Preferred Units) and Unvested Units held by such Member as of such date of determination (as adjusted for any splits, subdivisions, combinations or the like) and the denominator of which is the Fully Diluted Capitalization (excluding all Series D Preferred Units) as of such date of determination.

"**Non-Qualifying Income**" means income that is not "qualifying income" as defined in Section 7704(d) of the Code.

"**Non-US Member**" means a Member that is not a United States person (within the meaning of Section 7701(a)(30) of the Code) or that is a flow-through vehicle for U.S. federal income tax purposes and itself has partners or members that are not United States persons.

"**Nonrecourse Deductions**" has the meaning set forth in Regulations Sections 1.704-2(b)(1) and 1.704-2(c).

"**Nonrecourse Liability**" has the meaning set forth in Regulations Sections 1.704-2(b)(3) and 1.752-1(a)(2).

"**Observers**" is defined in Section 6.1.4(b).

"**Offer Notice**" is defined in Section 7.9.1.

"**Offered Interest**" is defined in Section 3.11.1.

"**Offerees**" is defined in Section 7.9.1.

"**Officer**" is defined in Section 6.1.3.

"**Participants**" is defined in Section 6.10.1.

"**Participation Threshold**" is defined in Section 3.8.1.

"**Percentage Interest**" means, with respect to a Member as of any date of determination, a fraction expressed as a percentage, the numerator of which is the aggregate number of Vested Units and Unvested Units held by such Member as of such date of determination (as adjusted for any splits, subdivisions, combinations or the like) and the denominator of which is the Fully Diluted Capitalization as of such date of determination.

"**Permitted Transfer**" means (i) an Estate Planning Transfer, (ii) a Transfer resulting from a Take-Along Transaction pursuant to Section 7.8, (iii) a Transfer resulting from a conversion pursuant to Section 7.11.1, (iv) a Transfer resulting from an exercise of liquidity rights pursuant to Section 7.12, (v) a Transfer in a Fundamental Transaction that has been approved by the Board, in its sole discretion, and that has been approved in accordance with this Agreement, including pursuant to Section 6.7, (vi) an Affiliate Transfer or (vii) a Transfer that has been approved by the Board and the Majority Preferred Members, each in their respective sole discretion (*provided* that for purposes of any approval of the Transfer of Units that would otherwise be subject to Section 7.9 and Section 7.10 as a "Permitted Transfer," any Series D Preferred Units, Series C Preferred Units or Series B Preferred Units held by the Member Transferring pursuant to Section 7.9 or Section 7.10 shall not be included in either the numerator or the denominator of the calculation of the Majority Preferred Members).

"**Person**" means an individual, a corporation, a partnership, a limited liability company, an association, a trust, an unincorporated organization, a government or any department, agency or authority thereof, or any other entity or organization.

"**Platform Company**" means any entity in which the Company owns an equity interest, whether directly or indirectly.

"**Platform Company IPO**" is defined in Section 7.8.4.

"**Platform Company IPO Take-Along Notice**" is defined in Section 7.8.4.

"**Platform Company Sale**" means the acquisition by any Person or group (within the meaning of Section 13(d)(3) of the Exchange Act), in a single transaction or in a related series of transactions, whether by way of merger, recapitalization, consolidation or other business combination or purchase of beneficial ownership (within the meaning of Rule 13d-3 under the Exchange Act) of (a) a majority of the equity interests of any Platform Company held directly or indirectly by the Company (other than the Company or another Platform Company), (b) a sale, transfer, exclusive license or other disposition, in a single transaction or in a related series of transactions, of all or substantially all of the assets of the Platform Company to any Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) (other than the Company or another Platform Company), or (c) any transaction involving a Platform Company that constitutes a "liquidation event", "change of control" or similar term under the organizational documents or other agreements relating to such Platform Company.

"**Platform Company Sale Initiation Notice**" is defined in Section 7.12.1.

"**Platform Fees**" is defined in Section 6.4.2.

"**Preemptive Period**" is defined in Section 3.11.1.

"**Preemptive Interest**" is defined in Section 3.11.1.

"**Preferred Units**" means the Series A Preferred Units, the Series B Preferred Units, the Series C Preferred Units and the Series D Preferred Units, collectively.

"**Preferred Members**" means the Series A Preferred Members, Series B Preferred Members, Series C Preferred Members and Series D Preferred Members, collectively.

"**Preferred Offeror**" as defined in Section 7.9.2.

"**Prior Agreement**" is defined in the Recitals.

"**Purchase Agreement**" is defined in the Recitals.

"**Purchaser**" is defined in Section 3.11.1.

"**Qualifying IPO**" means an IPO in which each Series D Preferred Unit receives common stock (or other equity interests) in the Company or the IPO Corporation with a fair market value (as determined in accordance with Section 7.11) equal to or greater than the Required Unit Price.

"**Registration Rights Agreement**" is defined in Section 7.11.2.

"**Regulation D**" is defined in Section 9.2.2(g).

"**Regulations**" means proposed, temporary and final Treasury Regulations promulgated under the Code, as such regulations may be amended from time to time (including corresponding provisions of succeeding Treasury Regulations).

"**Regulatory Allocations**" is defined in Section 5.2.8.

"**Required Unit Price**" means $2.38 (as adjusted for any splits, subdivisions, combinations or the like).

"**Requisite Series C Majority**" means the Members holding a majority of the outstanding Series C Preferred Units, which majority must include Viking.

"**Requisite Series D Majority**" means the Members holding a majority of the outstanding Series D Preferred Units.

"**Restricted Person**" is defined in Section 6.9.2.

"**Secondary Indemnitors**" is defined in Section 6.8.10.

"**Section 892 Member**" means a Non-US Member that has delivered to the Company an effective and properly executed IRS Form W-8 EXP to the effect that such Member benefits from the exceptions provided in Section 892 of the Code.

"**Securities**" means: any note, stock, treasury stock, security future, bond, or debenture; any evidence of indebtedness (including any loan); any certificate of interest or participation in any profit-sharing agreement; any collateral-trust certificate, preorganization certificate or subscription, transferable share, investment contract, voting-trust certificate, or certificate of deposit for a security; any fractional undivided interest in oil, gas, or other mineral rights; any put, call, straddle, option, or privilege on any security (including a certificate of deposit) or on any group of index securities (including any interest therein or based on the value thereof); any put, call, straddle, option, or privilege entered into on a U.S. national securities exchange relating to non-U.S. currency; any time deposit or certificate of deposit; in general any interest or instrument commonly known as a "security;" or any certificate of interest or participation in, temporary or interim certificate for, receipt for, guarantee of, or warrant or right to subscribe to or purchase, any of the foregoing; or any item that would constitute a Cash Item, except that Company deals or trades in such item.

"**Securities Act**" means the Securities Act of 1933, as amended from time to time, and the rules and regulations promulgated pursuant thereto.

"**Series A Preferred Member**" means any Member who holds Series A Preferred Units.

"**Series A Preferred Units**" means the Units designated as Series A Preferred Units having the rights to receive distributions and allocations of Net Profits and Net Losses (and items thereof) of the Company as set forth for such Units herein, which Units are issued to the Persons designated as Series A Preferred Members in the amounts set forth opposite such Member's name as such Member's Series A Preferred Units on Exhibit A attached hereto or in the books and records of the Company, as amended or supplemented from time to time.

"**Series A Unit Amount**" means $0.44 per Series A Preferred Unit, which amount shall be the same for all Series A Preferred Units, plus (i) $0.1044 if such Series A Preferred Unit was issued on March 11, 2016 and (ii) $0.1026 if such Series A Preferred Unit was issued on March 26, 2016 (in each case, as adjusted for any splits, subdivisions, combinations or the like), which for the immediately preceding clauses (i) and (ii), reflects the accruals for such Series A Preferred Units that have accrued through the date hereof pursuant to Section 4.1.2(d) of the Prior Agreement and shall no longer accrue pursuant to this Agreement.

"**Series A Unit Cap**" means $47,516,764 (as adjusted for any splits, subdivisions, combinations or the like).

"**Series B Manager**" is defined in Section 6.1.1(a)(i).

"**Series B Preferred Member**" means any Member who holds Series B Preferred Units.

"**Series B Preferred Units**" means the Units designated as Series B Preferred Units having the rights to receive distributions and allocations of Net Profits and Net Losses (and items thereof) of the Company as set forth for such Units herein, which Units are issued to the Persons designated as Series B Preferred Members in the amounts set forth opposite such Member's name as such Member's Series B Preferred Units on Exhibit A attached hereto or in the books and records of the Company, as amended or supplemented from time to time.

"**Series B Unit Cap**" means $170,877,056 (as adjusted for any splits, subdivisions, combinations or the like).

"**Series B Unit Value**" means $0.44 per Series B Preferred Unit, which amount shall be the same for all Series B Preferred Units, plus (i) $0.1044 if such Series B Preferred Unit was issued on March 11, 2016, (ii) $0.1023 if such Series B Preferred Unit was issued on March 29, 2016, (iii) $0.0863 if such Series B Preferred Unit was issued on August 15, 2016, (iv) $0.0733 if such Series B Preferred Unit was issued on December 9, 2016, (v) $0.0718 if such Series B Preferred Unit was issued on December 22, 2016 and (vi) $0.0575 if such Series B Preferred Unit was issued on May 1, 2017 (in each case, as adjusted for any splits, subdivisions, combinations or the like), which for the immediately preceding clauses (i) through (vi), reflects the accruals for such Series B Preferred Units that have accrued through the date hereof pursuant to Section 4.1.2(b) of the Prior Agreement and shall no longer accrue pursuant to this Agreement.

"**Series C Observer**" is defined in Section 6.1.4.

"**Series C Preferred Member**" means any Member who holds Series C Preferred Units.

"**Series C Preferred Units**" means the Units designated as Series C Preferred Units having the rights to receive distributions and allocations of Net Profits and Net Losses (and items thereof) of the Company as set forth for such Units herein, which Units are issued to the Persons designated as Series C Preferred Members in the amounts set forth opposite such Member's name as such Member's Series C Preferred Units on Exhibit A attached hereto or in the books and records of the Company, as amended or supplemented from time to time.

"**Series C Unit Cap**" means $339,494,355 (as adjusted for any splits, subdivisions, combinations or the like).

"**Series C Unit Value**" means $0.9656 per Series C Preferred Unit, which amount shall be the same for all Series C Preferred Units, plus (i) $0.1014 if such Series C Preferred Unit was issued on August 15, 2017, (ii) $0.0736 if such Series C Preferred Unit was issued on December 15, 2017, or (iii) $0.0477 if such Series C Preferred Unit was issued on April 10, 2018 (in each case, as adjusted for any splits, subdivisions, combinations or the like), which for the immediately preceding clauses (i) through (iii), reflects the accruals for such Series C Preferred Units that have accrued through the date hereof pursuant to Section 4.1.2(b) of the Prior Agreement and shall no longer accrue pursuant to this Agreement.

"**Series D Observer**" is defined in Section 6.1.4(b).

"**Series D Preferred Member**" means any Member who holds Series D Preferred Units.

"**Series D Preferred Units**" means the Units designated as Series D Preferred Units having the rights to receive distributions and allocations of Net Profits and Net Losses (and items thereof) of the Company as set forth for such Units herein, which Units are issued to the Persons designated as Series D Preferred Members in the amounts set forth opposite such Member's name as such Member's Series D Preferred Units on Exhibit A attached hereto or in the books and records of the Company, as amended or supplemented from time to time.

"**Series D Unit Value**" means $1.9823 per Series D Preferred Unit, which amount shall be the same for all Series D Preferred Units (as adjusted for any splits, subdivisions, combinations or the like).

"**Service Provider Exit Event**" is defined in Section 3.9.5.

"**Service Providers**" means Managers, members of any advisory or similar committee established by the Board, officers, employees, consultants, directors or other service providers to the Company, and officers, employees, consultants, directors or other service providers to any Platform Company who are acting in such capacity on behalf of the Company.

"**Services**" is defined in Section 6.9.2.

"**Substitute Common Member**" is defined in the Preamble.

"**Substitute Member**" means any Person (a) to whom a Member (or Assignee thereof) Transfers all or any part of its Interest, and (b) that has been admitted to the Company as a Substitute Member pursuant to Section 7.5 of this Agreement.

"**Take-Along Member**" is defined in Section 7.8.1.

"**Take-Along Notice**" is defined in Section 7.8.1.

"**Take-Along Transaction**" is defined in Section 7.8.1.

"**Tax Distributions**" is defined in Section 4.3.

"**Tax-Exempt Member**" means a Member whose UBTI is subject to the tax imposed by Section 511 of the Code or that is a flow-through vehicle for U.S. federal income tax purposes and itself has partners or members the UBTI of which is subject to the tax imposed by Code Section 511.

"**Tax Liability**" is defined in Section 4.3.

"**Tax Rate**" is defined in Section 4.3.

"**Title XI Partnership Audit Provisions**" means Title XI of the Bipartisan Budget Act of 2015, H.R. 1314, Public Law Number 114-74.

"**TMP**" is defined in Section 9.7.1.

"**Transfer**" means, with respect to any Units, a direct or indirect sale, conveyance, exchange, assignment, gift, bequest, hypothecation or other transfer or disposition by any other means, whether for value or no value and whether voluntary or involuntary (including by realization upon any Lien, by operation of law (including by merger, consolidation, amalgamation or otherwise) or by judgment, levy, attachment, garnishment, or bankruptcy,

pursuant to divorce or legal separation, or by any other legal or equitable proceedings), or an agreement to do any of the foregoing. The terms "**Transferred**" and "**Transferring**" shall have correlative meanings. Any Transfer of interests in the KKR Member, whether direct or indirect, shall not be a Transfer for purposes of this Agreement. Customary arrangements in connection with the deposit of Units in a non-margin custodial account shall not be deemed a Transfer for purposes of this Agreement so long as such Units are in certificated form.

"**Transferred Interests**" is defined in Section 7.10.2.

"**Transferring Member**" is defined in Section 7.10.1.

"**UBTI**" means "unrelated business taxable income" within the meaning of Sections 512 through 514 of the Code.

"**Unit**" means a unit of interest in the Company, including a Preferred Unit, a Common Unit, a Founder Unit, a Management Incentive Unit or any other unit of interest in the Company of any class or series hereafter created; and "**Units**" means all of the foregoing collectively. Units may be subject to certain vesting restrictions set forth herein or in separate agreements between a Member and the Company.

"**Unit Cap**" means each of the Series C Unit Cap, Series B Unit Cap, Series A Unit Cap, the Founder Unit Cap, the Common Unit Cap and the Management Incentive Unit Cap.

"**Unit Value**" means each of the Series D Unit Value, Series C Unit Value, Series B Unit Value, Series A Unit Amount and Founder/Common Unit Amount.

"**Unrestricted Persons**" is defined in Section 6.9.1.

"**Unvested Units**" means any Common Units or Management Incentive Units that are not Vested Units.

"**U.S. Government Securities**" means:

(a) any security issued or guaranteed as to principal or interest by the United States, or by a person controlled or supervised by and acting as an instrumentality of the Government of the United States by authority granted by the Congress of the United States;

(b) any certificate of deposit for any of the foregoing; and

(c) any of these instruments, all of which the Securities and Exchange Commission has stated qualify as U.S. Government Securities: (i) direct obligations issued by the United States, including: Cash Management Bills; U.S. Treasury Bills, Notes and Bonds; and Treasury securities designated by the U.S. Department of the Treasury as eligible to participate in the STRIPS (Separate Trading of Registered Interest and Principal of Securities) program; (ii) securities issued by: Federal National Mortgage Association and Federal Home Loan Mortgage Corporation (Fannie Mae and Freddie Mac); the Farm Credit Banks; the Federal Home Loan Banks; Government National Mortgage Association (Ginnie Mae); Resolution Funding Corporation (Refcorp); Small Business Administration; and Student Loan Marketing Association (Sallie Mae); and (iii) certificates of deposit for U.S. Government Securities, such as depository receipts.

"U.S. Government Securities" do *not* include: (a) private securities that are secured by U.S. Government Securities listed above; (b) privately created "strips," such as TIGRS and CATS; and (c) "repo" and "reverse repo" agreements involving any U.S. Government Securities listed above.

"**VCOC Management Rights**" is defined in Section 6.6.2.

"**Vested Units**" means as of any date of determination: (a) all Preferred Units, (b) all Founder Units, (c) those Common Units and Management Incentive Units that are not subject to vesting pursuant to any Vesting Agreement, and (d) those Common Units and Management Incentive Units that are subject to vesting pursuant to this Agreement or a Vesting Agreement, as applicable, which have become vested on or prior to such date pursuant to this Agreement or the related Vesting Agreement, as applicable.

"**Vesting Agreement**" is defined in Section 3.9.5.

"**Viking**" means Viking Global Opportunities Illiquid Investments Sub-Master LP, together with its successors and assigns.

ARTICLE 3.
CAPITAL; CAPITAL ACCOUNTS AND MEMBERS

3.1 **Generally**. The names, addresses, initial Capital Account balances and initial Units of the Members (including corresponding Unit Values), each as of the Effective Date, are set forth on Exhibit A attached hereto. Exhibit A (including and Schedules or Exhibits thereto) may be amended from time to time by the Board to reflect the admission of Additional Members or Substitute Members pursuant to this Agreement, as well as to reflect any changes in the Members' respective Interests or Units of any class pursuant to the terms of this Agreement, including any changes to any applicable Participation Threshold, and to reflect errors or inaccuracies. In the event Exhibit A is not so amended, such matters shall be reflected in the books and records of the Company, and the books and records of the Company shall be controlling.

3.2 **Capital Contributions**.

3.2.1 Except as otherwise required by law, no Member shall be permitted or required to make any Capital Contributions to the Company.

3.2.2 Each Member existing as of the Effective Date has previously or currently made Capital Contributions in respect of its Units (other than Management Incentive Units, which are "profits interests," as that term is defined in Revenue Procedure 93-27, 1993-2 C.B. 343, as clarified by Revenue Procedure 2001-43, 2001-2 C.B. 191) as set forth in the books and records of the Company.

3.2.3 No Member shall be obligated to make any Capital Contributions after the Effective Date without its consent, and, except as permitted herein and subject to the terms hereof, no Member or other Person shall be permitted to make any Capital Contributions after the Effective Date without the consent of the Board. Upon the approval of the Board, and subject to any limitations otherwise set forth in this Agreement, the Company may issue additional Units to any Person (including any Member, any Affiliate of a Member and/or any third party) in exchange for such Capital Contributions (and otherwise on such terms and conditions) as the Board may determine.

3.3 **Capital Accounts**. A Capital Account shall be established and maintained for each Member in accordance with the terms of this Agreement. Each Member's Capital Account balance as of the Effective Date is set forth on Exhibit A hereto.

3.4 **Additional Members**. Subject to the terms of this Agreement, including Section 3.11 and Section 6.7, after the Effective Date, the Board may cause the Company to issue Units (which may be Preferred Units, Founder Units, Management Incentive Units or Units of any other class or series, whether such Units are Vested Units or Unvested Units) directly from the Company to any Person ("**Additional Members**"), and to admit Additional Members to the Company in connection therewith.

3.5 **Member Capital.** Except as otherwise provided in this Agreement: (a) no Member shall demand or be entitled to receive a return of or interest on its Capital Contributions or Capital Account, and (b) no Member shall withdraw any portion of its Capital Contributions or Capital Account or receive any distributions from the Company as a return of capital on account of such Capital Contributions.

3.6 **Member Loans**. Subject to Section 6.7, to the extent the Board determines necessary or advisable for the business of the Company, one or more Members may, but shall not be obligated to, make loans or otherwise lend funds to, act as surety or endorser for, assume one or more specific obligations of, provide collateral for, or enter into other credit, guarantee, financing or refinancing arrangements with or for the benefit of, the Company; *provided* that any such loan shall be on reasonable, arms-length terms (as determined by the Board). No loans or other extensions of credit made by any Member to or for the benefit of the Company or its Affiliates shall have any effect on such Member's Units or Percentage Interest, such loans or other extensions of credit representing a debt of the Company payable or collectible solely from the assets of the Company in accordance with the terms and conditions upon which such loans were made.

3.7 **Liability of Members**. Notwithstanding anything to the contrary contained in this Agreement and except as otherwise required by any non-waivable provision of the Act or other applicable law: (a) no Member in its capacity as such shall be personally liable in any manner whatsoever for any debt, liability or other obligation of the Company, whether such debt, liability or other obligation arises in contract, tort or otherwise, solely by reason of being a Member of the Company; and (b) no Member in its capacity as such shall in any event have any liability whatsoever in excess of the following (without duplication), solely by reason of being a Member of the Company: (i) its share of any assets and undistributed profits of the Company; and (ii) the amount of any wrongful distribution to such Member, if, and only to the extent, the return of such wrongful distribution is required by this Agreement or by a non-waivable provision of the Act. Nothing in this Section 3.7 shall be deemed to limit a Member's liability to the Company or to another Member in respect of any actual fraud by such Member or any breach by such Member of this Agreement.

3.8 **Profits Interests**.

3.8.1 From and after the Effective Date, with the prior approval of the Board, the Company may from time to time issue Management Incentive Units from and to the extent of the Management Pool. The Management Incentive Units are intended to constitute "profits interests" within the meaning of Revenue Procedure 93-27, 1993-2 C.B. 343, as clarified by Revenue Procedure 2001-43, 2001-2 C.B. 191. The Management Incentive Units are interests solely in profits and shall have Capital Accounts associated therewith on the date of issuance of zero dollars and shall not at any time receive any distribution that would cause the Capital Account associated therewith to have a negative value. In accordance with the foregoing, it is intended that at the time of grant of any Management Incentive Units that there shall be no liquidation value attributable thereto. In order to eliminate any liquidation value of any Management Incentive Unit at the time of its grant, the Board shall establish a "participation threshold" amount for such Management Incentive Unit which shall be an amount that is not less than the Board-determined aggregate valuation for the Company as of the date such Management Incentive Unit is granted (each, a "**Participation Threshold**"). Such valuation shall be an amount not less than the amount that would be distributed in respect of all Units, if, immediately after the Management Incentive Unit is issued, the Company were to liquidate completely and in connection with such liquidation (i) sell all of its assets at their fair market values, (ii) settle all of its liabilities at their fair market values to the extent of the available assets of the Company, (iii) each Member were to pay to the Company at that time the amount of any obligation then unconditionally due to the Company, and (iv) the Company were to distribute any remaining cash and other proceeds to the Members in accordance with the distribution provisions of Section 8.5.1; *provided*, *however*, that the Participation Threshold shall not be less than zero dollars. As of the Effective Date, the Participation Threshold for each of the then outstanding Management Incentive Units is set forth in Schedule A to Exhibit A. The Board may equitably adjust the Participation Thresholds of the outstanding Management Incentive Units to the extent the Board determines necessary or appropriate to preserve the economic rights represented by the Management Incentive Units. Notwithstanding anything to the contrary in this Agreement, the Board may defer or reduce any distribution that would otherwise be made in respect of any Management Incentive Unit pursuant to this Agreement, to the extent the Board determines such reduction is necessary or appropriate to procure that such Management Incentive Unit will be treated as a "profits interest" as that term is defined in Revenue Procedure 93-27, 1993-2 C.B. 343, as clarified by Revenue Procedure 2001-43, 2001-2 C.B. 191.

3.8.2 The Company and the holders of Management Incentive Units shall file all tax returns consistent with such characterization. Within thirty (30) days following the receipt of any Unvested Units on or after the date hereof, each holder of such Unvested Units will file with the Internal Revenue Service an election authorized by Code Section 83(b) with respect to such Unvested Units and will deliver to the Company a copy of such election promptly after its filing. The failure of the holder thereof to timely file such election under Code Section 83(b) within thirty (30) days following the receipt of any Unvested Units on or after the date hereof shall result in the immediate forfeiture of such Unvested Units on the thirty-first (31st) day following such holder's receipt of such Unvested Units.

3.8.3 Each Member authorizes the Board to elect to apply the safe harbor set forth in proposed Treasury Regulations Section 1.83-(l) (under which the fair market value of a partnership interest that is transferred in connection with the performance of services is treated as being equal to the liquidation value of that interest) if such proposed Treasury Regulation or similar Treasury Regulation becomes a Regulation. If the Board determines that the Company should make such election, the Members hereby authorize the Board to amend this Agreement to provide (i) the Company is authorized and directed to elect the safe harbor, (ii) the Company and each of its Members (including any Person to whom a Membership Interest is transferred in connection with the performance of services) agrees to comply with all requirements of the safe harbor with respect to all interests transferred in connection with the performance of services while such election remains in effect and (iii) the Company and each of its Members agree to take all actions necessary, including providing the Company with any required information, to permit the Company to comply with the requirements set forth or referred to in the applicable Regulations for such election to be effective. The Members authorize the Board to amend this Agreement to modify Article 5 (Allocations of Net Profits and Net Losses) to the extent the Board determines in its discretion that such modification is necessary or desirable as a result of the issuance of Regulations relating to the tax treatment of the transfer of an interest in connection with the performance of services. Notwithstanding anything to the contrary in this Agreement, the Board shall not be required to obtain the Members' consent to amend this Agreement in accordance with this Section 3.8.3 and each Member agrees that it will be legally bound by any such amendment.

3.8.4 For the avoidance of doubt, neither the Company nor any Member of the Company is providing any covenant or guarantee that the characterization of the Management Incentive Units as "profits interests" as described in this Section 3.8 shall be accepted by any government authority or a court of law.

3.9 **Vesting**.

3.9.1 As of the Effective Date, all Common Units outstanding have vested or shall vest in accordance with the vesting schedule set forth in Schedule B to Exhibit A.

3.9.2 Subject to Section 3.9.3, one hundred percent (100%) of the Common Units that are then Unvested Units shall immediately vest and become Vested Units immediately prior to the consummation of (i) a Fundamental Transaction or (ii) the sale or transfer by KKR to Persons who are not Affiliates of KKR, in one transaction or a series of transactions, of at least ninety percent (90%) of the Series B Preferred Units that have been issued by the Company to KKR as of the date thereof.

3.9.3 Upon any of Neil Kumar, Charles Homcy, Frank McCormick, Richard Scheller or Hoyoung Huh (the "**Founders**") ceasing to be a Service Provider (each such cessation, a "**Founder Exit Event**") all of the outstanding Common Units that are then Unvested Units set forth next to the name of such ceasing Founder or their controlled Affiliate on Exhibit A shall automatically be forfeited to the Company and cancelled without any payment therefor, and shall no longer be outstanding, and Exhibit A shall be amended to reflect such forfeiture and cancellation.

3.9.4 In the event of a final liquidation, dissolution, winding-up or termination, voluntary or involuntary, of the Company, all Common Units that are then Unvested Units shall automatically be forfeited to the Company and cancelled, without any payment therefor.

3.9.5 Common Units and Management Incentive Units issued on or following the Effective Date may be subject to vesting, repurchase and/or forfeiture as determined by the Board and as set forth in a vesting, grant, award, employment or other agreement between the Company and any Common Member or Management Incentive Member with respect to such Common Units or Management Incentive Units, as applicable (each, a "**Vesting Agreement**"). With respect to any Common Units and Management Incentive Units issued to a Service Provider on or following the Effective Date, vesting shall cease with respect to such Common Units and Management Incentive Units that are then Unvested Units at the time the Service Provider who was issued such Common Units or Management Incentive Units ceases to be a Service Provider (a "**Service Provider Exit Event**"). Upon a Service Provider Exit Event with respect to any Service Provider, all of the outstanding Common Units or Management Incentive Units that are then Unvested Units set forth next to the name of such Service Provider on Exhibit A shall automatically be forfeited to the Company and cancelled without any payment therefor, and shall no longer be outstanding, and Exhibit A shall be amended to reflect such forfeiture and cancellation. Furthermore, Common Units and Management Incentive Units issued on or following the Effective Date will not vest upon the occurrence of a Fundamental Transaction unless otherwise provided in this Agreement or in a Vesting Agreement or as otherwise determined by the Board in its sole discretion. For the avoidance of doubt, (a) any Interests issued and granted from the Management Pool at or following the Effective Date shall have vesting schedules that commence as of the respective date of grant of such Interests, unless otherwise approved by the Board, and (b) unless otherwise provided in this Agreement (including Section 3.9.2 and the last paragraph of Section 4.1.2) or a Vesting Agreement or otherwise approved by the Board, Unvested Units will not participate in any share of Fundamental Transaction proceeds and all Unvested Units shall be cancelled upon the consummation of a Fundamental Transaction (excluding, for the avoidance of doubt, any (x) merger, consolidation, re-domestication, conversion of similar transaction entered into by the Company principally for bona fide equity financing purposes, to adopt a holding company structure or to change the domicile of the Company and (y) any final liquidation, dissolution, winding-up or termination, voluntary or involuntary, of the Company), without any payment therefor, and shall no longer be outstanding, and Exhibit A shall be amended to reflect such forfeiture and cancellation.

3.9.6 Except as otherwise provided in the applicable Vesting Agreement or as otherwise approved by the Board, upon a Service Provider Exit Event, the Company shall have the right and option (exercisable in the sole discretion of the Board) to purchase from the former Service Provider each Common Unit and Management Incentive Unit held by such former Service Provider that is a Vested Unit as of the date of the Service Provider Exit Event (the "**Call Right Units**") for cash at a price per Common Unit or Management Incentive Unit, as applicable, equal to the greater of (a) the amounts then remaining to be distributed in respect of such Call Right Units, pursuant to Section 4.1.2(d) or (b) fair market value for such Common

Unit or Management Incentive Unit as determined by a third-party appraisal firm selected by the Board (the "**Call Option**"). The Company may exercise its Call Option by delivering to such former Service Provider a written notice (a "**Call Notice**") within ninety (90) days of the date of the Service Provider Exit Event specifying that the Company has elected to repurchase the outstanding Call Right Units of such former Service Provider. In the event that a Call Notice is delivered by the Company to a holder of Call Right Units, the Company shall, promptly and in any event within thirty (30) days thereafter, repurchase the Call Right Units from the former Service Provider. The Company may revoke a Call Notice at any time by delivering, in its sole discretion, a subsequent written notice to the former Service Provider prior to the end of such thirty (30) day period. Upon the repurchase and payment in full of all of the former Service Provider's Call Right Units pursuant to this Section 3.9.6, such former Service Provider will cease to be a Member of the Company; *provided* that such former Service Provider does not hold any other class of Units that have not otherwise been forfeited, transferred or repurchased.

3.10 **Unit Splits and Combinations**. The Company may at any time effect (i) a split or subdivision or (ii) any combination of the outstanding Units of any class. The Board shall make such adjustments to the economic rights of the Preferred Units, the Common Units, the Management Incentive Units and any other outstanding class or series of Units in connection therewith as shall preserve the economic and other rights of the Members represented by the different classes of Units, including the Unit Value, the Unit Cap and the Required Unit Price with regard to such Units; *provided* that no such adjustment may be made without the written approval of: (x) the Requisite Series D Majority, if it would have an adverse impact on the Series D Preferred Units; (y) the Requisite Series C Majority, if it would have an adverse impact on the Series C Preferred Units; and (z) the Members holding a majority of the outstanding Series B Preferred Units, if it would have an adverse impact on the Series B Preferred Units.

3.11 **Preemptive Rights**.

3.11.1 Subject to Section 3.11.2, if the Company proposes to issue any Membership Interests ("**Offered Interest**") to any Person (the "**Purchaser**"), the Company shall offer to sell to each Series D Preferred Member, Series C Preferred Member and Series B Preferred Member (the "**Insider Purchasers**") a percentage of such Offered Interests (the "**Preemptive Interest**") equal to the product of (i) a fraction, the numerator of which is equal to the number of outstanding Series D Preferred Units, Series C Preferred Units and Series B Preferred Units held by such Insider Purchaser, and the denominator of which is equal to the aggregate number of outstanding Units held by all Members, multiplied by (ii) the Offered Interest. The Company shall give the Insider Purchasers at least ten (10) Business Days prior written notice of any proposed issuance of any Membership Interests, which notice shall disclose in reasonable detail the proposed terms and conditions (including the pricing terms) of such proposed issuance (the "**Issuance Notice**"). Each Insider Purchaser may elect to purchase all but not less than all of such Insider Purchaser's Preemptive Interest at the same price and on the same terms (including, if more than one type of Membership Interest is issued, the same proportionate mix of such Membership Interests) as the Membership Interests which are proposed to be issued by delivery of an irrevocable written notice of such election (the "**Election Notice**") to the Company within ten (10) Business Days after delivery of the Issuance Notice (the "**Preemptive Period**"). In addition, each Insider Purchaser that elects to purchase or acquire all of its Preemptive Interest (each, a "**Fully Exercising Member**") may, in the Election

Notice, elect to purchase or acquire, in addition to its Preemptive Interest, a portion of the Offered Interest, if any, for which other Insider Purchasers were entitled to subscribe that are not subscribed for by such Insider Purchasers. The amount of such overallotment that each Fully Exercising Member shall be entitled to purchase is equal to the proportion that the Series D Preferred Units, Series C Preferred Units and Series B Preferred Units then held by such Fully Exercising Member bears to the Series D Preferred Units, Series C Preferred Units or Series B Preferred Units then held by all Fully Exercising Members who wish to purchase such unsubscribed portion of the Offered Interest. If any Insider Purchaser has elected to purchase its Preemptive Interest, the sale of such Preemptive Interest shall be consummated on the date of the sale of the remaining Offered Interest to the Purchaser(s), or within 90 days following such date if all of the Offered Interests are Preemptive Interests. If at the end of the Preemptive Period, no Insider Purchaser has elected to exercise its right under this Section 3.11.1 to purchase its Preemptive Interest, then the Company may issue such Preemptive Interest, together with all of the remaining portion of the Offered Interest that is not otherwise subject to an Election Notice hereunder, to the Purchaser(s) at a price and on terms no more favorable to the Purchaser than those specified in the Issuance Notice during the ninety (90) day period following the Preemptive Period.

3.11.2 The rights contained in this Section 3.11 shall not apply to an Offered Interest if waived in writing by the Majority Preferred Members, and shall not apply to any issuance of (i) Series D Preferred Units to a Person on or following the Effective Date as provided for in the Purchase Agreement as in effect on the date of this Agreement, (ii) Membership Interests in accordance with Section 3.10, (iii) Membership Interests or other securities in accordance with Section 7.11, (iv) Membership Interests issued as a dividend or distribution on a pro rata basis on a class of Units in accordance with the terms of this Agreement, (v) Management Incentive Units issued to Service Providers from the Management Pool; *provided* that the aggregate number of Management Incentive Units issued and outstanding, including those issued pursuant to this Section 3.11.2, do not exceed the then available Units in the Management Pool, as adjusted for any Management Incentive Units that are forfeited or repurchased pursuant to Sections 3.9.5 and 3.9.6, respectively, (vi) Membership Interests issued to banks, equipment lessors or other financial institutions pursuant to a debt financing or equipment leasing transaction approved by the Board (provided such recipient is not a Member or an Affiliate of a Member), (vii) Membership Interests issued other than for cash pursuant to a *bona fide* acquisition of another entity by the Company by merger or consolidation with, purchase of substantially all of the assets of, or purchase of more than fifty percent (50%) of the outstanding equity securities of, the other entity, or issued pursuant to a bona fide joint venture agreement, *provided* that such issuances are approved by the Board and such recipient is not a Member or an Affiliate of a Member, or (viii) Membership Interests issued in connection with sponsored research, collaboration, technology license, development, OEM, marketing or other similar agreements or strategic partnerships approved by the Board; *provided* that such issuances are not primarily for equity financing purposes and such recipient is not a Member or an Affiliate of a Member.

3.11.3 In addition, the provisions of this Section 3.11 (i) shall not apply to an initial public offering of interests in the Company or any IPO Corporation or to any restructuring transaction in anticipation of any such initial public offering and (ii) shall expire upon the consummation of an initial public offering of interests in the Company or any IPO Corporation.

ARTICLE 4.
DISTRIBUTIONS

4.1 **Distributions of Cash Available for Distribution**.

4.1.1 Generally. Except as otherwise provided in this Section 4.1, Section 4.2, Section 4.3, Section 7.13 and Article 8, no Member shall be entitled to receive distributions from the Company.

4.1.2 Interim Distributions. Except as otherwise provided in Section 4.2, Cash Available for Distribution shall be distributed to the Members at such times as determined by the Board, and in each case, when made, shall be distributed as follows in accordance with the following priorities:

(a) First, to the Series D Preferred Members, an amount with respect to each Series D Preferred Unit (and pro rata among them in proportion to the amounts due each pursuant to this Section 4.1.2(a)) held by such Series D Preferred Member until each such Series D Preferred Unit has received aggregate distributions pursuant to this Section 4.1.2(a) in an amount that, when added to the distributions previously made in respect of such Series D Preferred Unit pursuant to this Section 4.1.2(a), equals the Series D Unit Value;

(b) Second, to the Series C Preferred Members and to the Series B Preferred Members, an amount with respect to each Series C Preferred Unit and each Series B Preferred Unit (and pro rata among them in proportion to the amounts due each pursuant to this Section 4.1.2(b)) held by such Series C Preferred Member or Series B Preferred Member, respectively, until each such Series C Preferred Unit and each such Series B Preferred Unit has received aggregate distributions pursuant to this Section 4.1.2(b) in an amount that, when added to the distributions previously made in respect of such Series C Preferred Unit or Series B Preferred Unit pursuant to this Section 4.1.2(b), equals the applicable Series C Unit Value and the applicable Series B Unit Value, respectively;

(c) Third, to the Series A Preferred Members (and pro rata among them in proportion to the amounts due each pursuant to this Section 4.1.2(c)), an amount with respect to each Series A Preferred Unit until such Series A Preferred Unit has received aggregate distributions pursuant to this Section 4.1.2(c) in an amount that, when added to the distributions previously made in respect of such Series A Preferred Unit pursuant to this Section 4.1.2(c), equals the applicable Series A Unit Amount;

(d) Fourth, to the Founder Members and the Common Members (and pro rata among them in proportion to the amounts due each pursuant to this Section 4.1.2(d)), an amount with respect to each Founder Unit and each Common Unit held by such Founder Member or Common Member, respectively, until such Founder Unit or Common Unit has received aggregate distributions pursuant to this Section 4.1.2(d) in an amount that, when added to the distributions previously made in respect of such Founder Unit or Common Unit pursuant to this Section 4.1.2(d), equals the applicable Founder/Common Unit Amount;

(e) Fifth, to the Members (other than the Series D Preferred Members in respect of any Series D Preferred Units) pro rata in proportion to their Non-D Percentage Interests; *provided* that (i) no Series C Preferred Member will share in any distribution under this Section 4.1.2(e) in respect of its, his or her Series C Preferred Units once the aggregate distributions previously and currently made to all Series C Preferred Units pursuant to Section 4.1.2(b) and this Section 4.1.2(e) equals the Series C Preferred Unit Cap, (ii) no Series B Preferred Member will share in any distribution under this Section 4.1.2(e) in respect of its, his or her Series B Preferred Units once the aggregate distributions previously and currently made to all Series B Preferred Units pursuant to Section 4.1.2(b) and this Section 4.1.2(e) equals the Series B Preferred Unit Cap, (iii) no Series A Preferred Member will share in any distribution under this Section 4.1.2(e) in respect of its, his or her Series A Preferred Units once the aggregate distributions previously and currently made to all Series A Preferred Units pursuant to Section 4.1.2(c) and this Section 4.1.2(e) equals the Series A Preferred Unit Cap, (iv) no Founder Member will share in any distribution under this Section 4.1.2(e) in respect of its, his or her Founder Units once the aggregate distributions previously and currently made to all Founder Units pursuant to Section 4.1.2(d) and this Section 4.1.2(e) equals the Founder Unit Cap, (v) no Common Member will share in any distribution under this Section 4.1.2(e) in respect of its, his or her Common Units once the aggregate distributions previously and currently made to all Common Units pursuant to Section 4.1.2(d) and this Section 4.1.2(e) equals the Common Unit Cap, and (v) no Management Incentive Member will share in any distribution under this Section 4.1.2(e) in respect of its, his or her Management Incentive Units once the aggregate distributions previously and currently made to all Management Incentive Units pursuant to Section 4.1.2(e) equals the Management Incentive Unit Cap; *provided further* that no Member will share in any distribution under this Section 4.1.2(e) with respect to any Management Incentive Unit until after the point at which the aggregate distributions previously and currently made to all Units pursuant to Section 4.1.2(a) through (e) exceed the amount of such Management Incentive Unit's Participation Threshold (with such amounts not distributed to Members with respect to Management Incentive Units pursuant to this proviso being distributed pursuant to Sections 4.1.2(e) to Members holding Units other than the Management Incentive Units, subject in each case to the applicable Unit Cap); and

(f) Sixth, to the Members pro rata in proportion to their Percentage Interests; *provided* that no Member will share in any distribution under this Section 4.1.2(f) with respect to any Management Incentive Unit until after the point at which the aggregate distributions previously and currently made to all Units pursuant to Section 4.1.2(a) through (f) exceed the amount of such Management Incentive Unit's Participation Threshold (with such amounts not distributed to Members with respect to Management Incentive Units pursuant to this proviso being distributed pursuant to Sections 4.1.2(f) to Members holding Units other than the Management Incentive Units).

Exhibit A shows the date of issuance or deemed issuance for all Series D Preferred Units, Series C Preferred Units, Series B Preferred Units, Series A Preferred Units, Founder Units and Common Units.

For the avoidance of doubt, notwithstanding the fact that distributions may have previously been made pursuant to this Section 4.1.2, each additional distribution shall again be subject to clauses (a) through (e) of this Section 4.1.2 until all amounts to be distributed with respect to the Series D Preferred Units, Series C Preferred Units, Series B Preferred Units, Series A Preferred Units, Common Units, Founder Units and Management Incentive Units outstanding at the time of such

distribution pursuant to clauses (a) through (e) of this Section 4.1.2 have been made in full; *provided* that in no event shall any Series D Preferred Unit, Series C Preferred Unit, Series B Preferred Unit, Series A Preferred Unit, Common Unit or Founder Unit be entitled to receive an aggregate amount pursuant to the applicable clause (a) through (d) of this Section 4.1.2 greater than the Unit Value payable as of such date of distribution with respect to such Unit; and *provided further* that if all amounts to be distributed pursuant to clauses (a) through (e) of this Section 4.1.2 with respect to the outstanding Series D Preferred Units, Series C Preferred Units, Series B Preferred Units, Series A Preferred Units, Common Units, Founder Units and Management Incentive Units have been distributed in full at the time of any distribution (whether as a result of such distribution, or prior distributions), any further distributions shall be made to the Members pursuant to Section 4.1.2(f).

Notwithstanding the foregoing or anything contained herein to the contrary: (1) no distribution shall be made with respect to any Management Incentive Units to the extent that such distribution would cause such Management Incentive Units to cease to constitute "profits interests" as described in Section 3.8; (2) if a distribution pursuant to Section 4.1.2(e) or Section 4.1.2(f) would result in the applicable Participation Threshold being met with respect to a Management Incentive Unit, then the distribution shall be treated as two distributions, the first of which will be made in an amount necessary to make the Management Incentive Unit reach its Participation Threshold, and the second of which will be made to include such Management Incentive Unit; (3) no Common Member or Management Incentive Member shall receive any distributions pursuant to this Section 4.1.2 with respect to any Common Units or Management Incentive Units, respectively, that are Unvested Units as of the date of distribution, but the distributions that would otherwise have been made pursuant to this Section 4.1.2 in respect of such Common Unit or Management Incentive Unit had such Common Unit or Management Incentive Unit, respectively, then been a Vested Unit shall instead be held in a separate reserve by the Company for distribution to the holder of such Common Unit or Management Incentive Unit upon (A) the vesting of such Common Unit or Management Incentive Unit or (B) the occurrence of a No-Fault Termination with respect to the holder of such Common Unit or Management Incentive Unit; (4) upon the vesting of any Common Unit that was an Unvested Unit or Management Incentive Unit that was an Unvested Unit (to the extent permissible under the foregoing clause (1)), the holder of such Common Unit or Management Incentive Unit, as applicable, shall be entitled to receive the distributions held in reserve for such Unit pursuant to the foregoing clause (3); (5) if any Common Unit that is an Unvested Unit or Management Incentive Unit that is an Unvested Unit is forfeited prior to its scheduled vesting date other than pursuant to a No-Fault Termination and amounts have been set aside in reserve for such Unit pursuant to the foregoing clause (3), all such amounts in reserve shall be forfeited by the Member for whose benefit such amounts were held and such amounts shall become property of the Company, and the Member that has forfeited such Unvested Unit and such amounts shall not be entitled to any other distributions or other amounts in respect of such forfeited Unvested Unit; and (6) if any Common Unit that is an Unvested Unit or Management Incentive Unit that is an Unvested Unit is forfeited prior to its scheduled vesting date pursuant to a No-Fault Termination and amounts have been set aside in reserve for such Unit pursuant to the foregoing clause (3), then the Member for whose benefit such amounts were held shall be entitled to receive such amounts at the times such Member would otherwise have received such amounts had such Unvested Units not been forfeited and such Member continued to vest in such Unvested Units in accordance with such Member's otherwise applicable vesting schedule (and, for the avoidance of doubt, a Member that has forfeited its Unvested Units pursuant to a No-Fault Termination shall not be entitled to any other distributions or other amounts in respect of such forfeited Unvested Units other than solely the amounts held in reserve on the date of the No-Fault Termination).

4.2 **Distributions Upon Liquidation**. Distributions made in conjunction with the final liquidation, dissolution, winding-up or termination of the Company shall be applied or distributed as provided in Article 8.

4.3 **Tax Distributions**. Unless in violation of the Act or other applicable law or if the Board, after consultation with the TMP, elects otherwise, the Company may, with the approval of the Board, cause distributions to be made out of Cash Available for Distribution (if any) to the Members in such amounts as the Board, in its reasonable discretion, determines appropriate to enable the Members to discharge their Tax Liability (as defined below) for any taxable year ("**Tax Distributions**"). A Member's "**Tax Liability**" with respect to a taxable year shall be equal to the product of (a) the Tax Rate (as defined below) and (b) the amount of (x) net taxable income or gain of the Company actually allocated or that the Board estimates to be allocated to such Member for federal income tax purposes for such taxable year and all prior taxable years, and any guaranteed payment pursuant to Section 707(c) of the Code to any Member in respect of Section 4.1.2 for such taxable year and all prior taxable years (to the extent such net taxable income, gain or guaranteed payment was not previously taken into account for purposes of the calculation of the amount of any Tax Liability), reduced, but not below zero, by (y) any tax deduction, loss or credit previously or currently allocated to such Member and not previously taken into account for purposes of the calculation of the amount of any Tax Liability (but not including any expense deductible by a natural person only under Section 212 of the Code or any expenses described in Section 709 of the Code). Each Tax Distribution shall be distributed among the Members on a pro rata basis according to the amount of Tax Liability in respect of each Member. The "**Tax Rate**" shall mean, for any taxable year, the highest marginal combined federal, state, and local income tax rate (taking into account any difference in rates applicable to ordinary income and capital gains and assuming a full limitation on the deduction of state and local Taxes under Section 68 of the Code) applicable to an individual resident in San Francisco, California with respect to such taxable year. If made, such Tax Distributions shall be made by the Company no later than April 15 (based on each Member's Schedule K-1 from the prior taxable year), or at such earlier time as may be determined by the Board, in its discretion. Distributions made to a Member pursuant to this Section 4.3 shall be treated as advances of distributions to be made to such Member, and shall be credited against, and reduce future distributions to be made to such Member, under (i) Section 4.1.2(c) (to the extent of any Tax Distributions attributable to allocations of net taxable income or gain in respect of Section 4.1.2(c)), (ii) Section 4.1.2(d) (to the extent of any Tax Distributions attributable to allocations of net taxable income or gain in respect of Section 4.1.2(d)), and (iii) Section 4.1.2(e) and Section 4.1.2(f) (in respect of all Tax Distributions except to the extent taken into account under clauses (i) or (ii) above and subject to the following sentence). For sake of clarification, distributions made to a Member pursuant to this Section 4.3 shall not be treated as advances of, and shall not be credited against, distributions to be made to such Member under Section 4.1.2(a) and Section 4.1.2(b) (including pursuant to Section 8.5.1(b) and for purposes of Section 7.8 and Section 7.10).

4.4 **Withholding**. The Company may withhold distributions or portions thereof if it is required to do so by any applicable rule, regulation, or law, and each Member hereby authorizes the Company to withhold from or pay on behalf of or with respect to such Member any amount of United States federal, state or local or foreign taxes that the Board determines the Company is required to withhold or pay with respect to any amount distributable or allocable to such Member pursuant to this Agreement. Any amount paid on behalf of or with respect to a Member pursuant to this Section 4.4 shall, at the option of the Board: (a) be treated as having been distributed to such Member as an advance against the next distributions that would otherwise be made to such Member, and such amount shall be satisfied by offset from such next distributions, or (b) constitute a recourse loan by the Company to such Member, which recourse loan shall include recourse to the entire Interest of such Member and which recourse loan shall be repaid by such Member within fifteen (15) days after notice from the Company that such payment must be made. In addition, if the Company is obligated to pay any taxes (including penalties, interest and any addition to tax) to any taxing authority that is specifically attributable to a Member (or such Member's transferee as a result of any Transfer of an interest in the Company), including, without limitation, on account of Sections 864 or 1446 of the Code, then (x) such persons shall indemnify the Company in full for the entire amount paid or payable, (y) the Board may offset future distributions from such persons pursuant to Section 4.1.2 to which such person is otherwise entitled under this Agreement against such person's obligation to indemnify the Company under this Section 4.4 and (z) such amounts shall be treated as a an amount paid on behalf of or with respect to such Member pursuant to this Section 4.4 with respect to both such former Member and such former Member's transferee(s), as applicable. Any Imputed Underpayment paid (or payable) by the Company as a result of an adjustment with respect to any Company item, including any costs, interest or penalties with respect to any such adjustment, shall be treated as an amount paid on behalf of or with respect to the appropriate Members pursuant to this Section 4.4. Each Member will furnish the Board with such information as may be requested by the Board from time to time to determine whether withholding is required, and each Member will promptly notify the Board if such Member determines at any time that it is subject to withholding. Any amounts withheld pursuant to this Section 4.4 shall be treated as having been distributed to the Member with respect to which the withholding was made.

4.5 **Distributions in Kind**. No right is given to any Member to demand or receive property other than cash as provided in this Agreement. The Board, in its sole discretion, may cause the Company to make distributions of Company Assets in kind. Any in-kind distributions shall be valued at their fair market value as of the date of distribution as determined by the Board (in its sole discretion) and shall be made in such a fashion as to ensure that either (a) each Member receives its proportionate share of such in-kind distributions (as determined in accordance with this Article 4) or (b) if one or more Members receives an in-kind distribution of Company Assets (as selected by the Board, in its sole discretion, but subject to such Member's approval (other than with respect to Management Incentive Units or Common Units held by such Member) if any other Member is receiving cash in lieu of such in-kind distribution of Company Assets), each other Member not receiving such Company Assets shall receive its proportionate distribution (as determined in accordance with Section 8.5), in cash or in other Company Assets (as selected by the Board in its sole discretion).

4.6 **Limitations on Distributions**. Notwithstanding any provision to the contrary contained in this Agreement, neither the Company nor the Board, on behalf of the Company, shall be required to make a distribution to any Person in violation of the Act or other applicable law.

ARTICLE 5.
ALLOCATIONS OF NET PROFITS AND NET LOSSES

5.1 **General Allocation of Net Profits and Losses**.

5.1.1 Generally. Net Profits and Net Losses shall be determined and allocated with respect to each Fiscal Year or other period of the Company, (a) as of the end of such Fiscal Year or other period, (b) at such times as the Gross Asset Value of any Company Asset is adjusted pursuant to the definition thereof, and (c) at such other times as may be required or, in the Board's sole discretion, permitted pursuant to this Agreement or otherwise under the Code. Subject to the other provisions of this Agreement, an allocation to a Member of a share of Net Profits or Net Losses shall be treated as an allocation of the same share of each item of income, gain, loss or deduction that is taken into account in computing Net Profits or Net Losses.

5.1.2 Allocations to Capital Accounts. Subject to the other provisions of this Article 5, for purposes of adjusting the Capital Accounts of the Members, Net Profits and Net Losses of the Company shall be allocated for each fiscal year or other period to the Members such that the positive balance of the Adjusted Capital Account of each Member immediately following such allocation is, as closely as possible, equal (proportionately) to the amount of the distributions that would be made to such Member pursuant to Section 8.5 if the Company sold all of its assets for their Gross Asset Values, all Company liabilities were satisfied (limited with respect to each Nonrecourse Liability to the Gross Asset Value of the assets securing such liability), and the remaining cash was distributed in accordance with the priority set forth in Section 4.1.2; *provided*, *however*, that the Board may adjust the allocations that are determined (without regard to this proviso) pursuant to this Section 5.1.2 if the Board determines reasonably and in good faith that such adjustment is required to comply with the requirements of Section 704(b) of the Code and the Treasury Regulations promulgated thereunder, or to give economic effect to Article 3, Article 4 and Article 8 and the other relevant provisions of this Agreement.

5.2 **Regulatory Allocations**. Notwithstanding the foregoing provisions of this Article 5, the following special allocations shall be made in the following order of priority:

5.2.1 Minimum Gain Chargeback. If there is a net decrease in Company Minimum Gain during a Company taxable year, then each Member shall be allocated items of Company income and gain for such taxable year (and, if necessary, for subsequent years) in an amount equal to such Member's share of the net decrease in Company Minimum Gain, determined in accordance with Regulations Section 1.704-2(g)(2). This Section 5.2.1 is intended to comply with the minimum gain chargeback requirement of Regulations Section 1.704-2(f) and shall be interpreted consistently therewith.

5.2.2 Member Minimum Gain Chargeback. If there is a net decrease in Member Minimum Gain attributable to a Member Nonrecourse Debt during any Company taxable year, each Member who has a share of the Member Minimum Gain attributable to such Member Nonrecourse Debt, determined in accordance with Regulations Section 1.704-2(i)(5), shall be specially allocated items of Company income and gain for such taxable year (and, if necessary, subsequent years) in an amount equal to such Member's share of the net decrease in Member Minimum Gain attributable to such Member Nonrecourse Debt, determined in a manner consistent with the provisions of Regulations Section 1.704-2(g)(2). This Section 5.2.2 is intended to comply with the partner nonrecourse debt minimum gain chargeback requirement of Regulations Section 1.704-2(i)(4) and shall be interpreted consistently therewith.

5.2.3 Qualified Income Offset. If any Member unexpectedly receives an adjustment, allocation, or distribution of the type contemplated by Regulations Section 1.704-1(b)(2)(ii)(d)(4), (5) or (6), items of income and gain shall be allocated to all such Members (in proportion to the amounts of their respective Adjusted Capital Account Deficits) in an amount and manner sufficient to eliminate the Adjusted Capital Account Deficit of such Member as quickly as possible. It is intended that this Section 5.2.3 qualify and be construed as a "qualified income offset" within the meaning of Regulations Section 1.704-1(b)(2)(ii)(d) and shall be interpreted consistently therewith.

5.2.4 Limitation on Allocation of Net Losses. If the allocation of Net Losses (or items of loss or deduction) to a Member as provided in Section 5.1 hereof would create or increase an Adjusted Capital Account Deficit, there shall be allocated to such Member only that amount of Net Losses (or items of loss or deduction) as will not create or increase an Adjusted Capital Account Deficit. The Net Losses (or items of loss or deduction) that would, absent the application of the preceding sentence, otherwise be allocated to such Member shall be allocated to the other Members in accordance with their relative Percentage Interests (as adjusted pursuant to Section 4.1.2(f)), subject to the limitations of this Section 5.2.4.

5.2.5 Certain Additional Adjustments. To the extent that an adjustment to the adjusted tax basis of any Company Asset pursuant to Code Section 734(b) or Code Section 743(b) is required, pursuant to Regulations Section 1.704-1(b)(2)(iv)(m)(2) or Regulations Section 1.704-1(b)(2)(iv)(m)(4), to be taken into account in determining Capital Accounts as the result of a distribution to a Member in complete liquidation of its Interest, the amount of such adjustment to the Capital Accounts shall be treated as an item of gain (if the adjustment increases the basis of the asset) or loss (if the adjustment decreases such basis), and such gain or loss shall be specially allocated to the Members in accordance with their Interests in the Company in the event that Regulations Section 1.704-1(b)(2)(iv)(m)(2) applies, or to the Members to whom such distribution was made in the event that Regulations Section 1.704-1(b)(2)(iv)(m)(4) applies.

5.2.6 Nonrecourse Deductions. The Nonrecourse Deductions for each taxable year of the Company shall be allocated to the Members in proportion to their relative Percentage Interests (as adjusted pursuant to Section 4.1.2(f)).

5.2.7 Member Nonrecourse Deductions. The Member Nonrecourse Deductions shall be allocated each year to the Member that bears the economic risk of loss (within the meaning of Regulations Section 1.752-2) for the Member Nonrecourse Debt to which such Member Nonrecourse Deductions are attributable.

5.2.8 Curative Allocations. The allocations set forth in Sections 5.2.1, 5.2.2, 5.2.3, 5.2.4, 5.2.5, 5.2.6 and 5.2.7 (the "**Regulatory Allocations**") are intended to comply with certain requirements of Regulations Sections 1.704-1(b) and 1.704-2(i). Notwithstanding the provisions of Section 5.1, the Regulatory Allocations shall be taken into account in allocating other items of income, gain, loss and deduction among the Members so that, to the extent possible, the net amount of such allocations of other items and the Regulatory Allocations to each Member shall be equal to the net amount that would have been allocated to each such Member if the Regulatory Allocations had not occurred.

5.3 **Tax Allocations**.

5.3.1 Except as provided in Section 5.3.2, for income tax purposes under the Code and the Regulations, each Company item of taxable income, gain, loss, deduction and credit shall be allocated between the Members as its correlative item of "book" income, gain, loss, deduction or credit is allocated pursuant to this Article 5.

5.3.2 Tax items with respect to Company Assets that are contributed to the Company with a Gross Asset Value that varies from its basis in the hands of the contributing Member immediately preceding the date of contribution shall be allocated among the Members for income tax purposes pursuant to Regulations promulgated under Code Section 704(c) so as to take into account such variation. The Company shall account for such variation using any method approved under Code Section 704(c) and the applicable Regulations as chosen by the Board in its discretion after consultation with its tax advisors and the TMP. If the Gross Asset Value of any Company Asset is adjusted pursuant to the definition of "Gross Asset Value" herein, subsequent allocations of income, gain, loss, deduction and credit with respect to such Company Asset shall take account of any variation between the adjusted basis of such Company Asset for federal income tax purposes and its Gross Asset Value in a manner consistent with Code Section 704(c) and the Regulations promulgated thereunder using any method approved under Code Section 704(c) and the applicable Regulations as chosen by the Board in its discretion after consultation with its tax advisors and the TMP. Allocations pursuant to this Section 5.3.2 are solely for purposes of federal, state and local taxes and shall not affect, or in any way be taken into account in computing, any Member's Capital Account or share of Net Profits, Net Losses and any other items or distributions pursuant to any provision of this Agreement.

5.4 **Other Tax Provisions**.

5.4.1 For any Fiscal Year or other period during which any part of an Interest is Transferred between the Members or by a Member to another Person, the portion of the Net Profits, Net Losses and other items of income, gain, loss, deduction and credit that are allocable with respect to such part of an Interest shall be apportioned between the transferor and the transferee under any method allowed pursuant to Code Section 706 and the applicable Regulations as determined by the Board in its discretion.

5.4.2 In the event that the Code or any Regulations require allocations of items of income, gain, loss, deduction or credit different from those set forth in this Article 5, the Board is hereby authorized to make new allocations in reliance on the Code and such Regulations, and no such new allocation shall give rise to any claim or cause of action by any Member.

5.4.3 For purposes of determining a Member's proportional share of the Company's "excess nonrecourse liabilities" within the meaning of Regulations Section 1.752-3(a)(3), each Member's interests in Net Profits shall be such Member's relative Percentage Interest (as adjusted pursuant to Section 4.1.2(f)).

5.4.4 The Members acknowledge and are aware of the income tax consequences of the allocations made by this Article 5 and hereby agree to be bound by the provisions of this Article 5 in reporting their shares of Net Profits, Net Losses and other items of income, gain, loss, deduction and credit for United States federal, state and local income tax purposes.

5.4.5 The Company and the Members shall not treat any of the rights of the Members under this Agreement as giving rise to any guaranteed payment for capital under Section 707 of the Code.

5.4.6 All matters concerning the allocations and other determinations provided for in this Article 5 and any accounting procedures not expressly provided for in this Agreement shall be determined by the Board in its discretion.

ARTICLE 6.
OPERATIONS

6.1 **Management**.

6.1.1 Board of Managers. The Company shall have a Board of Managers (the "**Board**"), appointed as set forth in this Section 6.1. Except as otherwise expressly provided in this Agreement: (a) the Board shall have sole and complete charge and management of all the affairs and business of the Company and the Company's interests in the Platform Companies to the extent of its interests therein, in all respects and in all matters, including all authority consistent with the authority of a board of directors of a Delaware corporation; and (b) the Board shall have full, exclusive and complete discretion to manage and control the business and affairs of the Company and the Company's interests in the Platform Companies to the extent of its interests therein, to make all decisions affecting the business and affairs of the Company and with respect to the Company's interests in the Platform Companies to the extent of its interests therein and to take all such actions as it deems necessary or appropriate to accomplish the purposes and direct the affairs of the Company and with respect to the Company's interests in the Platform Companies to the extent of its interests therein, including full power and authority over equity issuances, the payment of distributions or repurchase of Units, the appointment and termination of officers, employees and other Service Providers to the Company or to any Platform Company (who are acting in such capacity on behalf of the Company), executive compensation and equity award plans, material transactions and company decisions, incurrence of indebtedness, the annual budget or operating plan, oversight over litigation and regulatory matters and any transactions between the Company or any Platform Company and any Affiliate of the Company. Without limiting the foregoing, the Board shall also have control and oversight over the powers and duties, operation and composition of any advisory or other committees formed by the Board.

(a) Composition. The Board shall initially consist of seven (7) managers (each, a "**Manager**"), subject to reduction as provided for in Section 6.1.1(a)(iii). The Managers shall be appointed as follows:

(i) Two individuals who will be designated by the holders of a majority of the Series B Preferred Units, who initially shall be Ali Satvat and James Momtazee (each, a "**Series B Manager**").

(ii) Neil Kumar (the "**Founder Manager**"); *provided* that if for any reason the Founder Manager (x) shall resign from the Board, (y) shall cease to devote substantially all of his business time and attention to the business and affairs of the Company and the Platform Companies or (z) shall otherwise cease for any reason to be a Service Provider, then, automatically and without any action taken by any Member, (1) he shall be removed from the Board, and (2) all of the other Managers then on the Board, voting unanimously, may appoint a new Founder Manager, who shall devote substantially all of his or her business time and attention to the business and affairs of the Company and the Platform Companies.

(iii) Two individuals designated as follows (each, a "**Series D Manager**"): (A) one individual who shall be designated by KKR (the "**KKR Series D Manager**" and together with the Series B Managers, so long as KKR holds a majority of the Series B Preferred Units, the "**KKR Managers**") if KKR purchases all of its allocated Series D Preferred Units as set forth in, and in accordance with the terms of, the Purchase Agreement as in effect on the date of this Agreement (the "**KKR Closing**"), and (B) one individual who shall be designated by Viking (the "**Viking Series D Manager**"); *provided* that (x) such KKR Series D Manager shall either be (1) an employee of KKR or its affiliated management entities or (2) an individual who would be reasonably expected to qualify as an independent director under applicable Nasdaq rules and who has relevant industry experience and (y) such Viking Series D Manager shall either be (1) an employee of Viking or its affiliated management entities or (2) an individual who would be reasonably expected to qualify as an independent director under applicable Nasdaq rules and who has relevant industry experience; *provided, further* that (Y) if the KKR Closing does not occur within the timeline required by the Purchase Agreement as in effect on the date of this Agreement, the number of Series D Managers shall be reduced by one (by eliminating the KKR Series D Manager seat), and the number of total Managers shall be reduced to six, with Viking continuing to have the right to designate the Viking Series D Manager (subject to the following clause (Z)) and (Z) if Viking does not purchase all of its allocated Series D Preferred Units as set forth in, and in accordance with the terms of, the Purchase Agreement on the date of this Agreement (the "**Viking Closing**"), the number of Series D Managers shall be reduced by one (by eliminating the Viking Series D Manager seat), and the number of total Managers shall be reduced to six, with KKR continuing to have the right to designate the KKR Series D Manager (subject to the foregoing clause (Y)). Viking shall use commercially reasonable efforts to designate the Viking Series D Manager within sixty (60) days of the Viking Closing. The KKR Series D Manager seat shall remain vacant until the KKR Closing and the Viking Series D Manager seat shall remain vacant until the Viking Closing.

(iv) One individual designated by the Founder Manager (the "**Management Manager**"), and approved by any then-serving Independent Manager, who shall initially be Charles Homcy.

(v) One individual who will be designated by any then-serving Manager (the "**Independent Manager**"), and approved by majority vote of the then-serving Managers; *provided*, *however*, that if the then-designated Managers cast an equal number of votes for and against any proposed Independent Manager, the Company shall solicit the vote of the Deciding Members to determine (based on the vote of two of three of such Members) whether the proposed individual (or which one of the proposed individuals, if applicable) shall be approved as the Independent Manager. Such Independent Manager may be a Member as a result of holding Management Incentive Units, but will not be Affiliated with any other Member and will have relevant industry experience. Richard Scheller shall initially be the Independent Manager. "**Deciding Members**" means the three Members holding the largest number of then-outstanding Series D Preferred Units, Series C Preferred Units and Series B Preferred Units (taken together as a single class on a number of Units outstanding basis) who do not have a then-serving Manager Affiliated with such Member on the Board.

(b) Removal; Replacement. Any Manager may resign at any time by giving written notice to the Board. Any Manager may be removed at any time by the Persons entitled to appoint and approve such Manager pursuant to Section 6.1.1(a). Any vacancies created by the resignation, removal or death of a Manager shall be filled in accordance with Section 6.1.1(a).

(c) Decisions. Each Manager shall be entitled to one (1) vote; *provided*, *however*, that in the event that (i) any KKR Manager is not present at a meeting or a KKR Manager seat is vacant (other than, until the KKR Closing, the KKR Series D Manager seat), James Momtazee, in the first instance, Ali Satvat, in the alternative, shall be permitted to vote on behalf of the absent or vacant KKR Manager seat, and (ii) the Viking Series D Manager seat is vacant, the person then designated as the Independent Manager (in good faith consultation with Viking) shall be permitted to vote on behalf of the vacant Viking Series D Manager (but only if the Viking Closing has occurred). Except as otherwise expressly provided in this Agreement, any actions required or permitted to be taken by the Board shall be so taken with the approval of a majority of all of the Managers, *provided* that vacant Manager seats (other than any vacant KKR Manager seat (other than, until the KKR Closing, the KKR Series D Manager) or Viking Series D Manager seat (but only if the Viking Closing has occurred), as applicable, which will be treated as filled by James Momtazee, in the first instance, or Ali Satvat, in the alternative, in the case of any vacant KKR Manger seat, or the Independent Director, in the case of the Viking Series D Management Seat, in accordance with Section 6.1.1(c) for this purpose) shall not be counted for this purpose.

Actions by the Managers may be taken at a duly-called meeting of the Board pursuant to Section 6.1.1(f) at which a quorum is present or by written consent without a meeting pursuant to Section 6.1.1(h). The Board shall memorialize its actions in the form of minutes, which minutes shall be conclusive evidence of such action and shall be incorporated into the books and records of the Company. References in this Agreement to any action, determination, decision, vote, approval or consent of the Board mean the action, determination, decision, vote, approval or consent of the Board taken, given or made in accordance with this paragraph.

(d) Meetings. Meetings of the Board may be held at the principal office of the Company or at such other place(s) as are designated by the Board at such times and with such frequency as shall be designated from time to time by the Board; *provided* that a meeting may be called by any one Manager.

(e) Telephonic Participation. Managers may participate in any regularly scheduled or special meetings of the Board telephonically or through other similar communications equipment, as long as all of the representatives participating in the meeting can hear one another. Participation in a meeting pursuant to the preceding sentence shall constitute presence in person at such meeting for all purposes of this Agreement.

(f) Notice and Attendance. Notice of any meeting of, or of any action to be taken by written consent without a meeting pursuant to Section 6.1.1(h) by, the Board shall be given as far in advance of the meeting or such proposed action as is reasonably practicable and may be given by telephone (including by voicemail or by message to an individual who the notifying party instructs to and reasonably believes will notify the party to be notified of such meeting or such proposed action), by email, facsimile transmission, certified mail (return receipt requested) or by personal delivery. The Company shall use its reasonable best efforts to give notice of any meeting at least three (3) days prior to such meeting, unless otherwise agreed by all of the Managers. A Manager may waive notice of the date, time, place and purpose or purposes of a meeting of the Board. A waiver of notice is effective whether given before, at or after a meeting, and whether given in writing, orally or by attendance. Attendance by a Manager at a meeting is a waiver of notice of that meeting, unless the Manager objects at the beginning of the meeting to the transaction of business because the meeting is not properly called or convened, or objects before a vote on an item of business because the item may not properly be considered at that meeting and does not participate in the consideration of the item at that meeting.

(g) Quorum. A quorum shall be required to conduct any business at any meeting of the Board, and shall be deemed present at any such meeting so long as Managers entitled to cast at least a majority of the total number of votes entitled to be cast by the full Board (*provided* that vacant Manager seats (other than any vacant KKR Manager seat (other than, until the KKR Closing, the KKR Series D Manager seat) or Viking Series D Manager seat (but only if the Viking Closing has occurred), as applicable, which will be treated as filled by James Momtazee, in the first instance, or Ali Satvat, in the alternative, in the case of any vacant KKR Manger seat, or the Independent Director, in the case of the Viking Series D Management Seat, in accordance with Section 6.1.1(c) for this purpose) shall not be counted for this purpose).

(h) Actions Without Meetings. Any action required or permitted to be taken at a meeting of the Board may be taken by written consent without a meeting, which consent shall set forth the actions to be so taken and the approval of the Board required pursuant to Section 6.1.1(c). The Company shall provide at least three (3) days advance written notice of the proposed action and the purpose therefor to all Managers, *provided* that the requirement for such advanced written notice shall be deemed to be waived if all of the Managers then in office execute such written consent. Any such written consent shall have the same effect as an act of the Board at a properly called and constituted meeting of the Board. Copies of any executed written consent shall be delivered to all Managers promptly after execution thereof.

6.1.2 Binding Effect. Except as otherwise provided in this Agreement, the Board shall have the sole power and authority to bind the Company, except and to the extent that such power is expressly delegated in writing to any other Person by the Board (including through the appointment of Officers). The actions of the Board taken in such capacity and in accordance with this Agreement shall bind the Company.

6.1.3 Officers.

(a) The Board may appoint, from time to time, one or more individuals, including a Chief Executive Officer, to manage the day-to-day business affairs of the Company (each, an "**Officer**") and may assign titles to such Officers as the Board may deem necessary or advisable. Each Officer shall have such powers, authority and responsibilities as are delegated in writing by the Board from time to time. Each Officer shall serve at the pleasure of the Board, and any appointment or delegation pursuant to this Section 6.1.3 may be revoked by the Board at any time. To the extent delegated by the Board, the Officers shall have the authority to act on behalf of, bind and execute and deliver documents in the name and on behalf of the Company. The Board may designate in writing such other Persons to act as agents of the Company's business as the Board shall determine in its sole discretion, and the actions of such other Persons taken in such capacity and in accordance with this Agreement shall bind the Company.

(b) The Chief Executive Officer shall have general charge and supervision of the business and affairs of the Company subject to the direction of the Board and the terms of this Agreement, and shall perform all duties and have all powers that are commonly incident to the office of chief executive or that are otherwise delegated to the Chief Executive Officer by the Board. The Chief Executive Officer shall see that orders and resolutions of the Board are carried into effect. The Chief Executive Officer may sign certificates for Units and all other contracts and documents of the Company except in cases where the signing and execution thereof shall be expressly delegated by law or by the Board to some other Officer or agent of the Company. The Chief Executive Officer shall have general powers of supervision over the other Officers of the Company, subject only to all of the rights and powers of the Board. The Chief Executive Officer shall initially be Neil Kumar.

6.1.4 Observer Rights.

(a) As long as Viking, The United States Life Insurance Company in the City of New York ("**AIG**") and Aisling Capital IV, LP ("**Aisling**") are Series C Preferred Members, the Company shall invite a representative of each of Viking, AIG and Aisling (each, a "**Series C Observer**") to attend all meetings of the Board and of any committee of the Board in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its Managers in connection with such meetings; *provided*, *however*, that such Series C Observer shall have agreed in writing for the benefit of the Company to hold in confidence and trust all information so provided in accordance with Section 6.1.5 below; and *provided further*, that the Company and the Board reserve the right to withhold any information and to exclude such representative from any

meeting or portion thereof if access to such information or attendance at such meeting could reasonably result in the loss of attorney-client privilege or result in disclosure of trade secrets or confidential information to a competitor. For the avoidance of doubt, no such representative shall be a Manager or member of the Board or have any voting rights at any such meeting of the Board or any committee thereof for any purpose and no such representative shall have any fiduciary duties to the Company or the Members. No amendment or waiver to this Section 6.1.4 may adversely affect the specified rights of a Member set forth in this Section 6.1.4 unless the Member adversely affected thereby shall have consented in writing to such amendment or waiver. Each Series C Observer shall be entitled to reimbursement from the Company for all reasonable and documented out-of-pocket costs and expenses incurred by them in connection with any travel undertaken for the purpose of attending meetings of the Board and of any committee of the Board.

(b) As long as HH BBP LLC ("**Hillhouse**") is a Series D Preferred Member, the Company shall invite a representative of Hillhouse (the "**Series D Observer**" and collectively with the Series C Observers, the "**Observers**") to attend all meetings of the Board and of any committee of the Board in a nonvoting observer capacity and, in this respect, shall give such representative copies of all notices, minutes, consents, and other materials that it provides to its Managers in connection with such meetings; *provided*, *however*, that the Series D Observer shall have agreed in writing for the benefit of the Company to hold in confidence and trust all information so provided in accordance with Section 6.1.5 below; and *provided further*, that the Company and the Board reserve the right to withhold any information and to exclude such representative from any meeting or portion thereof if access to such information or attendance at such meeting could reasonably result in the loss of attorney-client privilege or result in disclosure of trade secrets or confidential information to a competitor. For the avoidance of doubt, no such representative shall be a Manager or member of the Board or have any voting rights at any such meeting of the Board or any committee thereof for any purpose and no such representative shall have any fiduciary duties to the Company or the Members. No amendment or waiver to this Section 6.1.4 may adversely affect the specified rights of a Member set forth in this Section 6.1.4 unless the Member adversely affected thereby shall have consented in writing to such amendment or waiver. The Series D Observer shall be entitled to reimbursement from the Company for all reasonable and documented out-of-pocket costs and expenses incurred by them in connection with any travel undertaken for the purpose of attending meetings of the Board and of any committee of the Board.

6.1.5 Confidentiality. Unless otherwise approved by the Board in writing, each Manager and each Observer shall keep strictly confidential the topics and substance of discussions that occur at any meeting of the Board or any committee thereof, as well as any information presented or otherwise obtained at or in connection therewith; *provided*, *however*, (a) the KKR Managers may share such information with KKR, and their respective Affiliates, employees, advisors, limited partners, current and prospective investors, and lenders, (b) the Viking Series D Manager may share such information with Viking, and their respective Affiliates, employees, advisors, limited partners, current and prospective investors, and lenders and (c) the Observers may share such information with the Series C Preferred Members or Series D Preferred Members, as applicable, and their respective Affiliates, employees, advisors, limited partners, investors, and lenders; *provided*, *further*, such recipients are (x) informed of the confidential nature of such information and bound by confidentiality obligations to such

Members similar to the obligations of confidentiality contained herein, and (y) each Member hereby agrees that it shall be responsible for any breach of the obligations of confidentiality contained in this Agreement by any recipients of such information that are (i) such Member's representatives as a Manager or Observer, or (ii) such Member's Affiliates, advisors, current or prospective investors or lenders as if such recipients were bound by such obligations of confidentiality; and *provided*, *further*, that such information may not be shared with any portfolio company Affiliated with any Manager or Preferred Member or with any competitor to the Company or any Platform Company. Notwithstanding the foregoing, nothing contained herein shall prohibit any Manager or Observer from disclosing as required pursuant to applicable law, regulation or legal or regulatory process or from reporting possible violations of federal law or regulation to any governmental agency or entity including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any Inspector General, or making other disclosures that are protected under the whistleblower provisions of applicable law or regulation.

6.2 **Powers of Members**. Except as otherwise expressly provided in this Agreement or as the Board may delegate in writing, the Members (in their capacity as such) shall not participate in the management of the Company, and shall have no right, power or authority to act for or on behalf of, or otherwise bind, the Company. Except as expressly provided in this Agreement or required by any non-waivable provisions of applicable law, the Members (in their capacity as such) shall have no right to vote on or consent to any other matter, act, decision or document involving the Company or its business. No Member shall take any action in the name of or on behalf of the Company, including assuming any obligation or responsibility on behalf of the Company, unless such action, and the taking thereof by such Member, shall have been expressly authorized by the Board in writing or shall be expressly and specifically authorized by this Agreement.

6.3 **Limitations on Authority**. Notwithstanding any contrary provision of this Agreement, the Board shall not have any authority to perform any act that would subject any Member (in its capacity as a Member of the Company) to liability for the debts, liabilities or obligations of the Company.

6.4 **Remuneration and Reimbursement**.

6.4.1 Managers and Committee Members. The Managers may receive fees or other compensation from the Company (including in the form of Units) for services provided in such Person's capacity as a Manager of the Company, in each case as approved by the Board. Managers (other than the Founder Manager) shall be entitled to reimbursement on a monthly basis from the Company for all reasonable out-of-pocket costs and expenses incurred by them in connection with their service as Managers.

6.4.2 Platform Fees.

(a) Subject to this Section 6.4.2, the Members may receive directors' fees (including fees derived from a position with similar status or functions in respect of a limited liability company), transaction fees, commitment fees, monitoring fees, break-up fees, success fees, syndication fees or similar fees (whether in the form of cash, securities or otherwise) from Platform Companies (including any such fees that such Member is contractually or legally required to remit to any other Person, "**Platform Fees**").

(b) To the extent that any Member is receiving or entitled to receive Platform Fees from any Platform Company that is a Platform Company as of the Effective Date, such Platform Fees are described on Schedule 6.4.2 to this Agreement.

(c) If at any time the Company is considering acquiring equity or debt of any Person from whom a Member receives, is entitled to receive or expects to become entitled to receive Platform Fees, such Member shall disclose such Platform Fees and the terms or potential terms thereof to the Board promptly, and in any event within a reasonable period of time prior to the Company acquires equity or debt of such Person.

(d) Unless (i) the applicable Platform Fees are described on Schedule 6.4.2 to this Agreement, (ii) the applicable Platform Fees are disclosed to the Board in accordance with Section 6.4.2(c) prior to the time the Company acquires equity or debt of the applicable Person, or (iii) the applicable Member receives the approval of the Board and the written consent of the Majority Preferred Members, all Platform Fees received by any Member from any Platform Company shall be received on behalf of, and promptly remitted in full to, the Company.

6.4.3 Expenses. From and after the Effective Date, the Company will be responsible for all costs, fees and expenses of the Company incurred in accordance with an operating budget approved by the Board, including any costs, fees and expenses of the Company under any employment agreement or consulting agreement with a Service Provider.

6.5 **Reliance by Third Parties**. Any Person dealing with the Company, any Manager or any Officer may rely upon a certificate signed by any Manager or any Officer as to:

6.5.1 The identity of any Manager, any Member or any Officer;

6.5.2 The existence or non-existence of any fact or facts which constitute a condition precedent to acts by the Board or Officers or in any other manner germane to the affairs of the Company;

6.5.3 The Persons who are authorized to execute and deliver any instrument or document for or on behalf of the Company; or

6.5.4 Any act or failure to act by the Company or as to any other matter whatsoever involving the Company, the Board, any Member or any Officer (in each case in relation to this Agreement or the business of the Company).

6.6 **Records and Reports**.

6.6.1 The Company shall keep, at the principal place of business of the Company or at such other location as the Board shall deem appropriate, full and proper ledgers, minutes of the proceedings of the Board, other books of account, and records of all receipts and disbursements, other financial activities, and the internal affairs of the Company for at least the current and past four Fiscal Years.

6.6.2 The Company shall prepare and deliver to each Series D Preferred Member, Series C Preferred Member and Series B Preferred Member, with respect to the Company, (a) audited consolidated financial statements within one hundred and twenty (120) days after the end of each Fiscal Year, quarterly unaudited financial reports within forty five (45) days after the end of each of the first three fiscal quarters in each Fiscal Year, and other information as determined by the Board; (b) upon request, promptly following the end of each fiscal quarter, an up-to-date schedule of Members with the information required to be set forth in Exhibit A; (c) within sixty (60) days after the end of each Fiscal Year, U.S. Internal Revenue Service Schedule K-1, "Partner's Share of Income, Deductions, Credits, Etc.," or any successor schedule or form, for such Series D Preferred Member, Series C Preferred Member and Series B Preferred Member, as applicable; and (d) such other information as such Series D Preferred Member, Series C Preferred Member or Series B Preferred Member, as applicable, may reasonably request from time to time to meet its tax reporting obligations in respect of the Company or for any other purpose related to its Interest. Any institutional investor that is a holder of Series D Preferred Units, Series C Preferred Units, Series B Preferred Units or their Affiliated investment funds will, upon request, be entitled to direct, contractual "management rights" in the Company and each of its subsidiaries as are reasonably necessary to permit such holder of Series D Preferred Units, Series C Preferred Units, Series B Preferred Units or their Affiliated investment funds to qualify at all relevant times as a "venture capital operating company" (as defined by the regulations issued by the United States Department of Labor at Section 2510.3-101 of Part 2510 of Chapter XXV, Title 29 of the United States Code of Federal Regulations) ("**VCOC Management Rights**"). The VCOC Management Rights of any such holder of Series D Preferred Units, Series C Preferred Units, Series B Preferred Units or their Affiliates will be separate and distinct from any right of any Member to appoint a Manager to the Board or to otherwise receive information regarding the Company or the Platform Companies pursuant to this Agreement.

6.6.3 Members (personally or through an authorized representative) may, for purposes reasonably related to their Membership Interests, examine and copy (at their own cost and expense) the books and records of the Company at all reasonable business hours. Notwithstanding the foregoing: (a) the Board shall be entitled to invoke the benefits of the confidential information provisions of Section 18-305(c) of the Act (other than with respect to Viking, the KKR Member and its authorized representatives), and, for the avoidance of doubt, any information provided to or gathered by a Member pursuant to the foregoing or pursuant to Section 6.6.2 shall be subject to Section 9.10; and (b) the Board may, in its sole discretion, restrict any and all rights of any Common Member or Management Incentive Member(s) who is or has been a Service Provider to obtain information (including the Units held by any other Member) to the greatest extent permitted by law (including Section 18-305(f) of the Act), without the consent of any other Member and without the need to comply with any other notice or other requirements under this Agreement.

6.6.4 Notwithstanding anything to the contrary herein, Section 6.6.2 and Section 6.6.3 shall not be amended or waived without the prior written consent of KKR and Viking.

6.7 **Actions Requiring Approval by Certain Preferred Members**.

6.7.1 Notwithstanding Section 6.1 or any other provision of this Agreement or the Certificate to the contrary, the following actions shall not be taken by the Company, whether by amendment, merger, reclassification or otherwise, without the prior written approval of the Majority Preferred Members, acting in their sole discretion:

(a) authorize or issue, or obligate itself to issue, any new class or series of Units, Membership Interests or other equity interests of the Company having rights, preferences or privileges senior to or pari passu with any of the Preferred Units in respect of the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends or rights of redemption;

(b) (i) reclassify, alter or amend any existing Unit that is pari passu with any series or class of Preferred Units in respect of the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to such series or class of Preferred Units in respect of any such right, preference, or privilege or (ii) reclassify, alter or amend any existing Unit that is junior to any series or class of Preferred Units in respect of the distribution of assets on the liquidation, dissolution or winding up of the Company, the payment of dividends or rights of redemption, if such reclassification, alteration or amendment would render such other security senior to or pari passu with such series or class of Preferred Units in respect of any such right, preference or privilege (other than in connection with a Qualifying IPO pursuant to which the Company serves as the IPO Corporation and securities received by the Members are consistent with the requirements of Section 7.11);

(c) amend, alter or waive the Certificate or this Agreement or any term or provision set forth therein so as to adversely alter or change the powers, preferences or special rights of the Preferred Units;

(d) enter into or consummate a Fundamental Transaction;

(e) redeem, repurchase or otherwise acquire any Units, other than pursuant to an agreement with a Service Provider giving the Company the right to repurchase Units at the original cost thereof upon the termination of services or otherwise pursuant to the terms of Section 3.9;

(f) increase or decrease the number of managers constituting the Board;

(g) borrow money for or on behalf of the Company, incur and/or guarantee obligations for or on behalf of the Company, pledge the credit of the Company, or grant any security interests in the Company Assets that in the aggregate exceed $100,000,000; *provided*, that no such consent shall be required to grant any security interest in the Company Assets, including securities of its controlled subsidiaries and assets held by such subsidiaries, as required under the terms of the Company's existing loan arrangement with Hercules Capital, Inc. or to draw-down amounts thereunder;

(h) adopt or materially amend any equity (or phantom equity) incentive plan of the Company or increase the Management Pool;

(i) any action that is, or that results in, a transaction between the Company or any Platform Company, on one hand, and any Member of the Company or Affiliate thereof, on the other hand except, in the case of this clause (i), for (x) ordinary course employee compensation approved by the Board or (y) pursuant to Section 3.9, Section 3.11, Section 7.9, Section 7.11 or Section 7.12; or

(j) any change in business operations or any other action that would cause the Company to have to register as an Investment Company within the meaning of the Investment Company Act or as an investment adviser within the meaning of the Investment Advisers Act.

6.7.2 Notwithstanding Section 6.1 or any other provision of this Agreement or the Certificate to the contrary, the Company, without the prior written approval of the Requisite Series D Majority, acting in their sole discretion, shall not take any action which (by amendment, merger, reclassification or otherwise) (a) amends, modifies or waives any provision of the Certificate or this Agreement in a manner adverse to the Series D Preferred Units, (b) results in the issuance of Series D Preferred Units (other than pursuant to the Purchase Agreement), (c) waives the treatment of a transaction (or series of related transactions) as a Fundamental Transaction with respect to the Series D Preferred Units, or (d) consummates an underwritten initial public offering other than a Qualifying IPO.

6.7.3 Notwithstanding Section 6.1 or any other provision of this Agreement or the Certificate to the contrary, the Company, without the prior written approval of the Requisite Series C Majority, acting in their sole discretion, shall not take any action which (by amendment, merger, reclassification or otherwise) (a) amends, modifies or waives any provision of the Certificate or this Agreement in a manner adverse to the Series C Preferred Units or (b) results in the issuance of any additional Series C Preferred Units other than the Series C Preferred Units outstanding as of the Effective Date.

6.7.4 Notwithstanding Section 6.1 or any other provision of this Agreement or the Certificate to the contrary, the Company, without the prior written approval of the Members holding a majority of the outstanding Series B Preferred Units, acting in their sole discretion, shall not take any action which (by amendment, merger, reclassification or otherwise) (a) amends, modifies or waives any provision of the Certificate or this Agreement in a manner adverse to the Series B Preferred Units or (b) results in the issuance of any additional Series B Preferred Units other than the Series B Preferred Units outstanding as of the Effective Date.

6.7.5 Subject to Section 6.7.1, Section 6.7.2(b), Section 6.7.3(b) and Section 6.7.4(b), nothing set forth in Section 6.1 or Section 9.1 shall limit the ability of the Board to cause the Company to issue any additional Units or other equity interest, or to admit any Additional Member, in each case with such rights as the Board shall prescribe, which may be lesser, equal or superior rights to those of any existing Member or existing Units, and the Board may amend this Agreement to reflect the rights and obligations of such class of Units or other equity interests and the issuance thereof without the consent of any holder of Units.

6.8 **Indemnification by the Company**.

6.8.1 The Company shall indemnify and hold harmless each current and former Manager, TMP, Preferred Member, the Chief Executive Officer of the Company and their respective Affiliates, and, to the extent determined by the Board in its sole discretion (without creating any right to indemnity for any such Persons), any other Members and any other Officers, employees and agents of the Company (each, an "**Indemnitee**"), to the fullest extent permitted by law from and against any and all losses, claims, demands, costs, taxes, damages, liabilities, expenses of any nature (including reasonable attorneys' fees and disbursements and other costs of litigation, whether pending or threatened), judgments, fines, settlements and other amounts, of any nature whatsoever, known or unknown, liquid or illiquid (collectively, "**Liabilities**") arising from any and all claims, demands, actions, suits or proceedings, whether civil, criminal, administrative or investigative (collectively, "**Actions**"), in which the Indemnitee may be involved, or threatened to be involved as a party or otherwise, arising out of or incident to the business of the Company, if (a) the Indemnitee acted in a manner such Person believed to be within the scope of such Indemnitee's authority, and (b) the Indemnitee's conduct did not constitute fraud, gross negligence or willful misconduct. The termination of an action, suit or proceeding by judgment, order, settlement, or upon a plea of *nolo contendere* or its equivalent, shall not, in and of itself, create a presumption that the Indemnitee acted in a manner contrary to that specified in clause (a) or (b) above. Notwithstanding anything to the contrary herein, the indemnity provided in this Section 6.8.1 shall not extend to any Liabilities arising from a Member's breach of its representations, warranties, covenants or acknowledgements in Section 9.2.

6.8.2 Expenses incurred by an Indemnitee in defending any Action subject to this Section 6.8 shall be advanced by the Company (to the extent of available cash as determined by the Board) prior to the final disposition of such Action upon receipt by the Company of a satisfactory written commitment by or on behalf of the Indemnitee to repay such amount if it shall be determined that such Indemnitee is not entitled to be indemnified as authorized in this Section 6.8.

6.8.3 The indemnification provided by this Section 6.8 shall be in addition to any other rights to which an Indemnitee may be entitled under any agreement, as a matter of law or equity or otherwise, and shall inure to the benefit of the heirs, successors, assigns and administrators of the Indemnitee.

6.8.4 Any indemnification provided in this Section 6.8 hereunder shall be satisfied solely out of the Company Assets. No Member or its Affiliates shall be subject to personal liability by reason of the indemnification provisions in this Section 6.8.

6.8.5 No Indemnitee shall be denied indemnification in whole or in part under this Section 6.8 by reason of the fact that the Indemnitee had an interest in the transaction with respect to which the indemnification applies if the transaction was otherwise permitted by the terms of this Agreement.

6.8.6 Except as set forth in Section 6.8.3, the provisions of this Section 6.8 are for the benefit of the Indemnitees only and shall not be deemed to create any rights for the benefit of any other Person. In no event shall any Indemnitee be entitled to double recovery for any liability indemnified by the Company pursuant to this Section 6.8.

6.8.7 No Indemnitee shall be liable to the Company or to any other Member for any losses sustained or Liabilities incurred as a result of any act or omission of such Person (other than the breach by such Person of the representations and warranties made by it in this Agreement) if (i) such Person acted in a manner such Person believed to be within the scope of such Person's authority, and (ii) such Person's conduct did not constitute fraud, gross negligence or willful misconduct.

6.8.8 The Board, on behalf of the Company, shall cause the Company to purchase and maintain insurance, at the expense of the Company, and in such amounts and on such terms as are reasonably satisfactory to the Board, for the protection of Indemnitees who are Service Providers against any liability incurred by such Persons in any such capacity or arising out of any such Person's status as such, whether or not the Company has the power to indemnify such Persons against such liability.

6.8.9 If any Indemnitee believes that it has a claim for indemnification under this Section 6.8 (a "**Claim**"), such Indemnitee shall so notify the Company, promptly in writing describing such Claim, the amount thereof, if known, and the method of computation of such Claim, all with reasonable particularity and containing a reference to the provisions of this Agreement in respect of which such Claim shall have arisen.

6.8.10 The Members hereby acknowledge that certain of the Indemnitees may have certain rights to indemnification, advancement of expenses and/or insurance provided by third Persons that are not Affiliates of the Company (collectively, the "**Secondary Indemnitors**"). Notwithstanding anything to the contrary in this Section 6.8, the Members hereby agree (a) that the Company is the indemnitor of first resort (*i.e.*, its obligations to the Indemnitees are primary and any obligation of the Secondary Indemnitors to advance expenses or to provide indemnification for the same expenses or Liabilities incurred by the Indemnitees are secondary), (b) that the Company shall be required to advance the full amount of expenses incurred by the Indemnitees and shall be liable for the full amount of all expenses, judgments, penalties, fines and amounts paid in settlement by or on behalf of any such Indemnitees to the extent legally permitted and as required by this Agreement (or any other agreement between the Company and one or more of the Indemnitees), without regard to any rights the Indemnitees may have against the Secondary Indemnitors, and (c) that the Company irrevocably waives, relinquishes and releases the Secondary Indemnitors from any and all claims against the Secondary Indemnitors for contribution, subrogation or any other recovery of any kind in respect thereof. The Members further agree that no advancement or payment by the Secondary Indemnitors on behalf of any Indemnitee with respect to any claim for which such Indemnitee has sought indemnification from the Company shall affect the foregoing and the Secondary Indemnitors shall have a right of contribution and/or be subrogated to the extent of such advancement or payment to all of the rights of recovery of such Indemnitee against the Company.

6.8.11 References to Managers in this Section 6.8 mean Managers acting in such capacity and not in any other capacity (such as an Officer or employee of the Company or a Platform Companies). Notwithstanding anything to the contrary in this Section 6.8, this Section 6.8 does not apply to any action, suit or proceeding by the Company or its Affiliates against any Officer or employee of the Company or its Affiliates, including any action, suit or proceeding to enforce any rights under any employment or similar agreement.

6.8.12 For the avoidance of doubt, no Member or Service Provider (including the Founder Manager) shall be personally liable to the Company, any Member or any other Indemnitee for any Liabilities sustained or incurred arising out of, as a result of or otherwise related to any breach by such Person of, or act or omission of such Person in connection with, any of the matters contemplated by Section 6.7 or Section 6.11 of this Agreement.

6.9 **Other Activities**.

6.9.1 Subject to Sections 6.9.2 and 6.9.3, each Member, each Manager and each of their respective Affiliates (excluding, in each case, the Founder Manager) (each, together with his or her respective Affiliates, an "**Unrestricted Person**" and, collectively, together with their respective Affiliates, the "**Unrestricted Persons**") may engage or invest in, and devote its and their time to, any other business venture or activity of any nature and description, whether or not such activities are considered competitive with the Company, and neither the Company nor any Member shall have any right by virtue of this Agreement or the relationship created hereby in or to such other venture or activity of any Unrestricted Person (or to the income or proceeds derived therefrom), and the pursuit of such other venture or activity shall not be deemed wrongful or improper. In connection with the foregoing, subject to Section 6.9.2, no Unrestricted Person shall be required to provide any notice to, or receive any approval from, or effect any sharing with, any of the other Managers or Members or the Company. The legal doctrines of "corporate opportunity," "business opportunity" and similar doctrines shall not be applied to any such competitive venture or activity of an Unrestricted Person. Subject to Section 6.9.2, no Unrestricted Person shall have any obligation to the Company or its Managers or Members with respect to any opportunity. Without limiting the foregoing, subject to Section 6.9.2, the Unrestricted Persons shall to the fullest extent permitted by law have no duty to refrain from investing in any Person which is engaged in the same or similar business as the Company or any of its Affiliates. None of the Unrestricted Persons shall (to the fullest extent permitted by law and subject to Section 6.9.2) be deemed to have breached their fiduciary duties, if any, to the Company by reason of engaging in any such activity. For the avoidance of doubt, nothing set forth in this Section 6.9.1 shall apply to the Founder Manager; *provided*, that the Board shall consider reasonably and in good faith any request by the Founder Manager for a waiver of Section 6.10.2 with respect to the Founder Manager to the extent that the Founder Manager would be in breach of any fiduciary duty to the Company or any Member as a result of taking any action on behalf of a Platform Company in compliance with the fiduciary duty he owes to such Platform Company. Notwithstanding anything to the contrary herein, this Section 6.9.1 shall not be amended or waived with respect to the Members and their respective Affiliates without the prior written consent of KKR and Viking.

6.9.2 Unless otherwise determined by the Board, each of (i) the Founder Manager and (ii) the Management Manager (if he or she is or was an employee of the Company or any Platform Company) (each, together with his or her respective Affiliates, a "**Restricted Person**"), for so long as such Restricted Person serves on the Board or otherwise remains a

Service Provider (any such services provided by such Restricted Person, his or her "**Services**") and for a period of one year after the termination or cessation of all of such Restricted Person's Services for any reason, will not directly or indirectly, either alone or in association with others, recruit, induce or attempt to induce, any Service Provider to terminate his or her Services, employment or other engagement with the Company or any Platform Company or hire such Service Provider.

6.9.3 The provisions of this Section 6.9 shall be subject to (and shall not be deemed to limit or override in any manner) any provision to the contrary in any Vesting Agreement, employment agreement, non-competition agreement or other agreement to which a Member or Manager is party with the Company, which contrary provision expressly refers to this Section 6.9.

6.10 **No Duty; Fiduciary Duties**.

6.10.1 This Agreement is not intended to, and does not, create or impose any fiduciary duty on any Unrestricted Person or any Additional Member or Substitute Member admitted after the Effective Date (with respect to any such Additional Member or Substitute Member, to the extent determined by the Board in its sole discretion) (in each case, solely in its capacity as such), any of their respective Affiliates or any officer or employee of any such Unrestricted Person, Additional Member or Substitute Member (collectively, the "**Participants**"). Further, each Member hereby waives any and all fiduciary duties owed to the Company or to such Member by any Participant (including those fiduciary duties that, absent such waiver, may be implied by law), and in doing so, each Member recognizes, acknowledges and agrees that the duties and obligations of the Participants to the Company and each other Member are only as expressly set forth in this Agreement. To the maximum extent permitted by law, no Participant shall owe any duty (including any fiduciary duty) to the Company or to any Member other than a duty to act in accordance with the implied contractual covenant of good faith and fair dealing. The parties hereto acknowledge and agree that any Participant acting in accordance with this Agreement shall (a) be deemed to be acting in compliance with such implied contractual covenant, and (b) not be liable to the Company, to any Member or to any other Person that is a party to or is otherwise bound by (or is a beneficiary of) this Agreement for its reliance on the provisions of this Agreement. The provisions of this Agreement, to the extent that they restrict or eliminate the duties and liabilities of a Participant otherwise existing at law or in equity in respect of the Company or its Members are agreed by all parties hereto to replace fully and completely such other duties and liabilities.

6.10.2 Unless otherwise determined by the Board, each employee, Officer or agent of the Company (notwithstanding the fact that such employee, Officer or agent may also be a Participant) shall owe fiduciary duties to the Company in its capacity as an Officer, employee or agent to the Company consistent with the fiduciary duties that such employee, Officer or agent would owe to the Company were it a corporation formed under the General Corporation Law of the State of Delaware; *provided*, *however*, that such fiduciary duties shall be subject to Section 6.9.1 and, other than with respect to the Founder Manager (provided that the Board shall consider reasonably and in good faith any request by the Founder Manager for a waiver of this Section 6.10.2 in connection with any such "corporate opportunity," "business opportunity" or similar doctrine that may be available to a Platform Company), the legal doctrines of "corporate opportunity," "business opportunity" and similar doctrines shall not apply to each employee, Officer or agent of the Company.

6.10.3 Subject to Section 6.10.1 but notwithstanding any other provision of this Agreement or otherwise applicable provision of law or equity, whenever in this Agreement a Participant is permitted or required to make a decision or take an action (a) in its "sole discretion" or "discretion" or under a similar grant of authority or latitude, in making such decisions, the Participant shall be entitled to take into account only such interests and factors as it desires (including its own interests) or (b) in its "good faith" or under another expressed standard, the Participant shall act under such express standard and shall not be subject to any other or different standards.

6.10.4 A Participant may consult with legal counsel and accountants (and other similar experts) and any act or omission suffered or taken by a Participant on its own behalf or, to the extent consistent with its authority granted in this Agreement, on behalf of the Company, in good faith in reliance upon and in accordance with the advice of such counsel or accountants (or other similar experts) will be full justification for any such act or omission, and such Participant will be fully protected (and shall not be liable to the Company, any Member, or any other Person that is a party to or is otherwise bound by (or is a beneficiary of) this Agreement) in so acting or omitting to act, so long as such counsel or accountants (or other similar experts) were selected with reasonable care.

6.11 **Certain Operational Matters**.

6.11.1 The Company shall, and shall cause each of its Platform Companies to, hold themselves out as primarily engaged, directly or through a wholly-owned subsidiary or subsidiaries, in a business or businesses other than that of investing, reinvesting, owning, holding, or trading in securities.

6.11.2 At no time shall the Company or any Service Provider, on behalf of the Company, provide investment advice with respect to Securities (as defined below) to any person for compensation or hold itself out as providing investment advice with respect to Securities. The Members acknowledge and agree that they have not received and will not receive any investment advice from the Company, any Service Provider, or any Affiliate of the foregoing with respect to an investment in the Company or any Company operations or activities.

6.11.3 The Company is not, and will take all such other actions necessary to ensure it shall not be, required to register as an investment company under the Investment Company Act or as an investment adviser under the Investment Advisers Act or under any applicable state securities laws.

6.11.4 At such other times as the Board or the KKR Member may request, the Chief Executive Officer of the Company shall confirm (solely in his capacity as an Officer of the Company and with no recourse or liability to him or her personally) to the Board (a) in the form set forth on Exhibit B hereto that the Company is not required to register as an investment company under the Investment Company Act based on (i) Section 3(a)(1)(C) of the Investment Company Act, (ii) Rule 3a-1 promulgated under the Investment Company Act or (iii) any other

exemption or exception from registration from the Investment Company Act, other than Sections 3(c)(1) or 3(c)(7) of the Investment Company Act, that the KKR Member has deemed acceptable, and (b) that the Company is not required to register as an investment adviser under the Investment Advisers Act or any applicable state securities laws and that the Company has based such determination on the advice of external legal counsel nationally recognized as experienced in advising on issues with respect to the Investment Advisers Act.

6.11.5 If at any time the Company or any Service Provider has otherwise breached the provisions set forth in this Section 6.11, the Chief Executive Officer of the Company is unable to deliver a confirmation in accordance with Section 6.11.4, or the KKR Member otherwise reasonably believes the Company is or will become required to register as an investment company under the Investment Company Act or as an investment adviser under the Investment Advisers Act, then the Company and the Members shall cooperate with the KKR Member to take all reasonable actions deemed necessary or desirable by the KKR Member in order to restructure either (a) the business and operations of the Company and the Platform Companies or (b) the KKR Member's Interests, in each case in a tax efficient manner that preserves the KKR Member's economic interests in the Company, including its rights under Section 4.1 and in a manner that does not adversely affect the other Members' interests, and that is reasonably satisfactory to the KKR Member, such that, at KKR's discretion, either (x) the Company would no longer be required to register as an investment company under the Investment Company Act or as an investment adviser under the Investment Advisers Act or (y) the KKR Member would not be deemed directly or indirectly to "control" the Company (as defined in Section 2(a)(9) of the Investment Company Act and Section 202(a)(12) of the Investment Advisers Act) or to otherwise be an "alter ego" of the Company for purposes of the Investment Advisers Act.

6.11.6 The Company shall, and shall use commercially reasonable efforts to cause each of its Controlled Platform Companies and each of the Company's and the Controlled Platform Companies' respective directors, officers, employees, agents, representatives, and other third parties operating on their behalf to (a) comply in all respects with the FCPA and any other applicable Bribery Legislation (in each case to the extent applicable), (b) keep all books and records, accounts and other records, such that they, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the Company and (c) institute policies and procedures reasonably designed to ensure compliance with the FCPA and other applicable Bribery Legislation and maintain such policies and procedures in force.

ARTICLE 7.
INTERESTS AND TRANSFERS OF INTERESTS

7.1 **Transfers**. No Common Member or Management Incentive Member or their respective Assignees may Transfer all or any portion of its Membership Interest with respect to Common Units or Management Incentive Units held by such Common Member or Management Incentive Member (or beneficial interest therein), without the prior written consent of the Board and the Majority Preferred Members; *provided*, *however*, that, subject to Section 7.2 and Section 7.5, neither the Board's nor the Majority Preferred Members consent shall be required with respect to a Permitted Transfer (except as provided in the definition of "Permitted Transfer"). Without limiting the foregoing, all Transfers of all or any portion of any Membership Interest (or beneficial interest therein) shall only be made in accordance with this Article 7. To the fullest extent permitted by law, any purported Transfer which is not in accordance with, or subsequently violates, this Agreement, including this Article 7, shall be null and void.

7.2 **Further Restrictions**. Without limiting Section 7.1, and notwithstanding any contrary provision in this Agreement, and to the fullest extent permitted by law, any Transfer otherwise permitted pursuant to the terms of this Agreement shall be null and void (unless waived by the Board) if:

(a) such Transfer may cause the Company to cease to be classified as a partnership for federal or state income tax purposes;

(b) such Transfer may not be effected without registration under the Securities Act or pursuant to a valid exemption thereto;

(c) such Transfer may require the registration of such Transferred Interest or other Interests pursuant to any applicable federal or state securities laws or pursuant to a valid exemption thereto;

(d) would result in a termination of the Company under Section 708 of the Code;

(e) such Transfer may cause the Company to become a "publicly traded partnership," as such term is defined in Code Sections 469(k)(2) or 7704(b);

(f) such Transfer may involve Interests being traded on an "established securities market" or a "secondary market or the substantial equivalent thereof" as those terms are defined in Regulations Section 1.7704-1 (in addition, such Transfers shall not be "recognized" (as that term is defined in Regulations Section 1.7704-1(d)(2)) by the Company);

(g) such Transfer may cause the Company to fail to meet the "private placement" safe harbor or any other safe harbor from treatment as a "publicly traded partnership" selected by the Board, as described in Regulations Section 1.7704-1;

(h) such Transfer may result in withholding pursuant to Section 1446(f) of the Code, and the transferring Member fails to provide a duly executed affidavit certifying (i) that withholding is not required as a result of the application of an exception to the requirement to withhold or (ii) that any applicable withholding tax that may be imposed on such Transfer (including pursuant to Sections 864 and 1446 of the Code) and any related tax returns or forms that are required to be filed, have been, or will be, timely paid and filed, as applicable;

(i) such Transfer may subject the Company to regulation under the Investment Company Act, the Investment Advisers Act or the Employee Retirement Income Security Act of 1974, each as amended;

(j) such Transfer may result in a violation of applicable laws, regulations or administrative orders;

(k) such Transfer is made to any Person who may lack the legal right, power or capacity to own such Interest; or

(l) the Company does not receive written instruments evidencing such Transfer (including copies of any instruments of Transfer and such Assignee's consent to be bound by this Agreement as an Assignee subject to the same terms and conditions as the Member initiating the Transfer) that are in a form satisfactory to the Board (as determined in the Board's sole discretion).

7.3 **Rights of Assignees**. Until such time, if any, as a transferee of any Transfer permitted pursuant to this Article 7 is admitted to the Company as a Substitute Member pursuant to Section 7.5: (a) such transferee shall be an Assignee only, and only shall receive from the Company, to the extent Transferred, the distributions and allocations of income, gain, loss, deduction, credit, or similar items to which the Member which Transferred its Interest would be entitled, (b) such Assignee shall not have any right or interest greater than that of the Membership Interest from which its interest is derived, (c) such Assignee shall be subject to all of the obligations of, and restrictions applicable to, the Membership Interest (or portion thereof) from which its interest is derived (including any Capital Contribution obligations) (*provided* that the transferring Member shall not be released from its obligations to make Capital Contributions should the Assignee fail to meet such obligations in a timely manner, nor shall the transferring Member otherwise be relieved of any of the obligations or restrictions applicable to it hereunder), (d) such Assignee shall have a separate Capital Account, which Capital Account shall be maintained in a manner consistent with this Agreement, and (e) such Assignee shall not be entitled or enabled to exercise any other rights or powers of a Member (including any rights to vote or participate in the management of the Company or any right to information concerning the business and affairs of the Company), such other rights relating to, or in connection with, such Interest, remaining with the Transferring Member. In such a case, the Transferring Member shall remain a Member even if it has Transferred its entire Interest to one or more Assignees until such time as each Assignee is admitted to the Company as a Substitute Member pursuant to Section 7.5. In the event any Assignee desires to make a further assignment of any Interest, such Assignee shall be subject to all of the provisions of this Agreement to the same extent and in the same manner as any Member desiring to make such an assignment.

7.4 **Admissions, Withdrawals and Removals**. No Person shall be admitted to the Company as a Member except in accordance with Section 3.2, 3.4, 7.5, 7.8 or 7.9. No Member shall be entitled to retire or withdraw from being a Member of the Company, nor shall any Member be removed or redeemed from the Company, except (a) in accordance with Section 7.6, (b) in accordance with the terms of such Member's Vesting Agreement, if any, (c) at the direction or with the consent of the Board (which may be given or withheld by the Board in its sole discretion), or (d) in the event that such Member has Transferred all of such Member's Interests to another Person or all of such Member's Interests have been redeemed by the Company, in each case in accordance with the terms of this Agreement. No admission, withdrawal, removal or redemption of a Member shall cause the dissolution of the Company. Any purported admission, withdrawal, removal or redemption which is not in accordance with this Agreement shall be null and void.

7.5 **Admission of Assignees as Substitute Members**.

7.5.1 An Assignee shall become a Substitute Member only if and when each of the following conditions is satisfied:

(a) The applicable Member or the Assignee sends written notice to the Board requesting the admission of the Assignee as a Substitute Member and setting forth the name and address of the Assignee, the Units transferred, and the effective date of the Transfer; and

(b) The Board receives from the Assignee (i) such information concerning the Assignee's financial capacities and investment experience as the Board may request, and (ii) written instruments (including copies of any instruments of Transfer, such Assignee's consent to be bound by this Agreement as a Substitute Member and confirmation that such Assignee is able to and does make each of the representations set forth in Section 9.2) that are in a form satisfactory to the Board (as determined in the Board's sole discretion).

7.5.2 Upon the admission of any Substitute Member, the books and records of the Company shall be amended by the Board to reflect the name, address and initial Units of such Substitute Member and to eliminate or adjust, if necessary, the name, address and then-current Units of the predecessor of such Substitute Member. Each Substitute Member shall succeed to the deemed Capital Contributions and Capital Account of the predecessor of such Member with respect to the Units transferred to such Substitute Member.

7.6 **Withdrawal of Members**. If a Member has transferred all of its Membership Interest to one or more Assignees, then such Member shall withdraw from the Company if and when all such Assignees have been admitted as Substitute Members in accordance with this Agreement.

7.7 **Liens**. No Member may encumber its Interest with a Lien without the prior written consent of the Board.

7.8 **Take-Along Rights**.

7.8.1 If (a) the Board, the Majority Preferred Members and, if and only if the amount payable at the initial closing of such transaction in respect of a Series D Preferred Unit is less than the Required Unit Price, the Requisite Series D Majority, approve a Fundamental Transaction or (b) the Majority Preferred Members and, if and only if the amount payable at the initial closing of such transaction in respect of a Series D Preferred Unit is less than the Required Unit Price, the Requisite Series D Majority, determine to proceed with a Company Sale pursuant to Section 7.12.1 (a "**Take-Along Transaction**"), then the Company or such Majority Preferred Members may notify each other Member (each, a "**Take-Along Member**") in writing at least ten (10) days prior to the consummation of such Take-Along Transaction (a "**Take-Along Notice**"). If the Company or such Majority Preferred Members delivers a Take-Along Notice: (i) each Take-Along Member shall be deemed to approve and consent to the proposed Take-Along Transaction for all purposes; (ii) to the extent any vote or consent to such Take-Along Transaction is required, each Take-Along Member shall vote for and consent to such Take-Along Transaction (including on behalf of all of its Interests and on behalf of all Interests with respect to which such Take-Along Member has the power to direct the voting) and shall waive and shall not exercise any dissenter's rights, appraisal rights or similar rights which such Take-Along

Member may have in connection therewith or otherwise in connection with the Take-Along Transaction; (iii) each Take-Along Member shall agree to sell all or a *pro rata* portion of its Units for an amount equal to the Implied Equity Value of such Units and otherwise on the same terms and conditions (except that the Board may adjust such terms and conditions (other than the Implied Equity Value) as applied to any Series D Preferred Units, Series C Preferred Units, Series B Preferred Units, Series A Preferred Units, Founder Units, Common Units and/or Management Incentive Units, in such manner as the Board deems equitable to reflect the differences between the Preferred Units, Founder Units, Common Units and/or the Management Incentive Units); (iv) each Take-Along Member shall agree to all representations, warranties, indemnities and releases reasonably required to effectuate such Take-Along Transaction as determined by the Board or the Majority Preferred Members, and to all other reasonable representations, warranties, covenants and agreements that the Majority Preferred Members (with the consent of both KKR and Viking) have agreed to be subject to or bound by in connection with such Take-Along Transaction; and (v) each Take-Along Member shall take all other actions reasonably necessary or desirable, as determined by the Majority Preferred Members (with the consent of both KKR and Viking), to cause the consummation of such Take-Along Transaction; *provided* that in the case of each of clause (i)-(v) above:

(1) such Take-Along Member shall receive the same form or forms of consideration as such Majority Preferred Members (or the option to elect to receive the same form or forms of consideration) in such Take-Along Transaction;

(2) any representations and warranties to be made by such Take-Along Member in connection with the Take-Along Transaction are limited to representations and warranties related to authority, ownership and the ability to convey title to such Interests, including, but not limited to, representations and warranties that (A) the Take-Along Member holds all right, title and interest in and to the Interests such Take-Along Member purports to hold, free and clear of all liens and encumbrances, (B) the obligations of the Take-Along Member in connection with the transaction have been duly authorized, if applicable, (C) the documents to be entered into by the Take-Along Member have been duly executed by the Take-Along Member and delivered to the acquirer and are enforceable against the Take-Along Member in accordance with their respective terms; and (D) neither the execution and delivery of documents to be entered into in connection with the transaction, nor the performance of the Take-Along Member's obligations thereunder, will cause a breach or violation of the terms of any agreement, law or judgment, order or decree of any court or governmental agency; *provided*, *however*, that, notwithstanding the foregoing, each Take-Along Member shall also provide any additional representation or warranty that is provided by the Majority Preferred Members (with the consent of both KKR and Viking) in connection with such Take-Along Transaction;

(3) no Take-Along Member shall be required to agree to any restrictive covenant, other than (x) reasonable employee non-solicitation and no-hire covenants with respect to the Company and the Platform Companies that are agreed to by the Majority Preferred Members and that do not apply to any portfolio company of such Take-Along Member, or (y) any other reasonable restrictive covenants that the Majority Preferred Members (with the consent of both KKR and Viking) have also agreed to be subject to, and no Take-Along Member shall be required to agree to provide indemnification in excess of the proceeds it would otherwise be entitled to receive in such transaction or shall be required to provide indemnification with respect

to any breach of any representation, warranty or covenant made by any other Member (in its capacity as such), or shall be required to provide any representation or warranty with respect to ownership of any Interests other than the Transferred Interests of such Take-Along Member (*provided* that such Take-Along Member may be required to provide several and not joint indemnification that applies equally to all Members with respect to breaches of any representation, warranty or covenant made by or with respect to the Company or the Platform Companies and all such indemnification shall be allocated pro rata (based upon the relative aggregate amounts of consideration received by such Member as compared to all other Members)).

7.8.2 If a Take-Along Transaction is consummated pursuant to Section 7.8.1, then each Member shall bear a pro rata share (based upon the relative aggregate amounts of consideration received by such Member as compared to all other Members) of all Company costs, fees and expenses related to the sale of the Interests (including of any escrows, holdbacks, earn-outs or contingent payments) pursuant to such transaction to the extent such costs, fees and expenses are not otherwise paid by the Company or the acquiring party. Costs incurred by any Member in connection with the transaction shall not be considered costs of the transaction hereunder.

7.8.3 Subject to Section 3.9, no Common Member or Management Incentive Member shall receive any payments pursuant to this Section 7.8 with respect to any Percentage Interest attributable to a Common Unit or a Management Incentive Unit that is an Unvested Unit as of the date the Take-Along Transaction is consummated (and for purposes of making payments pursuant to this Section 7.8, any such Unvested Unit shall be treated as if such Percentage Interest does not exist), unless and to the extent such Unvested Unit is accelerated (by its terms, as contemplated hereunder or in a Vesting Agreement or otherwise in the sole discretion of the Board) immediately prior to such Take-Along Transaction.

7.8.4 If the Board and the Majority Preferred Members determine to consummate an initial public offering of interests in any subsidiary of the Company pursuant to an effective registration statement under the Securities Act (a "**Platform Company IPO**"), then the Company or such Majority Preferred Members may notify each Take-Along Member in writing at least ten (10) days prior to the consummation of such Platform Company IPO (a "**Platform Company IPO Take-Along Notice**"). If the Company or such Majority Preferred Members delivers a Platform Company IPO Take-Along Notice, (i) each Take-Along Member shall be deemed to approve and consent to the proposed Platform Company IPO for all purposes; and (ii) to the extent any vote or consent to such Platform Company IPO is required, each Take-Along Member shall vote for and consent to such Platform Company IPO (including on behalf of all of its Interests and on behalf of all Interests with respect to which such Take-Along Member has the power to direct the voting) and (iii) each Take-Along Member agrees not to take any express action to impair, delay or hamper such Platform Company IPO. Notwithstanding anything to the contrary herein, the obligations of the Take-Along Members under this Section 7.8.4 shall be limited to the ownership and voting of Units, and shall in no event apply to any equity interests that may be held directly by such Take-Along Members in a Platform Company.

7.9 **Right of First Refusal**.

7.9.1 Prior to any Transfer of Interests by any Member (other than: (a) any Transfer by any Series D Preferred Member of its Series D Preferred Units, (b) any Transfer by any Series C Preferred Member of its Series C Preferred Units, (c) any Transfer by any Series B Preferred Member of its Series B Preferred Units, or (d) any Permitted Transfer), such Member shall deliver a written notice (an "**Offer Notice**") to the Company and the Series D Preferred Members, the Series C Preferred Members and the Series B Preferred Members (the "**Offerees**") at least thirty (30) days prior to making such Transfer (such 30-day period, the "**Election Period**"). The Offer Notice shall disclose in reasonable detail the proposed number and class of Interests to be Transferred, the proposed terms and conditions of the Transfer and the identity of the prospective transferee(s). The Company may, or if the Company declines its rights or elects to purchase less than the entire Interest being offered pursuant to this Section 7.9.1, the Offerees (or any of them, in accordance with this Section 7.9.1) may on a pro rata basis, based on the aggregate number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units outstanding held by such Offeree relative to the aggregate number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units outstanding, elect to purchase all or any portion of the Interests specified in the Offer Notice (or the portion of such Interest that the Company declined to purchase) at the price and on the terms specified therein by delivering written notice of such election to such offering Member as soon as practical, but in any event within fifteen (15) days after the delivery of the Offer Notice (or, in the case of the Members, within fifteen (15) days after the Company declines to exercise (or partially exercise) its option to purchase). If the Company or any one or more of the Offerees has elected to purchase any portion of the Interest from such offering Member, the Transfer of such Interest shall be consummated as soon as practical after the delivery of the election notice(s) contemplated by this Section 7.9.1 to the Company or such Member, but in any event within sixty (60) days after the expiration of the Election Period. In addition, if less than all of the Offerees elect to purchase their respective pro rata portion of the Interest being offered from such offering Member, the Offerees who do elect to purchase their respective pro rata portion of the Interest being offered from such offering Member shall be entitled to purchase the remainder of the Interest being offered on a pro rata basis, based on the aggregate number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units outstanding held by such participating Offeree relative to the aggregate number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units held by all of the participating Offerees, by delivery of a notice to such effect to the offering Member (which notice may be included in the initial election notice), and the Transfer of such additional portion of the Interest shall be consummated as soon as practical after the delivery of the election notice(s) contemplated by this Section 7.9.1 to the Company or such Member, but in any event within 60 days after the expiration of the Election Period. If the Company or any one or more of the Offerees has not elected to purchase any portion of the Interest being offered, such Member may, within seventy five (75) days after the expiration of the Election Period, and subject to the other provisions of this Article 7, Transfer such portion of Interest specified in the Offer Notice to one or more third parties approved by the Board at a price no less than the price specified in the Offer Notice and on other terms no more favorable to the transferees thereof than those that were offered to the Company and the Offerees in the Offer Notice. If such Interest is not sold within such seventy five (75) day period to one or more third parties approved by the Board, no part of such Interest shall thereafter be Transferred without again first complying with the provisions of this Section 7.9.1 and Section 7.10 below. The

purchase price specified in any Offer Notice shall be payable by the Company or the applicable Offeree(s) solely in cash at the closing of the transaction or, if agreed to by the offering Member, in installments over time and/or using consideration other than cash. If the Company has declined its rights, or only exercised a portion, pursuant to this Section 7.9.1 and more than one Offeree has elected to purchase the Interest being offered such that the amount elected by the Members exceeds the total Interest being offered, then the Offerees so electing to purchase the Interest being offered shall be entitled to purchase their proportionate shares of such Interest (based on their relative numbers of Units then held, excluding any Unvested Units) or in such other proportions as they may agree among themselves with the approval of the Board.

7.9.2 Prior to any Transfer of Series D Preferred Units, Series C Preferred Units or Series B Preferred Units by any Series D Preferred Member, Series C Preferred Member or any Series B Preferred Member (the "**Preferred Offeror**") (other than any Permitted Transfer) such Member shall deliver an Offer Notice to the Company and the Offerees (excluding the Preferred Offeror) at least thirty (30) days prior to making such Transfer. The Offer Notice shall disclose in reasonable detail the proposed number of Series D Preferred Units, Series C Preferred Units and/or Series B Preferred Units to be Transferred, the proposed terms and conditions of the Transfer and the identity of the prospective transferee(s). The Company may, or if the Company declines its rights or elects to purchase less than the entire Interest being offered pursuant to this Section 7.9.2, the Offerees (excluding the Preferred Offeror) (or any of them, in accordance with this Section 7.9.2) may, on a pro rata basis based on the aggregate number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units outstanding held by such Offeree relative to the aggregate number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units outstanding, elect to purchase all or any portion of the Series D Preferred Units, Series C Preferred Units and/or Series B Preferred Units specified in the Offer Notice (or the portion of such Interest that the Company declined to purchase) at the price and on the terms specified therein by delivering written notice of such election to such Preferred Offeror as soon as practical, but in any event within fifteen (15) days after the delivery of the Offer Notice (or, in the case of the Members, within fifteen (15) days after the Company declines to exercise (or partially exercise) its option to purchase). If the Company or any one or more of the Offerees (excluding the Preferred Offeror) has elected to purchase the entire Interest from such Preferred Offeror, the Transfer of such Interest shall be consummated as soon as practical after the delivery of the election notice(s) contemplated by this Section 7.9.2 to the Company or such Member, but in any event within sixty (60) days after the expiration of the Election Period. In addition, if less than all of the Offerees (excluding the Preferred Offeror) elect to purchase their respective pro rata portion of the Interest being offered from such Preferred Offerors, the Offerees (excluding the Preferred Offeror) who do elect to purchase their respective pro rata portion of the Interest being offered from such Preferred Offeror shall be entitled to purchase the remainder of the Interest being offered on a pro rata basis, based on the aggregate number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units outstanding held by such participating Offeree relative to the aggregate number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units held by all of the participating Offerees (excluding the Preferred Offeror), by delivery of a notice to such effect to the Preferred Offeror (which notice may be included in the initial election notice), and the Transfer of such additional portion of the Interest shall be consummated as soon as practical after the delivery of the election notice(s) contemplated by this Section 7.9.2 to the Company or such Member, but in any event within 60 days after the expiration of the Election Period. If the Company or any one or more of

the Offerees (excluding the Preferred Offeror) has not elected to purchase a portion of the Interest being offered, such Preferred Offeror may, within seventy five (75) days after the expiration of the Election Period, and subject to the other provisions of this Article 7, Transfer such portion of Interest specified in the Offer Notice to one or more third parties approved by the Board at a price no less than the price specified in the Offer Notice and on other terms no more favorable to the transferees thereof than those that were offered to the Company and the Offerees (excluding the Preferred Offeror) in the Offer Notice. If such Interest is not sold within such seventy five (75) day period to one or more third parties approved by the Board, no part of such Interest shall thereafter be Transferred without again first complying with the provisions of this Section 7.9.2 and Section 7.10 below. The purchase price specified in any Offer Notice shall be payable by the Company or the applicable Offeree(s) solely in cash at the closing of the transaction or, if agreed to by the Preferred Offeror, in installments over time and/or using consideration other than cash. If the Company has declined its rights, or only exercised a portion, pursuant to this Section 7.9.2 and more than one Offeree has elected to purchase the Interest being offered such that the amount elected by the Members exceeds the total Interest being offered, then the Offerees (excluding the Preferred Offeror) so electing to purchase the Interest being offered shall be entitled to purchase their proportionate shares of such Interest (based on their relative numbers of Units then held, excluding any Unvested Units) or in such other proportions as they may agree among themselves with the approval of the Board.

7.10 **Co-Sale Rights**.

7.10.1 In the event that any Interests that are subject to Sections 7.9.1 or 7.9.2 in connection with a Transfer are not purchased pursuant to Sections 7.9.1 and 7.9.2 above and thereafter are to be Transferred to a prospective transferee (for purposes of this Section 7.10, the "**Co-Sale Interests**"), each Series D Preferred Member, Series C Preferred Member and Series B Preferred Member (excluding any Preferred Offeror under Section 7.9.2, if applicable) (each, a "**Co-Sale Offeree**") may elect to participate in the contemplated Transfer by delivering written notice to the Member proposing to Transfer such Interests (the "**Transferring Member**") within fifteen (15) days after the Company declines to exercise its option to purchase pursuant to Section 7.9 above (a "**Co-Sale Acceptance Notice**"), which Co-Sale Acceptance Notice shall specify the percentage of its Series D Preferred Units, Series C Preferred Units and/or Series B Preferred Units, as the case may be, that such Co-Sale Offeree desires to include in such proposed Transfer, *provided* that such percentage shall not exceed the percentage that the total number of Series D Preferred Units, Series C Preferred Units and/or Series B Preferred Units, respectively, held by such Co-Sale Offeree represents of the sum of the total number of Series D Preferred Units, Series C Preferred Units and Series B Preferred Units, respectively, that are then outstanding. If no Co-Sale Offeree gives a Co-Sale Acceptance Notice prior to the expiration of the fifteen (15) day period for giving such Co-Sale Acceptance Notice, then the Transferring Member may Transfer the Co-Sale Interests to any Person on terms and conditions that are no more favorable to the Transferring Member than those set forth in the Offer Notice at any time within seventy five (75) days after expiration of such fifteen (15) day period for giving a Co-Sale Acceptance Notice (*provided* that if any governmental or other third party approval is required with respect to such Transfer, then such period shall be extended until a reasonable time after such approvals are obtained). Any Co-Sale Interests not Transferred by the Transferring Member during such seventy five (75) day period (as such period may be extended pursuant to the immediately preceding sentence) shall again be subject to the provisions of this Section 7.10 prior to any subsequent Transfer.

7.10.2 To the extent that one or more Co-Sale Offerees exercises its right of participation pursuant to Section 7.10, then the Interests that the Transferring Member may sell in the transaction shall be reduced such that the overall Interests to be sold, including any Interests to be sold by such Co-Sale Offerees, shall equal the initial number of Co-Sale Interests to be Transferred as set forth in the Offer Notice (collectively, the "**Transferred Interests**").

7.10.3 The aggregate proceeds received from the Transfer of the Transferred Interests pursuant to this Section 7.10 shall be distributed among the Transferring Member and the participating Co-Sale Offerees as if such Units had been sold for an amount equal to the Implied Equity Value of such Units (*provided* that, for the avoidance of doubt, such distribution of aggregate proceeds received from the Transfer of the Transferred Interests pursuant to this Section 7.10 shall not reduce the amount of any distributions that such Transferred Interests are entitled to receive pursuant to Section 4.1.2 of this Agreement).

7.10.4 The Transferring Member shall not Transfer any Transferred Interests to any prospective transferee if such prospective transferee declines to purchase Interests from participating Co-Sale Offerees, unless the Transferring Member acquires from each such participating Co-Sale Offeree (on the terms set forth in the Offer Notice and in accordance with this Section 7.10) the Interests that such Co-Sale Offeree would be entitled to include in such Transfer on the same price, terms and conditions as would be applicable in a direct sale of such Interests to the proposed transferee, including Section 7.10.3. The Transferring Member will endeavor to facilitate the purchase by any prospective transferee of Interests held by a Co-Sale Offeree which are not eligible for co-sale pursuant to this Section 7.10 if and to the extent such Co-Sale Offeree wishes to include such interests in the Transfer, but neither the Transferring Member nor any other Person shall be liable if the prospective transferee declines to do so.

7.10.5 In connection with any Transfer of Transferred Interests pursuant to this Section 7.10: (a) each Member shall be deemed to approve and consent to the proposed transaction for all purposes; and (b) each participating Co-Sale Offeree shall otherwise sell its Interests on the same terms and conditions as the Transferring Member (other than the Implied Equity Value), and each participating Co-Sale Offeree shall execute all documents and take such actions as may be reasonably required to effectuate such transaction, *provided* that no Co-Sale Offeree shall be required to provide indemnification in excess of the proceeds it would otherwise be entitled to receive in such transaction or shall be required to provide indemnification with respect to any breach of any representation, warranty or covenant made by any other Member (in its capacity as such), or shall be required to provide any representation or warranty with respect to ownership of any Interests other than the Transferred Interests of such Co-Sale Offeree (*provided* that such Co-Sale Offeree may be required to provide indemnification with respect to breaches of any representation, warranty or covenant made by or with respect to the Company or the Platform Companies). Each of the Transferring Member and the participating Co-Sale Offerees shall pay its own costs, fees and expenses incurred in connection with any Transfer pursuant to this Section 7.10.

7.10.6 To the extent that one or more Co-Sale Offerees exercises its right of participation pursuant to Section 7.10, the Transferring Member shall consummate the Transfer of the Transferred Interests within seventy five (75) days after expiration of the fifteen (15) day period for giving Co-Sale Acceptance Notices (*provided* that if any governmental or other third party approval is required with respect to such Transfer, then such period shall be extended until a reasonable time after such approvals are obtained). If the Transferred Interests are not Transferred during such 75-day period (as such period may be extended pursuant to the immediately preceding sentence), the Co-Sale Interests shall again be subject to the provisions of this Section 7.10 prior to any subsequent Transfer.

7.11 **Conversion**.

7.11.1 Notwithstanding any contrary provision of this Agreement, and without limiting the authority of the Board provided for elsewhere in this Agreement, in the event the Board determined to consummate an IPO and such IPO is approved by the Majority Preferred Members and, if and only if such IPO is not a Qualifying IPO, by the Requisite Series D Majority, the Board shall have the power and authority to incorporate any Person, including the Company, or to merge, convert, combine or effect any other restructuring of any such Person in connection therewith into a corporation or any other entity, and the Board may take such other action as it may deem advisable, including (a) creating one or more subsidiaries of the Company or the newly-formed corporation or other entity, transferring to such subsidiaries any or all of the assets of such Person or the Company (including by merger), dissolving such Person and distributing any stock or securities received to the Members, or (b) causing the Members to exchange their Units for common stock or other securities of the newly formed corporation or other entity that will be offered and sold in such initial public offering or of a newly formed holding company or companies (the entity ultimately conducting an initial public offering, whether the Company, a corporation or another type of entity, being the "**IPO Corporation**"). In connection with any such transaction, unless the Company continues as a holding company for the IPO Corporation, the Members shall receive, in exchange for their respective Units, either (x) shares of common stock or other equity interests of the IPO Corporation which are of the type offered and sold to the public in such initial public offering and have substantially the same relative economic interest in such corporation or other entity as is set forth in this Agreement or (y) equity interests of a holding company or companies which, together with any remaining interests in the Company and any securities received in the IPO Corporation, have substantially the same relative economic interest as are set forth in this Agreement, subject in each case to any modifications required as a result of the conversion to corporate or other entity form or otherwise reasonably necessary to complete such restructuring and consummate such IPO, all as determined by the Board in its reasonable discretion, it being agreed that common stock or other equity interests in an IPO Corporation will only be considered to have "substantially the same relative economic interest" if each Member receives in exchange for its Units (of any class) an amount of the common stock or other equity securities of such IPO Corporation having a fair market value equal to the amount that would have been distributed to such Member pursuant to Section 4.1.2 (or, if for less than all of the Units in accordance with clause (y) above, the Implied Equity Value with respect thereto) if: (i) all of the assets and business, subject to all liabilities, of the Company had been sold for aggregate net distributable proceeds equal to the fair market value of all of the outstanding capital stock or other equity interests of the IPO Corporation; (ii) the Company was liquidated and all of such net distributable proceeds were distributed pursuant

to Section 4.1.2 (for the avoidance of doubt, inclusive of the last paragraph thereof), all on the same date on which the initial public offering occurs and immediately prior thereto; and (iii) all determinations of fair market value in this Section 7.11 were made at the price that the common stock or other equity interest of the IPO Corporation is sold to the public in such initial public offering (as such price is shown on the cover page of the final prospectus for such initial public offering). At the time of such initial public offering, the Members shall, and hereby agree to, take any and all actions deemed necessary or appropriate by the Board to effect such transaction, including entering into "lock-up" agreements on customary terms with respect to securities held immediately before the effective date of the registration statement for such offering.

7.11.2 In connection with and prior to the consummation of any initial public offering by an IPO Corporation, the IPO Corporation shall, and the Board shall cause such IPO Corporation to enter into a Registration Rights Agreement (the "**Registration Rights Agreement**") with KKR, Viking and each other holder of Preferred Units representing (directly or indirectly, whether beneficially, upon conversion or otherwise) more than three percent (3%) ("**Holders**") of the outstanding shares of common stock or other equity securities of such IPO Corporation of the class registered or to be registered in such initial public offering, in the form attached hereto as Exhibit C, with such changes thereto as may be agreed by Holders holding a majority of the outstanding Units held by all of the Holders, which shall include KKR and Viking.

7.11.3 Prior to the date the IPO Corporation enters into the Registration Rights Agreement with the Holders, neither the Company nor the IPO Corporation shall grant registration rights or similar rights to any Person that have, or would have, priority over, or be *pari passu* with, the registration rights to be granted to the Holders pursuant to the Registration Rights Agreement without the prior written consent of the Majority Preferred Members. For clarity, neither the Company nor the IPO Corporation shall enter into any agreement with any holder or prospective holder of any securities of the Company or the IPO Corporation that (i) would allow such holder or prospective holder to include a portion of its securities in any "piggyback" registration if such inclusion could reduce the number of Registrable Securities (as defined in the Registration Rights Agreement) that the selling Holders could be entitled to include in such registration under Sections 2.2 and 2.3(b) of the Registration Rights Agreement, (ii) would allow such holder or prospective holder to include such securities in any registration if such agreement would allow such holder or prospective holder to initiate a demand for registration of any of its securities at a time earlier than the holders of Registrable Securities can demand registration under Section 2.1 of the Registration Rights Agreement or (iii) would allow such holder or prospective holder to include a portion of its securities in any registration initiated under Section 2.1 of the Registration Rights Agreement.

7.12 **Liquidity Rights**.

7.12.1 Company or Platform Company Sale. If, at any time following March 26, 2021, an IPO Corporation that is the Company, a successor to the Company or that owns all or substantially all of the Platform Companies, has not consummated an IPO in accordance with Section 7.11, then the Majority Preferred Members may seek to cause the Company to effect (x) a merger, sale, reorganization or recapitalization of the Company that would result in a Fundamental Transaction, by delivering written notice to the Board (such notice, the "**Company Sale Initiation Notice**") or (y) in consultation with the Board, a fully auctioned merger, sale, reorganization or recapitalization with respect to one or more Platform Companies that would result in a Platform Company Sale (such notice, the "**Platform Company Sale Initiation Notice**").

(a) Company Sale.

(i) Promptly following receipt by the Board of a Company Sale Initiation Notice, the Board shall select an independent nationally recognized investment bank or valuation firm (the "**Independent Financial Advisor**") reasonably acceptable to the Majority Preferred Members to assist the Company in soliciting and evaluating strategic alternatives that would result in a Fundamental Transaction, and the Board shall cause the Company to, as promptly as practicable thereafter, engage such Independent Financial Advisor. The fees, costs and expenses of the Independent Financial Advisor and all other fees, costs and expenses of the Company in connection with the Fundamental Transaction shall be borne by the Company.

(ii) The Company shall provide the Independent Financial Advisor with reasonable access at all reasonable times to the books and records, including financial and accounting records of the Company and the Platform Companies, and the Board and the Company shall afford such Independent Financial Advisor a meaningful opportunity to discuss such information about the business and operations of the Company and the Platform Companies as such Independent Financial Advisor reasonably requires. The Company shall promptly provide such cash flow, earnings and other projections as the Independent Financial Advisor may reasonably request, which projections shall be consistent with the annual operating plan then in effect and the most recently prepared consolidated projections of the Company with only such changes therein as are necessary to reflect events and developments after preparation of such projections; *provided* that such projections shall contain customary assumptions then being used by comparable companies to the Company.

(iii) If, following a review and evaluation of the strategic alternatives that would result in a Fundamental Transaction presented by the Independent Financial Advisor to the Board and the Majority Preferred Members delivering the Company Sale Initiation Notice, such Majority Preferred Members determine to proceed with one of the alternatives which would reasonably be likely to result in a Fundamental Transaction, the Board, the Company and the other Members shall cooperate fully in taking such actions as such Majority Preferred Members may reasonably request in order to effectuate such Fundamental Transaction, including conducting an auction process, soliciting and evaluating proposals that would result in a Fundamental Transaction, entering into customary confidentiality agreements and providing diligence materials and access to management and the Company's advisors to potential counterparties, negotiating and entering into definitive agreements to effect such a Fundamental Transaction, causing to be provided (or cooperating with such Majority Preferred Members to provide) a Take-Along Notice to the Members in accordance with Section 7.8 in connection with such Fundamental Transaction, enforcing the terms of Section 7.8 in connection with such Fundamental Transaction, and consummating such Fundamental Transaction as if it were a Take-Along Transaction in accordance with Section 7.8. Notwithstanding the foregoing, the Majority Preferred Members delivering any Company Sale Initiation Notice may withdraw such Company Sale Initiation Notice at any time by delivering, in their sole discretion, a subsequent written notice to the Board.

(b) Platform Company Sale.

(i) The Majority Preferred Members shall consult with the Board in connection with the delivery of any Platform Company Sale Initiation Notice and any Platform Company Sale.

(ii) Promptly following receipt by the Board of a Platform Company Sale Initiation Notice, the Board shall select an Independent Financial Advisor reasonably acceptable to the Majority Preferred Members to assist the Company in soliciting and evaluating strategic alternatives that would result in a Platform Company Sale with respect to the Platform Company or Platform Companies specified in the Platform Company Sale Initiation Notice, and the Board shall cause the Company to, as promptly as practicable thereafter, engage such Independent Financial Advisor. The fees, costs and expenses of the Independent Financial Advisor and all other fees, costs and expenses of the Company in connection with the Platform Company Sale shall be borne by the Company.

(iii) The Company shall provide the Independent Financial Advisor with reasonable access at all reasonable times to the books and records of the Platform Companies that are the subject of the Platform Company Sale Initiation Notice, including financial and accounting records of such investments, and the Board and the Company shall afford such Independent Financial Advisor a meaningful opportunity to discuss such information about the business and operations of such Platform Companies as such Independent Financial Advisor reasonably requires. The Company shall promptly provide such cash flow, earnings and other projections as the Independent Financial Advisor may reasonably request, which projections shall be consistent with the annual operating plan then in effect and the most recently prepared consolidated projections of the Company with respect to such Platform Companies and their businesses, with only such changes therein as are necessary to reflect events and developments after preparation of such projections; *provided* that such projections shall contain customary assumptions then being used by comparable companies to such Platform Companies.

(iv) If, following a review and evaluation of the strategic alternatives that would result in a Platform Company Sale presented by the Independent Financial Advisor to the Board and the Majority Preferred Members delivering the Platform Company Sale Initiation Notice, such Majority Preferred Members determine to proceed with one of the alternatives which would reasonably be likely to result in a Platform Company Sale, the Board and the Company shall cooperate fully in taking such actions as such Majority Preferred Members may reasonably request in order to effectuate such Platform Company Sale, including conducting an auction process with respect to any applicable Platform Companies, soliciting and evaluating proposals that would result in a Platform Company Sale, entering into customary confidentiality agreements and providing diligence materials and access to management and the Company’s advisors to potential counterparties with respect to any applicable Platform Companies, negotiating and entering into definitive agreements to effect such a Platform Company Sale, and consummating such Platform Company Sale. Notwithstanding the foregoing, the Majority Preferred Members delivering any Platform Company Sale Initiation Notice may withdraw such Platform Company Sale Initiation Notice at any time by delivering, in their sole discretion, a subsequent written notice to the Board.

7.12.2 Company IPO. If, at any time following March 26, 2021, an IPO Corporation has not consummated an IPO, then the Majority Preferred Members may seek to cause the Company or an IPO Corporation to effect an initial public offering in respect of the Company under the Securities Act by delivering written notice to the Board (such notice, the "**IPO Initiation Notice**").

(a) Promptly following receipt by the Board of an IPO Initiation Notice, the Board shall select one or more Independent Financial Advisors reasonably acceptable to the Majority Preferred Members delivering such IPO Initiation Notice to assist the Company in structuring, marketing and consummating such initial public offering, and the Board shall cause the Company to, as promptly as practicable thereafter, engage such Independent Financial Advisors.

(b) The Company, with the assistance of the Independent Financial Advisors and the Company's legal and accounting advisors, shall, and the Board and the Members shall cause the Company to, (i) form an IPO Corporation in accordance with Section 7.11 to the extent necessary or advisable in order to consummate such initial public offering, (ii) prepare all materials and make all required filings under the Securities Act and the Exchange Act or otherwise necessary or desirable in order to market and consummate such initial public offering and, in connection with the formation of any such IPO Corporation, unless the Company continues as a holding company for the IPO Corporation, the Members shall receive, in exchange for their respective Units, shares of common stock or other equity interests of the IPO Corporation, subject to any modifications required solely as a result of the conversion to corporate or other entity form, and as otherwise agreed by the Majority Preferred Members, (iii) cooperate with the Independent Financial Advisors in connection with the initial public offering process, including by providing them reasonable access at all reasonable times to the books and records, including financial and accounting records of the Company or the Platform Companies (in the case of non-Controlled Platform Companies, to the extent reasonably available to the Company) and providing them a meaningful opportunity to discuss such information about the business and operations of the Company and the Platform Companies as such Independent Financial Advisor reasonably requires, and (iv) consummate such initial public offering as promptly as reasonably practicable following receipt of the IPO Initiation Notice and in accordance with Section 7.11. The Company (or the applicable IPO Corporation) shall use its reasonable best efforts to cause the shares of such IPO Corporation to be registered in such initial public offering to be listed on the New York Stock Exchange or the NASDAQ Global Market.

(c) The Board, the Company, any IPO Corporation and the other Members shall cooperate fully in taking such actions as the Majority Preferred Members delivering such IPO Initiation Notice may reasonably request in order to effectuate any initial public offering pursuant to this Section 7.12.2. Without limiting the foregoing, at the time of such initial public offering, the Members shall, and hereby agree to, take any and all actions deemed reasonably necessary or appropriate by the Board or the Majority Preferred Members delivering such IPO Initiation Notice to effect such transaction, including entering into "lock-up" agreements on customary terms with respect to securities held immediately before the effective date of the

registration statement for such offering. All fees, costs and expenses of the Company in connection with any such initial public offering shall be borne by the Company. Notwithstanding the foregoing, the Majority Preferred Members delivering any IPO Initiation Notice may withdraw such IPO Initiation Notice at any time by delivering, in their sole discretion, a subsequent written notice to the Board.

7.13 **Distributions Upon Fundamental Transaction**. Unless the rights to any distribution pursuant to this Section 7.13 are waived in writing on behalf of all Members by the Majority Preferred Members and, with respect to the Series D Preferred Units, subject to Section 6.7.2, in the event of any Fundamental Transaction (other than any final liquidation, dissolution, winding-up or termination of the Company, which shall be governed exclusively by Article 8) or any divestiture of any material asset of the Company, including any Platform Company Sale, whether pursuant to this Article 7 or otherwise, the Company shall cause a distribution of the consideration received by the Company in such transaction to the holders of Units in accordance with Section 8.5 (or, in the case of any divestiture of any material asset of the Company, including any Platform Company Sale, that does not constitute a Fundamental Transaction, pursuant to Section 4.1.2), and shall not expend or dissipate the consideration received in such transaction, except to discharge expenses incurred by or on behalf of the Company in connection with such transaction, to repay indebtedness to the extent required by the terms thereof in connection with such transaction or as otherwise approved by the Board.

ARTICLE 8.
DISSOLUTION, LIQUIDATION, AND TERMINATION OF THE COMPANY

8.1 **Limitations**. The Company may be dissolved, liquidated, wound-up and terminated only pursuant to the provisions of this Article 8, and the parties hereto do hereby irrevocably waive any and all other rights they may have to cause a dissolution of the Company or a sale or partition of any or all of the Company Assets.

8.2 **Exclusive Causes**. Notwithstanding the Act, the following (and only the following) events shall cause the Company to be dissolved, liquidated, wound-up and terminated:

(a) by written election of the Board and with the approval of the Majority Preferred Members; or

(b) at any time that there are no Members, unless the business of the Company is continued in accordance with the Act.

To the fullest extent permitted by law, any dissolution of the Company other than as provided in this Section 8.2 shall be a dissolution in contravention of this Agreement.

8.3 **Effect of Dissolution**. The dissolution of the Company shall be effective on the day on which the event occurs giving rise to the dissolution, but the Company shall not terminate until it has been wound-up and its assets have been distributed as provided in Section 8.5 and its Certificate has been cancelled by the filing of a certificate of cancellation with the office of the Delaware Secretary of State. Notwithstanding the dissolution of the Company, prior to the termination of the Company, the business of the Company and the affairs of the Members, as such, shall continue to be governed by this Agreement.

8.4 **No Capital Contribution Upon Dissolution**. Each Member shall look solely to the Company Assets for all distributions with respect to the Company, its Capital Contributions thereto, its Capital Account and its share of Net Profits or Net Losses, and shall have no recourse therefor (upon dissolution or otherwise) against any other Member. Accordingly, if any Member has a deficit balance in its Capital Account (after giving effect to all contributions, distributions and allocations for all taxable years, including the year during which the liquidation occurs), then such Member shall have no obligation to make any Capital Contribution with respect to such deficit, and such deficit shall not be considered a debt owed to the Company or to any other Person for any purpose whatsoever.

8.5 **Liquidation**.

8.5.1 Upon dissolution of the Company, the Company shall thereafter engage in no further business other than that which is necessary to wind up the business, and the Board (or such other Person as the Board may determine) shall act as the "**Liquidator**" of the Company. A reasonable time shall be allowed for the winding up of the affairs of the Company in order to minimize any losses attendant upon such a winding up. In the event the Liquidator reasonably believes that it is prudent to do so, cash or other assets held in reserve may be placed in a liquidating trust or other escrow immediately prior to the termination of the Company in order to ensure that any and all obligations of the Company are satisfied. After allocating (pursuant to Article 5 of this Agreement) all income, gain, loss and deductions resulting from the liquidation of the Company Assets, the Liquidator shall apply and distribute the cash proceeds thereof as follows:

(a) First, to the creditors of the Company (including to Members who are creditors to the extent permitted by law) in satisfaction of liabilities of the Company, and to the setting up of any reserves for contingencies which the Liquidator may consider necessary or appropriate; and

(b) Thereafter, to the Members in accordance with Section 4.1.2.

8.5.2 Notwithstanding Section 8.5.1, in the event that the Liquidator determines that an immediate sale of all or any portion of the Company Assets would cause undue loss to the Members, the Liquidator, in order to avoid such loss and to the extent not then prohibited by the Act, may either (a) defer liquidation of and withhold from distribution for a reasonable time any Company Assets except those necessary to satisfy, including the provision of reasonable reserves for, the Company's debts and obligations, or (b) distribute the Company Assets to the Members in kind in a manner otherwise in accordance with the distribution procedure of Section 8.5.1.

ARTICLE 9.
MISCELLANEOUS

9.1 **Amendments**.

9.1.1 Each Additional Member and Substitute Member shall become a signatory hereto by signing a counterpart signature page to this Agreement, and such other instruments, in such manner, as the Board shall determine. By so signing, each Additional Member and Substitute Member, as the case may be, shall be deemed to have adopted and to have agreed to be bound by all of the provisions of this Agreement.

9.1.2 Subject to Section 6.7, any and all amendments, including by merger or otherwise, to this Agreement may be made from time to time by the Board with the prior written consent of the Majority Preferred Members and without the consent of any other Member; *provided* that the Board shall not amend this Agreement in a manner that (i) does not treat all Units of a particular class proportionately (for example, such amendment does not treat all Series C Preferred Units proportionately relative to all other Series C Preferred Units or does not treat all Management Incentive Units proportionately relative to all other Management Incentive Units) unless each Member holding Units of such class to be disproportionately adversely affected thereby shall have consented to such amendment, and (ii) treats any class of Units in a manner that is disproportionate and adverse to any other class of Units unless the Members holding a majority of the outstanding Units in each such class of Units to be disproportionately adversely affected thereby shall have consented to such amendment. Nothing in this Section 9.1.2 shall limit the right of the Board to cause the Company to issue any additional Units of any class, or admit any Additional Member, in each case with such rights as the Board shall prescribe, which may be lesser, equal or superior rights to those of any existing Member or existing Units, and the Board may amend this Agreement to reflect the rights and obligations of such class of Units and the issuance thereof, in each case, subject to Section 6.7 and the other terms of this Agreement. The Board may also amend Exhibit A from time to time as contemplated by Section 3.1.

9.1.3 Notwithstanding anything to the contrary set forth herein, if less than 150,955,597 Series D Preferred Units (the "**Maximum Series D Preferred Units**") are sold pursuant to the terms of the Purchase Agreement, the terms hereunder that were determined based on the Maximum Series D Preferred Units (*i.e.*, the size of the Management Pool (which shall be 15% of the number of Units following the issuance of the Series D Preferred Units under the Purchase Agreement), the Series D Unit Value, the Required Unit Price and the number of Series D Preferred Units based on the updated Series D Unit Value (taking into account the updated Management Pool) and the Unit Caps (taking into account the updated Management Pool)) shall be equitably adjusted to reflect the actual number of Series D Preferred Units sold by the Company in accordance with the terms of the Purchase Agreement. The Members shall take all actions to amend the terms hereof and the Purchase Agreement to give effect to this Section 9.1.3.

9.2 **Member Representations and Warranties**. Each Member (solely on behalf of itself and not with respect to any other Member) hereby represents, warrants, covenants and acknowledges as follows:

9.2.1 Generally. As of the date such Person is or was admitted as a Member:

(a) Status. If the Member is a corporation or other entity, such Member is duly incorporated, organized or formed, validly existing and in good standing under the laws of its state or country of incorporation, organization or formation (as the case may be). Such Member has the requisite power and authority to own its property and to carry on its business as now conducted, to the extent material to its rights and obligations under this Agreement.

(b) Authority. Such Member has the requisite power and authority to execute and deliver this Agreement and to carry out its obligations hereunder in accordance with the terms and provisions hereof. The execution, delivery and performance of this Agreement and the consummation of the transactions contemplated hereby have been duly authorized by all requisite action, corporate or otherwise, on the part of such Member. This Agreement has been duly executed and delivered by such Member and constitutes the legally valid and binding obligation of such Member, enforceable against it in accordance with its terms, except as enforceability may be affected by (i) the effect of bankruptcy, insolvency, reorganization, moratorium or other similar laws relating to or affecting the rights of creditors; (ii) the effect of general principles of equity and the limitation of certain remedies by certain equitable principles of general applicability; and (iii) the fact that the rights to indemnification hereunder may be limited by United States federal or state securities laws.

(c) No Breach or Default. The execution, delivery and performance by such Member of this Agreement and the transactions contemplated hereby will not constitute a breach of any term or provision of, or a default under (i) any outstanding indenture, mortgage, loan agreement or other similar contract or agreement to which such Member or any of its Affiliates is a party or by which it or any of its Affiliates or its or their property is bound; (ii) its certificate or articles of incorporation or bylaws or other governing documents; (iii) any applicable law, rule or regulation; or (iv) any order, writ, judgment or decree applicable to it, except (in case of each of the foregoing clauses (i), (iii) and (iv)) as would not, individually or in the aggregate, be reasonably expected to have a material adverse effect on such Member, the Company or the transactions contemplated hereby.

(d) Consents and Approvals. All material consents, licenses, approvals and authorizations, if any, and all material filings and registrations, required from any governmental body, authority, bureau or agency for or on the part of such Member or any of its Affiliates in connection with its execution and delivery of this Agreement and its contributions to the capital of the Company have been obtained on or prior to the Effective Date.

9.2.2 Investment Representations.

(a) Such Member is acquiring its Interest for its own account and not for the account of any other Person. Such Member is acquiring its Interest solely for investment and not with a view to, or for resale in connection with, the distribution or other disposition thereof either currently or after the passage of a fixed or determinable period of time or upon the occurrence or non-occurrence of any predetermined event or circumstance in violation of the Securities Act. Such Member understands that the sale and issuance of the Interests has not been registered under the Securities Act, applicable state securities laws or the securities or similar laws of any other jurisdiction whatsoever, and, therefore, the Interests cannot be sold, resold, pledged, assigned or otherwise disposed of unless they are subsequently registered under the securities and similar laws of each applicable jurisdiction, or unless exemptions from such registration requirements are available. Such Member understands that dispositions of its Interest can be

made only (i) as explicitly permitted or contemplated under the terms of this Agreement and (ii) in compliance with the Securities Act and the rules and regulations of the SEC promulgated thereunder and all applicable state securities and "blue sky" laws; and such Member understands that the Company is under no obligation to register the offer or sale of any Interests in any jurisdiction whatsoever or to assist Members in complying with any exemption from registration under the securities or similar laws of any jurisdiction whatsoever.

(b) Such Member understands that it may bear the economic risk of an investment in an Interest for an indefinite period of time, and such Member's financial situation is such that it can afford to bear the economic risk of holding its Interest for an indefinite period of time and suffer a complete loss of its investment in the Company.

(c) Such Member further acknowledges that there are substantial risks in making an investment in the Company (including loss of the entire amount of such investment), that such Member is capable of evaluating the merits and risks of the investment in the Company and such Member has evaluated such risks and determined that the Interest is a suitable investment for such Member. Such Member has such knowledge and experience in business, financial and tax matters, including experience in investing in non-listed and non-registered securities, and is a sophisticated investor capable of utilizing the information made available to it in connection with its investment in the Interest to evaluate the merits and risks of its investment in the Company, to make an informed investment decision with respect thereto and to protect its interests in connection with such investment.

(d) Such Member has had the opportunity to ask questions of, and has received satisfactory answers from, appropriate representatives of the Company with respect to the terms and conditions of the transactions contemplated hereby, with respect to the business, affairs, financial conditions, and results of operations of the Company and with respect to any other matters pertaining to this investment. Such Member has had access to such financial and other information as it deemed necessary or appropriate in order for it to make a fully-informed decision as to the transactions contemplated by this Agreement and its Interest, and such Member has had the opportunity to obtain any additional information that it deemed necessary or appropriate to verify any such information to which the Member has had access.

(e) Such Member and its legal, tax, accounting and financial advisers have been provided an opportunity to ask questions of and receive information from a Person or Persons acting on behalf of the Company concerning the investment in the Company, the Company Assets, the Company and such other matters as such Member and any of its advisors have deemed necessary or desirable. All such questions have been answered to the full satisfaction of such Member and any such advisors, and such Member has received all such information requested, but such Member has in all events relied upon its own due diligence in evaluating this Agreement, the Interests and the Company Assets.

(f) Such Member has consulted and been advised by its own legal counsel and tax advisor in connection with, and acknowledges that no representations as to potential profit, tax consequences of any sort (including the tax consequences resulting from forming or operating the Company, conducting the business of the Company, executing this Agreement, consummating the transactions provided for herein, making Capital Contributions, being

admitted to the Company, receiving or not receiving distributions from the Company, or being allocated Net Profits and Net Losses), cash flows or funds from operations have been made by the Company, any Member or any Affiliate of any Member or any employee or representative thereof, and that projections and any other financial information and documentation that may have been in any manner submitted to such Member from any source shall not constitute any representation or warranty of any kind or nature, express or implied and such Member is not relying on any representations or warranties of any other Person in connection therewith, including the Company or any other Member.

(g) Unless otherwise indicated by such Member (other than Members who are Service Providers and only hold Management Incentive Units) to the Company in writing prior to the date of such Member's admission to the Company, such Member, or each beneficial owner (within the meaning of Rule 501 of Regulation D promulgated under the Securities Act ("**Regulation D**")) of such Member, (i) is an "accredited investor" as such term is defined in Rule 501 of Regulation D or (ii) is a partnership, corporation, limited liability company, trust or estate with total assets in excess of $5,000,000 and has not been formed for the specific purpose of acquiring the Interest unless each beneficial owner of such entity is qualified as an accredited investor within the meaning of Rule 501 of Regulation D.

9.2.3 Other.

(a) Such Member has not incurred any obligation to a broker or finder for payment of any commission or fee in connection with the execution and delivery of this Agreement and the consummation of the transactions contemplated hereby, including its admission as a Member, for which the Company or any other Member may become liable.

(b) Without in anyway limiting the foregoing, such Member acknowledges and agrees that:

(i) Except as expressly set forth in this Agreement, the Purchase Agreement or any similar purchase agreement, subscription agreement or grant agreement for Units, or any Vesting Agreement, neither the Company, any Member nor any Affiliate of any Member nor any employee or other representative of the foregoing has at any time made any warranties or representations of any kind or character, express or implied, with respect to the Company or the Company Assets, including any warranties or representations as to merchantability or fitness for a particular purpose; and

(ii) All materials, data and information delivered to any Member by any Person relating to the Company Assets have been provided to such Member as a convenience only and any reliance on or use of such materials, data or information by such Member shall be at the sole risk of such Member.

(c) As of the Effective Date, except as set forth on Schedule 6.4.2 to this Agreement, such Member is not receiving or entitled to receive any Platform Fees from any Platform Company that is a Platform Company as of the Effective Date.

9.2.4 Survival. Notwithstanding anything to the contrary in this Agreement, the provisions of this Section 9.2 shall survive the expiration or sooner termination of this Agreement.

9.3 **Accounting and Fiscal Year**. Subject to Code Section 448, the books of the Company shall be kept on such method of accounting for tax and financial reporting purposes as may be determined by the Board. The fiscal year of the Company for tax and accounting purposes (the "**Fiscal Year**") shall be the calendar year or on such other date as permitted or required under the Code as the Board shall determine.

9.4 **Entire Agreement**. This Agreement, together with any Schedules and Exhibits hereto, any Vesting Agreements, any employment agreement or similar agreement between any Member and the Company or any of its Affiliates, and any joinder documents entered into after the Effective Date, sets forth the entire agreement among the parties hereto relating to the subject matter hereof and fully supersedes any and all prior or contemporaneous agreements or understandings among the parties hereto pertaining to the subject matter hereof.

9.5 **Further Assurances**. Each of the parties hereto does hereby covenant and agree on behalf of itself, its successors, and its assigns, without further consideration, to prepare, execute, acknowledge, file, record, publish, and deliver such other instruments, documents and statements, and to take such other action as may be required by law or reasonably necessary to effectively carry out the purposes of this Agreement. Each Member hereby undertakes to take any action necessary or convenient to implement any matter approved in accordance with this Agreement.

9.6 **Notices**. Any notice, consent, payment, demand, or communication required or permitted to be given by any provision of this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient's next Business Day, (c) five (5) days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one (1) Business Day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next Business Day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as follows:

(i) if to the Company:

BridgeBio Pharma LLC
421 Kipling Street
Palo Alto, CA 94301
Attention: Neil Kumar
E-mail: nkumar@bridgebiocapital.com

with a copy to each of the following:

Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02210
Attention: Mitchell S. Bloom
Maggie Wong
Email: mbloom@goodwinlaw.com
mwong@goodwinlaw.com

or to such other address as the Company may from time to time specify by notice to the Members; and

(ii) if to a Member, to such Member at the address set forth on Exhibit A, or to such other address as such Member may from time to time specify by notice to the Company.

9.7 **Tax Matters**.

9.7.1 The KKR Member shall be designated as and shall serve as the initial "**tax matters partner**" (as defined in Code Section 6231) and as a "partnership representative" for purposes of the Budget Act (defined below) and in any similar capacity under applicable state or local law, to oversee or handle matters relating to the taxation of the Company (such Person is herein referred to as the "**TMP**"), and as the TMP, such Person shall have the right and obligation to take all actions authorized and required, respectively, by the Code for the TMP. Successor TMPs may be designated by the KKR Member. The TMP shall be entitled to reimbursement for its reasonable out-of-pocket costs and expenses incurred by the TMP on behalf of the Company (as determined by the Board).

9.7.2 For any tax years for which the provisions of the Title XI Partnership Audit Provisions (the "**Budget Act**") are effective, the TMP shall use its commercially reasonable efforts to apply the rules and elections under the Budget Act in a manner that minimizes the likelihood that any Member would bear any material tax as a result of any audit or proceeding that is attributable to another Member (other than a predecessor in interest). The TMP is hereby authorized to take any reasonable action required to cause the financial burden of any "imputed underpayment" (as determined under Code Section 6225) (an "**Imputed Underpayment**") and associated interest, adjustments to tax and penalties arising from a Company-level adjustment that are imposed on the Company to be borne by the Members and former Members to whom such Imputed Underpayment relates as determined by the TMP after consulting with the Company's accountants or other advisers, taking into account any differences in the amount of taxes attributable to each Member because of such Member's status, nationality or other characteristics. By executing this Agreement or a counterpart hereof, each Member (A) expressly authorizes the TMP and the Company to take any and all action that is reasonably necessary under applicable federal income tax law (as such law may be revised from time to time) to cause the Company to make the election set forth in Code Section 6226(a) if the TMP decides to make such election, (B) expressly agrees to take any action, and furnish the TMP with any information necessary, to give effect to such election, and (C) expressly agrees to cooperate with the TMP in connection with determining whether any Imputed Underpayment may be modified pursuant to Code Section 6225(c) and in effecting such modifications. Each Member and former Member hereby severally indemnifies and holds the Company and the TMP harmless for such Member's or former Member's respective portion of the financial burden of an Imputed Underpayment as provided in the foregoing sentence. The TMP shall employ experienced tax

counsel to represent the Company in connection with any audit or investigation of the Company by the United States Internal Revenue Service ("**IRS**") and in connection with all subsequent administrative and judicial proceedings arising out of such audit. No Member shall file a notice with the IRS under Code Section 6222(b) in connection with such Member's intention to treat an item on such Member's federal income tax return in a manner that is inconsistent with the treatment of such item on the Company's federal income tax return unless such Member has, not less than thirty (30) days prior to the filing of such notice, provided the TMP with a copy of the notice and thereafter in a timely manner provides such other information related thereto as the TMP shall reasonably request. If the TMP is required by law or regulation to incur fees and expenses in connection with tax matters not affecting each of the Members, then the TMP may, in its reasonable discretion, seek reimbursement from or charge such fees and expenses to the Capital Accounts of those Members on whose behalf such fees and expenses were incurred. The TMP shall keep the Members informed of all administrative and judicial proceedings, as required by Code Section 6223(g), and shall furnish a copy of each notice or similar communication received by the TMP from the IRS to each Member, except such notices or similar communications as are sent directly to such Member by the IRS.

9.7.3 Except as otherwise specifically provided in this Agreement, the TMP may make all elections for federal income and all other tax purposes (including pursuant to Code Section 754).

9.8 **Binding Effect**. Except as otherwise expressly provided herein, this Agreement will be binding upon and will inure to the benefit of the Members, their respective heirs, executors, administrators, successors and all other Persons hereafter holding, having or receiving an Interest, whether as Assignees, Substitute Members, Members or otherwise.

9.9 **Severability**. If any provision of this Agreement as applied to any party or any circumstances is determined by an arbitrator or any court having jurisdiction to be void, unenforceable or inoperative as a matter of law, then the Members agree that such provision shall be modified to the greatest extent legally possible so that the intent of this Agreement may be legally carried out. If any one or more of the provisions contained herein, or the application thereof in any circumstances, is held void, unenforceable or inoperative as a matter of law in any respect or for any reason, then the validity, enforceability and operation of any such provision in every other respect and of the remaining provisions hereof shall not be in any way impaired or affected, it being intended that all of the Members' rights and privileges shall be enforceable to the fullest extent permitted by law.

9.10 **Confidentiality**. Each party hereto agrees that the provisions of this Agreement, all understandings, agreements and other arrangements between and among the parties, and all other non-public information received from or otherwise relating to, the Company and the Portfolio Companies shall be confidential, and shall not be disclosed or otherwise released to any other Person (other than another party hereto), without the written consent of the Board; *provided*, *however*, the KKR Member, Viking and the other Members that are institutional, venture capital or private equity investors may share such information with their respective Affiliates, employees, advisors, limited partners, current or prospective investors, and lenders; *provided*, *further*, that such recipients are bound by confidentiality obligations to such Member similar to the obligations of confidentiality contained herein; and *provided*, *further*, that the

confidential information of the Company and the Platform Companies may not be shared with any portfolio company affiliated with a Member without the prior written consent of the Board. The obligations of the parties hereunder shall not apply to the extent that the disclosure of information is required by applicable law, regulation or legal or regulatory process. The provisions of this Section 9.10 shall survive: (a) a Member's ceasing to be a Member of the Company for any reason for a period of three (3) years with respect to such Member, and (b) the termination of the Company for a period of three (3) years. Notwithstanding the foregoing, nothing contained herein shall prohibit any Member from reporting possible violations of federal law or regulation to any governmental agency or entity including but not limited to the Department of Justice, the Securities and Exchange Commission, the Congress, and any Inspector General, or making other disclosures that are protected under the whistleblower provisions of applicable law or regulation.

9.11 **Interpretation**.

9.11.1 All references in this Agreement to Articles, Sections, clauses, subparagraphs, Exhibits and Schedules shall be deemed to be references to Articles, Sections, clauses and subparagraphs of, and Exhibits and Schedules to, this Agreement unless the context shall otherwise require. The Exhibits and Schedules attached hereto are incorporated herein by reference and shall be considered part of this Agreement (and, for purposes of clarification, references to this Agreement shall include all Exhibits and Schedules attached hereto). Words in the singular include the plural, and words in the plural include the singular. Any pronoun used in this Agreement shall include the corresponding masculine, feminine or neuter forms. The words "include," and "including" shall be deemed to be followed by the phrase "without limitation." The term "or" is not exclusive. The word "extent" in the phrase "to the extent" shall mean the degree to which a subject or other thing extends, and such phrase shall not mean simply "if." The words "hereof," "hereby," "herein" and "hereunder" and words of similar import when used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement. Unless otherwise expressly provided herein, any agreement, instrument or statute defined or referred to herein or in any agreement or instrument that is referred to herein means such agreement, instrument or statute as from time to time amended, modified, supplemented or restated, including (in the case of agreements or instruments) by waiver or consent and (in the case of statutes) by succession of comparable successor statutes and references to all attachments thereto and instruments incorporated therein. All references to a "party" or "parties" mean a party or parties to this Agreement unless the context requires otherwise, and all references to any party shall mean and include such party, its successors and permitted assigns unless the context otherwise requires. Where specific language is used to clarify or illustrate by example a general statement contained herein, such specific language shall be deemed to modify, limit or restrict the construction of the general statement which is being clarified or illustrated.

9.11.2 This Agreement shall be construed without regard to any presumption or rule requiring construction or interpretation against the party drafting or causing any agreement, instrument or document to be drafted.

9.11.3 Any and all payments under this Agreement shall be paid in United States Dollars. All references to "$" herein mean United States Dollars.

9.11.4 For the avoidance of doubt, any determination of the fair market value of the Company or a Unit made by the Board shall not be binding on KKR for purposes of KKR's internal valuation of its investment in the Company (and vice versa).

9.12 **No Third Party Beneficiaries**. None of the provisions of this Agreement shall be for the benefit of, or be enforceable by, any creditor of the Company or any creditor of any Member. This Agreement is not intended to confer any rights or remedies hereunder upon, and shall not be enforceable by, any Person other than the parties hereto and, solely with respect to the provisions of Section 6.8, each Indemnitee and each other indemnified Person addressed therein.

9.13 **Counterparts**. This Agreement and any agreements or documents required to be delivered in connection with this Agreement may be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000 *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

9.14 **Waiver**.

9.14.1 No delay, failure or omission on the part of any party hereto in exercising any right, power, remedy or privilege under this Agreement or under any other documents furnished in connection with or pursuant to this Agreement or otherwise available to any party under applicable law shall impair any such right, power, remedy or privilege, or affect the right of such party thereafter to exercise the same, or be construed as a waiver of any default or any acquiescence therein. No single or partial exercise of any such right, power, remedy or privilege shall preclude the further exercise of such right, power, remedy or privilege, or the exercise of any other right, power, remedy or privilege. Any extension of time or other indulgence granted to any party hereunder will not otherwise alter or affect any power, remedy or right of any other parties, or the obligations of the party to whom such extension or indulgence is granted.

9.14.2 The failure at any time of any party to require performance by any other parties of any responsibility or obligation provided for in this Agreement shall in no way affect the full right to require such performance at any time thereafter, nor shall the waiver by any party of a breach of any provision of this Agreement by the other parties constitute a waiver of any succeeding breach of the same or any other obligation itself.

9.14.3 Subject to the last sentence of Section 9.16, no waiver shall be valid against any party hereto unless made in writing and signed by the party against whom enforcement of such waiver is sought and then only to the extent expressly specified therein.

9.15 **Aggregation of Units**. All Units held or acquired by Affiliated entities or Persons shall be aggregated together for the purposes of determining the availability of any rights under this Agreement.

9.16 **Consents**. Except as otherwise expressly provided herein or in the applicable consent, waiver or approval, any consent, waiver or approval to any act or matter required under this Agreement must be in writing and shall apply only with respect to the particular act or matter to which such consent, waiver or approval is given, and shall not relieve any Member from the obligation to obtain the consent, waiver or approval, as applicable, wherever required under this Agreement to any other act or matter. Notwithstanding any contrary provision of this Agreement but subject to the last sentence of this Section 9.16, each Member shall be entitled to exercise all of its approval, consent, voting and waiver rights under this Agreement (including pursuant to Section 6.7), and otherwise make any other determination under this Agreement, in each case in its sole and absolute discretion and in its own self-interest, and will owe no duties whatsoever (including any fiduciary duties) to the Company, any other Member or any other Person in connection with any exercise of any such approval, consent, voting or waiver right (or any decision to refrain from exercising any such approval, consent or waiver right) or any other determination under this Agreement. Except as otherwise expressly provided herein, including Section 6.7.2, Section 6.7.3 and Section 6.7.4, and except for any waiver or consent that would require the consent of holders of a class of Units pursuant to Section 9.1.2(i) or Section 9.1.2(ii) if such waiver or consent were instead an amendment to this Agreement (which waiver or consent shall then be approved by the requisite class of Units under Section 9.1.2(i) or Section 9.1.2(ii)), (i) the Majority Preferred Members may grant a waiver, extension of time or consent hereunder with respect to and on behalf of any or all of the Members and (ii) the Board may grant a waiver, extension of time or consent with respect to and on behalf of any or all of the Management Incentive Members.

9.17 **KKR and Viking Names**. The Company and each of the Members agree that they shall not use the names of any Member or any other Member, respectively (including "Kohlberg Kravis Roberts & Co.," "KKR & Co.," "KKR," "Viking," "Viking Global Investors," "Hillhouse", "□□", "Gaoling", "Gao Ling," or similar names or derivations thereof) in any manner, context or format in connection with this Agreement or the Member's investment in the Company (including reference on or links to websites, press releases, etc.) without the prior approval of the applicable Member; *provided* that the Company may, after obtaining the review and comment of the applicable Member, name any of the Members as an investor in the Company in any press release with respect to the transactions contemplated by this Agreement and the Purchase Agreement, and may name any of the Members as investors in the Company on the Company's website. Notwithstanding anything to the contrary herein, this Section 9.17 shall not be amended or waived without the prior written consent of any Member affected by such amendment or waiver.

9.18 **Ownership of Company Property**. The interest of each Member in the Company shall be personal property for all purposes. All real and other property owned by the Company shall be deemed owned by the Company as Company Assets. No Member, individually, shall have any direct ownership of Company Assets and title to such property shall be held in the name of the Company.

9.19 **Force Majeure**. The parties to this Agreement shall be excused from performance of their obligations under this Agreement where they are prevented from so performing by revolutions, terrorism or similar disorders, wars, acts of enemies, strikes, fires, floods, acts of God, or, without limiting the foregoing, by any cause not within the control of the party whose performance is interfered with, and which, by the exercise of reasonable diligence, the party is unable to prevent. All parties shall perform such parts or aspects of their obligations as are not interfered with by these causes.

9.20 **Tax Advice**. Each party hereto acknowledges and agrees that it has not received and is not relying upon tax advice from any other party hereto, and that it has and will continue to consult its own tax advisors.

9.21 **Headings**. The headings of all Articles and Sections contained in this Agreement are for convenience of reference only and do not form a part of this Agreement and shall not in any way affect the interpretation hereof.

9.22 **Survival**. Notwithstanding anything to the contrary contained herein, the provisions of Article 2 (Definitions), Section 3.7 (Liability of Members), Section 6.8 (Indemnification by Company), Section 6.9 (Other Activities), Section 6.10 (No Duty; Fiduciary Duty), Section 9.5 (Further Assurances), Section 9.6 (Notices), Section 9.10 (Confidentiality), Section 9.24 (Attorneys' Fees) and Section 9.26 (Governing Law) (and any other provision herein necessary for the effectiveness of the foregoing sections) shall survive any (a) termination of this Agreement, including any termination pursuant to Section 9.22, (b) any Transfer by a Member, and (c) the dissolution, liquidation, winding-up or termination of the Company. Notwithstanding the foregoing, any claim with respect to a breach of this Agreement or a failure to comply with any provision of this Agreement, in each case that occurs prior to a termination of this Agreement or any Transfer by a Member, shall survive the termination of this Agreement or such Transfer, respectively, and may be brought at any time following such termination or Transfer.

9.23 **Termination Upon an IPO**. Subject to Section 9.22, upon the consummation of an IPO by the Company or a successor to the Company in accordance with this Agreement, but, for the avoidance of doubt, not upon the consummation of an IPO by any Platform Company, this Agreement shall terminate and be of no further force or effect.

9.24 **Attorneys' Fees**. Each party in any action, mediation or arbitration proceeding to enforce or interpret the provisions of this Agreement shall be responsible for its own fees and expenses incurred in connection therewith.

9.25 **Attorney-in-Fact**. Each Member (other than the KKR Member and Viking) irrevocably constitutes and appoints each Manager, and any individual expressly designated by the Board (with full power of substitution and resubstitution), as its true and lawful attorney-in-fact and agent with full power and authority in its name, place and stead, where such Member fails to act, or is unable to act, in accordance with this Agreement to execute, acknowledge, verify, deliver, swear to, file and record at the appropriate public offices such documents as the Board or any such designated individual deems necessary or appropriate to carry out the provisions of this Agreement or otherwise continue the valid existence and affairs of the Company, including (a) all amendments to this Agreement adopted in accordance with the terms hereof, and all other instruments that the Board or any such designated individual deems necessary or appropriate to reflect or give effect to such amendments or to reflect or give effect to any change or modification of the Company in accordance with the terms of this Agreement,

and (b) all agreements and other instruments that the Board or any such designated individual deems necessary or appropriate to reflect or give effect to the provisions of Article 7. The appointment of the Board and any individual expressly designated by the Board as attorney-in-fact shall be deemed to be a power coupled with an interest, in recognition of the fact that each of the Members under this Agreement will be relying upon the power of the Board and any such designated individual to act as contemplated by this Agreement in any filing and other action by it on behalf of the Company, shall survive the incapacity of any Person hereby giving such power, and the transfer or assignment of all or any portion of the Interest of such Person in the Company, and shall not be affected by the subsequent incapacity of such Person; *provided* that in the event of the assignment by a Member of all of its Interest in the Company, the foregoing power of attorney of an Assignor Member shall survive such assignment; and *provided further* that if such assignee is admitted as a Substitute Member pursuant to this Agreement, the foregoing power of attorney shall survive with respect to the transferring Member only to the extent of, and for the purpose of, enabling the Board or any such designated individual to execute, acknowledge, swear to and file any instruments necessary to effect the substitution of the Assignee as a Substitute Member. This power of attorney may be exercised by such attorney-in-fact for all Members (or any of them) by a single resolution of the Board or a single signature of any such designated individual acting as attorney-in-fact with or without listing all of the Members executing an instrument. Any Person dealing with the Company may conclusively presume and rely upon the fact that any instrument referred to above, adopted by the Board or executed by any such designated individual holding this power of attorney, is authorized, legal, valid and binding, without further inquiry. If required, each Member shall execute and deliver to the Board or any such designated individual within ten (10) calendar days after the receipt of a request therefor, such further designations, powers of attorney or other instruments as the Board shall reasonably deem necessary for the purposes hereof.

9.26 **Governing Law**. This Agreement, including its existence, validity, construction and operating effect, and the rights of each of the parties hereto, shall be governed by and construed and enforced in accordance with the laws of the State of Delaware applicable to agreements made and to be performed wholly within that jurisdiction.

9.27 **Submission to Jurisdiction; Forum; Waiver of Jury Trial**. Any legal action or proceeding with respect to this Agreement shall be brought in the courts of the State of Delaware, and, by execution and delivery of this Agreement, the Company and each Member hereby irrevocably accepts for itself and in respect of its property, generally and unconditionally, the exclusive jurisdiction of the aforesaid courts. The Company and each Member hereby further irrevocably waives any claim that any such courts lack personal jurisdiction over it, and agrees not to plead or claim, in any legal action proceeding with respect to this Agreement in any of the aforementioned courts, that such courts lack personal jurisdiction over it. To the fullest extent permitted by applicable law, any legal action or proceeding with respect to this Agreement by the Company or any Member seeking any relief whatsoever against the Company or any other Member shall be brought only in the Chancery Court of the State of Delaware (or other appropriate state court in the State of Delaware) and any appellate court therefrom, and not in any other court in the United States of America, or any court in any other country, unless the Chancery Court of the State of Delaware determines that it does not have jurisdiction over the subject legal action or proceeding, in which case any such legal action or proceeding may be brought in the Federal Courts of the United States located in the State of Delaware and any

appellate court therefrom. The Company and each Member hereby irrevocably waives any objection that it may now or hereafter have to the laying of venue of any of the aforesaid actions or proceedings arising out of or in connection with this Agreement brought in the aforesaid courts and hereby further irrevocably, to the extent permitted by applicable law, waives its rights to plead or claim and agrees not to plead or claim in any such court that any such action or proceeding brought in any such court has been brought in an inconvenient forum. The Company and each Member, to the fullest extent permitted by applicable law, irrevocably consents to service of process in connection with any matter arising under this Agreement by first class mail, certified postage prepaid, in accordance with the provisions of Section 9.6. Nothing in this Agreement will affect the right of any party to this Agreement to serve process in any other manner permitted by law. THE COMPANY AND EACH MEMBER HEREBY IRREVOCABLY AND UNCONDITIONALLY WAIVES, TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT THAT SUCH MEMBER MAY HAVE TO A TRIAL BY JURY OF ANY CLAIM OR CAUSE OF ACTION DIRECTLY OR INDIRECTLY BASED UPON OR ARISING OUT OF THIS AGREEMENT.

9.28 **Equitable Remedies**. Each Member and the Company acknowledges and agrees that each of the other parties to this Agreement would be irreparably damaged in the event that any of the terms or provisions of this Agreement are not performed in accordance with their specific terms or otherwise are breached. Therefore, notwithstanding anything to the contrary set forth in this Agreement, each of the parties to this Agreement hereby agrees that (i) the parties to this Agreement shall be entitled to obtain an injunction or injunctions to prevent breaches of any of the terms or provisions of this Agreement, and to enforce specifically the performance by each other party hereto under this Agreement and (ii) the right of specific enforcement is an integral part of the transactions contemplated by this Agreement and without that right, the Members and the Company would not have entered into this Agreement. Each party to this Agreement hereby agrees to waive the defense in any such suit that the other parties to this Agreement have an adequate remedy at law and to interpose no opposition, legal or otherwise, as to the propriety of injunction or specific performance as a remedy, and hereby agrees to waive any requirement to post any bond in connection with obtaining such relief. The equitable remedies described in this Section 9.28 shall be in addition to, and not in lieu of, any other remedies at law or in equity that the parties to this Agreement may elect to pursue.

(signature pages follow)

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first above written.

BRIDGEBIO PHARMA LLC,
a Delaware limited liability company

By: /s/ Neil Kumar
Name: Neil Kumar
Title: Manager

NEIL KUMAR

/s/ Neil Kumar
Name: Neil Kumar

NEIL KUMAR, LLC

By: /s/ Neil Kumar
Name: Neil Kumar
Title: Sole Member

[Signature Page to BridgeBio Pharma LLC – Fourth A&R LLC Agreement]

RICHARD SCHELLER

/s/ Richard Scheller
Name: Richard Scheller

HOYOUNG HUH

/s/ Hoyoung Huh
Name: Hoyoung Huh

FRANK MCCORMICK

/s/ Frank McCormick
Name: Frank McCormick

CHARLES HOMCY

/s/ Charles Homcy
Name: Charles Homcy

KKR GENETIC DISORDER L.P.

By: KKR Genetic Disorder GP LLC, its general partner

By: /s/ Ali J. Satvat
Name: Ali J. Satvat
Title: VP

VIKING GLOBAL OPPORTUNITIES ILLIQUID INVESTMENTS SUB-MASTER LP

By: Viking Global Opportunities Portfolio GP LLC, its general partner

By: /s/ Matthew Bloom
Name: Matthew Bloom
Title: Authorized Signatory

THE UNITED STATES LIFE INSURANCE COMPANY IN THE CITY OF NEW YORK

By: AIG Asset Management (U.S.), LLC,
as its investment advisor

By: /s/ Monika Racz
Name: Monika Racz
Title: Managing Director

AMERICAN GENERAL LIFE INSURANCE COMPANY

By: AIG Asset Management (U.S.), LLC,
as its investment advisor

By: /s/ Monika Racz
Name: Monika Racz
Title: Managing Director

PERCEPTIVE LIFE SCIENCES MASTER FUND LTD

By: /s/ James H. Mannix
Name: James H. Mannix
Title: Chief Operating Officer

AISLING CAPITAL IV, LP

By: /s/ Robert Wenzel
Name: Robert Wenzel
Title: CFO

CORMORANT PRIVATE HEALTHCARE FUND I, LP

By: Cormorant Private Healthcare GP, LLC

By: /s/ Bihua Chen
Name: Bihua Chen
Title: Managing Member of the GP

CORMORANT PRIVATE HEALTHCARE FUND II, LP

By: Cormorant Private Healthcare GP II, LLC

By: /s/ Bihua Chen
Name: Bihua Chen
Title: Managing Member of the GP

CORMORANT GLOBAL HEALTHCARE MASTER FUND, LP

By: Cormorant Global Healthcare GP, LLC

By: /s/ Bihua Chen
Name: Bihua Chen
Title: Managing Member of the GP

CRMA SPV, LP

By: Cormorant Asset Management, LLC, its Attorney-In-Fact

By: /s/ Bihua Chen
Name: Bihua Chen
Title: CEO/Managing Member

SEQUOIA CAPITAL U.S. GROWTH FUND VIII, L.P., for itself and as a nominee

By: SC U.S. GROWTH VIII MANAGEMENT, L.P.
a Cayman Islands exempted limited partnership, its General Partner
By: SC US (TTGP), LTD.,
a Cayman Islands exempted company, its General Partner

By: /s/ Michael Dixon
Name: Michael Dixon
Title: Authorized Signatory

HERCULES CAPITAL, INC.

By: /s/ Jennifer Choe
Name: Jennifer Choe
Title: Assistant General Counsel

HH BBP LLC

By: /s/ Colm O'Connell
Name: Colm O'Connell
Title: Authorized Signatory

Exhibit 4.3

REGISTRATION RIGHTS AGREEMENT

This Registration Rights Agreement (this "**Agreement**") is made and entered into as of **[•]** by and among **[•]** (the "**Company**")[1], and each of the holders of Registrable Securities listed on Schedule A hereto, which shall include KKR and Viking, each of which is referred to in this Agreement as a "**Holder**," and any additional holders that becomes a party to this Agreement in accordance with Section 4.1 hereof.[2]

RECITALS

WHEREAS, Section 7.11.2 of that certain Third Amended and Restated Limited Liability Company Agreement, by and among BridgeBio Pharma LLC, a Delaware limited liability company ("**BridgeBio Pharma**"), KKR Genetic Disorder L.P., a Delaware limited partnership (together with its successors and permitted assigns, the "**KKR Member**" or "**KKR**") and Viking Global Opportunities Illiquid Investments Sub-Master LP (together with its successors and permitted assigns "**Viking Member**" or "**Viking**") and the members named on Exhibit A thereto (the "**LLC Agreement**") provides that in connection with and prior to the consummation of any initial public offering by an IPO Corporation (as defined in the LLC Agreement), such IPO Corporation shall, and the Board of BridgeBio Pharma shall cause such IPO Corporation to enter into a Registration Rights Agreement with KKR, Viking and each holder of Preferred Units representing (directly or indirectly, whether beneficially, upon conversion of otherwise) more than five percent (5%) of the outstanding shares of common stock or other equity securities of such IPO Corporation of the class registered or to be registered in such initial public offering.

WHEREAS, the Company is the IPO Corporation under the LLC Agreement.

WHEREAS, in accordance with Section 7.11.2 of the LLC Agreement, the Holders and the Company desire to enter this Agreement in order to set forth the rights of the Holders to cause the Company to register Common Equity issued or issuable to the Holders.

NOW, THEREFORE, in consideration of the foregoing recitals and the mutual promises hereinafter set forth, the parties hereto hereby agree as follows:

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1 Note to Draft: To be the Company or any IPO Corporation (each as defined in the LLC Agreement) conducting an initial public offering.

2 Note to Draft: Only Preferred Members holding at least three percent (3%) of the total outstanding Units prior to an initial public offering shall be party to this Agreement.

ARTICLE 1
DEFINITIONS

For purposes of this Agreement:

"**Affiliate**" means, with reference to a specified Person, a Person that directly, or indirectly through one or more intermediaries, Controls, is Controlled by, or is under common Control with, the specified Person, including, without limitation, any general partner, managing member, officer or director of such Person or any venture capital, private equity or other investment fund or account now or hereafter existing that is controlled by one or more general partners or managing members of, or shares the same management company or investment advisor with, such Person, and the term "Affiliated" shall have the correlative meaning. The Company and its Affiliates shall not be considered Affiliates of the KKR Member or the Viking Member, or of any of the KKR Member's or the Viking Member's Affiliates for purposes of this Agreement.

"**Automatic Shelf Registration Statement**" shall have the meaning given to that term in SEC Rule 405.

"**Board**" means the board of directors, board of managers or similar managing body of the Company.

"**BridgeBio Pharma**" has the meaning set forth in the recitals.

"**Business Day**" means any day other than Saturday, Sunday or another day on which commercial banks in New York, New York are authorized or required by law to close.

"**Change of Control**" shall mean any transaction pursuant to which, or as a result of which, a single Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) (other than KKR or its Affiliates) acquires or holds equity interests of the Company representing (a) a majority of the outstanding voting securities (in each case excluding any unvested voting securities that would not become vested voting securities as a result of such Change of Control, whether pursuant to the terms of such unvested voting securities, by Board action or otherwise), or (b) the right to receive a majority of the proceeds in a final liquidation, dissolution or termination, voluntary or involuntary, of the Company.

"**Common Equity**" means any shares of common stock or other equity securities of the Company or its successors, including any shares of common stock or other equity securities of any successor to the Company.

"**Control**" (including as used in the terms "Controlling," "Controlled by" and "under common Control with") means possession, directly or indirectly, of (a) more than 50% of the securities or other ownership interests in a Person or the voting power of a Person or (b) the power to direct or cause the direction of management or policies of a Person (whether through ownership of voting securities, by agreement or otherwise).

"**Damages**" means any loss, damage, or liability (joint or several) to which a party hereto may become subject under the Securities Act, the Exchange Act, or other federal or state law, insofar as such loss, damage, or liability (or any action in respect thereof) arises out of or is based upon (a) any untrue statement or alleged untrue statement of a material fact contained in any registration statement of the Company, including any preliminary prospectus or final prospectus contained therein or any amendments or supplements thereto, and any free-writing prospectus and any issuer information (as defined in Rule 433 of the Securities Act) filed or required to be filed pursuant to Rule 433(d) under the Securities Act or any other document incident to such registration prepared by or on behalf of the Company or used or referred to by the Company; (b) an omission or alleged omission to state therein a material fact required to be stated therein, or necessary to make the statements therein not misleading; or (c) any violation or alleged violation by the indemnifying party (or any of its agents or Affiliates) of the Securities Act, the Exchange Act, any state securities law, or any rule or regulation promulgated under the Securities Act, the Exchange Act, or any state securities law.

"**Demand Notice**" means notice sent by the Company to the Holders specifying that a demand registration has been requested as provided in Section 2.1.1.

"**Demanding Holder**" means any Holder of at least ten percent (10%) of the Registrable Securities then outstanding.

"**Exchange Act**" means the Securities Exchange Act of 1934, as amended from time to time, and the rules and regulations promulgated pursuant thereto.

"**Excluded Registration**" means (a) a registration relating to the sale of securities to employees of the Company or a subsidiary pursuant to an equity incentive, stock option, stock purchase, or similar plan; (b) a registration relating to an SEC Rule 145 transaction; (c) a registration on any form that does not include substantially the same information as would be required to be included in a registration statement covering the sale of the Registrable Securities; or (d) a registration in which the only Common Equity being registered is Common Equity issuable upon conversion of debt securities that are also being registered.

"**Form S-1**" means such form under the Securities Act as in effect on the date hereof or any successor registration form under the Securities Act subsequently adopted by the SEC.

"**Form S-3**" means such form under the Securities Act as in effect on the date hereof or any registration form under the Securities Act subsequently adopted by the SEC that permits incorporation of substantial information by reference to other documents filed by the Company with the SEC.

"**Free Writing Prospectus**" means a free-writing prospectus, as defined in Rule 405 under the Securities Act.

"**Holder**" has the meaning set forth in the preamble.

"**Immediate Family Member**" means a child, stepchild, grandchild, parent, stepparent, grandparent, spouse, sibling, mother-in-law, father-in-law, son-in-law, daughter-in-law, brother-in-law, or sister-in-law, including adoptive relationships, of a natural person referred to herein.

"**Initiating Holders**" means, collectively, Demanding Holders who properly initiate a registration request under this Agreement.

"**IPO**" means the Company's first underwritten public offering of its Common Equity under the Securities Act.

"**IPO Corporation**" has the meaning set forth in the LLC Agreement.

"**KKR**" and "**KKR Member**" has the meaning set forth in the recitals.

"**LLC Agreement**" has the meaning set forth in the recitals.

"**Person**" means an individual, a corporation, a partnership, a limited liability company, an association, a trust, an unincorporated organization, a government or any department, agency or authority thereof, or any other entity or organization.

"**Preferred Members**" has the meaning set forth in the LLC Agreement.

"**Preferred Units**" has the meaning set forth in the LLC Agreement.

"**Registrable Securities**" means (a) the Common Equity held by the Holders party to this Agreement as of the date of this Agreement or hereafter and (b) any Common Equity issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, the Common Equity referenced in clause (a), and (c) if BridgeBio Pharma is not the IPO Corporation, any Common Equity issued as (or issuable upon the conversion or exercise of any warrant, right, or other security that is issued as) a dividend or other distribution with respect to, or in exchange for or in replacement of, any security of BridgeBio Pharma (or any successor of BridgeBio Pharma) owned by the Holders party to this Agreement; excluding in all cases, however, any Registrable Securities sold by a Person in a transaction in which the applicable rights under this Agreement are not assigned pursuant to Section 4.1, and excluding for purposes of Section 2 any Common Equity for which registration rights have terminated pursuant to Section 3 of this Agreement.

"**Registrable Securities then outstanding**" means the number of units or shares determined by adding the number of units or shares of outstanding Common Equity that are Registrable Securities and the number of units or shares of Common Equity issuable (directly or indirectly) pursuant to then exercisable and/or convertible securities that are Registrable Securities.

"**SEC**" means the Securities and Exchange Commission.

"**SEC Rule 144**" means Rule 144 promulgated by the SEC under the Securities Act.

"**SEC Rule 145**" means Rule 145 promulgated by the SEC under the Securities Act.

"**SEC Rule 405**" means Rule 405 promulgated by the SEC under the Securities Act.

"**Securities Act**" means the Securities Act of 1933, as amended, and the rules and regulations promulgated thereunder.

"**Selling Expenses**" means all underwriting discounts, selling commissions, and unit/stock transfer taxes applicable to the sale of Registrable Securities, and fees and disbursements of counsel for any Holder, except for the fees and disbursements of the Selling Holder Counsel borne and paid by the Company as provided in Section 2.6.

"**Selling Holder Counsel**" means one counsel for the selling Holders selected by holders of a majority of Registrable Securities held by the selling Holders.

"**Standoff Period**" means the period commencing on the date of the final prospectus relating to the IPO and ending on the date specified by the Company and the managing underwriter (such period not to exceed one hundred eighty (180) days).

"Unit" and "**Units**" have the meaning set forth in the LLC Agreement.

ARTICLE 2
REGISTRATION RIGHTS

2.1 **Demand Registration.**

2.1.1 Form S-1 Demand. If at any time one hundred eighty (180) days after the effective date of the registration statement for the IPO, the Company receives a request from a Demanding Holder that the Company file a Form S-1 registration statement with respect to any Registrable Securities then outstanding, then the Company shall (a) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (b) use reasonable best efforts to as soon as practicable, and in any event within sixty (60) days after the date such request is given by the Initiating Holders, file a Form S-1 registration statement under the Securities Act covering all Registrable Securities that the Initiating Holders requested to be registered and any additional Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days after the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1.3 and Section 2.3.

2.1.2 Form S-3 Demand. If at any time when the Company is eligible to use a Form S-3 registration statement, the Company receives a request from a Demanding Holder that the Company file a Form S-3 registration statement (including by means of a shelf registration statement pursuant to Rule 415 under the Securities Act providing for an offering to be made on a continuous basis if so requested) with respect to any or all of the outstanding Registrable Securities of such Holders, then the Company shall (a) within ten (10) days after the date such request is given, give a Demand Notice to all Holders other than the Initiating Holders; and (b) use reasonable best efforts to as soon as practicable, and in any event within forty-five (45) days after the date such request is given by the Initiating Holders, file a Form S-3 registration statement under the Securities Act covering all Registrable Securities requested to be included in such registration by any other Holders, as specified by notice given by each such Holder to the Company within twenty (20) days of the date the Demand Notice is given, and in each case, subject to the limitations of Section 2.1.3 and Section 2.3.

2.1.3 Notwithstanding the foregoing obligations, if the Company furnishes to Holders requesting a registration pursuant to this Section 2.1 a certificate signed by the Company's chief executive officer stating that in the good faith judgment of the Board it would be materially detrimental to the Company and its equityholders for such registration statement to either become effective or remain effective for as long as such registration statement otherwise would be required to remain effective, because such action would (a) materially interfere with a significant acquisition, corporate reorganization, or other similar transaction involving the Company; (b) require premature disclosure of material information that the Company has a bona fide business purpose for preserving as confidential; or (c) render the Company unable to comply with requirements under the Securities Act or Exchange Act, then the Company shall have the right to defer taking action with respect to such filing, and any time periods with respect to filing or effectiveness thereof shall be tolled correspondingly, for a period of not more than ninety (90) days after the request of the Initiating Holders is given; *provided*, *however*, that (i) the Company may not invoke this right more than once in any twelve (12) month period and (ii) the Company shall not register any securities for its own account or that of any other equityholder during such ninety (90) day period other than an Excluded Registration.

2.1.4 Limitations. The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1.1: (a) during the period that is sixty (60) days before the Company's good faith estimate of the date of filing of, and ending on a date that is one hundred eighty (180) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith reasonable best efforts to cause such registration statement to become effective; (b) after the Company has effected four (4) registrations pursuant to Section 2.1.1; (c) for a six (6) month period after the Company has effected a registration pursuant to Section 2.1.1; or (d) if the Initiating Holders propose to dispose of Registrable Securities that may be immediately registered on Form S-3 pursuant to a request made pursuant to Section 2.1.2. The Company shall not be obligated to effect, or to take any action to effect, any registration pursuant to Section 2.1.2: (i) during the period that is thirty (30) days before the Company's good faith estimate of the date of filing of, and ending on a date that is ninety (90) days after the effective date of, a Company-initiated registration, provided, that the Company is actively employing in good faith reasonable best efforts to cause such registration statement to become effective; or (ii) if the Company has effected two (2) registrations pursuant to Section 2.1.2 within the six (6) month period immediately preceding the date of such request. A registration shall not be counted as "effected" for purposes of this Section 2.1.4 until such time as the applicable registration statement has been declared effective by the SEC, unless the Initiating Holders withdraw their request for such registration, elect not to pay the registration expenses therefor, and forfeit their right to one registration on Form S-1 or one registration on Form S-3 during the applicable six (6) month period immediately following the date of the initial registration request, as applicable, pursuant to Section 2.6, in which case such withdrawn registration statement shall be counted as "effected" for purposes of this Section 2.1.4.

2.2 **Company Registration.** If the Company proposes to register (including, for this purpose, a registration effected by the Company for equityholders other than the Holders, whether as part of an underwritten offering of Registrable Securities included by the Company on a shelf registration statement or otherwise) any of its Common Equity under the Securities Act in connection with the public offering of such securities solely for cash (other than in an

Excluded Registration), the Company shall, at such time, promptly give each Holder notice of such registration. Upon the request of each Holder given within twenty (20) days after such notice is given by the Company, the Company shall, subject to the provisions of Section 2.3, cause to be registered all of the Registrable Securities that each such Holder has requested to be included in such registration. The Company shall have the right to terminate or withdraw any registration initiated by it under this Section 2.2 before the effective date of such registration, whether or not any Holder has elected to include Registrable Securities in such registration. The expenses (other than Selling Expenses) of such withdrawn registration shall be borne by the Company in accordance with Section 2.6.

2.3 **Underwriting Requirements.**

2.3.1 Inclusion. If, pursuant to Section 2.1, the Initiating Holders intend to distribute the Registrable Securities covered by their request by means of an underwriting, they shall so advise the Company as a part of their request made pursuant to Section 2.1, and the Company shall include such information in the Demand Notice. The underwriter(s) will be selected by the Board, *provided* such underwriter(s) is reasonably acceptable to the Initiating Holders. In such event, the right of any Holder to include such Holder's Registrable Securities in such registration shall be conditioned upon such Holder's participation in such underwriting. All Holders proposing to distribute their securities through such underwriting shall (together with the Company as provided in Section 2.4.5) enter into an underwriting agreement in customary form with the underwriter(s) selected for such underwriting. Notwithstanding any other provision of this Section 2.3, if the managing underwriter(s) advise(s) the Initiating Holders in writing that marketing factors require a limitation on the number of equity securities to be underwritten, then the Initiating Holders shall so advise all Holders of Registrable Securities that otherwise would be underwritten pursuant hereto, and the number of Registrable Securities that may be included in the underwriting shall be allocated among such Holders of Registrable Securities, including the Initiating Holders, in proportion (as nearly as practicable) to the number of Registrable Securities owned or held by each Holder or in such other proportion as shall mutually be agreed to by all such selling Holders; provided, however, that the number of Registrable Securities owned or held by the Holders to be included in such underwriting shall not be reduced unless all other securities are first entirely excluded from the underwriting. To facilitate the allocation of equity securities in accordance with the above provisions, the Company or the underwriters may round the number of equity securities allocated to any Holder to the nearest one hundred (100) equity securities.

2.3.2 Underwriter Cutback. In connection with any offering involving an underwriting of shares of the Company's equity pursuant to Section 2.2, the Company shall not be required to include any of the Holders' Registrable Securities in such underwriting unless the Holders accept the terms of the underwriting as agreed upon between the Company and its underwriters. If the total number of securities, including Registrable Securities, requested by equityholders to be included in such offering exceeds the number of securities to be sold (other than by the Company) that the underwriters in their reasonable discretion determine is compatible with the success of the offering, then the Company shall be required to include in the offering only that number of such securities, including Registrable Securities, which the underwriters and the Company in their sole discretion determine will not jeopardize the success of the offering (after reasonable consultation with the Holders who have elected to include

Registrable Securities in such registration). If the underwriters determine that less than all of the Registrable Securities requested to be registered can be included in such offering, then the Registrable Securities that are included in such offering shall be allocated among the selling Holders in proportion (as nearly as practicable to) the number of Registrable Securities owned or held by each selling Holder or in such other proportions as shall mutually be agreed to by all such selling Holders. To facilitate the allocation of equity securities in accordance with the above provisions, the Company or the underwriters may round the number of equity securities allocated to any Holder to the nearest one hundred (100) equity securities. Notwithstanding the foregoing, in no event shall (a) the number of Registrable Securities included in the offering be reduced unless all other securities (other than securities to be sold by the Company) are first entirely excluded from the offering or (b) the number of Registrable Securities included in the offering be reduced below thirty percent (30%) of the total number of securities included in such offering, unless such offering is the IPO, in which case the selling Holders may be excluded further if the underwriters make the determination described above and no other equityholder's securities are included in such offering. For purposes of the provision in this Section 2.3.2 concerning apportionment, for any selling Holder that is a partnership, limited liability company, or corporation, the partners, members, retired partners, retired members, stockholders, and Affiliates of such Holder, or the estates and Immediate Family Members of any such partners, retired partners, members, and retired members and any trusts for the benefit of any of the foregoing Persons, shall be deemed to be a single "selling Holder," and any pro rata reduction with respect to such "selling Holder" shall be based upon the aggregate number of Registrable Securities owned or held by all Persons included in such "selling Holder," as defined in this sentence.

2.3.3 Registration Not Effected. For purposes of Section 2.1, a registration shall not be counted as "effected" if (a) the registration statement relating thereto does not become effective or is not maintained effective for the period required pursuant to this ARTICLE 2, (b) the offering of the Registrable Securities pursuant to such registration statement is subject to a stop order, injunction, or similar order or requirement of the SEC or (c) as a result of an exercise of the underwriter's cutback provisions in Section 2.3.1, fewer than seventy five percent (75%) of the total number of Registrable Securities that Holders have requested to be included in such registration statement are actually included.

2.4 **Obligations of the Company.** Whenever required under this ARTICLE 2 to effect the registration of any Registrable Securities, the Company shall use reasonable best efforts to effect the registration and sale of such Registrable Securities in accordance with the intended method of disposition thereof, and pursuant thereto the Company shall as expeditiously as reasonably possible:

2.4.1 prepare and file with the SEC a registration statement with respect to such Registrable Securities and use its reasonable best efforts to cause such registration statement to become effective as promptly as practicable, and, upon the request of a Demanding Holder registered thereunder, keep such registration statement effective for a period of up to one hundred twenty (120) days or, if earlier, until the distribution contemplated in the registration statement has been completed; *provided*, *however*, that (a) such 120-day period shall be extended for a period of time equal to the period the Holder refrains, at the request of an underwriter of Common Equity (or other securities) of the Company, from selling any securities included in

such registration, and (b) in the case of any registration of Registrable Securities on Form S-3 that are intended to be offered on a continuous or delayed basis, subject to compliance with applicable SEC rules, such registration statement shall be kept effective continually until all such Registrable Securities are sold;

2.4.2 prepare and file with the SEC such amendments and supplements to such registration statement, the prospectus and, if required, any Free Writing Prospectus used in connection with such registration statement as may be necessary to comply with the Securities Act in order to enable the disposition of all securities covered by such registration statement;

2.4.3 furnish to the selling Holders such numbers of copies of a prospectus, including a preliminary prospectus and any Free Writing Prospectus, as required by the Securities Act, and such other documents as the Holders may reasonably request in order to facilitate their disposition of their Registrable Securities;

2.4.4 use its reasonable best efforts to register and qualify the securities covered by such registration statement under such other securities or blue-sky laws of such jurisdictions as shall be reasonably requested by the selling Holders; *provided* that the Company shall not be required to qualify to do business or to file a general consent to service of process in any such states or jurisdictions, unless the Company is already subject to service in such jurisdiction and except as may be required by the Securities Act;

2.4.5 in the event of any underwritten public offering, enter into and perform its obligations under an underwriting agreement, in usual and customary form, with the underwriter(s) of such offering;

2.4.6 cause senior representatives of the Company to participate in any “road show” or “road shows” reasonably requested by any underwriter of an underwritten or “best efforts” offering of any Registrable Securities;

2.4.7 use its reasonable best efforts to furnish, on the date that such Registrable Securities are delivered to the underwriters for sale, if such securities are being sold through underwriters, (a) an opinion, dated as of such date, of the counsel representing the Company for the purposes of such registration, in form and substance as is customarily given to underwriters in an underwritten public offering, addressed to the underwriters, if any, and (b) a letter dated as of such date, from the independent public accountants of the Company, in form and substance as is customarily given by independent public accountants to underwriters in an underwritten public offering addressed to the underwriters;

2.4.8 use its reasonable best efforts to cause all such Registrable Securities covered by such registration statement to be listed on a national securities exchange or trading system and each securities exchange and trading system (if any) on which similar securities issued by the Company are then listed;

2.4.9 provide a transfer agent and registrar for all Registrable Securities registered pursuant to this Agreement and provide a CUSIP number for all such Registrable Securities, in each case not later than the effective date of such registration;

2.4.10 promptly make available for inspection by the selling Holders, any managing underwriter(s) participating in any disposition pursuant to such registration statement, and any attorney or accountant or other agent retained by any such underwriter or selected by the selling Holders, all financial and other records, pertinent corporate documents, and properties of the Company, and cause the Company's officers, directors, employees, and independent accountants to supply all information reasonably requested by any such seller, underwriter, attorney, accountant, or agent, in each case, as necessary or advisable to verify the accuracy of the information in such registration statement and to conduct appropriate due diligence in connection therewith;

2.4.11 notify each selling Holder, promptly after the Company receives notice thereof, of the time when such registration statement has been declared effective or a supplement to any prospectus or Free-Writing Prospectus forming a part of such registration statement has been filed;

2.4.12 after such registration statement becomes effective, notify each selling Holder of any request by the SEC that the Company amend or supplement such registration statement or prospectus or Free-Writing Prospectus;

2.4.13 use its reasonable best efforts to obtain for the underwriters one or more "cold comfort" letters, dated the effective date of the related registration statement (and, if such registration includes an underwritten public offering, dated the date of the closing under the underwriting agreement), signed by the Company's independent public accountants in customary form and covering such matters of the type customarily covered by "cold comfort" letters;

2.4.14 use its reasonable best efforts to obtain for the underwriters on the date such securities are delivered to the underwriters for sale pursuant to such registration a legal opinion of the Company's outside counsel with respect to the registration statement, each amendment and supplement thereto, the prospectus included therein (including the preliminary prospectus) and such other documents relating thereto in customary form and covering such matters of the type customarily covered by legal opinions of such nature;

2.4.15 to the extent the Company is a well-known seasoned issuer (as defined in SEC Rule 405) at the time any request for registration is submitted to the Company in accordance with Section 2.1, if so requested, file an Automatic Shelf Registration Statement to effect such registration; and

2.4.16 if at any time when the Company is required to re-evaluate its well-known seasoned issuer status for purposes of an outstanding Automatic Shelf Registration Statement used to effect a request for registration in accordance with Section 2.1.2 the Company determines that it is not a well-known seasoned issuer and (a) the registration statement is required to be kept effective in accordance with this Agreement and (b) the registration rights of the applicable Holders have not terminated, use reasonable best efforts to promptly amend the registration statement on a form the Company is then eligible to use or file a new registration statement on such form, and keep such registration statement effective in accordance with the requirements otherwise applicable under this Agreement.

2.5 **Furnish Information.** It shall be a condition precedent to the obligations of the Company to take any action pursuant to this ARTICLE 2 with respect to the Registrable Securities of any selling Holder that such Holder shall furnish to the Company such information regarding itself, the Registrable Securities held by it, and the intended method of disposition of such securities as is reasonably required to effect the registration of such Holder's Registrable Securities.

2.6 **Expenses of Registration.** All expenses (other than Selling Expenses) incurred in connection with registrations, filings, or qualifications pursuant to ARTICLE 2, including all registration, filing, and qualification fees; printers' and accounting fees; fees and disbursements of counsel for the Company; and the reasonable fees and disbursements of one (1) Selling Holder Counsel shall be borne and paid by the Company; *provided*, *however*, that (a) the Company shall not be required to pay for any expenses of any registration proceeding begun pursuant to Section 2.1 if the registration request is subsequently withdrawn at the request of the Initiating Holders to be registered (in which case all selling Holders shall bear such expenses pro rata based upon the number of Registrable Securities that were to be included in the withdrawn registration), unless the Initiating Holders agree to forfeit their right to one registration pursuant to Section 2.1.1 or one registration pursuant to Section 2.1.2, during the applicable six (6) month period immediately following the date of the initial registration request, as the case may be, and (b) if, at the time of such withdrawal, the Holders shall have learned of a material adverse change in the condition, business, or prospects of the Company and its subsidiaries, taken as a whole, not known to the Holders at the time of their request and have withdrawn the request with reasonable promptness after learning of such information, then the Holders shall not be required to pay any of such expenses and shall not forfeit their right to one registration pursuant to Section 2.1.1 or one registration pursuant to Section 2.1.2. All Selling Expenses relating to Registrable Securities registered pursuant to this ARTICLE 2 shall be borne and paid by the Holders pro rata on the basis of the number of Registrable Securities registered on their behalf.

2.7 **Delay of Registration.** No Holder shall have any right to obtain or seek an injunction restraining or otherwise delaying any registration pursuant to this Agreement as the result of any controversy that might arise with respect to the interpretation or implementation of this ARTICLE 2.

2.8 **Indemnification.** If any Registrable Securities are included in a registration statement under this ARTICLE 2:

2.8.1 Company Indemnification. To the extent permitted by law, the Company will indemnify and hold harmless each selling Holder, and the partners, members, officers, directors, and stockholders of each such Holder; legal counsel and accountants for each such Holder; any underwriter (as defined in the Securities Act) for each such Holder; and each Person, if any, who controls such Holder or underwriter within the meaning of the Securities Act or the Exchange Act, against any Damages, and the Company will pay to each such Holder, underwriter, controlling Person, or other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; provided, however, that the indemnity agreement contained in this Section 2.8.1 shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Company, which consent shall not be unreasonably withheld, conditioned, or delayed nor

shall the Company be liable for any Damages to the extent that they arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of any such Holder, underwriter, controlling Person, or other aforementioned Person expressly for use in connection with such registration.

2.8.2 Selling Holder Indemnification. To the extent permitted by law, each selling Holder, severally and not jointly, will indemnify and hold harmless the Company, and each of its directors, each of its officers who has signed the registration statement, each Person (if any), who controls the Company within the meaning of the Securities Act, legal counsel and accountants for the Company, any underwriter (as defined in the Securities Act), any other Holder selling securities in such registration statement, and any controlling Person of any such underwriter or other Holder, against any Damages, in each case only to the extent that such Damages arise out of or are based upon actions or omissions made in reliance upon and in conformity with written information furnished by or on behalf of such selling Holder expressly for use in connection with such registration; and each such selling Holder will pay to the Company and each other aforementioned Person any legal or other expenses reasonably incurred thereby in connection with investigating or defending any claim or proceeding from which Damages may result, as such expenses are incurred; *provided*, *however*, that (a) the indemnity agreement contained in this Section 2.8.2 shall not apply to amounts paid in settlement of any such claim or proceeding if such settlement is effected without the consent of the Holder, which consent shall not be unreasonably withheld, conditioned or delayed, and (b) that in no event shall the aggregate amounts payable by any Holder by way of indemnity or contribution under Sections 2.8.2 and 2.8.4 exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

2.8.3 Procedures. Promptly after receipt by an indemnified party under this Section 2.8 of notice of the commencement of any action (including any governmental action) for which a party may be entitled to indemnification hereunder, such indemnified party will, if a claim in respect thereof is to be made against any indemnifying party under this Section 2.8, give the indemnifying party notice of the commencement thereof. The indemnifying party shall have the right to participate in such action and, to the extent the indemnifying party so desires, participate jointly with any other indemnifying party to which notice has been given, and to assume the defense thereof with counsel mutually satisfactory to the parties; *provided*, *however*, that an indemnified party (together with all other indemnified parties that may be represented without conflict by one counsel) shall have the right to retain one separate counsel, with the fees and expenses to be paid by the indemnifying party, if representation of such indemnified party by the counsel retained by the indemnifying party would be inappropriate due to actual or potential differing interests between such indemnified party and any other party represented by such counsel in such action. The failure to give notice to the indemnifying party within a reasonable time of the commencement of any such action shall relieve such indemnifying party of any liability to the indemnified party under this Section 2.8, solely to the extent that such failure prejudices the indemnifying party's ability to defend such action.

2.8.4 Contribution. To provide for just and equitable contribution to joint liability under the Securities Act in any case in which either (y) any party otherwise entitled to indemnification hereunder makes a claim for indemnification pursuant to this Section 2.8 but it is judicially determined (by the entry of a final judgment or decree by a court of competent jurisdiction and the expiration of time to appeal or the denial of the last right of appeal) that such indemnification may not be enforced in such case, notwithstanding the fact that this Section 2.8 provides for indemnification in such case, or (z) contribution under the Securities Act may be required on the part of any party hereto for which indemnification is provided under this Section 2.8, then, and in each such case, such parties will contribute to the aggregate losses, claims, damages, liabilities, or expenses to which they may be subject (after contribution from others) in such proportion as is appropriate to reflect the relative fault of each of the indemnifying party and the indemnified party in connection with the statements, omissions, or other actions that resulted in such loss, claim, damage, liability, or expense, as well as to reflect any other relevant equitable considerations. The relative fault of the indemnifying party and of the indemnified party shall be determined by reference to, among other things, whether the untrue or allegedly untrue statement of a material fact, or the omission or alleged omission of a material fact, relates to information supplied by the indemnifying party or by the indemnified party and the parties' relative intent, knowledge, access to information, and opportunity to correct or prevent such statement or omission; *provided*, *however*, that:

(a) in any such case, (i) no Holder will be required to contribute any amount in excess of the public offering price of all such Registrable Securities offered and sold by such Holder pursuant to such registration statement, and (ii) no Person guilty of fraudulent misrepresentation (within the meaning of Section 11(f) of the Securities Act) will be entitled to contribution from any Person who was not guilty of such fraudulent misrepresentation; and

(b) in no event shall a Holder's liability pursuant to this Section 2.8.4, when combined with the amounts paid or payable by such Holder pursuant to Section 2.8.2, exceed the proceeds from the offering received by such Holder (net of any Selling Expenses paid by such Holder), except in the case of fraud or willful misconduct by such Holder.

2.8.5 Underwriting Agreement Controls. Notwithstanding the foregoing, to the extent that the provisions on indemnification and contribution contained in the underwriting agreement entered into in connection with the underwritten public offering are in conflict with the foregoing provisions, the provisions in the underwriting agreement shall control.

2.8.6 Survival. Unless otherwise superseded by an underwriting agreement entered into in connection with the underwritten public offering, the obligations of the Company and Holders under this Section 2.8 shall survive the completion of any offering of Registrable Securities in a registration under this ARTICLE 2, and otherwise shall survive the termination of this Agreement.

2.9 **Reports under the Exchange Act.** With a view to making available to the Holders the benefits of SEC Rule 144 and any other rule or regulation of the SEC that may at any time permit a Holder to sell securities of the Company to the public without registration or pursuant to a registration on Form S-3, the Company shall:

2.9.1 use reasonable best efforts to make and keep available adequate current public information, as those terms are understood and defined in SEC Rule 144, at all times after the effective date of the registration statement filed by the Company for the IPO;

2.9.2 use reasonable best efforts to file with the SEC in a timely manner all reports and other documents required of the Company under the Securities Act and the Exchange Act (at any time after the Company has become subject to such reporting requirements); and

2.9.3 furnish to any Holder, so long as the Holder owns any Registrable Securities, forthwith upon request (a) to the extent accurate, a written statement by the Company that it has complied with the reporting requirements of SEC Rule 144 (at any time after ninety (90) days after the effective date of the registration statement filed by the Company for the IPO), the Securities Act, and the Exchange Act (at any time after the Company has become subject to such reporting requirements), or that it qualifies as a registrant whose securities may be resold pursuant to Form S-3 (at any time after the Company so qualifies); and (b) such other information as may be reasonably requested in availing any Holder of any rule or regulation of the SEC that permits the selling of any such securities without registration (at any time after the Company has become subject to the reporting requirements under the Exchange Act) or pursuant to Form S-3 (at any time after the Company so qualifies to use such form).

2.10 **Limitations on Subsequent Registration Rights.** From and after the date of this Agreement, without the prior written consent of the holders of a majority of the Registrable Securities then outstanding, the Company shall not grant registration rights or similar rights to any Person that have, or would have, priority over, or be pari passu with, the registration rights to be granted to the holders of Registrable Securities pursuant to this Agreement. For clarity, the Company shall not enter into any agreement with any holder or prospective holder of any securities of the Company that would allow such holder or prospective holder to include such securities in any registration if such agreement (a) would allow such holder or prospective holder to include a portion of its securities in any "piggyback" registration if such inclusion could reduce the number of Registrable Securities that selling Holders could be entitled to include in such registration under Sections 2.2 and 2.3 hereof, (b) would allow such holder or prospective holder to initiate a demand for registration of any of its securities at a time earlier than the Demanding Holders can demand registration under Section 2.1 hereof or (c) would allow such holder or prospective holder to include a portion of its securities in any registration initiated pursuant to Section 2.1.

2.11 **"Market Stand-off" Agreement.** Each Holder hereby agrees that, during the Standoff Period, such Holder will not, without the prior written consent of the Company or the managing underwriter,

2.11.1 lend, offer, pledge, sell, contract to sell, sell any option or contract to purchase, purchase any option or contract to sell, grant any option, right, or warrant to purchase or otherwise transfer or dispose of, directly or indirectly, any Common Equity, or any securities convertible into or exercisable or exchangeable (directly or indirectly) for Common Equity, held immediately before the effective date of the registration statement for such offering; or

2.11.2 enter into any swap or other arrangement that transfers to another, in whole or in part, any of the economic consequences of ownership of such securities held immediately before the effective date of the registration statement for such offering, whether any such transaction described in Section 2.11.1 or this Section 2.11.2 is to be settled by delivery of Common Equity or other securities, in cash, or otherwise.

The foregoing provisions of this Section 2.11 shall apply only to the IPO and shall not apply to the sale of any equity securities to an underwriter pursuant to an underwriting agreement, and shall be applicable to the Holders only if all officers, directors, and equityholders individually owning more than one percent (1%) of the Company's outstanding Common Equity are similarly bound. For purposes of this Section 2.11, the term "Company" shall include any wholly-owned subsidiary of the Company into which the Company merges or consolidates. Any discretionary waiver or termination of the restrictions of any or all such agreements by the Company or the underwriters (other than discretionary waivers for requests based on financial hardship for the sale of equity securities having an aggregate sales price not exceeding $100,000 per Holder) shall apply pro rata to all Holders subject to such agreements, based on the number of equity securities subject to such agreements. In order to enforce the foregoing covenant, the Company shall have the right to place restrictive legends on the certificates representing the equity securities subject to this Section 2.11 and to impose stop transfer instructions with respect to such equity securities until the end of such period. The underwriters in connection with such registration are intended third-party beneficiaries of this Section 2.11 and shall have the right, power, and authority to enforce the provisions hereof as though they were a party hereto. Each Holder further agrees to execute such agreements as may be reasonably requested by the underwriters in connection with such registration that are consistent with this Section 2.11 or that are necessary to give further effect thereto. Notwithstanding anything herein to the contrary, the provisions of this Section 2.11 shall not apply to any equity securities purchased by a Holder in the IPO.

ARTICLE 3
TERMINATION

The right of any Holder to request registration or inclusion of Registrable Securities in any registration pursuant to Section 2.1 or Section 2.2 shall terminate upon the earliest to occur of: (a) when all of such Holder's Registrable Securities could be sold without any restriction on volume or manner of sale in any three-month period under SEC Rule 144 or any successor; and (b) upon a Change of Control. All of the rights of a Holder, other than any right of such Holder to enforce the obligations of the Company to such Holder arising under Section 2.6 or Section 2.8 under this Agreement, shall terminate automatically at such time as such Holder no longer owns (either directly or beneficially as the result of the ownership of shares of any holding company) at least two percent (2%) of the Registrable Securities.

ARTICLE 4
GENERAL PROVISIONS

4.1 **Successors and Assigns.** The rights under this Agreement may be assigned (but only with all related obligations) by a Holder to a transferee of Registrable Securities that (a) is an Affiliate, partner, member, limited partner, retired or former partner, retired or former member, or stockholder of a Holder or such Holder's Affiliate; (b) is a Holder's Immediate Family Member or trust for the benefit of an individual Holder or one or more of such Holder's Immediate Family Members; (c) after such transfer, holds at least two percent (2%) of the outstanding common stock of the Company; or (d) is a venture capital, private equity fund or other investment fund that is controlled by or under common control with one or more general partners or managing partners or managing members of, or shares the same management

company with, the Holder; *provided*, *however*, that (i) the Company is, within a reasonable time after such transfer, furnished with written notice of the name and address of such transferee and the Registrable Securities with respect to which such rights are being transferred; and (ii) such transferee agrees in a written instrument delivered to the Company to be bound by and subject to the terms and conditions of this Agreement, including the provisions of Section 2.11. For the purposes of determining the number of Registrable Securities held by a transferee, the holdings of a transferee (A) that is an Affiliate, limited partner, retired or former partner, member, retired or former member, or stockholder of a Holder or such Holder's Affiliate or is a venture capital, private equity fund or other investment fund that is controlled by or under common control with one or more general partners or managing partners or managing members of, or shares the same management company with, the Holder; (B) who is a Holder's Immediate Family Member; or (C) that is a trust for the benefit of an individual Holder or such Holder's Immediate Family Member shall be aggregated together and with those of the transferring Holder. The terms and conditions of this Agreement inure to the benefit of and are binding upon the respective successors and permitted assignees of the parties. Nothing in this Agreement, express or implied, is intended to confer upon any party other than the parties hereto or their respective successors and permitted assignees any rights, remedies, obligations or liabilities under or by reason of this Agreement, except as expressly provided herein.

4.2 **Governing Law.** This Agreement and the legal relations among the parties shall be governed by, and construed and enforced in accordance with, the laws of the State of Delaware, without regard to conflict of laws rules which would result in the application of the laws of any other jurisdiction.

4.3 **Counterparts; Facsimile.** This Agreement and any agreements or documents required to be delivered in connection with this Agreement may be executed and delivered by facsimile signature and in two or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument. Counterparts may be delivered via facsimile, electronic mail (including pdf or any electronic signature complying with the U.S. federal ESIGN Act of 2000 *e.g.*, www.docusign.com) or other transmission method and any counterpart so delivered shall be deemed to have been duly and validly delivered and be valid and effective for all purposes.

4.4 **Definitional and Interpretive Provisions**.

(a) The words "hereof," "herein" and "hereunder" and words of like import used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement.

(b) The titles and subtitles used in this Agreement are used for convenience only and are not to be considered in construing or interpreting this Agreement.

(c) Any singular term in this Agreement shall be deemed to include the plural, and any plural term the singular, and words denoting either gender shall include both genders as the context requires. Where a word or phrase is defined herein, each of its other grammatical forms shall have a corresponding meaning.

(d) Whenever the words “include,” “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation,” whether or not they are in fact followed by those words or words of like import.

(e) The use of the word “or” shall not be inclusive.

4.5 **Notices.** All notices, requests, and other communications given, made or delivered pursuant to this Agreement shall be in writing and shall be deemed effectively given upon the earlier of actual receipt or: (a) personal delivery to the party to be notified, (b) when sent, if sent by electronic mail or facsimile during normal business hours of the recipient, and if not sent during normal business hours, then on the recipient’s next Business Day, (c) five days after having been sent by registered or certified mail, return receipt requested, postage prepaid, or (d) one Business Day after deposit with a nationally recognized overnight courier, freight prepaid, specifying next Business Day delivery, with written verification of receipt. All communications shall be sent to the respective parties at their addresses as follows:

4.5.1 if to the Company:

[•]
[•]
[•]
Attention: **[•]**
E-mail: **[•]**

with a copy to:

[•]

or to such other address as the Company may from time to time specify by notice to the Holders; and

4.5.2 if to a Holder, to such Holder at the address set forth on Exhibit A, or to such other address as such Holder may from time to time specify by notice to the Company.

4.6 **Amendments and Waivers.** This Agreement may only be amended or terminated and the observance of any term hereof may be waived (either generally or in a particular instance, and either retroactively or prospectively) only by a written instrument executed by the Company and the Holders of majority of the Registrable Securities then outstanding, including KKR and Viking; *provided* that (a) any provision hereof may be waived by any waiving party on such party’s own behalf, without the consent of any other party; and (b) the Company may, without the consent or approval of any other party hereto, cause additional persons to become party to this Agreement as Holders pursuant to an assignment made in accordance with Section 4.1 hereto and Schedule A hereto shall be amended accordingly by the Company to reflect such assignment. Any amendment, termination, or waiver effected in accordance with this Section 4.6 shall be binding on each party hereto and all of such party’s successors and permitted assigns, regardless of whether or not any such party, successor or assignee entered into or approved such amendment, termination, or waiver. No waivers of or exceptions to any term, condition, or provision of this Agreement, in any one or more instances, shall be deemed to be or construed as a further or continuing waiver of any such term, condition, or provision.

4.7 **Severability.** In case any one or more of the provisions contained in this Agreement is for any reason held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality, or unenforceability shall not affect any other provision of this Agreement, and such invalid, illegal, or unenforceable provision shall be reformed and construed so that it will be valid, legal, and enforceable to the maximum extent permitted by law.

4.8 **Aggregation of Equity Securities.** All Registrable Securities held or acquired by Affiliates shall be aggregated together for the purpose of determining the availability of any rights under this Agreement and such Affiliated persons may apportion such rights as among themselves in any manner they deem appropriate.

4.9 **Entire Agreement.** This Agreement (including Schedule A hereto) and Section 7.12.2 of the LLC Agreement constitute the full and entire understanding and agreement among the parties with respect to the subject matter hereof, and any other written or oral agreement relating to the subject matter hereof existing between the parties is expressly canceled and replaced with this Agreement (including Schedule A hereto) and Section 7.12.2 of the LLC Agreement.

4.10 **Third Parties**. Except as set forth in Section 2.11 of this Agreement, nothing in this Agreement, express or implied, is intended to confer upon any person, other than the parties hereto and their successors and assigns, any rights or remedies under or by reason of this Agreement.

4.11 **Delays or Omissions.** No delay or omission to exercise any right, power, or remedy accruing to any party under this Agreement, upon any breach or default of any other party under this Agreement, shall impair any such right, power, or remedy of such nonbreaching or nondefaulting party, nor shall it be construed to be a waiver of or acquiescence to any such breach or default, or to any similar breach or default thereafter occurring, nor shall any waiver of any single breach or default be deemed a waiver of any other breach or default theretofore or thereafter occurring. All remedies, whether under this Agreement or by law or otherwise afforded to any party, shall be cumulative and not alternative.

4.12 **Submission to Jurisdiction; Forum.** The parties (a) hereby irrevocably and unconditionally submit to the jurisdiction of the Chancery Court of the State of Delaware and to the jurisdiction of the United States District Court for the District of Delaware for the purpose of any suit, action or other proceeding arising out of or based upon this Agreement and (b) agree not to commence any suit, action or other proceeding arising out of or based upon this Agreement except in the Chancery Court of the State of Delaware or the United States District Court for the District of Delaware.

4.13 **WAIVER OF JURY TRIAL.** EACH PARTY HEREBY WAIVES ITS RIGHTS TO A JURY TRIAL OF ANY CLAIM OR CAUSE OF ACTION BASED UPON OR ARISING OUT OF THIS AGREEMENT, THE SECURITIES OR THE SUBJECT MATTER HEREOF OR THEREOF. THE SCOPE OF THIS WAIVER IS INTENDED TO BE ALL-ENCOMPASSING OF ANY AND ALL DISPUTES THAT MAY BE FILED IN ANY COURT

AND THAT RELATE TO THE SUBJECT MATTER OF THIS AGREEMENT, INCLUDING, WITHOUT LIMITATION, CONTRACT CLAIMS, TORT CLAIMS (INCLUDING NEGLIGENCE), BREACH OF DUTY CLAIMS, AND ALL OTHER COMMON LAW AND STATUTORY CLAIMS. THIS SECTION HAS BEEN FULLY DISCUSSED BY EACH OF THE PARTIES HERETO AND THESE PROVISIONS WILL NOT BE SUBJECT TO ANY EXCEPTIONS. EACH PARTY HERETO HEREBY FURTHER WARRANTS AND REPRESENTS THAT SUCH PARTY HAS REVIEWED THIS WAIVER WITH ITS LEGAL COUNSEL, AND THAT SUCH PARTY KNOWINGLY AND VOLUNTARILY WAIVES ITS JURY TRIAL RIGHTS FOLLOWING CONSULTATION WITH LEGAL COUNSEL.

4.14 **Attorneys' Fees.** If any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, the non-prevailing party shall pay all costs and expenses incurred by the prevailing party, including, without limitation, all reasonable attorneys' fees.

4.15 **Stock Splits, Dividends, etc.** All references to a number of equity securities of a series or class of equity securities shall be automatically adjusted to reflect any stock splits, stock combinations, stock dividends, recapitalizations, reorganizations or the like occurring after the date hereof with respect to such series or class, as applicable.

[Signature Pages Follow]

IN WITNESS WHEREOF, the parties hereto have executed this Registration Rights Agreement as of the date first written above.

COMPANY:

_____

By: _____

Name:

Title:

[Signature Page to BridgeBio Pharma LLC – Registration Rights Agreement]

IN WITNESS WHEREOF, the parties hereto have executed this Registration Rights Agreement as of the date first written above.

HOLDERS:

KKR GENETIC DISORDER L.P.

By: KKR Genetic Disorder GP LLC, its General Partner

By: _____

Name:

Title:

VIKING GLOBAL OPPORTUNITIES
ILLIQUID INVESTMENTS SUB-MASTER LP

By: Viking Global Opportunities Portfolio GP LLC, its general partner

By: _____
Name:
Title:

SCHEDULE A

List of Holders

LOAN AND SECURITY AGREEMENT

THIS LOAN AND SECURITY AGREEMENT is made and dated as of June 19, 2018 and is entered into by and among BRIDGEBIO PHARMA LLC, a Delaware limited liability company ("Parent"), BRIDGEBIO SERVICES INC., a Delaware corporation ("Services Company"), and each of their Qualified Subsidiaries from time to time party hereto (Parent, Services Company and each such Qualified Subsidiary, individually, each, a "Borrower", and collectively, "Borrowers"), the several banks and other financial institutions or entities from time to time parties to this Agreement (collectively, "Lender") and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

RECITALS

A. Borrowers have requested Lender to make available to Borrowers one or more term loans in an aggregate principal amount of up to $35,000,000; and

B. Lender is willing to make such term loan on the terms and conditions set forth in this Agreement.

AGREEMENT

NOW, THEREFORE, Borrowers, Agent and Lender agree as follows:

SECTION 1. DEFINITIONS AND RULES OF CONSTRUCTION

1.1 Unless otherwise defined herein, the following capitalized terms shall have the following meanings:

"Account Control Agreement(s)" means any agreement entered into by and among Agent, a Borrower and a third party bank or other institution (including a Securities Intermediary) in which such Borrower maintains a Deposit Account or an account holding Investment Property and which perfects Agent's first priority security interest in the subject account or accounts.

"ACH Authorization" means the ACH Debit Authorization Agreement in substantially the form of Exhibit H.

"Advance" means the Term Loan Advance.

"Advance Date" means the funding date of any Advance.

"Advance Request" means a request for Advance submitted by Borrower Representative to Agent in substantially the form of Exhibit A.

"Affiliate" means any Person that directly or indirectly controls, is controlled by, or is under common control with the Person in question. As used in the definition of "Affiliate," the term "control" means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of a Person, whether through ownership of voting securities, by contract or otherwise. If not otherwise specified or required by the context, "Affiliate" shall refer to an Affiliate of a Borrower.

"Agent" has the meaning given to such term in the preamble to this Agreement.

"Agreement" means this Loan and Security Agreement, as amended, restated, supplemented or otherwise modified from time to time.

"AIG" means The United States Life Insurance Company in the City of New York, and its Controlled Investment Affiliates.

"Amortization Date" means July 1, 2020.

"Anti-Corruption Laws" means all laws, rules, and regulations of any jurisdiction applicable to any Borrower or any of its Affiliates from time to time concerning or relating to bribery or corruption, including without limitation the United States Foreign Corrupt Practices Act of 1977, as amended, the UK Bribery Act 2010 and other similar legislation in any other jurisdictions.

"Anti-Terrorism Laws" means any laws, rules, regulations or orders relating to terrorism or money laundering, including without limitation Executive Order No. 13224 (effective September 24, 2001), the USA PATRIOT Act, the laws comprising or implementing the Bank Secrecy Act, and the laws administered by OFAC.

"Assignee" has the meaning given to it in Section 11.13.

"Blocked Person" means any Person: (a) listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (b) a Person owned or controlled by, or acting for or on behalf of, any Person that is listed in the annex to, or is otherwise subject to the provisions of, Executive Order No. 13224, (c) a Person with which any Lender is prohibited from dealing or otherwise engaging in any transaction by any Anti-Terrorism Law, (d) a Person that commits, threatens or conspires to commit or supports "terrorism" as defined in Executive Order No. 13224, or (e) a Person that is named a "specially designated national" or "blocked person" on the most current list published by OFAC or other similar list.

"Board" means, with respect to any Person that is a corporation, its board of directors, with respect to any Person that is a limited liability company, its board of managers, board of members or similar governing body, and with respect to any other Person that is a legal entity, such Person's governing body in accordance with its Organizational Documents.

"Borrower" has the meaning given to such term in the preamble to this Agreement.

"Borrower Representative" means BridgeBio Pharma LLC.

"Business Day" means any day other than Saturday, Sunday and any other day on which banking institutions in the State of California are closed for business.

"Cash" means all cash, cash equivalents and liquid funds.

"Change in Control" means a transaction or series of related transactions (i) pursuant to which, or as a result of which, a single Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) (in each case other than any CoC Entity) acquires or holds equity interests of Parent representing (A) a majority of the outstanding voting securities (in each case excluding any unvested voting securities that would not become vested voting securities as a result of such transaction, whether pursuant to the terms of such unvested voting securities, by Board action or otherwise), or (B) the right to receive a majority of the proceeds in a final liquidation, dissolution or termination, voluntary or involuntary, of Parent, or (ii) resulting in Services Company or any other Subsidiary that is a Borrower ceasing to be a wholly-owned Subsidiary of a Borrower. Notwithstanding the foregoing, a "Change in Control" shall not include (a) an initial public offering of Parent's Equity Interests, provided that following such offering, such Equity Interests shall be listed on an established national or international exchange, (b) any Permitted Transfer, or (c) a bona fide private equity or venture capital round of financing in the ordinary course of business.

"Charter" means, with respect to any Person, such Person's formation documents, as in effect from time to time.

"Claims" has the meaning given to it in Section 11.10.

"Closing Date" means the date of this Agreement.

"CoC Entity" means KKR Viking and AIG.

"Code" means the Internal Revenue Code of 1986, as amended from time to time, and the rules and regulations promulgated thereunder from time to time.

"Collateral" means the property described in Section 3.

"Compliance Certificate" means a certificate in the form attached hereto as Exhibit F "Confidential Information" has the meaning given to it in Section 11.12.

"Contingent Obligation" means, as applied to any Person, any direct or indirect liability, contingent or otherwise, of that Person with respect to (i) any Indebtedness, lease, dividend, letter of credit or other obligation of another, including any such obligation directly or indirectly guaranteed, endorsed, co-made or discounted or sold with recourse by that Person, or in respect of which that Person is otherwise directly or indirectly liable; (ii) any obligations with respect to undrawn letters of credit, corporate credit cards or merchant services issued for the account of that Person; and (iii) all obligations arising under any interest rate, currency or commodity swap agreement, interest rate cap agreement, interest rate collar agreement, or other agreement or arrangement designated to protect a Person against fluctuation in interest rates, currency exchange rates or commodity prices; provided, however, that the term "Contingent Obligation" shall not include endorsements for collection or deposit in the ordinary course of business. The amount of any Contingent Obligation shall be deemed, without duplication of the primary obligation, to be an amount equal to the stated or determined amount of the primary obligation in respect of which such Contingent Obligation is made or, if not stated or determinable, the maximum reasonably anticipated liability in respect thereof as determined by such Person in good faith; provided, however, that such amount shall not in any event exceed the maximum amount of the obligations under the guarantee or other support arrangement.

"Controlled Account" means a Deposit Account or account in which Investment Property is maintained that is subject to an Account Control Agreement in favor of Agent in form and substance reasonably satisfactory to Agent.

"Controlled Investment Affiliate" means, as to any Person, any other Person, which directly or indirectly is in control of, is controlled by, or is under common control with such Person.

"Copyright License" means any written agreement granting any right to use any Copyright or Copyright registration, now owned or hereafter acquired by a Borrower or in which a Borrower now holds or hereafter acquires any interest.

"Copyrights" means all copyrights, whether registered or unregistered, held pursuant to the laws of the United States of America, any State thereof, or of any other country.

"Deposit Accounts" means any "deposit accounts," as such term is defined in the UCC, and includes any checking account, savings account, or certificate of deposit.

"Due Diligence Fee" means $25,000, which fee has been paid to Agent prior to the Closing Date, and shall be deemed fully earned on such date regardless of the early termination of this Agreement.

"Equity Cure Investment" means any Investment by a Borrower in a Platform Company or Subsidiary thereof, whether directly or indirectly through an Affiliate or another Platform Company, if (i) immediately prior to the consummation of such Investment, an event of default has occurred and is continuing pursuant to the terms of any secured loan facility to which such Platform Company or Subsidiary is a party, which could result in the acceleration of Indebtedness of such Platform Company in excess of $500,000 or more, and (ii) immediately after the making of such Investment, such event of default will be cured or waived.

"Equity Documents" means any agreement entered into in connection with an equity financing or otherwise among holders of the Equity Interests of a Person or otherwise binding upon the holders of the Equity Interests of such Person.

"Equity Interests" means, with respect to any Person, the capital stock, partnership or limited liability company interest, or other equity securities or equity ownership interests of such Person.

"ERISA" means the Employee Retirement Income Security Act of 1974, as amended, and the regulations promulgated thereunder.

"Event of Default" has the meaning given to it in Section 9.

"Exchange Act" means the Securities Exchange Act of 1934, as amended from time to time, and the rules and regulations promulgated pursuant thereto.

"Excluded Accounts" means Deposit Accounts (i) established in the ordinary course of business and used exclusively as a payroll, payroll taxes and other employee wage and benefit payments to or for the benefit of employees of Borrower, provided that the aggregate balance maintained in such Deposit Accounts shall not exceed the amount to be paid for the following four payroll periods at any time, and (ii) used exclusively as escrow accounts, or trust accounts, (iii) used exclusively to maintain Cash subject to a Lien permitted pursuant to the defined term "Permitted Liens", provided that, in each case, any Excluded Account shall be identified to Agent in writing;

"Excluded Taxes" means any of the following Taxes imposed on or with respect to a Recipient or required to be withheld or deducted from a payment to a Recipient: (a) Taxes imposed on or measured by net income (however denominated), franchise Taxes, and branch profits Taxes, in each case, (i) imposed as a result of such Recipient being organized under the laws of, or having its principal office or, in the case of any Lender, its applicable lending office located in, the jurisdiction imposing such Tax (or any political subdivision thereof), or (ii) that are Other Connection Taxes, (b) in the case of a Lender, U.S. federal withholding Taxes that are imposed on amounts payable to or for the account of such Lender with respect to an applicable interest in a Loan or Term Commitment pursuant to a law in effect on the date that (i) such Lender acquires such interest in the Loan or Term Commitment or (ii) such Lender changes its lending office, except in each case to the extent, pursuant to Section 2.9, amounts with respect to such Taxes were payable either to such Lender's assignor immediately before such Lender became a party hereto or to such Lender immediately before it changed its lending office, (c) any withholding Taxes imposed under FATCA, and (d) Taxes attributable to such Recipient's failure to comply with Section 2.9(d).

"Facility Charge" means $350,000.

"FATCA" means Sections 1471 through 1474 of the Code, as of the date of this Agreement (or any amended or successor version that is substantively comparable and not materially more onerous to comply with), any current or future regulations or official interpretations thereof, any agreements entered into pursuant to Section 1471(b)(1) of the Code and any fiscal or regulatory legislation, rules or practices adopted pursuant to any intergovernmental agreement, treaty or convention among governmental authorities and implementing such Sections of the Code "Financial Statements" has the meaning given to it in Section 7.1. "Foreign Lender" shall mean a Lender that is not a U.S. Person.

"GAAP" means generally accepted accounting principles in the United States of America, as in effect from time to time.

"Indebtedness" means indebtedness of any kind, including (a) all indebtedness for borrowed money or the deferred purchase price of property or services (excluding trade credit entered into in the ordinary course of business), including reimbursement and other obligations with respect to surety bonds and letters of credit, (b) all obligations evidenced by notes, bonds, debentures or similar instruments, (c) all capital lease obligations, as determined under GAAP, and (d) all Contingent Obligations.

"Indemnified Taxes" means (a) Taxes, other than Excluded Taxes, imposed on or with respect to any payment made by or on account of any obligation of any Borrower under any Loan Document and (b) to the extent not otherwise described in clause (a), Other Taxes.

"Intellectual Property" means all of each Borrower's Copyrights; Trademarks; Patents; Licenses; trade secrets and inventions; mask works; each Borrower's applications therefor and reissues, extensions, or renewals thereof; and each Borrower's goodwill associated with any of the foregoing, together with each Borrower's rights to sue for past, present and future infringement of Intellectual Property and the goodwill associated therewith.

"Investment" means any beneficial ownership (including stock, partnership or limited liability company interests) of or in any Person, or any loan, advance or capital contribution to any Person or the acquisition of any material asset or property of another Person.

"Investment Company Act" means the Investment Company Act of 1940, as amended, and the rules and regulations promulgated thereunder.

"Joinder Agreements" means a completed and executed Joinder Agreement in substantially the form attached hereto as Exhibit G.

"KKR" means KKR Genetic Disorder L.P., a Delaware limited partnership (together with its successors and assigns) and its Controlled Investment Affiliates.

"Lender" has the meaning given to such term in the preamble to this Agreement.

"License" means any Copyright License, Patent License, Trademark License or other license of rights or interests.

"Lien" means any mortgage, deed of trust, pledge, hypothecation, assignment for security, security interest, encumbrance, levy, lien or charge of any kind, whether voluntarily incurred or arising by operation of law or otherwise, against any property, any conditional sale or other title retention agreement, and any lease in the nature of a security interest.

"Loan" means the Advances made under this Agreement.

"Loan Documents" means this Agreement, the Term Note (if any), the ACH Authorization, the Account Control Agreements, any Joinder Agreements, all UCC Financing Statements, and any other documents executed in connection with the Secured Obligations and the security interest granted in connection therewith, or delivered pursuant to this Agreement or any of the foregoing Loan Documents, in each case, as the same may from time to time be amended, modified, supplemented or restated, but in each case excluding ministerial notices or ordinary course communications.

"Material Adverse Effect" means a material adverse effect upon: (i) the business, operations, properties, assets or financial condition of Borrowers and each of its Subsidiaries taken as a whole; or (ii) the ability of Borrowers to perform or pay the Secured Obligations in accordance with the terms of the Loan Documents, or the ability of Agent or Lender to enforce any of its rights or remedies with respect to the Secured Obligations; or (iii) the Collateral or Agent's Liens on the Collateral or the priority of such Liens.

"Maturity Date" means January 1, 2022.

"Maximum Rate" shall have the meaning assigned to such term in Section 2.2.

"Net Cash Proceeds" means the amount of all Cash proceeds (including deferred compensation) received (directly or indirectly) by or on behalf of a Borrower (if on behalf, then for the account of such Borrower), or distributable to a Borrower (to the extent such proceeds which are distributable are not distributed at the direction of such Borrower or as a result of such Borrower voting Equity Interests owned in favor of any corporate action that would result in such proceeds not being actually distributed), from time to time, as a result of a Prepayment Event, after deducting therefrom, without duplication, (x) reasonable fees, commissions, expenses and other direct costs related thereto and required to be paid or payable by such Borrower in connection with such Prepayment Event, and (y) Taxes paid, payable, or determined by such Borrower to be payable or attributable for payment in connection

with such transaction to any taxing authorities by such Borrower, to the extent then paid or payable and reasonably attributable to such transaction, and (z) any cash reserves required to be maintained by such Borrower in connection with such transaction in accordance with GAAP or applicable law, provided that when any reserve or any portion thereof is no longer required to be maintained such amount shall be considered Net Cash Proceeds then received, and provided further, that Borrowers shall, at Agent's reasonable request, provide such calculations or evidence of costs deducted in arriving at Net Cash Proceeds as Agent may reasonably require to confirm the calculation of Net Cash Proceeds in accordance with the foregoing.

"Non-Disclosure Agreement" means that certain Non-Disclosure Agreement/Confidentiality Agreement by and between Borrower Representative and Agent dated as of March 13, 2018.

"Non-Operating Subsidiary" means a Subsidiary of a Borrower other an Operating Company, and including, for avoidance of doubt, any alternative investment vehicle or other special purpose entity which holds, directly or indirectly, Investments of or on behalf of Parent, or any other Subsidiary primarily in the business of investing, reinvesting, holding or trading in securities.

"OFAC" means the U.S. Department of Treasury Office of Foreign Assets Control.

"OFAC Lists" means, collectively, the Specially Designated Nationals and Blocked Persons List maintained by OFAC pursuant to Executive Order No. 13224, 66 Fed. Reg. 49079 (Sept. 25, 2001) and/or any other list of terrorists or other restricted Persons maintained pursuant to any of the rules and regulations of OFAC or pursuant to any other applicable Executive Orders.

"Operating Company" means a Person which is predominately in the business of research, development, manufacturing, sale or marketing of products and activities related thereto, or a Person holding assets, including without limitation Intellectual Property that are useful for a Person that is predominately in the line of business described above and in anticipation of such Person commencing operations in such line of business and which Parent intends to cause to commence operations.

"Organizational Documents" means with respect to any Person, such Person's formation documents, and (a) if such Person is a corporation, its bylaws, (b) if such Person is a limited liability company, its limited liability company agreement (or similar agreement), and (c) if such Person is a partnership, its partnership agreement (or similar agreement), each of the foregoing with all current amendments or modifications thereto.

"Other Connection Taxes" means, with respect to any Recipient, Taxes imposed as a result of a present or former connection between such Recipient and the jurisdiction imposing such Tax (other than connections arising from such Recipient having executed, delivered, become a party to, performed its obligations under, received payments under, received or perfected a security interest under, engaged in any other transaction pursuant to or enforced any Loan Document, or sold or assigned an interest in any Loan or Loan Document).

"Other Taxes" means all present or future stamp, court or documentary, intangible, recording, filing or similar Taxes that arise from any payment made under, from the execution, delivery, performance, enforcement or registration of, from the receipt or perfection of a security interest under, or otherwise with respect to, any Loan Document, except any such Taxes that are Other Connection Taxes imposed with respect to an assignment.

"Parent" has the meaning given to such term in the preamble hereto.

"Patent License" means any written agreement granting any right with respect to any invention on which a Patent is in existence or a Patent application is pending, in which agreement a Borrower now holds or hereafter acquires any interest.

"Patents" means all letters patent of, or rights corresponding thereto, in the United States of America or in any other country, all registrations and recordings thereof, and all applications for letters patent of, or rights corresponding thereto, in the United States of America or any other country.

"Permitted Indebtedness" means:

(a) Indebtedness of a Borrower in favor of Lender or Agent arising under this Agreement or any other Loan Document;

(b) Indebtedness existing on the Closing Date which is disclosed in Schedule 1A;

(c) Indebtedness to trade creditors incurred in the ordinary course of business and Indebtedness incurred in the ordinary course of business with corporate credit cards;

(d) Subordinated Indebtedness;

(e) reimbursement obligations in connection with letters of credit that are secured by Cash and issued on behalf of a Borrower or a Subsidiary for real estate purposes in the ordinary course of business in an amount up to One Million Dollars ($1,000,000), and otherwise in an amount not to exceed $500,000 at any time outstanding;

(f) Indebtedness incurred to finance the acquisition of (i) equipment to be used for the development, testing and manufacturing of products, or (ii) other equipment, provided that the aggregate principal amount of Indebtedness outstanding at any time to finance equipment other than as described in subclause (i) shall not exceed $250,000;

(g) Intercompany Indebtedness among Borrowers;

(h) Indebtedness incurred to finance insurance premiums in the ordinary course of business;

(i) Indebtedness incurred as a result of endorsing negotiable instruments received in the ordinary course of business;

(j) other unsecured Indebtedness in an amount not to exceed $250,000 at any time outstanding; and

(k) extensions, refinancings and renewals of any Permitted Indebtedness described in clause (b) above, provided that the principal amount is not increased or the terms modified to impose materially more burdensome terms upon the applicable Borrower, as the case may be, and subject to any limitations on aggregate amount of Indebtedness of such type, to the extent described in one of the foregoing clauses of this defined term.

"Permitted Investment" means:

(a) Investments existing on the Closing Date which are disclosed in Schedule 1B;

(b) (i) marketable direct obligations issued or unconditionally guaranteed by the United States of America or any agency or any State thereof maturing within one year from the date of acquisition thereof currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (ii) commercial paper maturing no more than one year from the date of creation thereof and currently having a rating of at least A-2 or P-2 from either Standard & Poor's Corporation or Moody's Investors Services, (iii) certificates of deposit issued by any bank with assets of at least $500,000,000 maturing no more than one year from the date of investment therein, (iv) money market accounts, and (v) Investments permitted by Borrower's investment policy, provided that Agent has approved such investment policy in writing;

(c) Repurchases by Parent of its Equity Interests issued to managers, advisory members, officers, employees, consultants, directors or other service providers of Parent, or officers, employees, consultants or other consultants of any Platform Company who are acting in such capacity on behalf of

Parent of Equity Interests of Parent to the extent such Equity Interests are subject to a repurchase option upon the termination of service or otherwise in accordance with the applicable equity incentive plan, provided that the aggregate amount of such repurchases per fiscal year shall not exceed Five Hundred Thousand Dollars ($500,000) per fiscal year;

(d) Investments accepted in connection with Permitted Transfers;

(e) Investments received in connection with the bankruptcy or reorganization of a customer or supplier in the ordinary course of business;

(f) Investments consisting of notes receivable of, or prepaid royalties and other credit extensions in the ordinary course of business in an aggregate amount outstanding not to exceed One Million Dollars ($1,000,000) at any time;

(g) Investments consisting of loans not involving the net transfer on a substantially contemporaneous basis of cash proceeds relating to the purchase of Units of Parent pursuant to management incentive plans or other similar arrangements approved by Parent's Board;

(h) Investments consisting of travel advances in the ordinary course of business in an amount not to exceed $200,000;

(i) Investments in Qualified Subsidiaries, provided that each such Qualified Subsidiary is directly or indirectly wholly-owned by Parent, and that such Qualified Subsidiary has entered into a Joinder Agreement and has executed and delivered such other documents as shall be reasonably requested by Agent in connection therewith;

(j) Investments in Deposit Accounts, subject to compliance with Section 7.12 hereof;

(k) Investments consisting of (i) the ownership of Equity Interests of Platform Companies (whether as a result of a formation of a new Platform Company, the purchase of additional Equity Interests of a Platform Company, the formation of or contribution to a joint venture, or any other capital contribution a Platform Company), (ii) loans to a Platform Company, (iii) the purchase of capital assets to be used for the development, testing and manufacturing products (whether such capital assets are to be held by a Borrower or to be contributed to a Platform Company), in each case, consistent in all material respects with Parent's practices as of the Closing Date, provided that no Borrower shall make Investments in any Platform Company that is in default with respect to Indebtedness in excess of $500,000, except for (x) Equity Cure Investments up to $3,000,000 for any given Platform Company and up to $15,000,000 in the aggregate for all Platform Companies, in each case, during the term of this Agreement, (y) to fund any mandatory legal and regulatory expenses of a Platform Company when due, or (z) as otherwise approved by Agent in writing; and

(l) additional Investments that do not exceed $500,000 in the aggregate.

"Permitted Liens" means any and all of the following:

(a) Liens in favor of Agent or Lender;

(b) Liens existing on the Closing Date which are disclosed in Schedule 1C;

(c) Liens arising by operation of law in favor of materialmen, artisans, mechanics, carriers warehouseman, landlords and other Persons securing ordinary course obligations which are not yet delinquent and not in connection with borrowed money;

(d) Liens for Taxes, fees, assessments or other governmental charges or levies, either (i) not delinquent or (ii) being contested in good faith by appropriate proceedings, provided that Borrowers maintain adequate reserves therefor in accordance with GAAP;

(e) Liens arising from judgments, decrees or attachments in circumstances which do not constitute an Event of Default hereunder;

(f) the following deposits, to the extent made in the ordinary course of business: deposits under worker's compensation, unemployment insurance, social security and other similar laws, or to secure the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure indemnity, performance or other similar bonds for the performance of bids, tenders or contracts (other than for the repayment of borrowed money) or to secure statutory obligations (other than Liens arising under ERISA or environmental Liens) or surety or appeal bonds, or to secure indemnity, performance or other similar bonds;

(g) leasehold interests in leases or subleases and licenses granted in the ordinary course of business and not interfering in any material respect with the business of the licensor

(h) Liens on equipment, software embedded in such equipment, and proceeds thereof, which (i) secure Permitted Indebtedness described in clause (e) of the defined term "Permitted Indebtedness" above, or (ii) exist at the time such equipment is acquired by a Borrower;

(i) Liens in favor of customs and revenue authorities arising as a matter of law to secure payment of custom duties that are promptly paid on or before the date they become due;

(j) Liens in connection with Indebtedness described in clause (h) of the defined term "Permitted Indebtedness", provided that such Lien is limited to insurance proceeds arising from the subject insurance policy and the unearned portion of premium payments, and provided that financed premium payments are paid when due;

(k) statutory and common law rights of set-off and other similar rights as to deposits of cash and securities in favor of banks, other depository institutions and brokerage firms or securities intermediaries solely to secure payment of amounts due in the ordinary course of business in connection with the maintenance of Deposit Accounts or securities accounts;

(l) easements, servitudes, zoning restrictions, rights-of-way and similar encumbrances on real property imposed by law or arising in the ordinary course of business so long as they do not materially impair the value or marketability of the related property;

(m) Licenses described in clause (b) of the defined term "Permitted Transfer";

(n) (i) Liens on Cash securing obligations permitted in accordance with clause (e) of the defined term "Permitted Indebtedness" in an aggregate amount not to exceed the reimbursement obligation secured, and (ii) security deposits in connection with real property leases in an aggregate amount not to exceed $1,000,000 at any time;

(o) Liens incurred in connection with the extension, renewal or refinancing of the Indebtedness secured by Liens of the type described in clause (a) above; provided, that any extension, renewal or replacement Lien shall be limited to the property encumbered by the existing Lien and the principal amount of the Indebtedness being extended, renewed or refinanced (as may have been reduced by any payment thereon) does not increase, and subject to any limitation with respect to the amount secured by such Lien of such type, to the extent described in one of the foregoing clauses of this defined term; and

(p) to the extent constituting Liens, restrictions arising under applicable securities laws as a result of any Borrower's any/or any Agent's or Lender's status as an "affiliate" and/or "insider" of the issuer of any Equity Interests constituting Collateral and/or the status of any Equity Interests constituting Collateral as "restricted securities" under Rule 144 promulgated under the United States Securities Act of 1933, as amended.

"Permitted Transfers" means:

(a) sales of Inventory in the ordinary course of business;

(b) non-exclusive Licenses and similar arrangements for the use of Intellectual Property of in the ordinary course of business and Licenses to Platform Companies in the ordinary course of business;

(c) dispositions of worn-out, obsolete or surplus Equipment at fair market value in the ordinary course of business;

(d) use of cash in the ordinary course of business in a manner not prohibited by the terms of this Agreement;

(e) dispositions by Borrower of Investments in Platform Companies in accordance with Parent's Organizational Documents, subject to Section 2.4(b);

(f) transfers among Borrowers; and

(g) other transfers of assets having a fair market value of not more than $500,000 in the aggregate in any fiscal year.

"Person" means any individual, sole proprietorship, partnership, joint venture, trust, unincorporated organization, association, corporation, limited liability company, institution, other entity or government.

"Platform Company" means any Operating Company in the life science sector and focused on the development and commercialization of products, and in which a Borrower has made an Investment (whether by capital contribution, the acquisition of the Equity Interests thereof or in connection with a joint venture, corporate collaboration or similar corporate structure) in accordance with the terms of this Agreement, its Organizational Documents and consistent in all material respect with past practices, including each Operating Company in which Borrower maintains an Investment as of the Closing Date.

"Pledged Collateral" means

(a) all Equity Interests now owned or hereafter acquired by a Borrower;

(b) with respect to any limited liability company membership units or general or limited partnership interests now owned or hereafter acquired by a Borrower: (i) all payments or distributions whether in cash, property or otherwise, at any time owing or payable to such Borrower on account of its interest as a member or partner, as the case may be, in any of the issuers of such Equity Interests or in the nature of a management or other fee paid or payable by any of such issuers to such Borrower; (ii) all of such Borrower's rights and interests under each of the Organizational Documents, including all voting and management rights and all rights to grant or withhold consents or approvals; (iii) all rights of access and inspection to and use of all books and records, including computer software and computer software programs, of each of such issuers; (iv) all other rights, interests, property or claims to which such Borrower may be entitled in its capacity as a partner or a member of any such issuer; and (v) all proceeds, income from, increases in and products of any of the foregoing, in each case subject to the terms of this Agreement;

(c) all additional Equity Interests from time to time acquired or formed by a Borrower in any manner (which additional Equity Interests shall be deemed to be part of the Pledged Collateral whether or not Schedule 5.15 has been updated in accordance this Agreement), and any certificates, if applicable, representing such additional Equity Interests;

(d) all rights and interests of a Borrower in respect of a joint venture; and

(e) all dividends, distributions, cash, instruments and other property or proceeds from time to time received, receivable or otherwise distributed in respect of or in exchange for any or all of such Equity Interests, in each case subject to the terms of this Agreement.

"Prepayment Charge" has the meaning assigned to such term in Section 2.4(a).

"Prepayment Event" means (i) any sale of Pledged Collateral (ii) the sale of a material portion of Collateral (other than Pledged Collateral), whether in a single transaction or series of related transactions, (iii) the sale by a Platform Company or any of its Subsidiaries of assets (including Intellectual Property) of such Platform Company or Subsidiary, to the extent the subject assets constitute all or a material part of the applicable Platform Company's assets, on a consolidated basis, (iv) the exclusive License by a Platform Company or its Subsidiary of its Intellectual Property (except to the extent exclusive only with respect to discrete geographic territories other than the United States) to the extent the subject Intellectual Property constitutes all or a material part of the applicable Platform Company's assets, determined on a consolidated basis, or (v) the repurchase or redemption of Pledged Collateral by a Platform Company.

"Products" means all products, software, service offerings, technical data or technology currently being designed, manufactured or sold by a Platform Company or any of its Subsidiaries or which a Platform Company or such Subsidiary intends to sell, license, or distribute in the future including any products or service offerings under development, collectively, together with all products, software, service offerings, technical data or technology that have been sold, licensed or distributed by a Platform Company since each of its formation.

"Qualified Subsidiary" means any direct or indirect Non-Operating Subsidiary.

"Receivables" means (i) all of each Borrower's Accounts, Instruments, Documents, Chattel Paper, Supporting Obligations, letters of credit, proceeds of any letter of credit, and Letter of Credit Rights, and (ii) all customer lists, software, and business records related thereto.

"Recipient" means Agent, Lender or any other recipient of any payment to be made by or on account of the Secured Obligations.

"Register" has the meaning given to it in Section 11.7.

"Required Lenders" means at any time, the holders of more than 50% of the unpaid principal amount of the Term Loan Advance then outstanding.

"Sanctioned Country" means, at any time, a country or territory which is the subject or target of any Sanctions.

"Sanctioned Person" means, at any time, (a) any Person listed in any Sanctions-related list of designated Persons maintained by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or by the United Nations Security Council, the European Union or any EU member state, (b) any Person operating, organized or resident in a Sanctioned Country or (c) any Person controlled by any such Person.

"Sanctions" means economic or financial sanctions or trade embargoes imposed, administered or enforced from time to time by (a) the U.S. government, including those administered by the Office of Foreign Assets Control of the U.S. Department of the Treasury or the U.S. Department of State, or (b) the United Nations Security Council, the European Union or Her Majesty's Treasury of the United Kingdom.

"Secured Obligations" means Borrowers' obligations under this Agreement and any Loan Document, including any obligation to pay any amount now owing or later arising, but excluding in all cases any warrant or other right to purchase Equity Interests of Parent in connection with any Loan Document.

"Services Company" has the meaning given to such term in the preamble to this Agreement.

"Subordinated Indebtedness" means Indebtedness subordinated to the Secured Obligations in amounts and on terms and conditions satisfactory to Agent in its reasonable discretion and subject to a subordination agreement in form and substance satisfactory to Agent in its reasonable discretion on customary deep subordination terms.

"Subsequent Financing" means the next equity offering of Parent consummated after the Closing Date which (i) is broadly marketed or offered to multiple investors, and (ii) pursuant to which Parent is offering to sell equity for an aggregate purchase price of at least Ten Million Dollars ($10,000,000).

"Subsidiary" means an entity, whether corporate, partnership, limited liability company, joint venture or otherwise, in which a Borrower owns or controls, directly or indirectly, 50% or more of the outstanding voting securities.

"Taxes" means all present or future taxes, levies, imposts, duties, deductions, withholdings (including backup withholding), assessments, fees or other charges imposed by any governmental authority, including any interest, additions to tax or penalties applicable thereto.

"Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Term Commitment" opposite such Lender's name on Schedule 1.1.

"Term Loan Advance" means an Advance pursuant to Section 2.1(a)

"Term Loan Interest Rate" means, for any day a per annum rate of interest equal to the greater of either (i) the prime rate as reported in The Wall Street Journal plus 4.35%, and (ii) 9.35%.

"Term Note" means a Secured Term Promissory Note in substantially the form of Exhibit B.

"Trademark License" means any written agreement granting any right to use any Trademark or Trademark registration, now owned or hereafter acquired by a Borrower or in which a Borrower now holds or hereafter acquires any interest.

"Trademarks" means all trademarks (registered, common law or otherwise) and any applications in connection therewith, including registrations, recordings and applications in the United States Patent and Trademark Office or in any similar office or agency of the United States of America, any State thereof or any other country or any political subdivision thereof.

"UCC" means the Uniform Commercial Code as the same is, from time to time, in effect in the State of California; provided, that in the event that, by reason of mandatory provisions of law, any or all of the attachment, perfection or priority of, or remedies with respect to, Agent's Lien on any Collateral is governed by the

Uniform Commercial Code as the same is, from time to time, in effect in a jurisdiction other than the State of California, then the term "UCC" shall mean the Uniform Commercial Code as in effect, from time to time, in such other jurisdiction solely for purposes of the provisions thereof relating to such attachment, perfection, priority or remedies and for purposes of definitions related to such provisions.

"Unit" means a unit of interest in Parent of any class or series hereafter created.

"United States" and "U.S." mean the United States of America.

"U.S. Borrower" means any Borrower that is a U.S. Person.

"U.S. Person" means any Person that is a "United States person" as defined in Section 7701(a)(30) of the Code.

"U.S. Tax Compliance Certificate" has the meaning specified in Section 2.9(d).

"Viking" means Viking Global Opportunities Illiquid Investments Sub-Master LP and its Controlled Investment Affiliates.

"Withholding Agent" means any Borrower and Agent.

Unless otherwise specified, all references in this Agreement or any Annex or Schedule hereto to a "Section," "subsection," "Exhibit," "Annex," or "Schedule" shall refer to the corresponding Section, subsection, Exhibit, Annex, or Schedule in or to this Agreement. Unless otherwise specifically provided herein, any accounting term used in this Agreement or the other Loan Documents shall have the meaning customarily given such term in accordance with GAAP, and all financial computations hereunder shall be computed in accordance with GAAP, consistently applied. Unless otherwise defined herein or in the other Loan Documents, terms that are used herein or in the other Loan Documents and defined in the UCC shall have the meanings given to them in the UCC.

SECTION 2. THE LOAN

2.1 Term Loan Advance.

(a) Term Commitment. Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make in an amount not to exceed its respective Term Commitment, and Borrowers agree to draw, a Term Loan Advance of $35,000,000 on the Closing Date.

(b) Advance Request. Borrower shall complete, sign and deliver an Advance Request at least one (1) Business Day before the Closing Date, to Agent. Lender shall fund the Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the Closing Date.

(c) Interest. The principal balance of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed. The Term Loan Interest Rate will float and change on the day the prime rate as reported in the Wall Street Journal changes from time to time.

(d) Payment. Borrowers will pay interest on the Term Loan Advance on the first Business Day of each month, beginning the month after the Advance Date continuing until the Amortization Date. Borrowers shall repay the principal balance of the Term Loan Advance that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style) beginning on the Amortization Date and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid, provided that if the Term Loan Interest Rate is adjusted in accordance with its terms, or the Amortization Date or the Maturity Date is extended, the amount of each subsequent monthly installment shall be recalculated. The entire principal balance of the Term Loan Advance and all accrued but unpaid interest hereunder, shall be due and payable on the Maturity Date. Borrowers shall make all payments under this Agreement without setoff, recoupment or deduction and regardless of any counterclaim or defense. Lender will initiate debit entries to the Parent's account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to Lender with respect to the Term Loan Advance and (ii) out-of-pocket legal fees and costs incurred by Agent or Lender in connection with Section 11.11 of this Agreement; provided that, with respect to clause (i) above, in the event that Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry to such Borrower's account for a certain amount of the periodic obligations due on a specific payment date, Borrowers shall pay to Lender such

amount of periodic obligations in full in immediately available funds on such payment date; provided, further, that, with respect to clause (i) above, if Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry as described above later than the date that is three (3) Business Days prior to such payment date, Borrowers shall pay to Lender such amount of periodic obligations in full in immediately available funds on the date that is three (3) Business Days after the date on which Lender or Agent notifies Borrower Representative thereof; provided, further, that, with respect to clause (ii) above, in the event that Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry to a Borrower's account for specified out-of-pocket legal fees and costs incurred by Agent or Lender, Borrowers shall pay to Lender such amount in full in immediately available funds within three (3) Business Days.

2.2 Maximum Interest. Notwithstanding any provision in this Agreement or any other Loan Document, it is the parties' intent not to contract for, charge or receive interest at a rate that is greater than the maximum rate permissible by law that a court of competent jurisdiction shall deem applicable hereto (which under the laws of the State of California shall be deemed to be the laws relating to permissible rates of interest on commercial loans) (the "Maximum Rate"). If a court of competent jurisdiction shall finally determine that Borrowers have actually paid to Lender an amount of interest in excess of the amount that would have been payable if all of the Secured Obligations had at all times borne interest at the Maximum Rate, then such excess interest actually paid by Borrowers shall be applied as follows: first, to the payment of the Secured Obligations consisting of the outstanding principal; second, after all principal is repaid, to the payment of Lender's accrued interest, costs, expenses, professional fees and any other Secured Obligations; and third, after all Secured Obligations are repaid, the excess (if any) shall be refunded to Borrowers.

2.3 Default Interest. In the event any payment is not paid on the scheduled payment date (except if due solely to an administrative or operational error of Agent or Lender or Parent's bank if Borrowers had the funds to make the payment when due), an amount equal to four percent (4%) of the past due amount shall be payable on demand. In addition, upon the occurrence and during the continuation of an Event of Default hereunder, all Secured Obligations, including principal, interest, compounded interest, and professional fees, shall bear interest at a rate per annum equal to the rate set forth in Section 2.1(c), plus four percent (4%) per annum. In the event any interest is not paid when due hereunder, delinquent interest shall be added to principal and shall bear interest on interest, compounded at the rate set forth in Section 2.1(c) or Section 2.3, as applicable.

2.4 Prepayment.

(a) Optional Prepayment. At its option upon at least five (5) Business Days prior written notice to Agent, Borrowers may prepay all or a portion of the outstanding Advance by paying principal, all accrued and unpaid interest thereon, together with a prepayment charge equal to the following percentage of the principal amount being prepaid: if the prepayment is made on or prior to the one year anniversary of the Closing Date, 2.5%; after the one year anniversary of the Closing Date, through the two year anniversary of the Closing Date, 1.5%; and after the two year anniversary of the Closing Date, 1.0% (each, a "Prepayment Charge"), provided that each prepayment shall be in a minimum amount of $5,000,000 or, if less, the remaining outstanding principal amount of the Advance. Borrowers agree that the Prepayment Charge is a reasonable calculation of Lender's lost profits in view of the difficulties and impracticality of determining actual damages resulting from an early repayment of the Advance or any portion thereof. Borrowers shall prepay the outstanding amount of all principal and accrued interest through the prepayment date and the Prepayment Charge upon the occurrence of a Change in Control. Notwithstanding the foregoing, Agent and Lender agree to waive the Prepayment Charge if Agent and Lender (in its sole and absolute discretion) agree in writing to refinance the Advance prior to the Maturity Date.

(b) Mandatory Prepayment. Within five (5) Business Days of receipt of any Net Cash Proceeds from a Prepayment Event, Borrowers shall at Agent's election in its sole and absolute discretion, prepay the outstanding Advance by paying up to 75% of such Net Cash Proceeds. For the avoidance of doubt, no Prepayment Charge or charge pursuant to Section 2.5 shall apply to a prepayment in accordance with this Section 2.4(b). Notwithstanding the foregoing, Net Cash Proceeds received at the closing of a

sale Parent's Equity Interests of PellePharm, Inc. prior to December 31, 2018 shall not be required to be applied to the prepayment of the Secured Obligations as long as such Net Cash Proceeds are used by Parent for its ordinary course operations and investment activities pursuant to the terms of this Agreement or to make tax distributions to Parent's members as permitted pursuant to Section 7.7.

2.5 End of Term Charge. On the earliest to occur of (i) the Maturity Date, (ii) the date that Borrowers prepay the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) in full or in part (in case of a prepayment pursuant to Section 2.4(a)), or (iii) the date that the Secured Obligations become due and payable in full pursuant to the terms of this Agreement, Borrowers shall pay Lender a charge equal to (x) in case of a partial prepayment pursuant to Section 2.4(a), 6.35% of the principal amount prepaid, and (y) in connection with the payment in full of the outstanding Secured Obligations a charge in an amount equal to $2,222,500 less any charges paid prior to such date pursuant to the foregoing clause (x) in connection with partial prepayments. Notwithstanding the required payment date of such charge, it shall be deemed earned by Lender as of the Closing Date.

2.6 Due Diligence Fee. The Due Diligence Fee has been paid by Borrowers prior to the Closing Date.

2.7 Notes. If so requested by Lender by written notice to Borrower Representative, then Borrowers shall execute and deliver to Lender (and/or, if applicable and if so specified in such notice, to any Person who is an assignee of Lender pursuant to Section 11.13) (promptly after Borrower Representative's receipt of such notice) a Term Note or Term Notes to evidence Lender's Loans.

2.8 Pro Rata Treatment; Application of Payments. Each payment (including prepayment) on account of any fee and any reduction of the Term Loan Advance shall be made pro rata according to the Term Commitments of the relevant Lender. The Term Loan Advance shall be made pro rata according to the Term Commitments of the relevant Lender. Lender has the exclusive right to determine the order and manner in which all payments with respect to the Secured Obligations may be applied. No Borrower shall have a right to specify the order or the accounts to which Lender shall allocate or apply any payments made by a Borrower to Lender or otherwise received by Lender under this Agreement when any such allocation or application is not expressly specified elsewhere in this Agreement.

2.9 Taxes.

(a) Withholding. Any and all payments by or on account of any obligation of any Borrower under any Loan Document will be made free and clear of and without deduction or withholding for any Taxes, except as required by applicable law. If any applicable law (as determined in the good faith discretion of an applicable Withholding Agent) requires a Withholding Agent to make any withholding or deduction of any Tax from any such payment, then the applicable Withholding Agent shall be entitled to make such deduction or withholding and shall timely pay the full amount deducted or withheld to the relevant governmental authority in accordance with applicable law and, to the extent such Tax is an Indemnified Tax, then the sum payable by Borrowers hereunder shall be increased to the extent necessary to ensure that, after the making of such required withholding or deduction, Agent or Lender, as applicable receives an amount equal to the sum which it would have received had no such withholding or deduction been made. The applicable Borrower will, upon request, furnish Agent with proof reasonably satisfactory to Agent indicating that such Borrower has made such withholding payment.

(b) Payment of Other Taxes by Borrowers. Borrowers shall timely pay to the relevant governmental authority in accordance with applicable law, or at the option of Agent timely reimburse it for the payment of, any Other Taxes.

(c) Indemnification by Borrowers. Borrowers shall indemnify each Recipient, within 10 days after demand therefor, for the full amount of any Indemnified Taxes (including Indemnified Taxes imposed or asserted on or attributable to amounts payable under this Section) payable or paid by such Recipient or required to be withheld or deducted from a payment to such Recipient and any reasonable

expenses arising therefrom or with respect thereto, whether or not such Indemnified Taxes were correctly or legally imposed or asserted by the relevant governmental authority; provided that Borrowers shall not be obligated to compensate any Recipient pursuant to this Section in respect of penalties, interest or other liabilities attributable to any Indemnified Taxes, if such penalties, interest and other liabilities result solely from the gross negligence or willful misconduct of such Lender, the Agent or their Affiliates. A certificate as to the amount of such payment or liability delivered to Borrower Representative by a Lender (with a copy to Agent), or by Agent on its own behalf or on behalf of a Lender, shall be conclusive absent manifest error.

(d) Status of Lenders.

(i) Any Lender that is entitled to an exemption from or reduction of withholding Tax with respect to payments made under any Loan Document shall deliver to Borrower Representative and Agent, at the time or times reasonably requested by a Borrower or Agent, such properly completed and executed documentation reasonably requested by such Borrower or Agent as will permit such payments to be made without withholding or at a reduced rate of withholding. In addition, any Lender, if reasonably requested by a Borrower or Agent, shall deliver such other documentation prescribed by applicable law or reasonably requested by such Borrower or Agent as will enable such Borrower or Agent to determine whether or not such Lender is subject to backup withholding or information reporting requirements. Notwithstanding anything to the contrary in the preceding two sentences, the completion, execution and submission of such documentation (other than such documentation set forth in paragraphs (d)(ii)(A), (ii)(B) and (ii)(D) of this Section) shall not be required if in the Lender's reasonable judgment such completion, execution or submission would subject such Lender to any material unreimbursed cost or expense or would materially prejudice the legal or commercial position of such Lender.

(ii) Without limiting the generality of the foregoing, in the event that any Borrower is a U.S. Borrower,

(A) any Lender that is a U.S. Person shall deliver to Borrower Representative and Agent on or about the date on which such Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of any Borrower or Agent), executed copies of IRS Form W-9 certifying that such Lender is exempt from U.S. federal backup withholding tax;

(B) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower Representative and Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a Lender under this Agreement (and from time to time thereafter upon the reasonable request of any Borrower or Agent), whichever of the following is applicable:

(1) in the case of a Foreign Lender claiming the benefits of an income tax treaty to which the United States is a party (x) with respect to payments of interest under any Loan Document, executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "interest" article of such tax treaty and (y) with respect to any other applicable payments under any Loan Document, IRS Form W-8BEN or IRS Form W-8BEN-E establishing an exemption from, or reduction of, U.S. federal withholding Tax pursuant to the "business profits" or "other income" article of such tax treaty;

(2) executed copies of IRS Form W-8ECI;

(3) in the case of a Foreign Lender claiming the benefits of the exemption for portfolio interest under Section 881(c) of the Code, (x) a certificate substantially in the form of Exhibit I-1 to the effect that such Foreign Lender is not a "bank" within the meaning of Section 881(c)(3)(A) of the Code, a "10 percent shareholder" of any Borrower within the meaning of Section 871(h)(3)(B) of the Code, or a "controlled foreign corporation" related to any Borrower as described in Section 881(c)(3)(C) of the Code (a "U.S. Tax Compliance Certificate") and (y) executed copies of IRS Form W-8BEN or IRS Form W-8BEN-E; or

(4) to the extent a Foreign Lender is not the beneficial owner, executed copies of IRS Form W-8IMY, accompanied by IRS Form W-8ECI, IRS Form W-8BEN, IRS Form W-8BEN-E, a U.S. Tax Compliance Certificate substantially in the form of Exhibit I-2 or Exhibit I-3, IRS Form W-9, and/or other certification documents from each beneficial owner, as applicable; provided that if the Foreign Lender is a partnership and one or more direct or indirect partners of such Foreign Lender are claiming the portfolio interest exemption, such Foreign Lender may provide a U.S. Tax Compliance Certificate substantially in the form of Exhibit I-4 on behalf of each such direct and indirect partner;

(C) any Foreign Lender shall, to the extent it is legally entitled to do so, deliver to Borrower Representative and Agent (in such number of copies as shall be requested by the recipient) on or about the date on which such Foreign Lender becomes a party to this Agreement (and from time to time thereafter upon the reasonable request of any Borrower or Agent), executed copies of any other form prescribed by applicable law as a basis for claiming exemption from or a reduction in U.S. federal withholding Tax, duly completed, together with such supplementary documentation as may be prescribed by applicable law to permit any Borrower or Agent to determine the withholding or deduction required to be made; and

(D) if a payment made to a Lender under any Loan Document would be subject to U.S. federal withholding Tax imposed by FATCA if such Lender were to fail to comply with the applicable reporting requirements of FATCA (including those contained in Section 1471(b) or 1472(b) of the Code, as applicable), such Lender shall deliver to Borrower Representative and Agent at the time or times prescribed by law and at such time or times reasonably requested by any Borrower or Agent such documentation prescribed by applicable law (including as prescribed by Section 1471(b)(3)(C)(i) of the Code) and such additional documentation reasonably requested by any Borrower or Agent as may be necessary for Borrowers and Agent to comply with their obligations under FATCA and to determine that such Lender has complied with such Lender's obligations under FATCA or to determine the amount, if any, to deduct and withhold from such payment. Solely for purposes of this clause (D), "FATCA" shall include any amendments made to FATCA after the date of this Agreement.

Each Lender agrees that if any form or certification it previously delivered expires or becomes obsolete or inaccurate in any respect, it shall update such form or certification or promptly notify Borrower Representative and Agent in writing of its legal inability to do so.

(e) Treatment of Certain Refunds. If any party determines, in its sole discretion exercised in good faith, that it has received a refund of any Taxes as to which it has been indemnified pursuant to this Section (including by the payment of additional amounts pursuant to this Section), it shall pay to the indemnifying party an amount equal to such refund (but only to the extent of indemnity payments made

under this Section with respect to the Taxes giving rise to such refund), net of all out-of-pocket expenses (including Taxes) of such indemnified party and without interest (other than any interest paid by the relevant governmental authority with respect to such refund). Such indemnifying party, upon the request of such indemnified party, shall repay to such indemnified party the amount paid over pursuant to this paragraph (e) (plus any penalties, interest or other charges imposed by the relevant governmental authority) in the event that such indemnified party is required to repay such refund to such governmental authority. Notwithstanding anything to the contrary in this paragraph (e), in no event will the indemnified party be required to pay any amount to an indemnifying party pursuant to this paragraph (e) the payment of which would place the indemnified party in a less favorable net after-Tax position than the indemnified party would have been in if the Tax subject to indemnification and giving rise to such refund had not been deducted, withheld or otherwise imposed and the indemnification payments or additional amounts with respect to such Tax had never been paid. This paragraph shall not be construed to require any indemnified party to make available its Tax returns (or any other information relating to its Taxes that it deems confidential) to the indemnifying party or any other Person.

(f) Survival. Each party's obligations under this Section shall survive the resignation or replacement of Agent or any assignment of rights by, or the replacement of, a Lender, the termination of the Term Commitments and the repayment, satisfaction or discharge of all obligations under any Loan Document.

SECTION 3. SECURITY INTEREST

3.1 Grant of Security Interest. As security for the prompt and complete payment when due (whether on the payment dates or otherwise) of all the Secured Obligations, each Borrower grants to Agent a security interest in all of Borrower's right, title, and interest in, to and under all of Borrower's personal property and other assets including without limitation the following (except as set forth herein) whether now owned or hereafter acquired (collectively, the "Collateral"): (a) Receivables; (b) Equipment; (c) Fixtures; (d) General Intangibles; (e) Inventory; (f) Investment Property; (g) Deposit Accounts; (h) Cash; (i) Goods; and all other tangible and intangible personal property of Borrower whether now or hereafter owned or existing, leased, consigned by or to, or acquired by, Borrower and wherever located, and any of Borrowers' property in the possession or under the control of Agent; and, to the extent not otherwise included, all Proceeds of each of the foregoing and all accessions to, substitutions and replacements for, and rents, profits and products of each of the foregoing.

3.2 Excluded Collateral. Notwithstanding the broad grant of the security interest set forth in Section 3.1, above, the Collateral shall not include (a) nonassignable licenses or contracts, which by their terms require the consent of the licensor thereof or another party (but only to the extent such prohibition on transfer is enforceable under applicable law, including, without limitation, Sections 9406, 9407 and 9408 of the UCC) or Pledged Collateral consisting of Equity Interests, if pursuant to the terms of the applicable Equity Documents, a pledge of such Equity Interests would be prohibited or void or would require the consent of or waiver by the applicable Platform Company, provided further, that upon the lapse of such prohibition or such consent or waiver being provided with respect to any license or contract, such license, contract or Equity Interests shall automatically be included in the Collateral, (b) any property which is subject to a capital lease or similar equipment financing permitted under this Agreement, but only to the extent and for as long as a Lien in favor of Agent would be prohibited by the terms of the related equipment financing agreement or would result in a termination thereof, and provided further, that upon the termination of such prohibition, such property shall automatically be deemed included in the Collateral, or (c) any trademark application filed on an "intent-to-use" basis until the earlier of the filing of a statement of use with respect thereto or the issuance of a registration therefor.

3.3 Pledged Collateral.

(a) Each Borrower hereby pledges, collaterally assigns and grants to Agent a security interest in the Pledged Collateral, as security for the performance of the Secured Obligations. Each Borrower irrevocably waives any and all of its rights under provisions of any Organizational Documents of any Subsidiary which is a limited liability company or limited partnership, and under the laws under which such

Subsidiary has been organized, to the extent Borrower has the legal capacity to do so and that such waiver is permitted, that would operate to (a) prohibit, restrict, condition or otherwise adversely affect the pledge hereunder or any enforcement action which may be taken in respect of this pledge or (b) otherwise conflict with the terms of this Section 3.3. Each Borrower of which Equity Interests consisting of limited liability company or limited partnership interests constitute Pledged Collateral hereby irrevocably consents to the grant of the security interest provided for herein and to Agent or its nominee becoming a member or limited or general partner, as applicable, in such limited liability company or limited partnership, as applicable (including succeeding to any management rights appurtenant thereto), in connection with the exercise of remedies pursuant to Section 10; provided that such successor member or partner, as applicable, then agrees in writing to be bound by, and a party to, the applicable Organizational Document pursuant to the terms therein.

(b) Except as otherwise expressly provided in this Agreement, any sums or other property paid or distributed upon or with respect to any of the Pledged Collateral, whether by dividend or redemption or upon the liquidation or dissolution or recapitalization or reclassification of the capital of any issuer of the applicable Equity Interests or otherwise, shall, be paid over and delivered to Agent to be held by Agent as security for the payment in full in cash of all of the Secured Obligations, in each case, to the extent constituting Net Cash Proceeds. All payments received by a Borrower shall, until paid or delivered to Agent, be held in trust for Agent, as security for the payment and performance in full of all of the Secured Obligations, and when paid, shall be deposited into a Controlled Account.

(c) So long as no Event of Default shall have occurred and be continuing and at Agent's written direction to the contrary, each Borrower shall be entitled to receive all cash dividends and distributions paid in respect of Pledged Collateral owned by it, and, prior to any acceleration pursuant to Section 10.1 hereof and any election by Agent of any remedies pursuant to Section 10.2 hereof, each Borrower shall be entitled to vote any Equity Interests owned by it and to give consents, waivers and ratifications in respect of Pledged Collateral; provided, however, that no vote shall be cast or consent, waiver or ratification given by any Borrower if the effect thereof would materially impair respect Agent's rights with respect to the enforcement of its Lien on the Pledged Collateral or be inconsistent with or result in any violation of any of the provisions of this Agreement or any of the Loan Documents. All rights of any Borrower to receive cash dividends and distributions with respect to Pledged Collateral owned by such Borrower, and, at Agent's option, upon notice by Agent to the applicable Borrower, all right to vote and give consents, waivers and ratifications with respect to such Pledged Collateral, shall terminate upon the occurrence and during the continuation of an Event of Default.

3.4 Release; Agreements by Agent with respect to Pledged Collateral.

The security interest granted pursuant to this Agreement shall be automatically released (a) with respect to all Collateral upon the payment in full in cash of all Secured Obligations in accordance with this Agreement (other than inchoate indemnity obligations and any other obligations which, by their terms survive the termination of this Agreement), (b) with respect to any Pledged Collateral that is the subject of a sale or other disposition described in clause (e) of the defined term "Permitted Transfers", upon the consummation of such transaction, or (c) if otherwise approved, authorized or ratified in writing by Agent in its sole discretion. Upon such release, Agent shall, upon the reasonable request and at the sole cost and expense of Borrowers, assign, transfer and deliver to Borrowers, against receipt and without recourse to or warranty by Agent, except as to the fact that Agent does not continue to encumber the released assets, such Collateral or any part thereof, which shall be released in accordance with customary documents and instruments (including UCC-3 termination financing statements or releases) acknowledging the release of such Collateral. Agent agrees, on behalf of itself and Lender, that if any Platform Company is consummating an initial public offering of its stock or any relevant follow on offering, that Agent shall enter into lockup or similar agreements reasonably requested by Borrower or any underwriter with respect to Agent's exercise of remedies with respect to the Pledged Collateral constituting Equity Interests the Platform Company that is the issuer in such offering, in each case at the sole cost and expense of Borrower.

SECTION 4. CONDITIONS PRECEDENT TO LOAN

The obligations of Lender to make the Loan hereunder are subject to the satisfaction by Borrowers of the following conditions:

4.1 Initial Advance. On or prior to the Closing Date, Borrowers shall have delivered to Agent the following:

(a) duly executed copies of the following, in form and substance acceptable to Agent:

(i) this Agreement;

(ii) the completed ACH Authorization;

(iii) Account Control Agreements with respect to all Deposit Accounts and any accounts where Investment Property is maintained, as required by Section 7.12 hereof;

(iv) a duly executed certificate of an officer of each Borrower certifying and attaching copies of (A) the Charter, certified as of a recent date by the jurisdiction of organization of such Borrower as in effect as of the Closing Date; (B) the bylaws, operating agreement or similar governing document of such Borrower, as in effect as of the Closing Date; (C) resolutions of such Borrower's Board evidencing approval of the Loan and other transactions contemplated by the Loan Documents, as in effect as of the Closing Date; (D) resolutions of the holders of such Borrower's Equity Interests in connection with the transactions contemplated by this Agreement as in effect as of the Closing Date, to the extent required by the applicable Organizational Documents; and (E) a schedule setting forth the name, title and specimen signature of officers or other authorized signers on behalf of each Borrower;

(v) a duly executed certificate of an officer of Parent certifying and attaching copies of (A) the Charter, certified as of a recent date by the jurisdiction of organization of each Platform Company, as in effect as of the Closing Date; (B) the bylaws, operating agreement or similar governing document of each Platform Company; (C) copies of all Equity Documents in effect as of the Closing Date; and (D) a summary capitalization table of each Platform Company;

(vi) a legal opinion of Borrowers' counsel;

(vii) any other Loan Documents; and (viii) all other documents and instruments reasonably required by Agent to effectuate the transactions contemplated hereby or to create and perfect the Liens of Agent with respect to all Collateral.

(b) all originals certificates evidencing Pledged Collateral pledged pursuant to Section 3.3 together with any transfer powers or other instruments of transfer, in form and substance acceptable to Agent;

(c) copies of all consents, waivers, notices and other documents set forth on Schedule 5.15(ii);

(d) a certificate of good standing for each Borrower from its jurisdiction of organization and similar certificates from all other jurisdictions in which it does business and where the failure to be qualified could have a Material Adverse Effect;

(e) payment of the Facility Charge and reimbursement of Agent's and Lender's current expenses reimbursable pursuant to this Agreement, which amounts may be deducted from the initial Advance;

(f) all certificates of insurance, endorsements, and copies of each insurance policy required pursuant to Section 6.2; and

(g) such other documents as Agent may reasonably request.

Notwithstanding the foregoing, to the extent any of the above closing conditions is set forth on Schedule 7.19, Borrowers may deliver the same when required to be delivered pursuant to Schedule 7.19.

4.2 All Advance. On the Advance Date:

(a) Agent shall have received (i) an Advance Request for the relevant Advance as required by Section 2.1(b), duly executed by Borrower Representative's Chief Executive Officer or Chief Financial Officer, and (ii) any other documents Agent may reasonably request.

(b) The representations and warranties set forth in this Agreement shall be true and correct in all material respects on and as of the Advance Date with the same effect as though made on and as of such date, except to the extent such representations and warranties expressly relate to an earlier date.

(c) At the time of and immediately after such Advance no Event of Default shall have occurred and be continuing.

(d) Each Advance Request shall be deemed to constitute a representation and warranty by Borrowers on the relevant Advance Date as to the matters specified in subsections (b) and (c) of this Section 4.2 and as to the matters set forth in the Advance Request.

4.3 No Default. As of the Closing Date and each Advance Date, (i) no fact or condition exists that could (or could reasonably be expected to, with the passage of time, the giving of notice, or both) constitute an Event of Default and (ii) no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

SECTION 5. REPRESENTATIONS AND WARRANTIES OF BORROWERS

Borrowers represent and warrant that:

5.1 Organizational Status. Each Borrower is duly organized, legally existing and in good standing under the laws of its jurisdiction of organization, and is duly qualified as a foreign corporation, limited liability company or partnership, as the case may be, in all jurisdictions in which the nature of its business or location of its properties require such qualifications and where the failure to be qualified could reasonably be expected to have a Material Adverse Effect. Each Borrower's present name, former names (if any), locations, place of formation, tax identification number, organizational identification number and other information are correctly set forth in Exhibit C, or as such Borrower has subsequently notified Agent after the Closing Date in accordance with this Agreement (including in any Compliance Certificate).

5.2 Collateral. Each Borrower owns the Collateral free of all Liens, except for Permitted Liens. Each Borrower has the power and authority to grant to Agent a Lien in the Collateral as security for the Secured Obligations.

5.3 Consents. Each Borrower's execution, delivery and performance of this Agreement and all other Loan Documents, (i) have been duly authorized by all necessary action in accordance with Borrower's Organizational Documents, (ii) will not result in the creation or imposition of any Lien upon the Collateral, other than Permitted Liens and the Liens created by this Agreement and the other Loan Documents, (iii) do not violate any provisions of (A) a Borrower's Organizational Documents, or (B) any, law, regulation, order, injunction, judgment, decree or writ to which a Borrower is subject and which violation would have a Material Adverse Effect and (iv) do not violate any contract or agreement or require the consent or approval of any other Person which has not already been obtained if such violation or failure to obtain consent or approval would have a Material Adverse Effect. The individual or individuals executing the Loan Documents are duly authorized to do so.

5.4 Material Adverse Effect. Since December 31, 2017, no event that has had or could reasonably be expected to have a Material Adverse Effect has occurred and is continuing.

5.5 Actions Before Governmental Authorities. There are no actions, suits or proceedings at law or in equity or by or before any governmental authority now pending or, to the knowledge of a Borrower, threatened against or affecting a Borrower or its property, that is reasonably expected to result in a Material Adverse Effect.

5.6 Laws.

(a) Neither any Borrower nor any of its Subsidiaries is in violation of any law, rule or regulation, or in default with respect to any judgment, writ, injunction or decree of any governmental authority, where such violation or default is reasonably expected to result in a Material Adverse Effect. No Borrower is in default in any material respect in any manner under any provision of any agreement or instrument evidencing material Indebtedness, or any other material agreement to which it is a party or by which it is bound.

(b) Parent is not required to be registered as an "investment company" within the meaning of the Investment Company Act based on (i) Section 3(a)(1)(C) of the Investment Company Act, (ii) Rule 3a-1 promulgated under the Investment Company Act or (iii) certain other exemptions or exceptions from registration under the Investment Company Act, other than Sections 3(c)(1) or 3(c)(7) of the Investment Company Act. Neither a Borrower nor any of its Subsidiaries is engaged as one of its important activities in extending credit for margin stock (under Regulations X, T and U of the Federal Reserve Board of Governors). Each Borrower and each of its Subsidiaries has complied in all material respects with the Federal Fair Labor Standards Act. Neither a Borrower nor any of its Subsidiaries is a "holding company" or an "affiliate" of a "holding company" or a "subsidiary company" of a "holding company" as each term is defined and used in the Public Utility Holding Company Act of 2005. Neither a Borrower's nor any of its Subsidiaries' properties or assets has been used by a Borrower or such Subsidiary or, to a Borrower's knowledge, by previous Persons, in disposing, producing, storing, treating, or transporting any hazardous substance other than in material compliance with applicable laws. Each Borrower and each of its Subsidiaries has obtained all consents, approvals and authorizations of, made all declarations or filings with, and given all notices to, all Governmental Authorities that are necessary to continue their respective businesses as currently conducted.

(c) None of Borrowers, any of its Subsidiaries or, to Borrower's knowledge, any of Borrowers' or its Subsidiaries' Affiliates or any of their respective agents acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement is (i) in violation of any Anti-Terrorism Law, (ii) engaging in or conspiring to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding or attempts to violate, any of the prohibitions set forth in any Anti-Terrorism Law, or (iii) is a Blocked Person. None of Borrowers, any of its Subsidiaries, or to the knowledge of any Borrower any Affiliates or agents, acting or benefiting in any capacity in connection with the transactions contemplated by this Agreement, (x) conducts any business or engages in making or receiving any contribution of funds, goods or services to or for the benefit of any Blocked Person, or (y) deals in, or otherwise engages in any transaction relating to, any property or interest in property blocked pursuant to Executive Order No. 13224, any similar executive order or other Anti-Terrorism Law. None of the funds to be provided under this Agreement will be used, directly or indirectly, (a) for any activities in violation of any applicable anti-money laundering, economic sanctions and anti-bribery laws and regulations laws and regulations or (b) for any payment to any governmental official or employee, political party, official of a political party, candidate for political office, or anyone else acting in an official capacity, in order to obtain, retain or direct business or obtain any improper advantage, in violation of the United States Foreign Corrupt Practices Act of 1977, as amended.

5.7 Information Correct and Current. No information, report, Advance Request, financial statement, exhibit or schedule furnished, by or on behalf of Borrowers to Agent in connection with any Loan Document or included therein or delivered pursuant thereto contained, or, when taken as a whole, contains or will contain any material misstatement of fact or, when taken together with all other such information or documents, omitted, omits or will omit to state any material fact necessary to make the statements therein, in the light of the circumstances under which they were, are or will be made, not materially misleading at the time such statement was made or deemed made. Additionally, any and all financial or business projections provided by a Borrower to Agent, whether prior to or after the Closing Date, shall be (i) provided in good faith and based on the most current data and information available to Borrowers, and (ii) the most current of such projections provided to Parent's Board, provided that it is understood that the projections are based on assumptions made in good faith but are subject to significant uncertainties and contingencies and that actual results may differ significantly and no assurances are provided by Borrower for any projections made or given.

5.8 Tax Matters. Except to the extent contested in good faith with adequate reserves under GAAP, (a) each Borrower has filed all material federal and state income tax returns and other tax returns that it is required to file, (b) each Borrower has duly paid or fully reserved for all federal and state income Taxes and other material Taxes or installments thereof (including any interest or penalties) as and when due, which have or may become due pursuant to such returns, and (c) each Borrower has paid or fully reserved for any material Tax assessment received by such Borrower for the three (3) years preceding the Closing Date, if any (including any material Taxes being contested in good faith and by appropriate proceedings).

5.9 Intellectual Property Claims. To Borrowers' knowledge, each Platform Company is the sole owner of, or otherwise has the right to use, the Intellectual Property material to such Platform Company's business. To Borrowers' knowledge, each of the material Copyrights, Trademarks and Patents is valid and enforceable, no material part of the Intellectual Property of a Platform Company has been judged invalid or unenforceable, in whole or in part, and no claim has been made to a Borrower or, to Borrower's knowledge, to a Platform Company, that any material part of the Intellectual Property of a Platform Company violates the rights of any third party. Exhibit D is a true, correct and complete list of all registered Trademarks, Copyrights, Patents of each Borrower, Qualified Subsidiary and, to the best of Borrower's knowledge, each Platform Company, together with application or registration numbers, as applicable, and of all material agreements under which a Borrower, Qualified Subsidiary or Platform Company licenses Intellectual Property from third parties (other than shrink-wrap software licenses or software licenses available in the ordinary course of business), in each case as of the Closing Date. No Borrower, Qualified Subsidiary or, to Borrowers' knowledge, no Platform Company is in material breach of, nor has such Person failed to perform any material obligations under, any material contracts, licenses or agreements and, to Borrowers' knowledge, no third party to any such contract, license or agreement is in material breach thereof or has failed to perform any material obligations thereunder.

5.10 Intellectual Property. To Borrowers' knowledge, each Platform Company has all material rights with respect to Intellectual Property necessary or material in the operation or conduct of such Person's business as currently conducted and proposed to be conducted. Without limiting the generality of the foregoing, and in the case of licenses, except for restrictions that are unenforceable under Division 9 of the UCC, to Borrowers' knowledge, each Platform Companies have the right, to the extent required to operate such Platform Company's business, to freely transfer, license or assign Intellectual Property necessary or material in the operation or conduct of such Platform Company's business as currently conducted and proposed to be conducted, without condition, restriction or payment of any kind (other than license payments in the ordinary course of business) to any third party, and, to Borrowers' knowledge, each Platform Company owns or has the right to use, pursuant to valid licenses, all software development tools, library functions, compilers and all other third-party software and other items that are material to such Platform Company's business and used in the design, development, promotion, sale, license, manufacture, import, export, use or distribution of Products except customary covenants in inbound license agreements and equipment leases where a Platform Company is the licensee or lessee.

5.11 Products. No material Intellectual Property owned by a Borrower, Qualified Subsidiary or, to Borrowers' knowledge, Platform Company or Product has been or is subject to any actual or, to the knowledge of any Borrower, threatened litigation, proceeding (including any proceeding in the United States Patent and Trademark Office or any corresponding foreign office or agency) or outstanding decree, order, judgment, settlement agreement or stipulation that restricts in any manner the use, transfer or licensing thereof by the owner thereof or that may affect the validity, use or enforceability thereof. There is no decree, order, judgment, agreement, stipulation, arbitral award or other provision entered into in connection with any litigation or proceeding that obligates any Borrower, Qualified Subsidiary or, to Borrowers' knowledge, Platform Company to grant licenses or ownership interest in any future material Intellectual Property related to the operation or conduct of the business of any Borrower, Qualified Subsidiary or Platform Company or to any Products. No Borrower or, to Borrowers' knowledge, Platform Company has received any written notice or claim, or, to the knowledge of any Borrower, oral notice or claim, challenging or questioning any Borrower's, Qualified Subsidiary's or Platform Company's ownership in any material Intellectual Property (or written notice of any claim challenging or questioning the ownership in any licensed Intellectual Property of the owner thereof) or suggesting that any third party has any claim of legal or beneficial ownership with respect thereto nor, to any Borrower's knowledge, is there a reasonable basis for any such claim. Neither any use by any Borrower, Qualified Subsidiary or, to Borrowers' knowledge, by Platform Company, of its respective material Intellectual Property nor the production and sale of Products infringes in any material respect on the Intellectual Property or other rights of others.

5.12 Financial Accounts. Exhibit E, as may be updated by Borrowers in a written notice provided to Agent after the Closing Date, is a true, correct and complete list of (a) all banks and other financial institutions at which a Borrower or any Qualified Subsidiary maintains Deposit Accounts and (b) all institutions at which a Borrower or any Qualified Subsidiary maintains an account holding Investment Property, and such exhibit correctly identifies the name and address of each bank or other institution, the name in which the account is held, a description of the purpose of the account, and the complete account number therefor.

5.13 Employee Loans. Other than loans constituting Permitted Investments, no Borrower has any outstanding loans to any employee, officer, manager or director of a Borrower, nor has a Borrower guaranteed the payment of any loan made to an employee, officer, manager or director of such Borrower by a third party.

5.14 Capitalization and Subsidiaries. Parent's capitalization as of the Closing Date is set forth on Schedule 5.14 annexed hereto. As of the Closing Date, no Equity Interests of a Qualified Subsidiary or a Platform Company are owned by a Borrower indirectly through a Subsidiary of such Borrower. No Borrower owns any stock, partnership interest or other securities of any Person, except for Permitted Investments.

5.15 Pledged Collateral; Instruments. All Equity Interests constituting Pledged Collateral are validly issued, fully paid and non-assessable in all material respects. The execution, delivery and performance thereof and the pledge of and granting of a security interest in the Pledged Collateral under this Agreement do not contravene any provision of the Organizational Documents of the issuer of such Equity Interests. All certificates representing a Borrower's interest in Pledged Collateral have been delivered to Agent, together with duly executed transfer powers or other appropriate instruments of transfer (each in form and substance satisfactory to Agent), duly executed in blank by the applicable Borrower. As of the Closing Date, Schedule 5.15 sets forth (i) a true and accurate schedule of all Pledged Collateral and all Instruments owned by Borrowers, and (ii) a complete and accurate list of all consents, waivers, amendment or modification or other action to be taken in connection with the grant of the security interest pursuant to the terms of this Agreement in the Pledged Collateral.

SECTION 6. INSURANCE; INDEMNIFICATION

6.1 Coverage. Each Borrower shall cause to be carried and maintained commercial general liability insurance, on an occurrence form, against risks customarily insured against in Borrowers' line of business. Such risks shall include the risks of bodily injury, including death, property damage, personal injury, advertising injury, and contractual liability per the terms of the indemnification agreement found in Section 6.3. Borrowers must maintain a minimum of $2,000,000 of commercial general liability insurance for each occurrence. Borrowers have and agree to maintain a minimum of $2,000,000 of directors' and officers' insurance for each occurrence and $5,000,000 in the aggregate. So long as there are any Secured Obligations outstanding, Borrowers shall also cause to be carried and maintained insurance upon the business and assets of Borrower and each of its Subsidiaries, insuring against all risks of physical loss or damage howsoever caused, in an amount not less than the full replacement cost of the Collateral, provided that such insurance may be subject to standard exceptions and deductibles.

6.2 Certificates. Borrowers shall deliver to Agent certificates of insurance that evidence Borrowers' compliance with its insurance obligations in Section 6.1 and the obligations contained in this Section 6.2. Borrowers' insurance certificate shall state Agent (shown as "Hercules Capital, Inc.", as "Agent") is an additional insured for commercial general liability, a lender loss payee for all risk property damage insurance, subject to the insurer's approval, and promptly following any purchase of new or replacement insurance, Borrower shall deliver to Agent certificates of insurance showing Agent as additional insured and a lender loss payee for property insurance and additional insured for liability insurance for any future insurance that Borrowers may acquire from such insurer. Attached to the certificates of insurance will be additional insured endorsements for liability and lender's loss payable endorsements for all risk property damage insurance. All certificates of insurance will provide for a minimum of thirty (30) days advance written notice to Agent of cancellation (other than cancellation for non-payment of premiums, for which ten (10) days' advance written notice shall be sufficient) or any other change adverse to Agent's interests. Any failure of Agent to scrutinize such insurance certificates for compliance is not a waiver of any of Agent's rights, all of which are reserved. At Agent's reasonable request, Borrowers shall provide Agent with copies of each insurance policy, and upon entering or amending any insurance policy required hereunder, Borrowers shall provide Agent with copies of such policies and shall promptly deliver to Agent updated insurance certificates with respect to such policies.

6.3 Indemnity. Borrowers agree to indemnify and hold Agent, Lender and their officers, directors, employees, agents, in-house attorneys, representatives and shareholders (each, an "Indemnified Person") harmless from and against any and all claims, costs, expenses, damages and liabilities (including such claims, costs, expenses, damages and liabilities based on liability in tort, including strict liability in tort), including reasonable attorneys' fees and disbursements and other costs of investigation or defense (including those incurred upon any appeal) (collectively, "Liabilities"), that may be instituted or asserted against or incurred by such Indemnified Person as the result of credit having been extended, suspended or terminated under this Agreement and the other Loan Documents or the administration of such credit, or in connection with or arising out of the transactions contemplated hereunder and thereunder, or any actions or failures to act in connection therewith, or arising out of the disposition or utilization of the Collateral, excluding in all cases Liabilities to the extent resulting solely from any Indemnified Person's gross negligence or willful misconduct. In no event shall any Indemnified Person be liable on any theory of liability for any special, indirect, consequential or punitive damages (including any loss of profits, business or anticipated savings). This Section 6.3 shall survive the repayment of indebtedness under, and otherwise shall survive the expiration or other termination of, the Loan Agreement, in each case subject to the applicable statute of limitations. Furthermore, this Section 6.3 shall not apply with respect to Taxes other than any Taxes that represent losses, claims, damages, etc. arising from any non-Tax claim.

SECTION 7. COVENANTS OF BORROWERS

Each Borrower agrees as follows:

7.1 Financial Reports. Borrower Representative shall furnish to Agent the financial statements and reports listed hereinafter (the "Financial Statements")

(a) as soon as practicable (and in any event within 30 days) after the end of each month, unaudited interim and year-to-date financial statements of each Borrower as of the end of such month, including balance sheet and related statements of income and cash flows accompanied by a report detailing

any material contingencies (including the commencement of any material litigation by or against such Borrower) or any other occurrence that could reasonably be expected to have a Material Adverse Effect, and including, for the balance sheet line item for "investments", a breakdown by Platform Company or other investment, all certified by Borrower Representative's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, (i) except for the absence of footnotes, (ii) subject to normal year-end adjustments, and (iii) except for certain non-cash items that are customarily included in quarterly and annual financial statements;

(b) as soon as practicable (and in any event within 45 days) after the end of each calendar quarter, the most recent capitalization table for Parent, including the weighted average exercise price of employee stock options, (ii) if Parent completes an initial public offering, unaudited interim and year-to-date financial statements as of the end of such calendar quarter, including balance sheet and related statements of income and cash flows accompanied by a report detailing any material contingencies certified by Borrower Representative's Chief Executive Officer or Chief Financial Officer to the effect that they have been prepared in accordance with GAAP, (A) except for the absence of footnotes, and (B) subject to normal year-end adjustments; and (iii) if Parent changes its accounting practices to perform a quarterly fair value analysis of its Equity Interests, copies of such valuations when completed; and

(c) as soon as practicable (and in any event within 180 days) after the end of each fiscal year, unqualified audited financial statements (other than a as going concern qualification), prepared on a consolidated basis, including balance sheet and related statements of income and cash flows, and setting forth in comparative form the corresponding figures for the preceding fiscal year, certified by a firm of independent certified public accountants selected by Borrowers and reasonably acceptable to Agent, provided that to the extent not required by the Board of Parent, audited financial statements shall not be required;

(d) as soon as practicable (and in any event within 30 days) after the end of each month, a Compliance Certificate in the form of Exhibit F;

(e) promptly after the sending or filing thereof, as the case may be, copies of any material financial statements or reports that Parent has made available to holders of its Preferred Units, including any valuation report with respect to Investments in Platform Companies made available to members of Parent, and copies of any regular, periodic and special reports or registration statements that Parent files with the Securities and Exchange Commission or any governmental authority that may be substituted therefor, or any national securities exchange;

(f) at the same time and in the same manner as provided to the members of the Board, (i) a report of any new Investments (by a Borrower or otherwise) made in Platform Companies, (ii) a report of any material developments with respect to Platform Companies, including financial performance, research and development, clinical milestones, sales and pipeline, strategic partnerships and other transactions and registration, licensing and other matters relating to Intellectual Property, (iii) copies of all notices, minutes, consents and other materials that Parent provides to the members of its Board in connection with meetings of the Board, and (iv) within 30 days after each such meeting, minutes of such meeting, provided that in all cases Parent may exclude (x) confidential compensation information, (y) any information or materials referred to in clauses (iii) and (iv) that are confidential, and (z) any information or materials referred to in clauses (i) through (iv) that are subject to attorney-client privilege or would potentially create a conflict of interest with Agent or Lender;

(g) financial and business projections and budget promptly following their approval by Parent's Board, and in any event, within 90 days after the end of Parent's fiscal year, and promptly after any material update to such projections or budget is approved by Parent's Board, in each case as well as any other budgets, operating plans and other financial information or information with respect to the Collateral or the Platform Companies as may be reasonably requested by Agent;

(h) within five (5) Business Days of the acquisition of Collateral consisting of Equity Interests or Instruments, notification thereof, together with such originals and other documents as required pursuant to Section 7.18;

(i) within five (5) Business Days of (i) the formation of a new Platform Company, (ii) any material amendment, restatement, supplement or other modification of or to any Organizational Document of a Platform Company, (iii) the entering into of any new material Equity Documents with respect to a Platform Company's Equity Interests, any material amendment, restatement, supplement or other modification of or to any such Equity Document, copies of such Organizational Documents, Equity Documents or applicable amendment, restatement, supplement or modification, as the case may be;

(j) together with the monthly financial statements, copies of any loan documents entered into by a Platform Company or any Subsidiary thereof with respect to secured Indebtedness for borrowed money of a Platform Company or such Subsidiary, and any material amendment or other modification thereto, in each case to the extent permitted by law or contract;

(k) promptly after any material amendment, restatement, supplement or other modification to or of any Organizational Document or Equity Document of a Borrower or Qualified Subsidiary, a copy thereof;

(l) within five (5) Business Day of the occurrence of a Prepayment Event, a notification thereof, together with a description of such Prepayment Event, copies of such documents entered into in connection with the transaction giving rise to the Prepayment Event as Agent may reasonably request and calculations in form reasonably acceptable to Agent of the amount of Net Cash Proceeds, if any, arising from such Prepayment Event;

(m) promptly upon any legal process in an amount greater than $500,000 affecting the Collateral, a notification thereof;

(n) within three (3) Business Days of the occurrence of any Event of Default, a notification thereof; and

(o) promptly (and in any event within three (3) Business Days) notice if a Borrower or any Subsidiary has knowledge that a Borrower, or any Subsidiary or Affiliate of a Borrower, is listed on the OFAC Lists or (a) is convicted of, (b) pleads *nolo contendere* to, (c) is indicted on, or (d) is arraigned and held over on charges involving money laundering or predicate crimes to money laundering.

Notwithstanding the foregoing, documents required to be delivered under this Article 7 may be delivered electronically and shall be deemed delivered when Borrower posts a link to such publically disclosed documents on its website.

No Borrower shall make any change in its (a) accounting policies or reporting practices other than to the extent required or otherwise contemplated by GAAP or other applicable regulatory requirements, or (b) and shall not change its fiscal years or fiscal quarters. The fiscal year of each Borrower shall end on December 31.

The executed Compliance Certificate may be sent via email to Agent at legal@herculestech.com with a copy to hbhalla@htgc.com and nshah@htgc.com. All Financial Statements required to be delivered pursuant to clauses (a), (b) and (c) shall be sent via e-mail to financialstatements@herculestech.com with a copy to legal@herculestech.com with a copy to hbhalla@htgc.com; and nshah@htgc.com, provided, that if e-mail is not available or sending such Financial Statements via e-mail is not possible, they shall be faxed to Agent at: (650) 473-9194, attention Account Manager: BridgeBio Pharma LLC,

7.2 Management Rights. Borrowers shall permit any representative that Agent or Lender authorizes, including its attorneys and accountants, to inspect the Collateral and examine and make copies and abstracts of the books of account and records of Borrowers at reasonable times and upon reasonable notice during normal business hours; provided, however, that so long as no Event of Default has occurred and is continuing, such examinations shall be limited to no more often than twice per fiscal year. In addition, any such representative shall have the right to meet with management and officers of Borrowers to discuss such books of account and records at reasonable times and upon reasonable notice. In addition, Agent or Lender shall be entitled at reasonable times and intervals to consult with and advise the management and officers of Borrowers concerning significant business issues affecting Borrowers. Such consultations shall not unreasonably interfere with Borrowers' business operations. The parties intend that the rights under this paragraph shall permit Agent or Lender solely the right to provide advice or recommendations and not be deemed to give Agent or Lender any right to exercise control or any rights of operations with respect to Borrower or its business.

7.3 Further Assurances. Each Borrower shall from time to time execute, deliver and file, alone or with Agent, any financing statements, security agreements, collateral assignments, notices, control agreements, or other documents to perfect or give the highest priority to Agent's Lien on the Collateral. Each Borrower shall from time to time procure any instruments or documents as may be reasonably requested by Agent, and take all further action that may be necessary, or that Agent may reasonably request, to perfect and protect the Liens granted hereby and thereby. In addition, and for such purposes only, each Borrower hereby authorizes Agent to execute and deliver on behalf of such Borrower and to file such financing statements (including an indication that the financing statement covers "all assets or all personal property" of such Borrower in accordance with Section 9-504 of the UCC), and each Borrower hereby authorizes Agent, at any time during the existence of an Event of Default, to execute and deliver on behalf of such Borrower any collateral assignments, notices, control agreements, security agreements and other documents without the signature of such Borrower either in Agent's name or in the name of Agent as agent and attorney-in-fact for such Borrower if such Borrower does not deliver the same within three (3) Business Days of Agent's request. Each Borrower shall protect and defend such Borrower's title to the Collateral and Agent's Lien thereon against all Persons claiming any interest adverse to such Borrower or Agent other than Permitted Liens.

7.4 Indebtedness. No Borrower shall create, incur, assume, guarantee or be or remain liable with respect to any Indebtedness, other than Permitted Indebtedness, or prepay any Indebtedness or take any actions which impose on any Borrower an obligation to prepay any Indebtedness, except for (a) the conversion of Indebtedness into equity securities and the payment of cash in lieu of fractional shares in connection with such conversion, (b) with respect to purchase money Indebtedness permitted hereunder to the extent the outright purchase of such equipment would constitute an Investment in a capital asset that is permitted, (c) to the extent refinanced with similar Permitted Indebtedness, (d) to the extent permitted pursuant to the terms of any subordination or intercreditor agreement executed by Agent, or (e) as otherwise permitted hereunder or approved in writing by Agent.

7.5 Liens. Each Borrower shall at all times keep the Collateral and all other property and assets used in Borrowers' business or in which such Borrower now or hereafter holds any interest free and clear from any Liens whatsoever (except for Permitted Liens). No Borrower shall agree with any Person other than Agent or Lender not to encumber the Collateral, other than pursuant to Permitted Indebtedness and except for restrictions on the granting of Liens (other than Permitted Liens and the Liens pursuant to the Loan Documents) in a Borrower's Organizational Documents.

7.6 Investments. Each Borrower shall not directly or indirectly acquire or own, or make any Investment in or to any Person other than Permitted Investments.

7.7 Distributions. No Borrower shall (a) repurchase or redeem any class of stock or other Equity Interest of Borrower or a Qualified Subsidiary other than repurchases described in clause (c) of the defined term "Permitted Investments"; (b) declare or pay any cash dividend or make a cash distribution on any class of stock or other Equity Interest, except for (i) distributions of Net Cash Proceeds, to the extent Agent shall have waived the application of any portion of such Net Cash Proceeds to the mandatory prepayment and to the extent Agent has consented to the distribution in respect of any portion of such Net Cash Proceeds to Parent's members, (ii) distributions of proceeds received by Parent from an initial public

offering of Parent's common stock on a recognized national or international exchange, or (iii) for any calendar year or portion thereof during which Parent is a pass-through entity for U.S. federal income tax purposes, payments and distributions to members of Parent, on or prior to each estimated tax payment date as well as each other applicable due date, in an amount not to exceed the product of (x) the total aggregate taxable income of Parent and its Subsidiaries (or estimates thereof) which is allocable to its members or partners as a result of the operations or activities of Parent and its Subsidiaries during the relevant period, multiplied by (y) the highest combined marginal federal, state and local income tax rates applicable to any member or partner of Parent (or, if any of them are themselves a pass-through entity for U.S. federal income tax purposes, their members or partners) determined by taking into account the character of the income and loss allocable to the members or partners as it affects the applicable tax rate, after taking proper account of loss carryforwards resulting from losses allocated to the members or partners by Parent, to the extent not taken into account in prior periods; (c) lend money to any employees, officers, managers or directors or guarantee the payment of any such loans granted by a third party in excess of $500,000 in the aggregate; or (d) waive, release or forgive any Indebtedness owed by any employees, officers, managers or directors in excess of $100,000 in the aggregate.

7.8 Transfers. Except for Permitted Transfers, no Borrower shall voluntarily or involuntarily transfer, sell, lease, license, lend or in any other manner convey any equitable, beneficial or legal interest in any material portion of its assets.

7.9 Mergers or Acquisitions. No Borrower shall merge or consolidate with or into any other Person.

7.10 Taxes. Each Borrower and each Qualified Subsidiary shall pay when due all material Taxes, fees or other charges of any nature whatsoever (together with any related interest or penalties) now or hereafter imposed or assessed against a Borrower or the Collateral or upon a Borrower's ownership, possession, use, operation or disposition thereof or upon a Borrower's rents, receipts or earnings arising therefrom, unless the same are being contested in good faith and by appropriate proceedings and adequate reserves in accordance with GAAP are being maintained by such Borrower or such Qualified Subsidiary. Each Borrower shall file on or before the due date therefor all material personal property Tax returns in respect of the Collateral.

7.11 Certain Changes. No Borrower shall

(a) suffer a Change in Control.

(b) change its jurisdiction of organization, organizational form or legal name without twenty (20) days' prior written notice to Agent.

(c) relocate its chief executive office or its principal place of business unless: (i) it has provided prior written notice to Agent; and (ii) such relocation shall be within the continental United States of America.

(d) amend, restate, supplement or otherwise modify the terms of the Organizational Documents of a Borrower or Qualified Subsidiary if the effect of such change could be expected to be materially adverse to the interests of Agent or Lender.

(e) suffer any Investments in Equity Interests of a Platform Company to be held, directly or indirectly by a Subsidiary of Parent that is not organized under the laws of the United States or any state or territory thereof.

7.12 Deposit Accounts. No Borrower shall maintain any Deposit Accounts, or accounts holding Investment Property, except for Excluded Accounts and accounts with respect to which Agent has an Account Control Agreement.

7.13 Qualified Subsidiaries; Platform Companies.

(a) Borrower Representative shall, within 15 days of formation, shall cause any Qualified Subsidiary to execute and deliver to Agent a Joinder Agreement. Prior to the execution and delivery of a Joinder Agreement, Borrowers shall cause any Qualified Subsidiary to comply with the terms of this Agreement applicable to Borrowers.

(b) No Borrower shall suffer the Organizational Documents of any Platform Company or any Qualified Subsidiary, or any of its Equity Document to contain any provision, unless waived, which would restrict, delay or condition the grant of the security interest in the Pledged Collateral as set forth in this Agreement or the exercise of any remedy with respect to the Pledged Collateral, including, without limitation, the exercise of voting rights by Agent or the disposition of the Pledged Collateral after the occurrence and during the continuation of an Event of Default.

7.14 Use of Proceeds. Each Borrower agrees that the proceeds of the Loans shall be used solely to pay related fees and expenses in connection with this Agreement and for working capital and general business purposes, including Investments in Platform Companies. The proceeds of the Loans will not be used in violation of Anti-Corruption Laws or applicable Sanctions.

7.15 Compliance with Laws.

(a) Each Borrower shall maintain compliance in all material respect with all applicable laws, rules or regulations, and shall, or cause its Subsidiaries to, obtain and maintain all required governmental authorizations, approvals, licenses, franchises, permits or registrations reasonably necessary in connection with the conduct of Borrowers' business; and no Borrower shall become an "investment company" or a company controlled by an "investment company", under the Investment Company Act.

(b) No Borrower shall, nor shall a Borrower permit any controlled Affiliate to, directly or indirectly, knowingly enter into any documents, instruments, agreements or contracts with any Person listed on the OFAC Lists. No Borrower shall (i) conduct any business or engage in any transaction or dealing with any Blocked Person, including, without limitation, the making or receiving of any contribution of funds, goods or services to or for the benefit of any Blocked Person, (ii) deal in, or otherwise engage in any transaction relating to, any property or interests in property blocked pursuant to Executive Order No. 13224 or any similar executive order or other Anti-Terrorism Law, or (iii) engage in or conspire to engage in any transaction that evades or avoids, or has the purpose of evading or avoiding, or attempts to violate, any of the prohibitions set forth in Executive Order No. 13224 or other Anti-Terrorism Law, nor shall a Borrower knowingly permit any controlled Affiliate to, directly or indirectly do any of the foregoing.

(c) Each Borrower has implemented and maintains in effect policies and procedures designed to ensure compliance by a Borrower, and their respective directors, officers, managers, employees, and agents with Anti-Corruption Laws and applicable Sanctions, and each Borrower, and their respective officers and employees and to the knowledge of each Borrower its directors, managers and agents, are in compliance with Anti-Corruption Laws and applicable Sanctions in all material respects.

(d) None of Borrowers, or any of their respective directors, officers, managers or employees, or to the knowledge of Borrowers, any agent for Borrowers that will act in any capacity in connection with or benefit from the credit facility established hereby, is a Sanctioned Person. No Loan, use of proceeds or other transaction contemplated by this Agreement will violate Anti-Corruption Laws or applicable Sanctions.

7.16 Intellectual Property. Each Borrower shall (i) protect, defend and maintain the validity and enforceability of its Intellectual Property necessary for its continued operations; (ii) promptly advise Agent in writing of material infringements of material Intellectual Property of a Borrower; and Borrower shall use commercially reasonable efforts to prevent any Intellectual Property material to Borrowers' business from being abandoned, forfeited or dedicated to the public. If a Borrower (i) obtains any Patent,

registered Trademark, registered Copyright, registered mask work, or any pending application for any of the foregoing, whether as owner, licensee or otherwise, or (ii) applies for any Patent or the registration of any Trademark, then such Borrower shall on the next Compliance Certificate required to be delivered hereunder provide written notice thereof to Agent and shall execute such intellectual property security agreements and other documents and take such other actions as Agent may request in its good faith business judgment to perfect and maintain a first priority perfected security interest in favor of Agent in such property. Borrowers shall when it delivers the next Compliance Certificate required to be delivered hereunder provide to Agent copies of all applications that it files for Patents or for the registration of Trademarks, Copyrights or mask works, together with evidence of the recording of the intellectual property security agreement required for Agent to perfect and maintain a first priority perfected security interest in such property.

7.17 Transactions with Affiliates. No Borrower shall, directly or indirectly, enter into or permit to exist any transaction of any kind with any Affiliate of any Borrower on terms that are less favorable to Borrowers, than those that might be obtained in an arm's length transaction from a Person who is not an Affiliate of a Borrower, except that Borrower shall not be subject to the foregoing limitation with respect to (i) issuance of Subordinated Indebtedness or Equity Interests, including to existing investors, (ii) entrance into customary compensation arrangements in the ordinary course of business a and approved by the Board, (iii) consummation of any Permitted Transfer expressly contemplated to be entered into between a Borrower and an Affiliate, or (iv) any distribution permitted pursuant to Section 7.7.

7.18 Pledged Collateral. Any Borrower shall, (a) at such Borrower's expense, promptly execute, acknowledge and deliver all such instruments and take all such actions as Agent from time to time may reasonably request in order to ensure to Agent the benefits of the pledge intended to be created by Section 3.3, shall maintain, preserve and defend the title to the Pledged Collateral and the Lien of the Agent thereon against the claim of any other Person (other than Permitted Liens); (b) with respect to any Equity Interests of an issuer owned by such Borrower constituting limited liability company membership interests, shall, to the extent it controls such issuer, cause Article 8 of the Uniform Commercial Code of such issuer's jurisdiction of organization to govern the Equity Interests of such issuer, such Equity Interests to be certificated or otherwise evidenced by an instrument, and shall deliver such certificate or instrument, together with a duly executed transfer power or other instrument of transfer (in form and substance reasonably satisfactory to the Agent) executed in blank, promptly (but in any event within three (3) Business Days after receipt thereof by Borrower) to the Agent; (c) upon acquiring any new Equity Interests constituting Pledged Collateral or Instruments constituting Collateral, within five (5) Business Days (i) deliver to Agent an updated Schedule 5.15 hereto, in form reasonably satisfactory to Agent, identifying such additional Equity Interests, which shall be attached to this Agreement, (ii) either deliver or otherwise cause the transfer of such additional Equity Interests or Instruments (including any certificates and duly executed transfer powers or other instruments of transfer executed in blank and in form and substance satisfactory to Agent) to Agent as required under this Agreement or any Loan Document or enter into a control agreement in favor of Agent in form acceptable to Agent with respect thereto, provided that with respect to Equity Interests of a Borrower other than Parent, to the extent the Organizational Documents of such Borrower do not provide for the issuance of physical stock certificates and as long as no physical stock certificates are issued, Borrowers shall not be required to deliver stock certificates, stock powers or control agreements, and (iii) to the extent related to an Investment in a new Platform Company, deliver an acknowledgement, consent and waiver in substantially the form delivered by the Platform Companies as of the Closing Date. No Borrower shall enter into any agreement restricting its ability to vote the Equity Interests or assigning or otherwise transferring or restricting its ability to vote the Equity Interests owned by such Borrower other than pursuant to any Loan Document or in connection with voting agreements entered into by holders of Equity Interests in each Platform Company on customary terms for venture capital financings, in each case, which are not designed to impair the pledge or Agent's exercise of remedies with respect to Pledged Collateral.

7.19 Post-Closing Deliveries. Borrower shall deliver the documents or take the actions as set forth in Schedule 7.19 hereto.

7.20 Introductions. When any Platform Company is considering a secured loan facility, Borrower shall use commercially reasonable efforts to introduce a representative of Agent to the chief financial officer or other appropriate officer of such Platform Company to allow Agent's representative to present possible lending options to such Platform Company.

SECTION 8. RIGHT TO INVEST

8.1 Lender or its assignee or nominee shall have the right, in its discretion, to participate in the next Subsequent Financing in an amount of up to $2,000,000 on the same terms, conditions and pricing afforded to others participating in any such Subsequent Financing, provided that with respect to an initial public offering of Parent, Parent shall use commercially reasonable efforts to allow such participation. Parent shall provide written notice to Lender at least five (5) Business Days prior to the consummation of each Subsequent Financing, and if Lender desires to exercise its right to participate in such Subsequent Financing, Lender shall cooperate to consummate its Investment in such closing within five (5) days of receipt of documentation with respect thereto. Parent shall not take any action to avoid or seek to avoid the observance or performance of any of the obligations pursuant to this Section 8.1, but will at all times in good faith assist in the carrying out the same and take all such action as may be necessary or appropriate to protect the rights of Lender hereunder against impairment. Without limiting the generality of the foregoing, Parent will obtain all such authorizations, exemptions or consents from any third party or any Governmental Authority having jurisdiction thereof as may be necessary to enable Parent to perform its obligations under this Agreement.

SECTION 9. EVENTS OF DEFAULT

The occurrence of any one or more of the following events shall be an Event of Default:

9.1 Payments. Borrowers fail to pay principal, interest and regularly scheduled fee when due under this Agreement or any other Loan Document, or shall pay any other amount due hereunder within three (3) Business Days of the due date; provided, however, that an Event of Default shall not occur on account of a failure to pay due solely to an administrative or operational error of Agent or Lender or a Borrower's bank if such Borrower had the funds to make the payment when due and makes the payment within three (3) Business Days following such Borrowers' knowledge of such failure to pay; or

9.2 Covenants. A Borrower breaches or defaults in the performance of any covenant or Secured Obligation under this Agreement, or any of the other Loan Documents or any other agreement among any Borrower, Agent and Lender, and (a) with respect to a default under any covenant under this Agreement other than the Sections specifically identified in clause (b) hereof, any other Loan Document or any other agreement between any Borrower and Agent or Lender, and such default continues for more than twenty (20) days, or (b) with respect to a default under any of Sections 6, 7.1, 7.4, 7.5, 7.6, 7.7, 7.8, 7.9, 7.10, 7.11, 7.12, 7.13, 7.14, 7.15, 7.17, 7.18 or 7Jj) the occurrence of such default; or

9.3 Material Adverse Effect. A circumstance has occurred that could reasonably be expected to have a Material Adverse Effect; or

9.4 Representations. Any representation or warranty made by any Borrower in any Loan Document shall have been false or misleading in any material respect when made or when deemed made; or

9.5 Insolvency. Any Borrower or Qualified Subsidiary (i) (A) shall make an assignment for the benefit of creditors; or (B) shall be unable to pay its debts as they become due, or shall become insolvent; or (C) shall file a voluntary petition in bankruptcy; or (D) shall file any petition, answer, or document seeking for itself any reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation pertinent to such circumstances; or (E) shall seek or consent to or acquiesce in the appointment of any trustee, receiver, or liquidator of such Person or of all or any part of the assets or property of such Person; or (F) shall cease

operations of its business as its business has normally been conducted, or terminate substantially all of its employees; or (G) any Borrower or Qualified Subsidiary or the Board or majority of the holders of the Equity Interests of the foregoing shall take any action initiating any of the foregoing actions described in clauses (A) through (F); or (ii) either (A) forty-five (45) days shall have expired after the commencement of an involuntary action against any Borrower seeking reorganization, arrangement, composition, readjustment, liquidation, dissolution or similar relief under any present or future statute, law or regulation, without such action being dismissed or all orders or proceedings thereunder affecting the operations or the business of a Borrower, or a Qualified Subsidiary being stayed; or (B) a stay of any such order or proceedings shall thereafter be set aside and the action setting it aside shall not be appealed within twenty (20) days; or (C) any Borrower, or Qualified Subsidiary shall file any answer admitting or not contesting the material allegations of a petition filed against such Borrower or Qualified Subsidiary in any such proceedings; or (D) the court in which such proceedings are pending shall enter a decree or order granting the relief sought in any such proceedings; or (E) thirty (30) days shall have expired after the appointment, without the consent or acquiescence of the applicable Borrower or Qualified Subsidiary, of any trustee, receiver or liquidator of such Person or of all or any material part of the properties of such Person without such appointment being vacated; or

9.6 Attachments; Judgments. Any material portion of the assets of any Borrower or Qualified Subsidiary is attached or seized, or a levy is filed against any such assets, or a judgment or judgments is/are entered (in each case not covered by independent third party insurance) for the payment of money individually or in the aggregate, of at least $500,000, or any Borrower or Qualified Subsidiary is enjoined or in any way prevented by court order from conducting any material part its business; or

9.7 Other Obligations. The occurrence of any default under any agreement or obligation of any Borrower or Qualified Subsidiary involving any Indebtedness in excess of $500,000, which could entitle or permit any Person to accelerate such Indebtedness.

SECTION 10. REMEDIES

10.1 General. Upon and during the continuance of any one or more Events of Default, (i) Agent may, and at the direction of the Required Lenders shall, accelerate and demand payment of all or any part of the Secured Obligations together with a Prepayment Charge and declare them to be immediately due and payable (provided, that upon the occurrence of an Event of Default of the type described in Section 9.5, all of the Secured Obligations shall automatically be accelerated and made due and payable, in each case without any further notice or act), (ii) Agent may, at its option, sign and file in any Borrower's name any and all collateral assignments, notices, control agreements, security agreements and other documents it deems necessary or appropriate to perfect or protect the repayment of the Secured Obligations, and in furtherance thereof, each Borrower hereby grants Agent an irrevocable power of attorney coupled with an interest, and (iii) Agent may notify any of any Borrower's account debtors to make payment directly to Agent, compromise the amount of any such account on such Borrower's behalf and endorse Agent's name without recourse on any such payment for deposit directly to Agent's account. Agent may, and at the direction of the Required Lenders shall, exercise all rights and remedies with respect to the Collateral under the Loan Documents or otherwise available to it under the UCC and other applicable law, including the right to release, hold, sell, lease, liquidate, collect, realize upon, or otherwise dispose of all or any part of the Collateral and the right to occupy, utilize, process and commingle the Collateral. All Agent's rights and remedies shall be cumulative and not exclusive.

10.2 Collection; Foreclosure. Upon the occurrence and during the continuance of any Event of Default, Agent shall at the direction of the Required Lenders, at any time or from time to time, apply, collect, liquidate, sell in one or more sales, lease or otherwise dispose of, any or all of the Collateral, in its then condition or following any commercially reasonable preparation or processing, in such order as Agent may elect. Any such sale may be made either at public or private sale at its place of business or elsewhere. Each Borrower agrees that any such public or private sale may occur upon ten (10) calendar days' prior written notice to Borrower Representative. Agent may require any Borrower to assemble the Collateral and make it available to Agent at a place designated by Agent. The proceeds of any sale, disposition or other realization upon all or any part of the Collateral shall be applied by Agent in the following order of priorities:

First, to Agent and Lender in an amount sufficient to pay in full Agent's and Lender's reasonable costs and professionals' and advisors' fees and expenses as described in Section 11.11;

Second, to Lender in an amount equal to the then unpaid amount of the Secured Obligations (including principal, interest, subject to increase in accordance with Section 2.3), in such order and priority as Agent may choose in its sole discretion; and

Finally, after the full and final payment in Cash of all of the Secured Obligations (other than inchoate obligations), to any creditor holding a junior Lien on the Collateral, or to Borrowers or each of its representatives or as a court of competent jurisdiction may direct.

Agent shall be deemed to have acted reasonably in the custody, preservation and disposition of any of the Collateral if it complies with the obligations of a secured party under the UCC.

10.3 No Waiver. Agent shall be under no obligation to marshal any of the Collateral for the benefit of any Borrower or any other Person, and each Borrower expressly waives all rights, if any, to require Agent to marshal any Collateral.

10.4 Pledged Collateral. Upon the occurrence and during the continuation of an Event of Default, (a) at Agent's election and upon notice to the applicable Borrower, Agent may vote any or Equity Interests (whether or not the same shall have been transferred into its name or the name of its nominee or nominees) for any lawful purpose, including, without limitation, for the liquidation of the assets of the issuer thereof, and give all consents, waivers and ratifications in respect of the Equity Interests and otherwise act with respect thereto as though it were the outright owner thereof (hereby irrevocably constituting and appointing Agent the proxy and attorney-in-fact of such Borrower, with full power of substitution, to do so); (b) Agent may demand, sue for, collect or make any compromise or settlement Agent deems suitable in respect of any Equity Interests; (c) Agent may sell, resell, assign and deliver, or otherwise dispose of any or all of the Pledged Collateral, for cash or credit or both and upon such terms at such place or places, at such time or times and to such entities or other persons as Agent deems expedient, all without demand for performance by any Borrower or any notice or advertisement whatsoever except as expressly provided herein or as may otherwise be required by law; (d) Agent may cause all or any part of the Pledged Collateral to be transferred into its name or the name of its nominee or nominees; and (e) at Agent's election and upon notice thereof to the applicable Borrower, Agent may exercise all membership or partnership, as applicable, rights, powers and privileges to the same extent as the applicable Borrower is entitled to exercise such rights, powers and privileges. Agent may enforce its rights hereunder without any other notice and without compliance with any other condition precedent now or hereunder imposed by statute, rule of law or otherwise (all of which are hereby expressly waived by each Borrower, to the fullest extent permitted by law). Each Borrower recognizes that the Collateral Agent may be unable to effect a public sale or other disposition of its Equity Interests by reason of certain prohibitions contained in securities laws and other applicable laws, but may be compelled to resort to one or more private sales thereof to a restricted group of purchasers. Each Borrower agrees that any such private sales may be at prices and other terms less favorable to the seller than if sold at public sales and that such private sales shall not by reason thereof be deemed not to have been made in a commercially reasonable manner. Agent shall be under no obligation to delay a sale of any of the Pledged Collateral for the period of time necessary to permit the issuer of Equity Interests to register such securities for public sale under securities laws or other applicable laws, even if such issuer would agree to do so. In connection with the sale of Pledged Collateral by Agent during the continuation of an Event of Default, each Borrower agrees to use its commercially reasonable efforts to cause each issuer of the Equity Interests contemplated to be sold, to execute and deliver, and cause the directors and officers of such issuer to execute and deliver, all at such Borrower's expense, all such instruments and documents, and to do or cause to be done all such other acts and things as may be necessary or, in the reasonable opinion of Agent, advisable to exempt such Equity Interests from registration under the provisions of applicable laws, and to make all amendments to such instruments and documents which, in the opinion of Agent, are necessary or advisable, all in conformity with the requirements of applicable laws and the rules and regulations of the Securities and Exchange Commission applicable thereto.

10.5 Cumulative Remedies. The rights, powers and remedies of Agent hereunder shall be in addition to all rights, powers and remedies given by statute or rule of law and are cumulative. The exercise of any one or more of the rights, powers and remedies provided herein shall not be construed as a waiver of or election of remedies with respect to any other rights, powers and remedies of Agent.

SECTION 11. MISCELLANEOUS

11.1 Severability. Whenever possible, each provision of this Agreement shall be interpreted in such manner as to be effective and valid under applicable law, but if any provision of this Agreement shall be prohibited by or invalid under such law, such provision shall be ineffective only to the extent and duration of such prohibition or invalidity, without invalidating the remainder of such provision or the remaining provisions of this Agreement.

11.2 Notice. Except as otherwise provided herein, any notice, demand, request, consent, approval, declaration, service of process or other communication (including the delivery of Financial Statements) that is required, contemplated, or permitted under the Loan Documents or with respect to the subject matter hereof shall be in writing, and shall be deemed to have been validly served, given, delivered, and received upon the earlier of: (i) the day of transmission by electronic mail or hand delivery or delivery by an overnight express service or overnight mail delivery service; or (ii) the third calendar day after deposit in the United States of America mails, with proper first class postage prepaid, in each case addressed to the party to be notified as follows:

(a) If to Agent:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer; Himani Bhalla; Nimesh Shah
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Telephone: 650-289-3060

(b) If to Lender:

HERCULES CAPITAL, INC.
Legal Department
Attention: Chief Legal Officer; Himani Bhalla; Nimesh Shah
400 Hamilton Avenue, Suite 310
Palo Alto, CA 94301

email: legal@herculestech.com; hbhalla@htgc.com; nshah@htgc.com
Telephone: 650-289-3060

(c) If to Borrowers:

BridgeBio Pharma LLC
Attention:
421 Kipling Street
Palo Alto, CA 94301

email: nk@bridgebio.com
Telephone: 650-391-9740

or to such other address as each party may designate for itself by like notice.

11.3 Entire Agreement; Amendments.

(a) This Agreement and the other Loan Documents constitute the entire agreement and understanding of the parties hereto in respect of the subject matter hereof and thereof, and supersede and replace in their entirety any prior proposals, term sheets, non-disclosure or confidentiality agreements, letters, negotiations or other documents or agreements, whether written or oral, with respect to the subject matter hereof or thereof (including Agent's proposal letter dated April 12, 2018 and the Non-Disclosure Agreement).

(b) Neither this Agreement, any other Loan Document, nor any terms hereof or thereof may be amended, supplemented or modified except in accordance with the provisions of this Section 11.3(b). The Required Lenders and Borrowers party to the relevant Loan Document may, or, with the written consent of the Required Lenders, Agent and Borrowers party to the relevant Loan Document may, from time to time, (i) enter into written amendments, supplements or modifications hereto and to the other Loan Documents for the purpose of adding any provisions to this Agreement or the other Loan Documents or changing in any manner the rights of Lender or of Borrowers hereunder or thereunder or (ii) waive, on such terms and conditions as the Required Lenders or Agent, as the case may be, may specify in such instrument, any of the requirements of this Agreement or the other Loan Documents or any default or Event of Default and its consequences; provided, however, that no such waiver and no such amendment, supplement or modification shall (A) forgive the principal amount or extend the final scheduled date of maturity of any Loan, extend the scheduled date of any amortization payment in respect of any Term Loan Advance, reduce the stated rate of any interest or fee payable hereunder, or extend the scheduled date of any payment thereof, in each case without the written consent of each Lender directly affected thereby; (B) eliminate or reduce the voting rights of any Lender under this Section 11.3(b) without the written consent of such Lender; (C) reduce any percentage specified in the definition of Required Lenders, consent to the assignment or transfer by Borrowers of any of its rights and obligations under this Agreement and the other Loan Documents, release all or substantially all of the Collateral or release a Borrower from its obligations under the Loan Documents, in each case without the written consent of all Lenders; or (D) amend, modify or waive any provision of Section 11.17 without the written consent of Agent. Any such waiver and any such amendment, supplement or modification shall apply equally to each Lender and shall be binding upon Borrowers, Lender, Agent and all future holders of the Loans.

11.4 No Strict Construction. The parties hereto have participated jointly in the negotiation and drafting of this Agreement. In the event an ambiguity or question of intent or interpretation arises, this Agreement shall be construed as if drafted jointly by the parties hereto and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

11.5 No Waiver. The powers conferred upon Agent and Lender by this Agreement are solely to protect its rights hereunder and under the other Loan Documents and its interest in the Collateral and shall not impose any duty upon Agent or Lender to exercise any such powers. No omission or delay by Agent or Lender at any time to enforce any right or remedy reserved to it, or to require performance of any of the terms, covenants or provisions hereof by Borrowers at any time designated, shall be a waiver of any such right or remedy to which Agent or Lender is entitled, nor shall it in any way affect the right of Agent or Lender to enforce such provisions thereafter.

11.6 Survival. All agreements, representations and warranties contained in this Agreement and the other Loan Documents or in any document delivered pursuant hereto or thereto shall be for the benefit of Agent and Lender and Borrowers and shall survive the execution and delivery of this Agreement. Section 2.9, Section 6.3 and Section 11.14 shall survive the termination of this Agreement.

11.7 Successors and Assigns. The provisions of this Agreement and the other Loan Documents shall inure to the benefit of and be binding on each Borrower and its permitted assigns (if any). No Borrower shall assign its obligations under this Agreement or any of the other Loan Documents without Agent's express prior written consent, and any such attempted assignment shall be void and of no effect. Agent and Lender may assign, transfer, or endorse its rights hereunder and under the other Loan Documents without prior notice to Borrowers, and all of such rights shall inure to the benefit of Agent's and Lender's successors and assigns; provided that as long as no Event of Default has occurred and is continuing, neither Agent nor any Lender may assign, transfer or endorse its rights hereunder or under the Loan Documents to any party that is a direct competitor of Borrowers or a distressed debt or vulture investor (as reasonably determined by Agent), it being acknowledged that in all cases, any transfer to a Controlled Investment Affiliate of any Lender or Agent shall be allowed. Agent, acting solely for this purpose as an agent of Borrowers, shall maintain at one of its offices in the State of California a copy of each assignment delivered to it in connection with any assignment by a Lender, and a register for the recordation of the names and addresses of each Lender, and the Term Commitments of, and principal amounts (and stated interest) of the Loans owing to, each Lender pursuant to the terms hereof from time to time (the "Register"). The entries in the Register shall be conclusive absent manifest error, and Borrowers, Agent and Lender shall treat each Person whose name is recorded in the Register pursuant to the terms hereof as Lender hereunder for all purposes of this Agreement. The Register shall be available for inspection by Borrowers and Lender, at any reasonable time and from time to time upon reasonable prior notice.

11.8 Governing Law. This Agreement and the other Loan Documents have been negotiated and delivered to Agent and Lender in the State of California, and shall have been accepted by Agent and Lender in the State of California. Payment to Agent and Lender by Borrowers of the Secured Obligations is due in the State of California. This Agreement and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

11.9 Consent to Jurisdiction and Venue. All judicial proceedings (to the extent that the reference requirement of Section 11.10 is not applicable) arising in or under or related to this Agreement or any of the other Loan Documents may be brought in any state or federal court located in the State of California. By execution and delivery of this Agreement, each party hereto generally and unconditionally: (a) consents to nonexclusive personal jurisdiction in Santa Clara County, State of California; (b) waives any objection as to jurisdiction or venue in Santa Clara County, State of California; (c) agrees not to assert any defense based on lack of jurisdiction or venue in the aforesaid courts; and (d) irrevocably agrees to be bound by any judgment rendered thereby in connection with this Agreement or the other Loan Documents following the exhaustion of all rights with respects to appeals relating thereto. Service of process on any party hereto in any action arising out of or relating to this Agreement shall be effective if given in accordance with the requirements for notice set forth in Section 11.2, and shall be deemed effective and received as set forth in Section 11.2. Nothing herein shall affect the right to serve process in any other manner permitted by law or shall limit the right of either party to bring proceedings in the courts of any other jurisdiction.

11.10 Mutual Waiver of Jury Trial / Judicial Reference.

(a) Because disputes arising in connection with complex financial transactions are most quickly and economically resolved by an experienced and expert Person and the parties wish applicable state and federal laws to apply (rather than arbitration rules), the parties desire that their disputes be resolved by a judge applying such applicable laws. EACH OF BORROWERS, AGENT AND LENDER SPECIFICALLY WAIVES ANY RIGHT IT MAY HAVE TO TRIAL BY JURY OF ANY CAUSE OF ACTION, CLAIM, CROSS-CLAIM, COUNTERCLAIM, THIRD PARTY CLAIM OR ANY OTHER CLAIM (COLLECTIVELY, "CLAIMS") ASSERTED BY BORROWERS AGAINST AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE OR BY AGENT, LENDER OR THEIR RESPECTIVE ASSIGNEE AGAINST A BORROWER. This waiver extends to all such Claims, including Claims that involve Persons other than Agent, Borrowers and Lender; Claims that arise out of or are in any way connected to the relationship among Borrowers, Agent and Lender; and any Claims for damages, breach of contract, tort, specific performance, or any equitable or legal relief of any kind, arising out of this Agreement, any other Loan Document.

(b) If the waiver of jury trial set forth in Section 11.10(a) is ineffective or unenforceable, the parties agree that all Claims shall be resolved by reference to a private judge sitting without a jury, pursuant to Code of Civil Procedure Section 638, before a mutually acceptable referee or, if the parties cannot agree, a referee selected by the Presiding Judge of the Santa Clara County, California. Such proceeding shall be conducted in Santa Clara County, California, with California rules of evidence and discovery applicable to such proceeding.

(c) In the event Claims are to be resolved by judicial reference, either party may seek from a court identified in Section 11.9, any prejudgment order, writ or other relief and have such prejudgment order, writ or other relief enforced to the fullest extent permitted by law notwithstanding that all Claims are otherwise subject to resolution by judicial reference.

11.11 Professional Fees. Each Borrower promises to pay Agent's and Lender's reasonable fees and expenses necessary to finalize the loan documentation, including but not limited to reasonable attorneys' fees, UCC searches, filing costs, and other miscellaneous expenses. In addition, each Borrower promises to pay any and all reasonable attorneys' and other professionals' fees and expenses incurred by Agent and Lender after the Closing Date in connection with or related to: (a) the Loan; (b) the administration, collection, or enforcement of the Loan; (c) the amendment or modification of the Loan Documents; (d) any waiver, consent, release, or termination under the Loan Documents; (e) the protection, preservation, audit, field exam, sale, lease, liquidation, or disposition of Collateral or the exercise of remedies with respect to the Collateral; (f) any legal, litigation, administrative, arbitration, or out of court proceeding in connection with or related to a Borrower or the Collateral, and any appeal or review thereof; and (g) any bankruptcy, restructuring, reorganization, assignment for the benefit of creditors, workout, foreclosure, or other action related to a Borrower, the Collateral, the Loan Documents, including representing Agent or Lender in any adversary proceeding or contested matter commenced or continued by or on behalf of a Borrower's estate, and any appeal or review thereof.

11.12 Confidentiality. Agent and Lender acknowledge that certain items of Collateral and information provided to Agent and Lender by a Borrower are confidential and proprietary information of Borrowers, if and to the extent such information either (i) is marked as confidential by such Borrower at the time of disclosure, or (ii) should reasonably be understood to be confidential (the "Confidential Information"). Accordingly, Agent and Lender agree that any Confidential Information it may obtain in the course of acquiring, administering, or perfecting Agent's security interest in the Collateral shall not be disclosed to any other Person or entity in any manner whatsoever, in whole or in part, without the prior written consent of Borrowers, except that Agent and Lender may disclose any such information: (a) to its own directors, officers, employees, accountants, counsel and other professional advisors and to its Affiliates if Agent or Lender in their reasonable discretion determines that any such party should have access to such information in connection with such party's responsibilities in connection with the Loan or this Agreement and, provided that such recipient of such Confidential Information either (i) agrees to be bound by the confidentiality provisions of this paragraph or (ii) is otherwise subject to confidentiality restrictions that reasonably protect against the disclosure of Confidential Information; (b) if such information is generally available to the public; (c) if required or appropriate in any report, statement or testimony submitted to any governmental authority having or claiming to have jurisdiction over Agent or Lender; (d) if required or appropriate in response to any summons or subpoena or in connection with any litigation, to the extent permitted or deemed advisable by Agent's or Lender's counsel; (e) to comply with any legal requirement or law applicable to Agent or Lender; (f) to the extent reasonably necessary in connection with the exercise of any right or remedy under any Loan Document, including Agent's sale, lease, or other disposition of Collateral after default; (g) to any participant or assignee of Agent or Lender or any prospective participant or assignee; provided, that such participant or assignee or prospective participant or assignee agrees in writing to be bound by this Section prior to disclosure; or (h) otherwise with the prior consent of any Borrower; provided, that any disclosure made in violation of this Agreement shall not affect the obligations of any Borrower or any of its Affiliates or any guarantor under this Agreement or the other Loan Documents. Agent's and Lender's obligations under this Section 11.12 shall supersede all of their respective obligations under the Non-Disclosure Agreement.

11.13 Assignment of Rights. Each Borrower acknowledges and understands that Agent or Lender may, subject to Section 11.7, sell and assign all or part of its interest hereunder and under the Loan Documents to any Person or entity (an "Assignee"). After such assignment the term "Agent" or "Lender" as used in the Loan Documents shall mean and include such Assignee, and such Assignee shall be vested with all rights, powers and remedies of Agent and Lender hereunder with respect to the interest so assigned; but with respect to any such interest not so transferred, Agent and Lender shall retain all rights, powers and remedies hereby given. No such assignment by Agent or Lender shall relieve any Borrower of any of its obligations hereunder. Lender agrees that in the event of any transfer by it of the Term Note(s)(if any), it will endorse thereon a notation as to the portion of the principal of the Term Note(s), which shall have been paid at the time of such transfer and as to the date to which interest shall have been last paid thereon.

11.14 Revival of Secured Obligations; Termination. This Agreement and the Loan Documents shall remain in full force and effect and continue to be effective if any petition is filed by or against any Borrower for liquidation or reorganization, if any Borrower becomes insolvent or makes an assignment for the benefit of creditors, if a receiver or trustee is appointed for all or any significant part of any Borrower's assets, or if any payment or transfer of Collateral is recovered from Agent or Lender. The Loan Documents and the Secured Obligations and Collateral security shall continue to be effective, or shall be revived or reinstated, as the case may be, if at any time payment and performance of the Secured Obligations or any transfer of Collateral to Agent, or any part thereof is rescinded, avoided or avoidable, reduced in amount, or must otherwise be restored or returned by, or is recovered from, Agent, Lender or by any obligee of the Secured Obligations, whether as a "voidable preference," "fraudulent conveyance," or otherwise, all as though such payment, performance, or transfer of Collateral had not been made. In the event that any payment, or any part thereof, is rescinded, reduced, avoided, avoidable, restored, returned, or recovered, the Loan Documents and the Secured Obligations (other than obligations that survive termination) shall be deemed, without any further action or documentation, to have been revived and reinstated except to the extent of the full, final, and payment in cash to Agent or Lender in cash. This Agreement and the Loan Documents shall terminate on the payment in full in cash of the Secured Obligations (other than any obligations that specifically survive termination).

11.15 Counterparts. This Agreement and any amendments, waivers, consents or supplements hereto may be executed in any number of counterparts, and by different parties hereto in separate counterparts, each of which when so delivered shall be deemed an original, but all of which counterparts shall constitute but one and the same instrument.

11.16 No Third Party Beneficiaries. No provisions of the Loan Documents are intended, nor will be interpreted, to provide or create any third-party beneficiary rights or any other rights of any kind in any Person other than Agent, Lender and Borrowers unless specifically provided otherwise herein, and, except as otherwise so provided, all provisions of the Loan Documents will be personal and solely among Agent, Lender and Borrowers.

11.17 Agency.

(a) Lender hereby irrevocably appoints Hercules Capital, Inc. to act on its behalf as Agent hereunder and under the other Loan Documents and authorizes Agent to take such actions on its behalf and to exercise such powers as are delegated to Agent by the terms hereof or thereof, together with such actions and powers as are reasonably incidental thereto.

(b) Lender agrees to indemnify Agent in its capacity as such (to the extent not reimbursed by Borrowers and without limiting the obligation of Borrowers to do so), according to its respective Term Commitment percentages (based upon the total outstanding Term Commitments) in effect on the date on which indemnification is sought under this Section 11.17, from and against any and all liabilities, obligations, losses, damages, penalties, actions, judgments, suits, costs, expenses or disbursements of any

kind whatsoever that may at any time be imposed on, incurred by or asserted against Agent in any way relating to or arising out of, this Agreement, any of the other Loan Documents or any documents contemplated by or referred to herein or therein or the transactions contemplated hereby or thereby or any action taken or omitted by Agent under or in connection with any of the foregoing; The agreements in this Section shall survive the payment of the Loans and all other amounts payable hereunder.

(c) Agent in Its Individual Capacity. The Person serving as Agent hereunder shall have the same rights and powers in its capacity as a Lender as any other Lender and may exercise the same as though it were not Agent and the term "Lender" shall, unless otherwise expressly indicated or unless the context otherwise requires, include each such Person serving as Agent hereunder in its individual capacity.

(d) Exculpatory Provisions. Agent shall have no duties or obligations except those expressly set forth herein and in the other Loan Documents. Without limiting the generality of the foregoing, Agent shall not:

(i) be subject to any fiduciary or other implied duties, regardless of whether any default or any Event of Default has occurred and is continuing;

(ii) have any duty to take any discretionary action or exercise any discretionary powers, except discretionary rights and powers expressly contemplated hereby or by the other Loan Documents that Agent is required to exercise as directed in writing by Lender, provided that Agent shall not be required to take any action that, in its opinion or the opinion of its counsel, may expose Agent to liability or that is contrary to any Loan Document or applicable law; and (iii) except as expressly set forth herein and in the other Loan Documents, have any duty to disclose, and Agent shall not be liable for the failure to disclose, any information relating to Borrowers or any of its Affiliates that is communicated to or obtained by any Person serving as Agent or any of its Affiliates in any capacity.

(e) Agent shall not be liable for any action taken or not taken by it (i) with the consent or at the request of Lender or as Agent shall believe in good faith shall be necessary, under the circumstances or (ii) in the absence of its own gross negligence or willful misconduct.

(f) Agent shall not be responsible for or have any duty to ascertain or inquire into (i) any statement, warranty or representation made in or in connection with this Agreement or any other Loan Document, (ii) the contents of any certificate, report or other document delivered hereunder or thereunder or in connection herewith or therewith, (iii) the performance or observance of any of the covenants, agreements or other terms or conditions set forth herein or therein or the occurrence of any default or Event of Default, (iv) the validity, enforceability, effectiveness or genuineness of this Agreement, any other Loan Document or any other agreement, instrument or document or (v) the satisfaction of any condition set forth in Section 4 or elsewhere herein, other than to confirm receipt of items expressly required to be delivered to Agent.

(g) Reliance by Agent. Agent may rely, and shall be fully protected in acting, or refraining to act, upon, any resolution, statement, certificate, instrument, opinion, report, notice, request, consent, order, bond or other paper or document that it has no reason to believe to be other than genuine and to have been signed or presented by the proper party or parties or, in the case of cables, telecopies and telexes, to have been sent by the proper party or parties. In the absence of its gross negligence or willful misconduct, Agent may conclusively rely, as to the truth of the statements and the correctness of the opinions expressed therein, upon any certificates or opinions furnished to Agent and conforming to the requirements of the Loan Agreement or any of the other Loan Documents. Agent may consult with counsel, and any opinion or legal advice of such counsel shall be full and complete authorization and protection in respect of any action taken, not taken or suffered by Agent hereunder or under any Loan Documents in accordance therewith. Agent shall have the right at any time to seek instructions concerning the administration of the Collateral from any court of competent jurisdiction. Agent shall not be under any obligation to exercise any of the rights or powers granted to Agent by this Agreement, the Loan Agreement and the other Loan Documents at the request or direction of Lenders unless Agent shall have been provided by Lender with adequate security and indemnity against the costs, expenses and liabilities that may be incurred by it in compliance with such request or direction.

11.18 Publicity. None of the parties hereto nor any of its respective member businesses and Affiliates shall, without the other parties' prior written consent (which shall not be unreasonably withheld or delayed), publicize or use (a) the other party's name (including a brief description of the relationship among the parties hereto), logo or hyperlink to such other parties' web site, separately or together, in written and oral presentations, advertising, promotional and marketing materials, client lists, public relations materials or on its web site (together, the "Publicity Materials"); (b) the names of officers of such other parties in the Publicity Materials; and (c) such other parties' name, trademarks, service marks in any news or press release concerning such party; provided however, notwithstanding anything to the contrary herein, no such consent shall be required (i) to the extent necessary to comply with the requests of any regulators, legal requirements or laws applicable to such party, pursuant to any listing agreement with any national securities exchange (so long as such party provides prior notice to the other party hereto to the extent reasonably practicable) and (ii) to comply with Section 11.12.

11.19 Multiple Borrowers.

(a) Borrowers' Agent. Each of Borrowers hereby irrevocably appoints Borrower Representative as its agent, attorney-in-fact and legal representative for all purposes, including requesting disbursement of the Term Loan Advance and receiving account statements and other notices and communications to Borrowers (or any of them) from Agent or any Lender. Agent may rely, and shall be fully protected in relying, on any request for the Term Loan Advance, disbursement instruction, report, information or any other notice or communication made or given by Borrower Representative, whether in its own name or on behalf of one or more of the other Borrowers, and Agent shall not have any obligation to make any inquiry or request any confirmation from or on behalf of any other Borrower as to the binding effect on it of any such request, instruction, report, information, other notice or communication, nor shall the joint and several character of Borrowers' obligations hereunder be affected thereby.

(b) Waivers. Each Borrower hereby waives: (i) any right to require Agent to institute suit against, or to exhaust its rights and remedies against, any other Borrower or any other Person, or to proceed against any property of any kind which secures all or any part of the Secured Obligations, or to exercise any right of offset or other right with respect to any reserves, credits or deposit accounts held by or maintained with Agent or any Indebtedness of Agent or any Lender to any other Borrower, or to exercise any other right or power, or pursue any other remedy Agent or any Lender may have; (ii) any defense arising by reason of any disability or other defense of any other Borrower or any guarantor or any endorser, co-maker or other Person, or by reason of the cessation from any cause whatsoever of any liability of any other Borrower or any guarantor or any endorser, co-maker or other Person, with respect to all or any part of the Secured Obligations, or by reason of any act or omission of Agent or others which directly or indirectly results in the discharge or release of any other Borrower or any guarantor or any other Person or any Secured Obligations or any security therefor, whether by operation of law or otherwise; (iii) any defense arising by reason of any failure of Agent to obtain, perfect, maintain or keep in force any Lien on, any property of any Borrower or any other Person; (iv) any defense based upon or arising out of any bankruptcy, insolvency, reorganization, arrangement, readjustment of debt, liquidation or dissolution proceeding commenced by or against any other Borrower or any guarantor or any endorser, co-maker or other Person, including without limitation any discharge of, or bar against collecting, any of the Secured Obligations (including without limitation any interest thereon), in or as a result of any such proceeding. Until all of the Secured Obligations have been paid, performed, and discharged in full, nothing shall discharge or satisfy the liability of any Borrower hereunder except the full performance and payment of all of the Secured Obligations. If any claim is ever made upon Agent for repayment or recovery of any amount or amounts received by Agent in payment of or on account of any of the Secured Obligations, because of any claim that any such payment constituted a preferential transfer or fraudulent conveyance, or for any other reason whatsoever, and Agent repays all or part of said amount by reason of any judgment, decree or order of any court or administrative body having jurisdiction over Agent or any of its property, or by reason of any settlement or compromise of any such claim effected by Agent with any such claimant (including without limitation the any other Borrower), then and in any such event, each Borrower agrees

that any such judgment, decree, order, settlement and compromise shall be binding upon such Borrower, notwithstanding any revocation or release of this Agreement or the cancellation of any note or other instrument evidencing any of the Secured Obligations, or any release of any of the Secured Obligations, and each Borrower shall be and remain liable to Agent and Lender under this Agreement for the amount so repaid or recovered, to the same extent as if such amount had never originally been received by Agent or any Lender, and the provisions of this sentence shall survive, and continue in effect, notwithstanding any revocation or release of this Agreement. Each Borrower hereby expressly and unconditionally waives all rights of subrogation, reimbursement and indemnity of every kind against any other Borrower, and all rights of recourse to any assets or property of any other Borrower, and all rights to any collateral or security held for the payment and performance of any Secured Obligations, including (but not limited to) any of the foregoing rights which a Borrower may have under any present or future document or agreement with any other Borrower or other Person, and including (but not limited to) any of the foregoing rights which any Borrower may have under any equitable doctrine of subrogation, implied contract, or unjust enrichment, or any other equitable or legal doctrine.

(c) Consents. Each Borrower hereby consents and agrees that, without notice to or by such Borrower and without affecting or impairing in any way the obligations or liability of such Borrower hereunder, Agent may, from time to time before or after revocation of this Agreement, do any one or more of the following in its sole and absolute discretion: (i) accept partial payments of, compromise or settle, renew, extend the time for the payment, discharge, or performance of, refuse to enforce, and release all or any parties to, any or all of the Secured Obligations; (ii) grant any other indulgence to any Borrower or any other Person in respect of any or all of the Secured Obligations or any other matter; (iii) accept, release, waive, surrender, enforce, exchange, modify, impair, or extend the time for the performance, discharge, or payment of, any and all property of any kind securing any or all of the Secured Obligations or any guaranty of any or all of the Secured Obligations, or on which Agent at any time may have a Lien, or refuse to enforce its rights or make any compromise or settlement or agreement therefor in respect of any or all of such property; (iv) substitute or add, or take any action or omit to take any action which results in the release of, any one or more other Borrowers or any endorsers or guarantors of all or any part of the Secured Obligations, including, without limitation one or more parties to this Agreement, regardless of any destruction or impairment of any right of contribution or other right of such Borrower; (v) apply any sums received from any other Borrower, any guarantor, endorser, or co-signer, or from the disposition of any Collateral or security, to any Indebtedness whatsoever owing from such Person or secured by such Collateral or security, in such manner and order as Agent determines in its sole discretion, and regardless of whether such Indebtedness is part of the Secured Obligations, is secured, or is due and payable. Each Borrower consents and agrees that Agent shall be under no obligation to marshal any assets in favor of Borrower, or against or in payment of any or all of the Secured Obligations. Each Borrower further consents and agrees that Agent shall have no duties or responsibilities whatsoever with respect to any property securing any or all of the Secured Obligations. Without limiting the generality of the foregoing, Agent shall have no obligation to monitor, verify, audit, examine, or obtain or maintain any insurance with respect to, any property securing any or all of the Secured Obligations.

(d) Independent Liability. Each Borrower hereby agrees that one or more successive or concurrent actions may be brought hereon against such Borrower, in the same action in which any other Borrower may be sued or in separate actions, as often as deemed advisable by Agent. Each Borrower is fully aware of the financial condition of each other Borrower and is executing and delivering this Agreement based solely upon its own independent investigation of all matters pertinent hereto, and such Borrower is not relying in any manner upon any representation or statement of Agent or any Lender with respect thereto. Each Borrower represents and warrants that it is in a position to obtain, and each Borrower hereby assumes full responsibility for obtaining, any additional information concerning any other Borrower’s financial condition and any other matter pertinent hereto as such Borrower may desire, and such Borrower is not relying upon or expecting Agent to furnish to it any information now or hereafter in Agent’s possession concerning the same or any other matter.

(e) Subordination. All Indebtedness of any Borrower now or hereafter arising held by another Borrower is subordinated to the Secured Obligations and any Borrower holding the Indebtedness shall take all actions reasonably requested by Agent to effect, to enforce and to give notice of such subordination.

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IN WITNESS WHEREOF, Borrowers, Agent and Lender have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

BORROWERS:

BRIDGEBIO PHARMA LLC

Signature: /s/ Neil Kumar
Print Name: Neil Kumar
Title: Chief Executive Officer

BRIDGEBIO SERVICES INC.

Signature: /s/ Neil Kumar
Print Name: Neil Kumar
Title: Chief Executive Officer

IN WITNESS WHEREOF, Borrowers, Agent and Lender have duly executed and delivered this Loan and Security Agreement as of the day and year first above written.

Accepted in Palo Alto, California:

AGENT:

HERCULES CAPITAL, INC.

Signature: /s/ Zhuo Huang
Print Name: Zhuo Huang
Title: Associate General Counsel

LENDER:

HERCULES CAPITAL, INC. ,

Signature: /s/ Zhuo Huang
Print Name: Zhuo Huang
Title: Associate General Counsel

Table of Exhibits and Schedules

Exhibit 10.7

FIRST AMENDMENT TO LOAN AND SECURITY AGREEMENT

THIS FIRST AMENDMENT TO LOAN AND SECURITY AGREEMENT (this "Amendment"), dated as of December 28, 2018 is entered into by and among BRIDGEBIO PHARMA LLC, a Delaware limited liability company ("Parent"), BRIDGEBIO SERVICES INC., a Delaware corporation ("Services Company"), SUB20, INC., a Delaware corporation ("Sub20", and together with Parent, Services Company and each other Person party hereto from time to time as borrower, from time to time, collectively, "Borrowers", and each, a "Borrower"), and the several banks and other financial institutions or entities party thereto as Lender, constituting the Required Lenders and HERCULES CAPITAL, INC., a Maryland corporation, in its capacity as administrative agent and collateral agent for Lender (in such capacity, "Agent").

A. Parent, Services Company, Lender and Agent are parties to a Loan and Security Agreement, dated as of June 19, 2018 (as amended, restated, supplemented or otherwise modified from time to time, the "Loan Agreement").

B. Sub20 entered into a Joinder Agreement, dated as of July 27, 2018, to become a Borrower pursuant to the Loan Agreement.

C. Borrowers, Lender and Agent desire to modify the terms of the Loan Agreement as set forth in this Amendment.

SECTION 1 Definitions; Interpretation.

(a) **Terms Defined in Loan Agreement**. All capitalized terms used in this Amendment (including in the recitals hereof) and not otherwise defined herein shall have the meanings assigned to them in the Loan Agreement.

(b) **Rules of Construction**. The rules of construction that appear in the last paragraph of Section 1.1 of the Loan Agreement shall be applicable to this Amendment and are incorporated herein by this reference.

SECTION 2 Amendments to the Loan Agreement.

(a) The Loan Agreement shall be amended as follows effective as of the First Amendment Effective Date:

(i) The following defined terms are either added in appropriate alphabetical order to, or amended and restated in, Section 1.1 of the Loan Agreement, to read as follows:

"Amortization Date" means January 1, 2021, provided that if Parent consummates a Qualified IPO, the Amortization Date shall be extended to July 1, 2021, provided further, that the Amortization Date of the Discretionary Advance will be determined prior to the Advance Date thereof.

"Cash Interest Reduction Amount" has the meaning set forth in the Term Loan Cash Interest Rate definition.

"Change in Control" means a transaction or series of related transactions (i) pursuant to which, or as a result of which, a single Person or group (within the meaning of Section 13(d)(3) of the Exchange Act) (in each case other than any CoC Entity) acquires or holds equity interests of Parent representing (A) a majority of the outstanding voting securities (in each case excluding any unvested voting securities that would not become vested voting securities as a result of such transaction, whether pursuant to the terms of such unvested voting securities, by Board action or otherwise), or (B) the right to receive a majority of the proceeds in a final liquidation, dissolution or termination, voluntary or involuntary, of Parent, or (ii) resulting in Services Company or any other Subsidiary that is a Borrower ceasing to be a wholly-owned Subsidiary of a Borrower. Notwithstanding the foregoing, a "Change in Control" shall not include (a) an initial public offering of Parent's Equity Interests, provided that following such offering, such Equity Interests shall be listed on an established national or international exchange, (b) an SPAC Transaction; (c) any Permitted Transfer, or (d) a bona fide private equity or venture capital round of financing in the ordinary course of business.

"Discretionary Advance" has the meaning set forth in Section 2.1(a)(iii).

"Facility Charge" means, collectively, $350,000, due on the Closing Date (which has been paid prior to the First Amendment Effective Date), and $100,000, due on the First Amendment Effective Date.

"First Amendment Effective Date" means December 28, 2018.

"Maturity Date" means July 1, 2022, provided that if Parent consummates a Qualified IPO, the Maturity Date shall be January 1, 2023, provided further, that the Maturity Date of the Discretionary Advance will be determined prior to the Advance Date thereof.

"PIK Deferral Period" has the meaning set forth in the Term Loan Cash Interest Rate definition.

"Qualified IPO" means either (i) an initial public offering (and any follow-on offerings within six (6) months of such initial public offering) of Parent's common Equity Interests in an underwritten public offering that results in such common Equity Interests being listed on a United States national securities exchange, and as a result of which Parent receives not less than $175,000,000 in net cash proceeds, or (ii) an SPAC Transaction.

"SPAC" means a newly formed special purpose acquisition entity, which (i) has been formed with the purpose of raising capital, (ii) has completed an initial public offering resulting in the Equity Interests of such entity being listed on a United States national securities exchange, and (iii) does not conduct any material business or maintain any material assets other than Cash.

"SPAC Transaction" means an acquisition, merger or other business combination pursuant to between Parent and an SPAC, provided that (i) the surviving entity shall be Parent, (ii) the transaction shall result in Parent being listed on a United States national securities exchange, (iii) Parent shall receive not less than $175,000,000 in net cash proceeds as a result of the transaction, and (iv) Borrowers shall have provided ten (10) Business Days prior written notice of the transaction to Agent, and Agent shall have received copies of the material documents entered into to effect the SPAC Transaction, as Agent may reasonably request, together with any documents that Agent may reasonably request to maintain Agent's security interest and other rights with respect to Borrowers and the Collateral pursuant to this Agreement.

"Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers as set forth in Section 2.1.

"Term Loan Advance" means, individually or collectively, as the context may require, a Tranche I Advance, Tranche II Advance or Discretionary Advance.

"Term Loan Cash Interest Rate" means, for any day a per annum rate of interest equal to (a), in case of the Tranche I Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 4.35%, and (ii) 9.35%, and (b) in case of the Tranche II Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 3.35%, and (ii) 9.10%, provided that if Parent consummates a Qualified IPO, the Term Loan Cash Interest Rate shall be reduced to a per annum rate of interest equal to (a) in case of the Tranche I Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 3.85%, and (ii) 8.85%, (b) in case of the Tranche II Advance, the greater of either (i) the "prime rate" as reported in The Wall Street Journal plus 2.85%, and (ii) 8.60%, provided further that the interest rate applicable to the Discretionary Advance will be determined prior to the Advance Date thereof. If Parent consummates a Qualified IPO, Parent may elect, by prior written notice to Agent at least five (5) Business Days prior to the first Business Day of a month, to reduce the then effective per annum rates of interest applicable to the Tranche I Advance and the Tranche II Advance, respectively,

by up to 1.50% (the amount of such reduction, the "Cash Interest Reduction Amount") for a period specified in such notice, provided that such period shall begin on the first Business Day of the next month and shall end on the last day of the third month or any subsequent month thereafter (the "PIK Deferral Period"), provided that after the expiration of the PIK Deferral Period, the reduction to the rates of interest applicable to the Tranche I Advance and Tranche II Advance shall cease to apply. If during a PIK Deferral Period, Parent desires to terminate the PIK Deferral Period prior to the previously requested end date of the PIK Deferral Period, Parent may by written notice to Agent at least five Business Days prior to the previously scheduled end date of the PIK Deferral Period, elect an earlier end date (which must be the last day of a month that is no earlier than the last day of the third month after the commencement of the PIK Deferral Period). If during a PIK Deferral Period, Parent desires to change the Cash Interest Reduction Amount, Parent may by written notice to Agent at least five Business Days prior to the first Business Day of the month when such change is to take effect, elect a different Cash Interest Reduction Amount, provided that the Cash Interest Reduction Amount shall not be changed more frequently than once during any consecutive three month period.

"Term Loan PIK Interest" has the meaning set forth in Section 2.1(c)(ii).

"Term Loan PIK Interest Rate" means, for any day a per annum rate of interest equal to (a) during any PIK Deferral Period, the Cash Interest Reduction Amount, multiplied by 1.2, and (b) otherwise, 0.00%.

"Tranche I Advance" has the meaning set forth in Section 2.1(a)(i).

"Tranche I Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche I Term Commitment" opposite such Lender's name on Schedule 1.1.

"Tranche II Advance" has the meaning set forth in Section 2.1(a)(ii).

"Tranche II Term Commitment" means as to any Lender, the obligation of such Lender, if any, to make a Term Loan Advance to Borrowers in a principal amount not to exceed the amount set forth under the heading "Tranche I Term Commitment" opposite such Lender's name on Schedule 1.1.

(ii) Section 2.1(a) of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

(a) Term Commitments.

(i) *Tranche I Term Loan Advance.* Subject to the terms and conditions of this Agreement, Lender has made a Term Loan Advance in an original principal amount of $35,000,000 on the Closing Date (the "Tranche I Advance").

(ii) *Tranche II Term Loan Advance.* Subject to the terms and conditions of this Agreement, Lender will severally (and not jointly) make a Term Loan Advance in a principal amount not to exceed its respective Tranche II Term Commitment, and Borrowers agree to draw, a Term Loan Advance of $20,000,000 on the First Amendment Effective Date (the "Tranche II Advance").

(iii) *Discretionary Advance.* Subject to the terms and conditions of this Agreement and subject to Lender's approval in its sole and absolute discretion, no later than June 15, 2020, Lender may make a Term Loan Advance in an aggregate principal amount up to $25,000,000 (the "Discretionary Advance").

(iii) Section 2.1(b) of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

(b) Advance Request. Borrower shall complete, sign and deliver to Agent an Advance Request at least one (1) Business Day before the Advance Date of each Term Loan Advance. Lender shall fund the Term Loan Advance in the manner requested by the Advance Request provided that each of the conditions precedent to such Term Loan Advance is satisfied as of the respective Advance Date.

(iv) Section 2.1(c) of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

(c) Interest.

(i) Term Loan Cash Interest Rate. In addition to interest accrued pursuant to the Term Loan PIK Interest Rate, the principal balance (including, for the avoidance of doubt, any amount equal to the Term Loan PIK Interest added to principal pursuant to Section 2.1(c)(ii)) of each Term Loan Advance shall bear interest thereon from such Advance Date (or date such amount equal to the Term Loan PIK Interest is added to the principal) at the Term Loan Cash Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed. The Term Loan Cash Interest Rate will float and change on the day the "prime rate" as reported in the Wall Street Journal changes from time to time.

(ii) Term Loan PIK Interest Rate. In addition to interest accrued pursuant to the Term Loan Cash Interest Rate, to the extent Parent has initiated a PIK Deferral Period, the principal balance of each Term Loan Advance shall bear interest thereon from such Advance Date at the Term Loan PIK Interest Rate based on a year consisting of 360 days, with interest computed daily based on the actual number of days elapsed (the "Term Loan PIK Interest"), which amount shall be added to the outstanding principal balance and so capitalized so as to increase the outstanding principal balance of such Term Loan Advance on each payment date for such Advance and which amount shall be payable when the principal amount of the applicable Advance is payable in accordance with Section 2.1(d).

(v) Section 2.1(d) of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

(d) Payment. Borrowers will pay interest on the Term Loan Advance on the first Business Day of each month, beginning the month after the Advance Date continuing until the Amortization Date. Borrowers shall repay the principal balance of the Term Loan Advance that is outstanding on the day immediately preceding the Amortization Date, in equal monthly installments of principal and interest (mortgage style) beginning on the Amortization Date and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid, provided that if the Term Loan Cash Interest Rate is adjusted in accordance with its terms, or the Amortization Date or the Maturity Date is extended, or a PIK Deferral Period becomes effective, the amount of each subsequent monthly installment shall be recalculated so that the remaining payments shall be equal monthly installments of principal and interest (mortgage style) beginning on the first Business Day of the month following such recalculation and continuing on the first Business Day of each month thereafter until the Secured Obligations (other than inchoate indemnity obligations) are repaid in full. The entire principal balance of the Term Loan Advance and all accrued but unpaid interest hereunder, shall be due and payable on the Maturity Date. Borrowers shall make all payments under this Agreement without setoff, recoupment or deduction and regardless of any counterclaim or defense. Lender will initiate debit entries to the Parent's account as authorized on the ACH Authorization (i) on each payment date of all periodic obligations payable to Lender with respect to the Term Loan Advance and (ii) out-of-pocket legal fees and costs incurred by Agent or Lender in connection with Section 11.11 of this Agreement; provided that, with respect to clause (i) above, in the event that Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry to such Borrower's account for a certain amount of the periodic obligations

due on a specific payment date, Borrowers shall pay to Lender such amount of periodic obligations in full in immediately available funds on such payment date; provided, further, that, with respect to clause (i) above, if Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry as described above later than the date that is three (3) Business Days prior to such payment date, Borrowers shall pay to Lender such amount of periodic obligations in full in immediately available funds on the date that is three (3) Business Days after the date on which Lender or Agent notifies Borrower Representative thereof; provided, further, that, with respect to clause (ii) above, in the event that Lender or Agent informs Borrower Representative that Lender will not initiate a debit entry to a Borrower's account for specified out-of-pocket legal fees and costs incurred by Agent or Lender, Borrowers shall pay to Lender such amount in full in immediately available funds within three (3) Business Days.

(vi) Section 2.5 of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

2.5 End of Term Charge. On the earliest to occur of (i) the Maturity Date, (ii) the date that Borrowers prepay the outstanding Secured Obligations (other than any inchoate indemnity obligations and any other obligations which, by their terms, are to survive the termination of this Agreement) in full or in part (in case of a prepayment pursuant to Section 2.4(a)), or (iii) the date that the Secured Obligations become due and payable in full pursuant to the terms of this Agreement, Borrowers shall pay Lender a charge equal to (x) in case of a partial prepayment pursuant to Section 2.4(a), 6.35% of any principal prepayment in respect of the Tranche I Advance, and 5.75% of any principal prepayment in respect of Tranche II Advance, and (y) in connection with the payment in full of the outstanding Secured Obligations a charge in an amount equal to the sum of $2,222,500, in respect of the Tranche I Advance, and $1,150,000, in respect of the Tranche II Advance, less any charges paid prior to such date pursuant to the foregoing clause (x) in connection with partial prepayments. Any similar charge applicable to payment of the Discretionary Advance will be determined prior to the Advance Date thereof. Notwithstanding the required payment date of such charge, it shall be deemed earned by Lender as of the Closing Date.

(vii) Section 7.9 of the Loan Agreement is hereby amended and restated in its entirety to read as follows:

7.9 Mergers or Acquisitions. No Borrower shall merge or consolidate with or into any other Person, provided that the foregoing shall not restrict Parent from consummating an SPAC Transaction.

(viii) Schedule 1.1 of the Loan Agreement is hereby amended and restated as set forth in Schedule 1.1 attached hereto.

(**b) References Within Loan Agreement.** Each reference in the Loan Agreement to "this Agreement" and the words "hereof," "herein," "hereunder," or words of like import, shall mean and be a reference to the Loan Agreement as amended by this Amendment. This Amendment shall be a Loan Document.

SECTION 3 Conditions of Effectiveness. The effectiveness of Section 2 of this Amendment shall be subject to Agent's receipt of the following documents, in form and substance satisfactory to Agent, or, as applicable, the following conditions being met:

(a) this Amendment, executed by Agent, Lender and Borrowers;

(b) an Advance Request with respect to the Tranche II Advance;

(c) a duly executed certificate of an officer of each Borrower certifying and attaching copies of (A) the Charter, certified as of a recent date by the jurisdiction of organization of such Borrower and as in effect as of the First Amendment Effective Date; (B) the bylaws, operating agreement or similar governing document of such Borrower, as in effect as of the First Amendment Effective Date; (C) resolutions of such Borrower's Board evidencing approval of this Amendment and the Advance to be made on the First Amendment Effective Date, as such resolutions remain in full force and effect as of the First Amendment Effective Date; (D) resolutions of the holders of such Borrower's Equity Interests in connection with the execution and delivery of this Amendment and the Advance to be made on the First Amendment Effective Date, as the same are in full force and effect as of the First Amendment Effective Date, to the extent required by the applicable Organizational Documents; and (E) a schedule setting forth the name, title and specimen signature of officers or other authorized signers on behalf of each Borrower;

(d) a certificate of good standing for each Borrower from its jurisdiction of organization; and

(e) payment of the Facility Charge due on the First Amendment Effective Date, and all of Agent's costs and expenses incurred through the date hereof.

SECTION 4 Waiver; Post-Closing Deliveries. Borrowers acknowledge that in connection with Parent's Investment in Calcilytix, Inc., a Delaware corporation ("**New Platform Company**"), Borrower Representative failed to timely deliver to Agent, (i) the stock certificate(s) representing the Equity Securities of New Platform Company owned by Borrower Representative, together with the stock power(s) with respect thereto, in accordance with Section 7.18 of the Loan Agreement, (ii) the Equity Documents and Organizational Documents of New Platform Company, required to be delivered in accordance with Section 7.1(i) of the Loan Agreement, and (iii) an acknowledgement, consent and waiver with respect to the pledge of the Equity Securities of New Platform Company, in substantially the form delivered with respect to the pledges of Equity Securities of Platform Companies as of the Closing Date, in accordance with Section 7.18(iii) of the Loan Agreement (the foregoing documents described in the foregoing clauses (i) through (iii) hereof, the "**New Platform Company Documents**"). Agent hereby waives any Event of Default arising due to a failure to deliver the New Platform Company Documents as required in accordance with the Loan Agreement, and agrees that the same may be delivered within thirty (30) days of the First Amendment Effective Date, and Borrowers hereby agree to deliver the New Platform Company Documents within such period. A failure to deliver the New Platform Company Documents within such period shall constitute an immediate Event of Default without cure period. The foregoing waiver is not a continuing waiver with respect to any failure to perform (except for the specified period), is specific as to content and time and shall not constitute a waiver of any other current or future default or breach of any covenants contained in the Loan Agreement, establish a course of dealing with respect to any failure to comply with the terms of the Loan Agreement or obligate Agent or Required Lenders to waive any future Event of Default.

SECTION 5 Representations and Warranties. To induce Agent and Lender to enter into this Amendment, each Borrower hereby confirms, as of the date hereof, that the representations and warranties made by it in Section 5 of the Loan Agreement and in the other Loan Documents are true and correct in all material respects; provided, however, that such materiality qualifier shall not be applicable to any representations and warranties that already are qualified or modified by materiality in the text thereof and that any representations and warranties made as of a specific date are only true and correct in all material respects as of such date, and that no Event of Default has occurred and is continuing.

SECTION 6 Miscellaneous.

(a) Loan Documents Otherwise Not Affected; Reaffirmation. Except as expressly amended pursuant hereto or referenced herein, the Loan Agreement and the other Loan Documents shall remain unchanged and in full force and effect and are hereby ratified and confirmed in all respects. Lender's and Agent's execution and delivery of, or acceptance of, this Amendment shall not be deemed to create a course of dealing or otherwise create any express or implied duty by any of them to provide any other or further amendments, consents or waivers in the future. Each Borrower hereby reaffirms the security interest granted pursuant to the Loan Documents and hereby reaffirms that such grant of security in the Collateral as granted as of the Closing Date continues without novation and secures all Secured Obligations under the Loan Agreement and the other Loan Documents.

(b) **Conditions**. For purposes of determining compliance with the conditions specified in Section 3, each Lender that has signed this Amendment shall be deemed to have consented to, approved or accepted or to be satisfied with, each document or other matter required thereunder to be consented to or approved by or acceptable or satisfactory to a Lender unless Agent shall have received notice from such Lender prior to the date hereof specifying its objection thereto.

(c) **Release**. In consideration of the agreements of Agent and Lender contained herein and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, each Borrower, on behalf of itself and its successors, assigns, and other legal representatives, hereby fully, absolutely, unconditionally and irrevocably releases, remises and forever discharges Agent and Lender, and its successors and assigns, and its present and former shareholders, affiliates, subsidiaries, divisions, predecessors, directors, officers, attorneys, employees, agents and other representatives (Agent, Lender and all such other persons being hereinafter referred to collectively as the "Releasees" and individually as a "Releasee"), of and from all demands, actions, causes of action, suits, covenants, contracts, controversies, agreements, promises, sums of money, accounts, bills, reckonings, damages and any and all other claims, counterclaims, defenses, rights of set-off, demands and liabilities whatsoever of every name and nature, known or unknown, suspected or unsuspected, both at law and in equity, which any Borrower, or any of its successors, assigns, or other legal representatives may now or hereafter own, hold, have or claim to have against the Releasees or any of them for, upon, or by reason of any circumstance, action, cause or thing whatsoever which arises at any time on or prior to the day and date of this Amendment, including, without limitation, for or on account of, or in relation to, or in any way in connection with the Loan Agreement, or any of the other Loan Documents or transactions thereunder or related thereto. Each Borrower waives the provisions of California Civil Code section 1542, which states:

> A GENERAL RELEASE DOES NOT EXTEND TO CLAIMS WHICH THE CREDITOR DOES NOT KNOW OR SUSPECT TO EXIST IN HIS OR HER FAVOR AT THE TIME OF EXECUTING THE RELEASE, WHICH IF KNOWN BY HIM OR HER, MUST HAVE MATERIALLY AFFECTED HIS OR HER SETTLEMENT WITH THE DEBTOR.

Each Borrower understands, acknowledges and agrees that the release set forth above may be pleaded as a full and complete defense and may be used as a basis for an injunction against any action, suit or other proceeding which may be instituted, prosecuted or attempted in breach of the provisions of such release. Each Borrower agrees that no fact, event, circumstance, evidence or transaction which could now be asserted or which may hereafter be discovered shall affect in any manner the final, absolute and unconditional nature of the release set forth above. The provisions of this section shall survive payment in full of the Secured Obligations, full performance of all the terms of this Amendment and the other Loan Documents.

(d) **No Reliance**. Each Borrower hereby acknowledges and confirms to Agent and Lender that such Borrower is executing this Amendment on the basis of its own investigation and for its own reasons without reliance upon any agreement, representation, understanding or communication by or on behalf of any other Person.

(e) **Costs and Expenses**. Each Borrower agrees to pay to Agent the date hereof the reasonable out-of-pocket costs and expenses of Agent and Lender party hereto, and the fees and disbursements of counsel to Agent and Lender party hereto in connection with the negotiation, preparation, execution and delivery of this Amendment and any other documents to be delivered in connection herewith on the date hereof.

(f) **Binding Effect**. This Amendment binds and is for the benefit of the successors and permitted assigns of each party.

(g) **Governing Law**. This Amendment and the other Loan Documents shall be governed by, and construed and enforced in accordance with, the laws of the State of California, excluding conflict of laws principles that would cause the application of laws of any other jurisdiction.

(h) **Complete Agreement; Amendments**. This Amendment and the Loan Documents represent the entire agreement about this subject matter and supersede prior negotiations or agreements with respect to such subject matter. All prior agreements, understandings, representations, warranties, and negotiations between the parties about the subject matter of this Amendment and the Loan Documents merge into this Amendment and the Loan Documents.

(i) **Severability of Provisions**. Each provision of this Amendment is severable from every other provision in determining the enforceability of any provision.

(j) **Counterparts**. This Amendment may be executed in any number of counterparts and by different parties on separate counterparts, each of which, when executed and delivered, is an original, and all taken together, constitute one Amendment. Delivery of an executed counterpart of a signature page of this Amendment by facsimile, portable document format (.pdf) or other electronic transmission will be as effective as delivery of a manually executed counterpart hereof.

[REMAINDER OF PAGE INTENTIONALLY LEFT BLANK]

IN WITNESS WHEREOF, the parties hereto have duly executed this Amendment, as of the date first above written.

BORROWERS:

BRIDGEBIO PHARMA LLC

Signature: /s/ Neil Kumar
Print Name: Neil Kumar
Title: Chief Executive Officer

BRIDGEBIO SERVICES INC.

Signature: /s/ Neil Kumar
Print Name: Neil Kumar
Title: Chief Executive Officer

SUB20, INC.

Signature: /s/ Michael Pettigrew
Print Name: Michael Pettigrew
Title: President

AGENT:

HERCULES CAPITAL, INC.

Signature: /s/ David Huang
Print Name: David Huang
Title: Associate General Counsel

LENDER:

HERCULES CAPITAL, INC.

Signature: /s/ David Huang
Print Name: David Huang
Title: Associate General Counsel

SCHEDULE 1.1

COMMITMENTS

LENDER	TRANCHE I TERM COMMITMENT	TRANCHE II TERM COMMITMENT	DISCRETIONARY TERM COMMITMENT
Hercules Capital, Inc.	$ 35,000,000	$ 20,000,000	$ 25,000,000
TOTAL COMMITMENTS	$ 35,000,000	$ 20,000,000	$ 25,000,000

AIR COMMERCIAL REAL ESTATE ASSOCIATION
STANDARD INDUSTRIAL/COMMERCIAL SINGLE-TENANT LEASE — NET
(DO NOT USE THIS FORM FOR MULTI-TENANT BUILDINGS)

1. Basic Provisions ("Basic Provisions").

1.1 **Parties:** This Lease ("**Lease**"), dated for reference purposes only March 23, 2017 , is made by and between Michael J. Harbour ("**Lessor**") and BridqeBio, Inc., a Delaware company ("**Lessee**"), (collectively the "Parties," or individually a "**Party**").

1.2 **Premises:** That certain real property, including all improvements therein or to be provided by Lessor under the terms of this Lease, and commonly known as 421-423 Kipling Street, Palo Alto , located In the County of Santa Clara , State of California , and generally described as (describe briefly the nature of the property and, if applicable, the "**Project**", if the property is located within a Project) the entire three-story Victorian style office building, together with all of the adjacent parking, consisting of approximately 3,900 rentable sq. ft. ("**Premises**"), (See also Paragraph 2)

1.3 Term: Approx. Three (3) years **("Original Term**") commencing April 14, 2017 ("**Commencement Date**") and ending April 30, 2020 ("**Expiration Date**"). (See also Paragraph 3)

1.4 Early Possession: Upon full execution of Lease and Lessor receipt of Lessee insurance certificate for the purpose of preparing the Premises and Lessee taking occupancy. Lessee shall not be responsible for base rent or operating expenses during this early access period, except Lessee shall be responsible for utilities and janitorial and shall repair any damage during move in and early occupancy, if applicable. ("**Early Possession Date**"). (See also Paragraphs 3.2 and 3.3)

1.5 **Base Rent:** $27,885.00 per month ($7.15/RSF/Mo./NNN) ("**Base Rent**"), payable on the first (1st) day of each month commencing April 14, 2017 (See Addendum rent schedule) . (See also Paragraph 4)

☐ If this box is checked, there are provisions in this Lease for the Base Rent to be adjusted.

1.6 **Bases Rent and Other Monies Paid Upon Execution**:

(a) Base Rent: $43,686.50 for the period April 14, 2017-April 30, 2017 and May Base Rent. Thereafter Base Rent and Operating Expense is due June 1, 2017 as further defined in the Addendum .

(b) Security Deposit: $90,000.00 ("Security Deposit"). (See also Paragraph 5)

(c) Association Fees: $N/A for the period N/A .

(d) Other: $8,859.50 for Operating Expense estimate for a) April 14, 2017 - April 30, 2017 and b) month of May .

(e) Total Due Upon Execution of this Lease: $142,546.00 .

1.7 Agreed Use: General office . (See also Paragraph 6)

1.8 **Insuring Party**: Lessor is the "**Insuring Party**" unless otherwise stated herein. (See also Paragraph 8)

1.9 **Real Estate Brokers**: (See also Paragraph 15)

(a) **Representation:** The following real estate brokers (the "**Brokers**") and brokerage relationships exist in this transaction (check applicable boxes):

☐ Newmark Cornish & Carey - Cherie Wittry represents Lessor exclusively ("**Lessor's Broker**");

☐ T3 Advisors - Rollins Stallworth & Andrew Zink represents Lessee exclusively ("**Lessee's Broker**"); or

☐ _____ represents both Lessor and Lessee ("**Dual Agency**").

(b) **Payment to Brokers:** Upon execution and delivery of this Lease by both Parties, Lessor shall pay to the Broker the fee 4% of the total Base Rent) for the brokerage services rendered by the Brokers, split 50% to Newmark Cornish & Carey and 50% to T3 Advisors.

1.10 **Guarantor**. The obligations of the Lessee under this Lease are to be guaranteed by _____ _____ ("**Guarantor**"). (See also Paragraph 37)

1.11 **Attachments**. Attached hereto are the following, all of which constitute a part of this Lease:

☐ an Addendum consisting of Paragraphs 1 through 15 ;
☐ floor plan depicting the Premises;
☐ a current set of the Rules and Regulations;
☐ a Work Letter;

INITIA **INITIA**

☐ other (specify): Addendum; Arbitration; Exhibit B (FF&E/Personal Property); Exhibit C -

Operating Expenses

2. Premises.

2.1 **Letting**. Lessor hereby leases to Lessee, and Lessee hereby leases from Lessor, the Premises, for the term, at the rental, and upon all of the terms, covenants and conditions set forth in this Lease. Unless otherwise provided herein, any statement of size set forth in this Lease, or that may have been used in calculating Rent, is an approximation which the Parties agree is reasonable and any payments based thereon are not subject to revision whether or not the actual size Is more or less. **Note: Lessee is advised to verify the actual size prior to executing this Lease.**

2.2 **Condition**. Lessor shall deliver the Premises to Lessee broom clean and free of debris on the Commencement Date or the Early Possession Date, whichever first occurs ("**Start Date**"), and, so long as the required service contracts described in Paragraph 7.1(b) below are obtained by Lessee and in effect within thirty days following the Start Date, warrants that the existing electrical, plumbing, fire sprinkler, lighting, heating, ventilating and air conditioning systems ("**HVAC**"), loading doors, Sump pumps, if any, and all other such elements In the Premises, other than those constructed by Lessee, shall be in good operating condition on said date, that the structural elements of the roof, bearing walls and foundation of any buildings on the Premises (the "**Building**") shall be free of material defects, and that the Premises do not contain hazardous levels of any mold or fungi defined as toxic under applicable state or federal law. If a non-compliance with said warranty exists as of the Start Date, or If one of such systems or elements should malfunction or fall within thirty (30) days after occupancy, Lessor shall, as Lessor's sole obligation with respect to such matter, except as otherwise provided in this Lease, promptly after receipt of written notice from Lessee setting forth with specificity the nature and extent of such noncompliance, malfunction or failure, rectify same at Lessor's expense. The warranty period shall be 6-months for the HVAC. If Lessee does not give Lessor the required notice within the appropriate warranty period, correction of any such non-compliance, malfunction or failure shall be the obligation of Lessee at Lessee's sole cost and expense. Lessor shall remain liable for the repair (and replacement, as applicable) of any structural defects In the roof, bearing walls and foundations of the Building during the Term at its sole cost and expense as long as the structural defects are not caused by Lessee and Lessor cost is limited to $5000 per expense and subject to the damage /destruction Article 9 herein for which Lessor may elect not to repair and terminate the lease.

2.3 **Compliance**. Lessor warrants that all of the building systems, as of the Commencement Date, are operational and in good condition and repair. Lessor warrants that, to the best of its knowledge, the Improvements on the Premises comply with the building codes, applicable laws, covenants or restrictions of record, regulations, and ordinances ("**Applicable Requirements**") that were in effect at the time that each improvement, or portion thereof, was constructed and that the building in its "as is "condition is not required to be ADA and is not fully ADA compliant as a 3-story historic building (no elevator). Said warranty does not apply to the use to which Lessee will put the Premises, modifications which may be required by the Americans with Disabilities Act or any similar laws as a result of Lessee's use (see Paragraph 50), or to any Alterations or Utility Installations (as defined in Paragraph 7.3(a)) made or to be made by Lessee. **NOTE: Lessee is responsible for determining whether or not the Applicable Requirements, and especially the zoning, are appropriate for Lessee's intended use, and acknowledges that past uses of the Premises may no longer be allowed**. If the Premises do not comply with said warranty, Lessor shall, except as otherwise provided herein, promptly after receipt of written notice from Lessee setting forth with specificity the nature and extent of such non -compliance (ADA exempt) rectify the same at Lessor's expense. If Lessee does not give Lessor written notice of a non-compliance with this warranty within 6 months following the Start Date, correction of that non-compliance shall be the obligation of Lessee at Lessee's sole cost and expense. If the Applicable Requirements are hereafter changed so as to require during the term of this Lease the construction of an addition to or an alteration of the Premises and/or Building, the remediation of any Hazardous Substance, or the reinforcement or other physical modification of the Unit, Premises and/or Building ("**Capital Expenditure**"), Lessor and Lessee shall allocate the cost of such work as follows:

(a) Subject to Paragraph 2.3(c) below, if such Capital Expenditures are required as a result of the specific and unique use of the Premises by Lessee as compared with uses by tenants in general, Lessee shall be fully responsible for the cost thereof, provided, however that if such Capital Expenditure is required during the last 2 years of this Lease and the cost thereof exceeds 6 months' Base Rent, Lessee may instead terminate this Lease unless Lessor notifies Lessee, in writing, within 10 days after receipt of Lessee's termination notice that Lessor has elected to pay the difference between the actual cost thereof and an amount equal to 6 months' Base Rent. If Lessee elects termination, Lessee shall immediately cease the use of the Premises which requires such Capital Expenditure and deliver to Lessor written notice specifying a termination date at least 90 days thereafter. Such termination date shall, however, in no event be earlier than the last day that Lessee could legally utilize the Premises without commencing such Capital Expenditure.

(b) If such Capital Expenditure is not the result of the specific and unique use of the Premises by Lessee (such as, governmentally mandated seismic modifications), then Lessor shall pay for such Capital Expenditure and Lessee shall only be obligated to pay, each month during the remainder of the term of this Lease, on the date that on which the Base Rent is due, an amount equal to the cost of such capital improvements amortized over the reasonable useful life of the capital improvement as determined in accordance with generally accepted accounting principles. Lessee shall pay Interest on the balance but may prepay its obligation at any time. If, however, such Capital Expenditure is required during the last 2 years of this Lease or B Lessor reasonably determines that It is not economically feasible to pay Its share thereof, Lessor shall have the option to terminate this Lease upon 90 days prior written notice to Lessee unless Lessee notifies Lessor, in writing, within 10 days after receipt of Lessor's termination notice that Lessee will pay for such Capital Expenditure. If Lessor does not elect to terminate, and fails to tender its share of any such Capital Expenditure, Lessee may advance such funds and deduct same, with Interest, from Rent until Lessor's share of such costs have been fully paid. If Lessee is unable to finance Lessor's share, or if the balance of the Rent due and payable for the remainder of this Lease is not sufficient to fully reimburse Lessee on an offset basis. Lessee shall have the right to terminate this Lease upon 30 days written notice to Lessor.

(c) Notwithstanding the above, the provisions concerning Capital Expenditures are intended to apply only to non-voluntary, unexpected, and new Applicable Requirements. If the Capital Expenditures are instead triggered by Lessee as a result of an actual or proposed change in use, change in Intensity of use, or modification to the Premises then, and in that event, Lessee shall either: (i) immediately cease such changed use or intensity of use and/or take such other steps as may be necessary to eliminate the requirement for such Capital Expenditure, or (ii) complete such Capital Expenditure at its own expense. Lessee shall not, however, have any right to terminate this Lease.

2.4 **Acknowledgements**. Lessee acknowledges that; (a) it has been advised by Lessor and/or Brokers to satisfy itself with respect to the condition of the Premises (including but not limited to the electrical, HVAC and fire sprinkler systems, security, environmental aspects, and compliance with Applicable Requirements and the Americans with Disabilities Act), and their suitability for Lessee's intended use, (b) Lessee has made such investigation as it deems necessary with reference to such matters and assumes all responsibility therefor as the same relate to its occupancy of the Premises, and (c) neither Lessor, Lessor's agents, nor Brokers have made any oral or written representations or warranties with respect to said matters other than as set forth in this Lease. In addition, Lessor acknowledges that: (i) Brokers have made no representations, promises or warranties concerning Lessee's ability to honor the Lease or suitability to occupy the Premises, and (ii) it is Lessor's sole responsibility to investigate the financial capability and/or suitability of all proposed tenants.

2.5 **Lessee as Prior Owner/Occupant**. The warranties made by Lessor in Paragraph 2 shall be of no force or effect if Immediately prior to the Start Date Lessee was the owner or occupant of the Premises. In such event, Lessee shall be responsible for any necessary corrective work.

3. Term.

3.1 **Term**. The Commencement Date, Expiration Date and Original Term of this Lease are as specified in Paragraph 1.3.

3.2 **Early Possession**. If Lessee totally or partially occupies the Premises prior to the Commencement Date, the obligation to pay Base Rent and the Operating Expenses, (Exhibit C), except utilities and janitorial (see Addendum) shall be abated for the period of such early possession. All other terms of this Lease shall be in effect during such period including Lessee obligation to maintain the property and provide Lessee insurance certificate. Any such early possession shall not affect the Expiration Date.

3.3 **Delay In Possession**. Lessor agrees to use its best commercially reasonable efforts to deliver possession of the Premises to Lessee by the Commencement Date. If, despite said efforts, Lessor is unable to deliver possession by such date, Lessor shall not be subject to any liability therefor, nor shall such failure affect the validity of this Lease. Lessee shall not, however, be obligated to pay Rent or perform its other obligations until Lessor delivers possession of the Premises and any period of rent abatement that Lessee would otherwise have enjoyed shall run from the date of delivery of possession and continue for a period equal to what Lessee would otherwise have enjoyed under the terms hereof, but minus any days of delay caused by the acts or omissions of Lessee, if possession is not delivered within 60 days after the Commencement Date, Lessee may, at Its option, by notice in writing within 10 days after the end of such 60 day period, cancel this Lease, in which event the Parties shall be discharged from all obligations hereunder. If such written notice is not received by Lessor within said 10 day period, Lessee's right to cancel shall terminate. If possession of the Premises is not delivered within 120 days after the Commencement Date, this Lease shall terminate unless other agreements am reached between Lessor and Lessee, in writing.

3.4 **Lessee Compliance**. Lessor shall not be required to deliver possession of the Premises to Lessee until Lessee complies with Its obligation to provide evidence of insurance (Paragraph 8.5). Pending delivery of such evidence, Lessee shall be required to perform all of its obligations under this Lease from and after the Start Date, including the payment of Rent, notwithstanding Lessor's election to withhold possession pending receipt of such evidence of insurance. Further, if Lessee is required to perform any other conditions prior to or concurrent with the Start Date, the Start Date shall occur but Lessor may elect to withhold possession until such conditions are satisfied.

4. Rent.

4.1 **Rent Defined**. All monetary obligations of Lessee to Lessor under the terms of this Lease (except for the Security Deposit) are deemed to be rent ("**Rent**").

4.2 **Payment**. Lessee shall cause payment of Rent to be received by Lessor in lawful money of the United States, without offset or deduction (except as specifically permitted in this Lease), on or before the day on which it is due, in the event that any invoice prepared by Lessor is inaccurate such Inaccuracy shall not constitute a waiver and Lessee shall be obligated to pay the amount set forth in this Lease. Rent for any period during the term hereof which is for less than one full calendar month shall be prorated based upon the actual number of days of said month. Payment of Rent shall be made to Lessor at its address stated herein or to such other persons or place as Lessor may from time to time designate in writing. Acceptance of a payment which is less than the amount then due shall not be a waiver of Lessor's rights to the balance of such Rent, regardless of Lessor's endorsement Of any check so stating. In the event that any check, draft, or other instrument of payment given by Lessee to Lessor is dishonored for any reason, Lessee agrees to pay to Lessor the sum of $25 in addition to any Late Charge and Lessor, at its option, may require all future Rent be paid by cashier's check. Payments will be applied first to accrued late charges and attorneys fees, second to accrued interest, than to Base Rent and Common Area Operating Expenses, and any remaining amount to any other outstanding charges or costs. See Addendum.

4.3 **Association Fees**. N/A.

5. Security Deposit. Lessee shall deposit with Lessor upon execution hereof the Security Deposit as security for Lessee's faithful performance of its obligations under this Lease, if Lessee fails to pay Rent, or otherwise Defaults under this Lease, Lessor may use, apply or retain all or any portion of said Security Deposit for the payment of any amount due already due Lessor, for Rents

which will be due in the future, and/ or to reimburse or compensate Lessor for any liability, expense, loss or damage which Lessor may suffer or incur by reason thereof. If Lessor uses or applies all or any portion of the Security Deposit, Lessee shall within 10 days after written request therefor deposit monies with Lessor sufficient to restore said Security Deposit to the full amount required by this Lease. Should the Agreed Use be amended to accommodate a material change in the business of Lessee or to accommodate a sublessee or assignee, Lessor shall have the right to Increase the Security Deposit to the extent necessary, in Lessors reasonable judgment, to account for any increased wear and tear that the Premises may suffer as a result thereof. If a change in control of Lessee occurs during this Lease and following such change the financial condition of Lessee is, in Lessor's reasonable judgment, significantly reduced, Lessee shall deposit such additional monies with Lessor as shall be sufficient to cause the Security Deposit to be at a commercially reasonable level based on such change in financial condition. Lessor shall not be required to keep the Security Deposit separate from its general accounts. Within 60 days after the expiration or termination of this Lease, Lessor shall return that portion of the Security Deposit not used or applied by Lessor which can also include an estimate for the cost to repair. No part of the Security Deposit shall be considered to be held in trust, to bear interest or to be prepayment for any monies to be paid by Lessee under this Lease.

6. Use. Lessee shall use and occupy the Premises only for the Agreed Use, or any other legal use which Is reasonably comparable thereto, and for no other purpose. Lessee shall not use or permit the use of the Premises in a manner that is unlawful, creates damage, waste or a nuisance, or that disturbs occupants of or causes damage to neighboring premises or properties, other than guide, signal and service animals, as defined in the Addendum and to be registered with Lessor prior to occupancy. Lessee shall be responsible for any damage to the wood floor, carpet areas, walls, or other areas of the property including the landscaping. Other than service animals, Lessee shall not keep or allow in the Premises any pets, animals, birds, fish, or reptiles. Lessor shall not unreasonably withhold or delay its consent to any written request for a modification of the Agreed Office Use, so long as the same will not Impair the structural integrity of the improvements on the Premises or the mechanical or electrical systems therein, and/or is not significantly more burdensome to the Premises. If Lessor elects to withhold consent, Lessor shall within 7 days after such request give written notification of same, which notice shall Include an explanation of Lessors objections to the change In the Agreed Use.

6.1 **Hazardous Substances**.

(a) **Reportable Uses Require Consent**. The term "**Hazardous Substance**" as used in this Lease shall mean any product, substance, or waste whose presence, use, manufacture, disposal, transportation, or release, either by itself or in combination with other materials expected to be on the Premises, is either: (i) potentially injurious to the public health, safety or welfare, the environment or the Premises, (ii) regulated or monitored by any governmental authority, or (iii) a basis for potential liability of Lessor to any governmental agency or third party under any applicable statute or common law theory. Hazardous Substances shall include, but not be limited to, hydrocarbons, petroleum, gasoline, and/or crude oil or any products, by-products or fractions thereof. Lessee shall not engage in any activity in or on the Premises which constitutes a Reportable Use of Hazardous Substances without the express prior written consent of Lessor and timely compliance (at Lessee's expense) with all Applicable Requirements. "**Reportable Use**" shall mean (i) the installation or use of any above or below ground storage tank, (ii) the generation, possession, storage, use, transportation, or disposal of a Hazardous Substance that requires a permit from, or with respect to which a report, notice, registration or business plan is required to be filed with, any governmental authority, and/or (iii) the presence at the Premises of a Hazardous Substance with respect to which any Applicable Requirements requires that a notice be given to persons entering or occupying the Premises or neighboring properties. Notwithstanding the foregoing, Lessee may use any ordinary and customary materials reasonably required to be used in the normal course of the Agreed Use, ordinary office supplies (copier toner, liquid paper, glue, etc.) and common household cleaning materials, so long as such use is in compliance with all Applicable Requirements, is not a Reportable Use, and does not expose the Premises or neighboring property to any meaningful risk of contamination or damage or expose Lessor to any liability therefor. In addition, Lessor may condition its consent to any Reportable Use upon receiving such additional assurances as Lessor reasonably deems necessary to protect itself, the public, the Premises and/or the environment against damage, contamination, injury and/or liability, including, but not limited to, the installation (and removal on or before Lease expiration or termination) of protective modifications (such as concrete encasements) and/or increasing the Security Deposit.

(b) **Duty to Inform Lessor**. If Lessee knows, or has reasonable cause to believe, that a Hazardous Substance has come to be located in, on, under or about the Premises, other than as previously consented to by Lessor, Lessee shall Immediately give written notice of such fact to Lessor, and provide Lessor with a copy of any report, notice, claim or other documentation which it has concerning the presence of such Hazardous Substance.

(c) **Lessee Remediation**. Lessee shall not cause or permit any Hazardous Substance to be spilled or released in, on, under, or about the Premises (including through the plumbing or sanitary sewer system) and shall promptly, at Lessee's expense, comply with all Applicable Requirements and take ail investigatory and/or remedial action reasonably recommended, whether or not formally ordered or required, for the cleanup of any contamination of, and for the maintenance, security and/or monitoring of the Premises or neighboring properties, that was caused or materially contributed to by Lessee, or pertaining to or involving any Hazardous Substance brought onto the Premises during the term of this Lease, by or for Lessee, or any third party.

(d) **Lessee Indemnification**. Lessee shall indemnify, defend and hold Lessor, its agents, employees, lenders and ground lessor, if any, harmless from and against any and all loss of rents and/or damages, liabilities, judgments, claims, expenses, penalties, and attorneys' and consultants' fees arising out of or Involving any Hazardous Substance brought onto the Premises by or for Lessee, or Lessee's agents (provided, however, that Lessee shall have no liability under this Lease with respect to underground migration of any Hazardous Substance under the Promises from adjacent properties not caused or contributed to by Lessee). Lessee's obligations shall include, but not be limited to, the effects of any contamination or injury to person, property or the environment created or suffered by Lessee, and the cost of investigation, removal, remediation, restoration and/or abatement, and shall survive the expiration or termination of this Lease. **No termination, cancellation or release agreement entered Into by Lessor and Lessee shall release Lessee from Its obligations under this Lease with respect to Hazardous Substances, unless specifically so agreed by Lessor In writing at the time of such agreement.**

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(e) **Lessor Indemnification**. Lessor and Its successors and assigns shall indemnify, defend, reimburse and hold Lessee, Its employees and lenders, harmless from and against any and all environmental damages, including the cost of remediation, which result from Hazardous Substances which existed on the Premises prior to Lessee's occupancy or which are caused by the negligence or willful misconduct of Lessor, its agents or employees. Lessor's obligations, as and when required by the Applicable Requirements, shall Include, but not be limited to, the cost of investigation, removal, remediation, restoration and/or abatement, and shall survive the expiration or termination of this Lease.

(f) **Investigations and Remediations**. Lessor shall retain the responsibility and pay for any investigations or remediation measures required by governmental entities having jurisdiction with respect to the existence of Hazardous Substances on the Premises prior to Lessee's occupancy, unless such remediation measure is required as a result of Lessee's use (including "Alterations", as defined in paragraph 7.3(a) below) of the Premises, in which event Lessee shall be responsible for such payment. Lessee shall cooperate fully in any such activities at the request of Lessor, including allowing Lessor and Lessor's agents to have reasonable access to the Premises at reasonable times in order to carry out Lessor's investigative and remedial responsibilities.

(g) **Lessor Termination Option**. If a Hazardous Substance Condition (see Paragraph 9.1(e)) occurs during the term of this Lease, unless Lessee is legally responsible therefor (in which case Lessee shall make the investigation and remediation thereof required by the Applicable Requirements and this Lease shall continue in full force and effect, but subject to Lessor's rights under Paragraph 6.2(d) and Paragraph 13), Lessor may, at Lessor's option, either (i) investigate and remediate such Hazardous Substance Condition, if required, as soon as reasonably possible at Lessor's expense, In which event this Lease shall continue in full force and effect, or (II) If the estimated cost to remediate such condition exceeds 12 times the then monthly Base Rent or $100,000, whichever is greater, give written notice to Lessee, within 30 days after receipt by Lessor of knowledge of the occurrence of such Hazardous Substance Condition, of Lessor's desire to terminate this Lease as of the date 60 days following the date of such notice. In the event Lessor elects to give a termination notice, Lessee may, within 10 days thereafter, give written notice to Lessor of Lessee's commitment to pay the amount by which the cost of the remediation of such Hazardous Substance Condition exceeds an amount equal to 12 times the then monthly Base Rent or $100,000, whichever is greater. Lessee shall provide Lessor with said funds or satisfactory assurance thereof within 30 days following such commitment. In such event, this Lease shall continue in full force and effect, and Lessor shall proceed to make such remediation as soon as reasonably possible after the required funds are available. If Lessee does not give such notice and provide the required funds or assurance thereof within the time provided, this Lease shall terminate as of the date specified In Lessor's notice of termination.

6.2 **Lessee's Compliance with Applicable Requirements**. Except as otherwise provided in this Lease, Lessee shall, at Lessee's sole expense, fully, diligently and In a timely manner, materially comply with all Applicable Requirements, the requirements of any applicable fire Insurance underwriter or rating bureau, and the recommendations of Lessor's engineers and/or consultants which relate in any manner to the such Requirements, without regard to whether such Requirements are now in effect or become effective after the Start Date; provided, nothing in this Section 6.3 shall be construed to impose the obligation on Lessee to perform any structural repairs or alterations to the Premises .unless caused by Lessee or Lessee invitees. Lessee shall, within 10 days after receipt of Lessor's written request, provide Lessor with copies of all permits and other documents, and other information evidencing Lessee's compliance with any Applicable Requirements specified by Lessor, and shall immediately upon receipt, notify Lessor in writing (with copies of any documents involved) of any threatened or actual claim, notice, citation, warning, complaint or report pertaining to or involving the failure of Lessee or the Premises to comply with any Applicable Requirements. Likewise, Lessee shall immediately give written notice to Lessor of: (i) any wafer damage to the Premises and any suspected seepage, pooling, dampness or other condition conducive to the production of mold; or (ii) any mustiness or other odors that might indicate the presence of mold in the Premises.

6.3 **Inspection; Compliance**. Lessor and Lessors **"Lender"** (as defined in Paragraph 30) and consultants shall have the right to enter into Premises at any time, in the case of an emergency, and otherwise at reasonable times after reasonable notice, for the purpose of inspecting the condition of the Premises and for verifying compliance by Lessee with this Lease. The cost of any such inspections shall be paid by Lessor, unless a violation of Applicable Requirements, or a Hazardous Substance Condition (see paragraph 9.1) is found to exist or be imminent, or the inspection is requested or ordered by a governmental authority. In such case, Lessee shall upon request reimburse Lessor for the cost of such inspection, so long as such inspection is reasonably related to the violation or contamination. In addition, Lessee shall provide copies of all relevant material safety data sheets (**MSDS**) to Lessor within 10 days of the receipt of a written request therefor.

7. Maintenance; Repairs, Utility Installations; Trade Fixtures and Alterations. (The estimated Operating Expenses Exhibit C includes Section 7)

7.1 **Lessee's Obligations**.

(a) In General. Subject to the provisions of Paragraph 2.2 (Condition), 2.3 (Compliance), 6.3 (Lessee's Compliance with Applicable Requirements), 7.2 (Lessor's Obligations), 9 (Damage or Destruction), and 14 (Condemnation), Lessee shall, at Lessee's sole expense, keep the Premises, Utility Installations (intended for Lessee's exclusive use, no matter where located), and Alterations in good order, condition and repair (whether or not the portion of the Premises requiring repairs, or the means of repairing the same, are reasonably or readily accessible to Lessee, and whether or not the need for such repairs occurs as a result Of Lessee's use, any prior use, the elements or the age of such portion of the Premises), Including, but not limited to, all equipment or facilities, such as plumbing, HVAC equipment, electrical, lighting facilities, boilers, pressure vessels, fire protection system, fixtures, walls (interior and exterior), foundations, ceilings, roofs, roof drainage systems, floors, windows, doors, plate glass, skylights, landscaping, driveways, parking lots, fences, retaining walls, signs, sidewalks and parkways located in, on, or adjacent to the Premises. Lessee, in keeping the Premises in good order, condition and repair, shall exercise and perform good maintenance practices, specifically including the procurement and maintenance of the service contracts required by Paragraph 7.1(b) below.

Lessee's obligations shall include restorations, replacements or renewals when necessary to keep the Premises and all improvements thereon or a part thereof in good order, condition and state of repair. Lessee shall, during the term of this Lease, keep the exterior appearance of the Building in a first-class condition (including, e.g. graffiti removal) consistent with the exterior appearance of other similar facilities of comparable age and size in the vicinity, including, when necessary, the exterior repainting of the Building. The terms of this Section shall also apply to all FF&E and personal property (Exhibit B) belonging to Lessor in the property, a list of which is attached hereto as Exhibit B. Notwithstanding anything to the contrary (i) Lessee shall have no obligation to improve the condition of the Premises or keep the Premises, Utility Installations and Alterations in better order, condition and repair than as delivered by Lessor, (ii) Lessee's obligations under this Paragraph 7.1(a) shall not extend to any structural element of the Building, including, without limitation the roof, and shall be solely limited to routine maintenance, repairs and replacements and shall not extend to any condition arising from any prior use of the Premises or Building predating Lessee's use or occupancy of the Premises, and (iii) Lessee shall have no obligation to repaint the exterior of the Building during the Term. Such Items shall be Lessor's sole responsibility at Lessor's sole expense except if any Items i-iii is caused by Lessee.

(b) **Service Contracts**. Lessee shall, at Lessee's sole expense, procure and maintain contracts, with copies to Lessor, in customary form and substance for, and with contractors specializing and experienced in the maintenance of the following equipment and Improvements, if any, if and when installed on the Premises: (i) HVAC equipment, (ii) boiler, and pressure vessels, (iii) fire extinguishing systems, including fire alarm and/or smoke detection, (iv) landscaping and irrigation systems, (v) roof covering and drains, (vi) clarifiers (vii) basic utility feed to the perimeter of the Building, and (viii) any other equipment, if reasonably required by Lessor. However, Lessor reserves the right, upon notice to Lessee, to procure and maintain any or all of such service contracts, and Lessee shall reimburse Lessor, upon demand, for the actual cast thereof. Lessor shall maintain all service contracts required by Lessor which are reasonably related to the Property, including but not limited to gardening and lawn maintenance, termite and pest control and such cost is included in the operating expense estimate.

(c) **Failure to perform**. If Lessee fails to perform Lessee's obligations under this Paragraph 7.1, Lessor may enter upon the Premises after 10 days' prior written notice to Lessee (except In the case of an emergency, in which case no notice shall be required), perform such obligations on Lessee's behalf, and put the Premises in good order, condition and repair, and Lessee shall promptly pay to Lessor a sum equal to 110% of the cost thereof.

(d) **Replacement**. Subject to Lessee's indemnification of Lessor as set forth in Paragraph B.7 below, and without relieving Lessee of liability resulting from Lessee's failure to exercise and perform good maintenance practices, if an Item described in Paragraph 7.1(b) cannot be repaired other than at a cost which is in excess of 50% of the cost of replacing such item, then such item shall be replaced by Lessor, and the cost thereof shall be prorated between the Parties and Lessee shall only be obligated to pay, each month during the remainder of the term of this Lease, on the date on which Base Rent is due, an amount equal to the cost of such capital improvements amortized by over the reasonable useful life of the capital improvement as determined in accordance with generally accepted accounting principles. Lessee shall pay Interest on the unamortized balance but may prepay its obligation at any time. With respect to any FF&E personal property (Exhibit B) listed in Exhibit B that cannot be repaired, Lessee shall be responsible for 100% of the cost of replacement with no allocation for remainder of lease term, no allocation between the Parties and no amortization of payment.

7.2 **Lessor's Obligations**. Subject to the provisions of Paragraphs 2.2 (Condition), 2.3 (Compliance), 9 (Damage or Destruction) and 14 (Condemnation), it is intended by the Parties hereto that Lessor have no obligation, in any manner whatsoever, to repair and maintain the Premises, or the equipment therein, all of which obligations are intended to be that of the Lessee. It is the Intention of the Parties that the terms of this Lease the equipment therein, all of which obligations are intended to be that of the Lessee. It is the Intention of the Parties that the terms of this Lease the respective obligations of the Parties as to maintenance and repair of the Premises, and they expressly waive the benefit of any statute now or hereafter in effect to the extent it is inconsistent with the terms of this Lease.

7.3 **Utility Installations; Trade Fixtures; Alterations**.

(a) **Definitions**. The term "**Utility Installations**" refers to all floor and window coverings, air and/or vacuum lines, power panels, electrical distribution, security and fire protection systems, communication cabling, lighting fixtures, HVAC equipment, plumbing, and fencing in or on the Premises. The term "**Trade Fixtures**" shall mean Lessee's machinery and equipment that can be removed without doing material damage to the Premises. The term "**Alterations**" shall mean any modification of the improvements, other than Utility Installations or Trade Fixtures, whether by addition or deletion. "**Lessee Owned Alterations and/or Utility Installations**" are defined as Alterations and/or Utility Installations made by Lessee that are not yet owned by Lessor pursuant to Paragraph 7.4(a).

(b) **Consent**. Lessee shall not make any Alterations or Utility Installations to the Premises without Lessor's prior written consent. Lessee may, however, make non-structural Utility Installations to the interior of the Premises (excluding the roof) without such consent but upon notice to Lessor, as long as they are not visible from the outside, do not involve puncturing, relocating or removing the roof or any existing walls, will not affect the electrical, plumbing, HVAC, and/or life safety systems, and the cumulative cast thereof during this Lease as extended does not exceed a sum equal to $20,000 In any one year. Notwithstanding the foregoing, Lessee shall not make or permit any roof penetrations and/or install anything on the roof without the prior written approval of Lessor. Lessor may, as a precondition to granting such approval, require Lessee to utilize a contractor chosen and/or approved by Lessor. Any Alterations or Utility Installations that Lessee shaft desire to make and which require the consent of the Lessor shall be presented to Lessor in written form with detailed plans. Consent shall be deemed conditioned upon Lessee's: (i) acquiring all applicable governmental permits, (ii) furnishing Lessor with copies of both the permits and the plans and specifications prior to commencement of the work, and (iii) compliance with all conditions of said permits and other Applicable Requirements in a prompt and expeditious manner. Any Alterations or Utility Installations shall be performed in a workmanlike manner with good and sufficient materials. Lessee shall promptly upon completion furnish Lessor with as-built plans and specifications. For work which costs an amount in excess of one month's Base Rent, Lessor may condition its consent upon Lessee providing a lien and completion bond in an amount equal to 150% of the estimated cost of such Alteration or Utility Installation

and/or upon Lessee's posting an additional Security Deposit with Lessor. Lessor shall notify Lessee whether Lessee has to restore the Premises to their original condition, at such time as Lessee seeks Lessor's consent, or at such time as Lessee provides prior notice to Lessor of Lessee's installation of any Alterations or Utility Installations.

Liens; Bonds. Lessee shall pay, when due, all claims for labor or materials furnished or alleged to have been furnished to or for Lessee at or for use on the Premises, which claims are or may be secured by any mechanic's or materialmen's lien against the Premises or any interest therein. Lessee shall give Lessor not less than 10 days' notice prior to the commencement of any work in, on or about the Premises, and Lessor shall have the right to post notices of non-responsibility. If Lessee shall contest the validity of any such lien, claim or demand, then Lessee shall, at its sole expense defend and protect itself, Lessor and the Premises against the same and shall pay and satisfy any such adverse judgment that may be rendered thereon before the enforcement thereof. If Lessor shall require, Lessee shall furnish a surety bond in an amount equal to 150% of the amount of such contested lien, claim or demand, indemnifying Lessor against liability for the same. If Lessor elects to participate in any such action, Lessee shall pay Lessor's attorneys' fees and costs.

7.4 **Ownership; Removal; Surrender; and Restoration**.

(a) **Ownership**. Subject to Lessors right to require removal or elect ownership as hereinafter provided, all Alterations and Utility Installations made by Lessee shall be the property of Lessee, but considered a part of the Premises. Lessor may, at any time, elect in writing to be the owner of all or any specified part of the Lessee Owned Alterations and Utility Installations. Unless otherwise instructed per paragraph 7.4(b) hereof, all Lessee Owned Alterations and Utility Installations shall, at the expiration or termination of this Lease, become the property of Lessor and be surrendered by Lessee with the Premises.

(b) **Removal**. By delivery to Lessee of written notice from Lessor not earlier than 90 and not later than 30 days prior to the end of the term of this Lease, Lessor may require that any or all Lessee Owned Alterations or Utility Installations be removed by the expiration or termination of this Lease, provided Lessor notified Lessee that Lessor would require such removal at the time it provided consent. Lessor may require the removal at any time of all or any part of any Lessee Owned Alterations or Utility Installations made without the required consent.

(c) **Surrender; Restoration**. Lessee shall surrender the Premises by the Expiration Date or any earlier termination date, with all of the improvements, parts and surfaces thereof broom clean and free of debris, and in good operating order, condition and state of repair, ordinary wear and tear excepted. "Ordinary wear and tear" shall not include any damage or deterioration that would have been prevented by good maintenance practice. Notwithstanding the foregoing, if this Lease is for 12 months or less, then Lessee shall surrender the Premises in the same condition as delivered to Lessee on the Start Date with NO allowance for ordinary wear and tear. Lessee shall repair any damage occasioned by the installation, maintenance or removal of Trade Fixtures, Lessee owned Alterations and/or Utility Installations, furnishings, and equipment as well as the removal of any storage tank Installed by or for Lessee. Lessee shall completely remove from the Premises any and all Hazardous Substances brought onto the Premises by or for Lessee, or any third party (except Hazardous Substances which were deposited via underground migration from areas outside of the Premises, or if applicable, the Premises) even if such removal would require Lessee to perform or pay for work that exceeds statutory requirements. Trade Fixtures shall remain the property of Lessee and shall be removed by Lessee. Any personal property of Lessee not removed on or before the Expiration Date or any earlier termination date shall be deemed to have been abandoned by Lessee and may be disposed of or retained by Lessor as Lessor may desire. The failure by Lessee to timely vacate the Premises pursuant to this Paragraph 7.4(c) without the express written consent of Lessor shall constitute a holdover under the provisions of Paragraph 26 below.

8. Insurance; Indemnity.

8.1 **Payment For Insurance**. Lessee shall pay for all insurance required under Paragraph S except to the extent of the cost attributable to liability insurance carried by Lessor under Paragraph 8.2(b) in excess of 53,000,000 per occurrence. Premiums for policy periods commencing prior to or extending beyond the Lease term shall be prorated to correspond to the Lease term. Payment shall be made by Lessee to Lessor within 10 days following receipt of an invoice.

8.2 **Liability Insurance**.

(a) **Carried by Lessee**. Lessee shall obtain and keep in force a Commercial General Liability policy of Insurance protecting Lessee and Lessor as an additional insured against claims for bodily injury, personal injury and property damage based upon or arising out of the ownership, use, occupancy or maintenance of the Premises and all areas appurtenant thereto. Such Insurance shall be on an occurrence basis providing single limit coverage in an amount not less than $1,000,000 per occurrence with an annual aggregate of not less than $3,000,000. Lessee shall add Lessor as an additional insured by means of an endorsement at least as broad as the Insurance Service Organization's "Additional Insured-Managers or Lessors of Premises" Endorsement and coverage shall also tie extended to include damage caused by heat, smoke or fumes from a hostile fire, The policy shall not contain any intra-insured exclusions as between insured persons or organizations, but shall include coverage for liability assumed under this Lease as an "**insured contract**" for the performance of Lessee's indemnity obligations under this Lease. The limits of said insurance shall not, however, limit the liability of Lessee nor relieve Lessee of any obligation hereunder. Lessee shall provide an endorsement on its liability policy(les) which provides that its insurance shall be primary to and not contributory with any similar insurance carried by Lessor, whose insurance shall be considered excess insurance only. In addition, Lessee shall maintain an umbrella policy to supplement all policies required under Section 6 herein in the amount of $3,000,000.

(b) Carried by Lessor. Lessor shall maintain liability insurance as described in Paragraph 8.2(a), in addition to, and not in lieu of, the insurance required to be maintained by Lessee. Lessee shall not be named as an additional insured therein.

8.3 **Property Insurance - Building, Improvements and Rental Value**.

(a) **Building and Improvements**. The Insuring Party shall obtain and keep in force a policy or policies in the name of Lessor, with loss payable to Lessor, any ground-lessor, and to any Lender insuring loss or damage to the Premises. The amount of such insurance shall be equal to the full Insurable replacement cost of the Premises, as the same shall exist from time to time, or the amount required by any Lender, but in no event more than the commercially reasonable and available Insurable value thereof, if Lessor is the Insuring Party, however, Lessee Owned Alterations and Utility Installations, Trade Fixtures, and Lessee's personal property shall be insured by Lessee under Paragraph 8.4 rather than by Lessor. If the coverage is available, such policy or policies shall insure against all risks of direct physical loss or damage, including coverage for debris removal and the enforcement of any Applicable Requirements requiring the upgrading, demolition, reconstruction or replacement of any portion of the Premises as the result of a covered loss. Said policy or policies shall also contain an agreed valuation provision in lieu of any coinsurance clause, waiver of subrogation, and inflation guard protection causing an increase In the annual property insurance coverage amount by a factor of not less than the adjusted U.S. Department of Labor Consumer Price Index for All Urban Consumers for the city nearest to where the Premises are located. If such insurance coverage has a deductible clause, the deductible amount shall not exceed $1,000 per occurrence, and Lessee shall be liable for such deductible amount in the event of an Insured Loss not to exceed $1000 per casualty. Lessee acknowledges that Lessor has earthquake Insurance on the Building and is included in the operating expense estimate (Exhibit C).

(b) **Rental Value**. The Insuring Party shall obtain and keep in force a policy or policies in the name of Lessor with loss payable to Lessor and any Lender, insuring the loss of the full Rent for one year with an extended period of indemnity for an additional 180 days ("**Rental Value Insurance**"). Said insurance shall contain an agreed valuation provision in lieu of any coinsurance clause, and the amount of coverage shall be adjusted annually to reflect the projected Rent otherwise payable by Lessee, for the next 12 month period. Lessee shall be liable for any deductible amount in the event of such loss.

(c) **Adjacent Premises**. If the Premises are part of a larger building, or of a group of buildings owned by Lessor which are adjacent to the Premises, the Lessee shall pay for any increase in the premiums for the property insurance of such building or buildings if said Increase is caused by Lessee's acts, omissions, use or occupancy of the Premises.

8.4 **Lessee's Property; Business Interruption Insurance**.

(a) **Property Damage**. Lessee shall obtain and maintain Insurance coverage on all of Lessee's personal property, Trade fixtures, and Lessee Owned Alterations and Utility Installations. Such insurance shall be full replacement cost coverage with a deductible of not to exceed $5,000 per occurrence. The proceeds from any such Insurance shall be used by Lessee for the replacement of personal property, Trade Fixtures and Lessee Owned Alterations and Utility Installations. Lessee shall provide Lessor with written evidence that such insurance is in force.

(b) **No Representation of Adequate Coverage**. Lessor makes no representation that the limits or forms of coverage of insurance specified herein are adequate to cover Lessee's property, business operations or obligations under this Lease.

8.5 **Insurance Policies**. Insurance required herein shall be by companies duly licensed or admitted to transact business in the state where the Premises are located, and maintaining during the policy term a "General Policyholders Rating" of at least A-, VI, as set forth in the most current issue of "Best's Insurance Guide", or such other rating as may be required by a Lender. Lessee shall not do or permit to be done anything which invalidates the required insurance policies. Lessee shall, prior to the Start Date, deliver to Lessor certified copies of policies of such insurance or certificates evidencing the existence and amounts of the required insurance. No such policy shall be cancelable or subject to modification except after 30 days prior written notice to Lessor. Lessee shall, at least 10 days prior to the expiration of such policies, furnish Lessor with evidence Of renewals or "Insurance binders" evidencing renewal thereof, or Lessor may order such insurance and charge the cost thereof to Lessee, which amount shall be payable by Lessee to Lessor upon demand. Such policies shall be for a term of at least one year, or the length of the remaining term of this Lease, whichever is less. If either Party shall fail to procure and maintain the insurance required to be carried by it, the other Party may, but shall not be required to, procure and maintain the same.

8.6 **Waiver of Subrogation**. Without affecting any other rights or remedies, Lessee and Lessor each hereby release and relieve the other, and waive their entire right to recover damages against the other, for loss of or damage to Its property arising out of or incident to the perils required to be insured against herein. The effect of such releases and waivers is not limited by the amount of insurance carried or required, or by any deductibles applicable hereto, The Parties agree to have their respective property damage insurance earners waive any right to subrogation that such companies may have against Lessor or Lessee, as the case may be, so long as the Insurance is not invalidated thereby.

8.7 **Indemnity**. Except for Lessor's gross negligence or willful misconduct, Lessee shall indemnify, protect, defend and hold harmless the Premises, Lessor and its agents, Lessor's master or ground lessor, partners and Lenders, from and against any and all claims, loss of rents and/or damages, liens, judgments, penalties, attorneys' and consultants' fees, expenses and/or liabilities arising out of, involving, or in connection with, the use and/or occupancy of the Premises by Lessee. If any action or proceeding is brought against Lessor by reason of any of the foregoing matters, Lessee shall upon notice defend the same at Lessee's expense by counsel reasonably satisfactory to Lessor and Lessor shall cooperate with Lessee in such defense. Lessor need not have first paid any such claim in order to be defended or indemnified. Except In the case of Lessee's gross negligence or willful misconduct, Lessor shall indemnify, protect, defend and hold harmless Lessee from and against any and all claims, damages. Hens, judgments, penalties, attorneys' and consultants' fees, expenses and/or liabilities arising out of, involving, or in connection with, any breach of this Lease by Lessor or the gross negligence or willful misconduct of Lessor In connection with the Premises, Building, or Project. If any action or proceeding is brought against Lessee by reason of any of the foregoing matters Lessor shall upon notice defend the same at Lessor's expense by counsel reasonably satisfactory to Lessee and Lessee shall cooperate with Lessor in such defense. Lessee need not have first paid any such claim in order to be defended or indemnified.

Exemption of Lessor and its Agents from Liability. Except to the extent of the negligence or breach of this Lease by Lessor or its agents, neither Lessor nor Its agents shall be liable under any circumstances for: (i) injury or damage to the person or goods, wares, merchandise or other property of Lessee, Lessee's employees, contractors, Invitees, customers, or any other person in or about the Premises, whether such damage or injury is caused by or results from fire, steam, electricity, gas, water or rain, indoor air quality, the presence of mold or from the breakage, leakage, obstruction or other defects of pipes, fire sprinklers, wires, appliances, plumbing, HVAC or lighting fixtures, or from any other cause, whether the said injury or damage results from conditions arising upon the Premises or upon other portions of the building of which the Premises are a part, or from other sources or places, (ii) any damages arising from any act or neglect of any other tenant of Lessor or from the failure of Lessor or Its agents to enforce the provisions of any other lease in the Project or (iii) injury to Lessee's business or for any loss of Income or profit therefrom. Instead, it is intended that Lessee's sole recourse in the event of such damages or injury be to file a claim on the insurance policy(ies) that Lessee is required to maintain pursuant to the provisions of paragraph 8.

8.8 **Failure to Provide Insurance**. Lessee acknowledges that any failure on its pant to obtain or maintain the insurance required herein will expose Lessor to risks and potentially cause Lessor to incur costs not contemplated by this Lease, the extent of which will be extremely difficult to ascertain. Accordingly, for any month or portion thereof that Lessee does not maintain the required insurance and/or does not provide Lessor with the required binders or certificates evidencing the existence of the required insurance, the Base Rent shall be automatically increased, without any requirement for notice to Lessee, by an amount equal to 10% of the then existing Base Rent or $100, whichever is greater, until such time as the required insurance is obtained and proof of such is provided to Lessor at which time the rent will return to its pre-violation amount. The parties agree that such increase in Base Rent represents fair and reasonable compensation for the additional risk/costs that Lessor will incur by reason of Lessee's failure to maintain the required Insurance. Such increase in Base Rent shall in no event constitute a waiver of Lessee's Default or Breach with respect to the failure to maintain such insurance, prevent the exercise of any of the other rights and remedies granted hereunder, nor relieve Lessee of its obligation to maintain the insurance specified in this Lease.

9. Damage or Destruction.

9.1 **Definitions**.

(a) "**Premises Partial Damage**" shall mean damage or destruction to the improvements on the Premises, other than Lessee Owned Alterations and Utility Installations, which can reasonably be repaired in 6 months or less from the date of the damage or destruction. Lessor shall notify Lessee in writing within 30 days from the date of the damage or destruction as to whether or not the damage is Partial or Total. Notwithstanding the foregoing, Premises Partial Damage shall not include damage to windows, doors, and/or other similar items which Lessee has the responsibility to repair or replace pursuant to the provisions of Paragraph 7.1. If the notice is Partial and the work is not completed within 6 months from date of damage or destruction, then Lessee may terminate their Lease upon ten (10) days prior written notice and the work is not substantially completed within that ten (10) day.

(b) "**Premises Total Destruction**" shall mean damage or destruction to the Premises, other than Lessee Owned Alterations and Utility Installations and Trade Fixtures, which cannot reasonably be repaired in 6 months or less from the date of the damage or destruction. Lessor shall notify Lessee In writing within 30 days from the date of the damage or destruction as to whether or not the damage is Partial or Total.

(c) "**Insured Loss**" shall mean damage or destruction to improvements on the Premises, other than Lessee Owned Alterations and Utility Installations and Trade Fixtures, which was caused by an event required to be covered by the insurance described in Paragraph 8.3(a), irrespective of any deductible amounts or coverage limits involved.

(d) "**Replacement Cost**" shall mean the cost to repair or rebuild the Improvements owned by Lessor at the time of the occurrence to their condition existing immediately prior thereto, including demolition, debris removal and upgrading required by the operation of Applicable Requirements, and without deduction for depreciation.

(e) "**Hazardous Substance Condition**" shall mean the occurrence or discovery of a condition Involving the presence of, or a contamination by, a Hazardous Substance as defined in Paragraph 6.2(a), in, on, or under the Premises which requires repair, remediation, or restoration.

9.2 **Partial Damage - Insured Loss**. If a Premises Partial Damage that is an Insured Loss occurs, then Lessor shall, at Lessor's expense, repair such damage (but not Lessee's Trade Fixtures or Lessee Owned Alterations and Utility Installations) as soon as reasonably possible and this Lease shall continue in full force and effect; provided, however, that Lessee shall, at Lessor's election, make the repair of any damage or destruction the total cost to repair of which is $10,000 or less, as long as Lessor shall make any applicable insurance proceeds available to Lessee on a reasonable basis for that purpose. Notwithstanding the foregoing, if the required insurance was not in force or the insurance proceeds are not sufficient to effect such repair, the Insuring Party shall promptly contribute the shortage in proceeds (except as to the deductible which is Lessee's responsibility) as and when required to complete said repairs. In the event, however, such shortage was due to the fact that, by reason of the unique nature of the improvements, full replacement cost insurance coverage was not commercially reasonable and available, Lessor shall have no obligation to pay for the shortage In Insurance proceeds or to fully restore the unique aspects of the Premises unless Lessee provides Lessor with the funds to cover same, or adequate assurance thereof, within 10 days following receipt of written notice of such shortage and request therefor. If Lessor receives said funds or adequate assurance thereof within said to day period, the party responsible for making the repairs shall complete them as soon as reasonably possible and this Lease shall remain in full force and effect. If such funds or assurance are not received, Lessor may nevertheless elect by written notice to Lessee within 10 days thereafter to: (i) make such restoration and repair as is commercially reasonable with Lessor paying any shortage in proceeds, In which case this Lease shall remain in full force and effect, or (ii) have this Lease terminate 30 days thereafter. Lessee shall not be entitled to reimbursement of any funds contributed by Lessee to repair any such damage or destruction. Premises Partial Damage due to flood or earthquake shall be subject to Paragraph 9.3, notwithstanding that there may be some insurance coverage, but the net proceeds of any such Insurance shall be made available for the repairs if made by either Party.

9.3 **Partial Damage - Uninsured Loss**. If a Premises Partial Damage that is not an Insured Loss occurs, unless caused by a negligent or willful act of Lessee (in which event Lessee shall make the repairs at Lessee's expense), Lessor may either: (i) repair such damage as soon as reasonably possible at Lessor's expense, in which event this Lease shall continue In full force and effect, or (ii) terminate this Lease by giving written notice to Lessee within 30 days after receipt by Lessor of knowledge of the occurrence of such damage. Such termination shall be effective 60 days following the date of such notice. In the event Lessor elects to terminate this Lease, Lessee shall have the right within 10 days after receipt of the termination notice to give written notice to Lessor of Lessee's commitment to pay for the repair of such damage without reimbursement from Lessor. Lessee shall provide Lessor with said funds or satisfactory assurance thereof within 30 days after making such commitment. In such event this Lease shall continue in full force and effect, and Lessor shall proceed to make such repairs as soon as reasonably possible after the required funds are available. If Lessee does not make the required commitment, this Lease shall terminate as of the date specified in the termination notice.

9.4 **Total Destruction**. Notwithstanding any other provision hereof, if a Premises Total Destruction occurs, this Lease shall terminate 60 days following such Destruction If the damage or destruction was caused by the negligence or willful misconduct of Lessee, Lessor shall have the right to recover Lessor's damages from Lessee, except as provided in Paragraph 8.6.

9.5 **Damage Near End of Term**. If at any time during the last 6 months of this Lease there is damage for which the cost to repair exceeds one month's Base Rent, whether or not an Insured Loss, Lessor may terminate this Lease effective 60 days following the date of occurrence of such damage by giving a written termination notice to Lessee within 30 days after the date of occurrence of such damage. Notwithstanding the foregoing, if Lessee at that time has an exercisable option to extend this Lease or to purchase the Premises, then Lessee may preserve this Lease by, exercising such option and (b) providing Lessor with any shortage in insurance proceeds (or adequate assurance thereof) needed to make the repairs on or before the earlier of (i) the date which is 10 days after Lessee's receipt of Lessor's written notice purporting to terminate this Lease, or (ii) the day prior to the date upon which such option expires. If Lessee duly exercises such option during such period and provides Lessor with funds (or adequate assurance thereof) to cover any shortage in insurance proceeds, Lessor shall, at Lessor's commercially reasonable expense, repair such damage as soon as reasonably possible and this Lease shall continue in full force and effect. If Lessee fails to exercise such option and provide such funds or assurance during such period, then this Lease shall terminate on the date specified in the termination notice and Lessee's option shall be extinguished.

9.6 **Abatement of Rent; Lessee's Remedies**.

(a) **Abatement**. In the event of Premises Partial Damage or Premises Total Destruction or a Hazardous Substance Condition for which Lessee is not responsible under this Lease, the Rent payable by Lessee for the period required for the repair, remediation or restoration Of such damage shall be abated up to the full rent amount due until restoration In proportion to the degree to which Lessee's use of the Premises is impaired., -All other obligations of Lessee hereunder shall be performed by Lessee, and Lessor shall have no liability for any such damage, destruction, remediation, repair or restoration except as provided herein.

(b) **Remedies**. If Lessor shall be obligated to repair or restore the Premises and does not commence, in a substantial and meaningful way, such repair or restoration within 90 days after such obligation shall accrue or diligently pursue the repair or restoration to completion, Lessee may, at any time prior to the completion of such repair or restoration, give written notice ID Lessor and to any Lenders of which Lessee has actual notice, of Lessee's election to terminate this Lease on a date not less than 30 days following the giving of such notice. If Lessee gives such notice and such repair or restoration is not commenced, or completed, depending upon the reason for the notice, within 30 days thereafter, this Lease shall terminate as of the date specified in said notice. If the repair or restoration Is commenced or completed within such 30 days as the notice sets forth, this Lease shall continue in full force and effect. "Commence" shall mean the beginning of the actual work on the Promises.

9.7 **Termination; Advance Payments**. Upon termination of this Lease pursuant to Paragraph 6.2(g) or Paragraph 9, an equitable adjustment shall be made concerning advance Base Rent and any other advance payments made by Lessee to Lessor. Lessor shall, in addition, return to Lessee so much of Lessee's Security Deposit as has not been, or is not then required to be, used by Lessor.

10. Real Property Taxes. Lessor Property Tax estimate is included in the operating expense estimate - Exhibit C.

10.1 **Definition**. As used herein, the term "**Real Property Taxes**" shall include any form of assessment; real estate, general, special, ordinary or extraordinary, or rental levy or tax (other than inheritance, personal income or estate taxes); improvement bond; and/or license fee imposed upon or levied against any legal or equitable interest of Lessor in the Premises or the Project, Lessor's right to other income therefrom, and/or Lessor's business of leasing, by any authority having the direct or indirect power to tax and where the funds are generated with reference to the Building address and where the proceeds so generated are to be applied by the city, county or other local taxing authority of a jurisdiction within which the Premises are located. Real Property Taxes shall also include any tax, fee, levy, assessment or charge, or any increase therein: (i) imposed by reason of events occurring during the term of this Lease, including but not limited to, a change in the ownership of the Premises, and (ii) levied or assessed on machinery or equipment provided by Lessor to Lessee pursuant to this Lease.

10.2 **Payment of Taxes**. In addition to Base Rent, Lessee shall pay to Lessor an amount equal to the Real Property Tax installment due at least 20 days prior to the applicable delinquency date. If any such installment shall cover any period of time prior to or after the expiration or termination of this Lease, Lessee's share of such installment shall be prorated. In the event Lessee incurs a late charge on any Rent payment, Lessor may estimate the current Real Property Taxes, and require that such taxes be paid in advance to Lessor by Lessee monthly in advance with the payment of the Base Rent. Such monthly payments shall be an amount equal to the amount of the estimated Installment of taxes divided by the number of months remaining before the month in

which said installment becomes delinquent. When the actual amount of the applicable tax bill is known, the amount of such equal monthly advance payments shall be adjusted as required to provide the funds needed to pay the applicable taxes. If the amount collected by Lessor is insufficient to pay such Real Property Taxes when due, Lessee shall pay Lessor, upon demand, such additional sum as is necessary. Advance payments may be intermingled with other moneys of Lessor and shall not bear Interest In the event of a Breach by Lessee in the performance of its obligations under this Lease, then any such advance payments may be treated by Lessor as an additional Security Deposit.

10.3 **Joint Assessment**. If the Premises are not separately assessed, Lessee's liability shall be an equitable proportion of the Real Property Taxes for all of the land and improvements included within the tax parcel assessed, such proportion to be conclusively determined by Lessor from the respective valuations assigned in the assessor's work sheets or such other information as may be reasonably available.

10.4 **Personal Property Taxes**. Lessee shall pay, prior to delinquency, all taxes assessed against and levied upon Lessee Owned Alterations, Utility Installations, Trade Fixtures, furnishings, equipment and all personal property of Lessee. When possible, Lessee shall cause its Lessee Owned Alterations and Utility Installations, Trade Fixtures, furnishings, equipment and all other personal property to be assessed and billed separately from the real property of Lessor. If any of Lessee's said property shall be assessed with Lessor's real property. Lessee shall pay Lessor the taxes attributable to Lessee's property within 10 days after receipt of a written statement setting forth the taxes applicable lo Lessee's property.

11. Utilities and Services. Lessee shall pay as further defined in the Addendum for all water, gas, heat, light, power, telephone, trash disposal and other utilities and services supplied to the Premises, together with any taxes thereon. If any such services are not separately metered or billed to Lessee, Lessee shall pay a reasonable proportion, to be determined by Lessor, of all charges jointly metered or billed. There shall be no abatement of rent and Lessor shall not be liable in any respect whatsoever for the inadequacy, stoppage, interruption or discontinuance of any utility or service due to riot, strike, labor dispute, breakdown, accident, repair or other cause beyond Lessor's reasonable control or in cooperation with governmental request or directions. Notwithstanding any provision in the Lease to the contrary, if Lessee is prevented from using the Premises or any portion thereof, for five (5) consecutive business days as a result of (a) any repair, maintenance or alteration performed by Lessor after the Commencement Date, except Utilities which are contracted for by Lessee, then Rent shall be abated or reduced, as the case may be, after expiration of such five-day period for such time that Lessee continues to be so prevented from using the Premises or portion thereof, in the proportion that the rentable area of the portion of the Premises that Lessee is prevented from using bears to the total rentable area of the Premises.

12. Assignment and Subletting.

12.1 **Lessor's Consent Required**.

(a) Lessee shall not voluntarily or by operation of law assign, transfer, mortgage or encumber (collectively, "**assign or assignment**") or sublet all or any part of Lessee's interest In this Lease or in the Premises without Lessor's prior written consent, which shall not be unreasonably withheld, conditioned or delayed beyond thirty (30) days, and as further defined in the Addendum.

(b) Unless Lessee is a corporation and its stock is publicly traded on a national stock exchange, a change in the control of Lessee shall constitute an assignment requiring consent. The transfer, on a cumulative basis, of 50% or more of the voting control of Lessee shall constitute a change in control for this purpose.

(c) The involvement of Lessee or its assets in any transaction, or series of transactions (by way of merger, sale, acquisition, financing, transfer, leveraged buy-out or otherwise), whether or not a formal assignment or hypothecation of this Lease or Lessee's assets occurs, which results or will result in a reduction of the Net Worth of Lessee by an amount greater than 25% of such Net Worth as it was represented at the time of the execution of this Lease or at the time of the most recent assignment to which Lessor has consented, or as It exists immediately prior to said transaction or transactions constituting such reduction, whichever was or is greater, shall be considered an assignment of this Lease to which Lessor may withhold its consent. "Net Worth of Lessee" shall mean the net worth of Lessee (excluding any guarantors) established under generally accepted accounting principles.

(d) An assignment or subletting without consent shall, at Lessor's option, be a Default curable after notice per Paragraph 13.1(c), or a noncurable Breach without the necessity of any notice and grace period. If Lessor elects to treat such unapproved assignment or subletting as a noncurable Breach, Lessor may either: (i) terminate this Lease, or (ii) upon 30 days written notice, increase the monthly Base Rent to 110% of the Base Rem then in effect, Further, in the event of such Breach and rental adjustment, (i) the purchase price of any option to purchase the Premises held by Lessee shall be subject to similar adjustment to 110% of the price previously in effect, and (ii) all fixed and non-fixed rental adjustments scheduled during the remainder of the Lease term shall be increased to 110% of the scheduled adjusted rent.

(e) Lessee's remedy for any breach of Paragraph 12.1 by Lessor shall be limited to compensatory damages and/or injunctive relief,

(f) Lessor may reasonably withhold consent to a proposed assignment or subletting if Lessee is in Default at the time consent Is requested,

(g) Notwithstanding the foregoing, allowing a de minimis portion of the Premises, ie. 20 square feet or less, to be used by a third party vendor In connection with the installation of a vending machine or payphone shall not constitute a subletting.

12.2 **Terms and Conditions Applicable to Assignment and Subletting**.

(a) Regardless of Lessors consent, no assignment or subletting shall: (i) be effective without the express written assumption by such assignee or sublessee of the obligations of Lessee under this Lease, (ii) release Lessee of any obligations hereunder, or (iii) alter the primary liability of Lessee for the payment of Rent or for the performance of any other obligations to be performed by Lessee.

(b) Lessor may accept Rent or performance of Lessee's obligations from any person other than Lessee pending approval or disapproval of an assignment. Neither a delay in the approval or disapproval of such assignment nor the acceptance of Rent or performance shall constitute a waiver or estoppel of Lessor's right to exercise its remedies for Lessee's Default or Breach.

(c) Lessors consent to any assignment or subletting shall not constitute a consent to any subsequent assignment or subletting.

(d) In the event of any Default or Breach by Lessee, Lessor may proceed directly against Lessee, any Guarantors or anyone else responsible for the performance of Lessee's obligations under this Lease, including any assignee or sublessee, without first exhausting Lessor's remedies against any other person or entity responsible therefor to Lessor, or any security held by Lessor.

(e) Each request for consent to an assignment or subletting shall be in writing, accompanied by information relevant to Lessors determination as to the financial and operational responsibility and appropriateness of the proposed assignee or sublessee, Including but not limited to the intended use and/or required modification of the Premises, if any, together with a fee of $500 as consideration for Lessors considering and processing said request. Lessee agrees to provide Lessor with such other or additional information and/or documentation as may be reasonably requested. (See also Paragraph 36) and Lessee shall be responsible for Lessor attorney fee incurred for Lessor to draft a sublet or assignment consent or a sublease.

(f) Any assignee of, or sublessee under, this Lease shall, by reason of accepting such assignment, entering into such sublease, or entering into possession of the Premises or any portion thereof, be deemed to have assumed and agreed to conform and comply with each and every term, covenant, condition and obligation herein to be observed or performed by Lessee during the term of said assignment or sublease, other than such obligations as are contrary to or inconsistent with provisions of an assignment or sublease to which Lessor has specifically consented to in writing.

(g) Lessors consent to any assignment or subletting shall not transfer to the assignee or sublessee any Option granted to the original Lessee by this Lease unless such transfer is specifically consented to by Lessor in writing. (See Paragraph 39.2)

12.3 **Additional Terms and Conditions Applicable to Subletting**. The following terms and conditions shall apply to any subletting by Lessee of all or any part of the Premises and shall be deemed Included in all subleases under this Lease whether or not expressly incorporated therein:

(a) Lessee hereby assigns and transfers to Lessor all of Lessee's interest in all Rent payable on any sublease, and Lessor may collect such Rent and apply same toward Lessee's obligations under this Lease as further defined in the Addendum. Lessor shall not, by reason of the foregoing or any assignment of such sublease, nor by reason of the collection of Rent, be deemed liable to the sublessee for any failure of Lessee to perform and comply with any of Lessee's obligations to such sublessee. Lessee hereby irrevocably authorizes and directs any such sublessee, upon receipt of a written notice from Lessor stating that a Breach exists in the performance of Lessee's obligations under this Lease, to pay to Lessor all Rent due and to become due under the sublease. Sublessee shall rely upon any such notice from Lessor and shall pay all Rents to Lessor without any obligation or right to inquire as to whether such Breach exists, notwithstanding any claim from Lessee to the contrary.

(b) In the event of a Breach by Lessee, Lessor may, at its option, require sublessee to attorn to Lessor, in which event Lessor shall undertake the obligations of the sublessor under such sublease from the time of the exercise of said option to the expiration of such sublease; provided, however, Lessor shall not be liable for any prepaid rents or security deposit paid by such sublessee to such sublessor or for any prior Defaults or Breaches of such sublessor.

(c) Any matter requiring the consent of the sublessor under a sublease shall also require the consent of Lessor.

(d) No sublessee shall further assign or sublet all or any part of the Premises without Lessors prior written consent.

(e) Lessor shall deliver a copy of any notice of Default or Breach by Lessee to the sublessee, who shall have the right to cure the Default of Lessee within the grace period, If any, specified in such notice. The sublessee shall have a right of reimbursement and offset from and against Lessee for any such Defaults cured by the sublessee.

13. Default; Breach; Remedies.

13.1 **Default; Breach**. A "**Default**" is defined as a failure by the Lessee to comply with or perform any of the terms, covenants, conditions or Rules and Regulations under this Lease. A "**Breach**" is defined as the occurrence of one or more of the following Defaults, and the failure of Lessee to cure such Default within any applicable grace period:

(a) The abandonment of the Premises; or the vacating of the Premises without providing a commercially reasonable level of security, or where the coverage of the property insurance described in Paragraph 8.3 is jeopardized as a result thereof, or without providing reasonable assurances to minimize potential vandalism.

(b) The failure of Lessee to make any payment of Rent or any Security Deposit required to be made by Lessee hereunder, whether to Lessor or to a third party, when due, to provide reasonable evidence of insurance or surety bond, or to fulfill any obligation under this Lease which endangers or threatens life or property, where such failure continues for a period of 3 business days following written notice to Lessee.

(c) The commission of waste, act or acts constituting public or private nuisance, and/or an illegal activity on the Promises by Lessee, where such actions continue for a period of 3 business days following written notice to Lessee.

(d) The failure by Lessee to provide (i) reasonable written evidence of compliance with Applicable Requirements, (ii) the service contracts, (iii) the rescission of an unauthorized assignment or subletting, (iv) an Estoppel Certificate, (v) a requested subordination, (vi) evidence concerning any guaranty and/or Guarantor, (vii) any document requested under Paragraph 42, (viii) material safety data sheets (MSDS), or (ix) any other documentation or information which Lessor may reasonably require of Lessee under the terms of this Lease, where any such failure continues for a period of 10 days following written notice to Lessee.

(e) A Default by Lessee as to the terms, covenants, conditions or provisions of this Lease, or of the rules adopted under Paragraph 40 hereof, other than those described in subparagraphs 13.1 (a), (b), (c) or (d), above, where such Default continues for a period of 30 days after written notice; provided, however, that if the nature of Lessee's Default is such that more than 30 days are reasonably required for its cure, then It shall not be deemed to be a Breach if Lessee commences such cure within said 30 day period and thereafter diligently prosecutes such cure to completion.

(f) The occurrence of any of the following events: (i) the making of any general arrangement or assignment for the benefit of creditors; (ii) becoming a "debtor" as defined in 11 U.S.C. §101 or any successor statute thereto (unless, in the case of a petition filed against Lessee, the same is dismissed within 60 days); (iii) the appointment of a trustee or receiver to take possession of substantially all of Lessee's assets located at the Premises or of Lessee's Interest in this Lease, where possession is not restored to Lessee within 30 days; or (iv) the attachment, execution or other judicial seizure of substantially all of Lessee's assets located at the Premises or of Lessee's interest in this Lease, where such seizure is not discharged within 30 days; provided, however, in the event that any provision of this subparagraph is contrary to any applicable law, such provision shall be of no force or effect, and not affect the validity of the remaining provisions.

(g) The discovery that any financial statement of Lessee or of any Guarantor given to Lessor was materially false.

(h) If the performance of Lessee's obligations under this Lease is guaranteed: (i) the death of a Guarantor, (ii) the termination of a Guarantor's liability with respect to this Lease other than in accordance with the terms of such guaranty, (iii) a Guarantor's becoming insolvent or the subject of a bankruptcy filing, (iv) a Guarantor's refusal to honor the guaranty, or (v) a Guarantor's breach of its guaranty obligation on an anticipatory basis, and Lessee's failure, within 60 days following written notice of any such event, to provide written alternative assurance or security, which, when coupled with the then existing resources of Lessee, equals or exceeds the combined financial resources of Lessee and the Guarantors that existed at the time of execution of this Lease.

13.2 **Remedies**. If Lessee fails to perform any of Its affirmative duties or obligations, within 10 days after written notice (or in case of an emergency, without notice), Lessor may, at its option, perform such duty or obligation on Lessee's behalf, including but not limited to the obtaining of reasonably required bonds, insurance policies, or governmental licenses, permits or approvals. Lessee shall pay to Lessor an amount equal to 110% of the costs and expenses incurred by Lessor in such performance upon receipt of an Invoice therefor. In the event of a Breach, Lessor may, with or without further notice or demand, and without limiting Lessor in the exercise of any right or remedy which Lessor may have by reason of such Breach:

(a) Terminate Lessee's right to possession of the Premises by any lawful means, in which case this Lease shall terminate and Lessee shall immediately surrender possession to Lessor. In such event Lessor shall be entitled to recover from Lessee: (i) the unpaid Rent which had been earned at the time of termination; (ii) the worth at the time of award of the amount by which the unpaid rent which would have been earned after termination until the time of award exceeds the amount of such rental loss that the Lessee proves could have been reasonably avoided; (iii) the worth at the time of award of the amount by which the unpaid rent for the balance of the term after the time of award exceeds the amount of such rental loss that the Lessee proves could be reasonably avoided; and (iv) any other amount necessary to compensate Lessor for all the detriment proximately caused by the Lessee's failure to perform its obligations under this Lease or which in the ordinary course of things would be likely to result therefrom, including but not limited to the cost of recovering possession of the Premises, expenses of reletting, including necessary renovation and alteration of the Premises, reasonable attorneys' fees, and that portion of any leasing commission paid by Lessor in connection with this Lease applicable to the unexpired term of this Lease. The worth at the time of award of the amount referred to in provision (iii) of the immediately preceding sentence shall be computed by discounting such amount at the discount rate of the Federal Reserve Bank of the District within which the Premises are located at the time of award plus one percent. Efforts by Lessor to mitigate damages caused by Lessee's Breach of this Lease shall not waive Lessors right to recover damages under Paragraph 12. If termination of this Lease is obtained through the provisional remedy of unlawful detainer, Lessor shall have the right to recover in such proceeding any unpaid Rent and damages as are recoverable therein, or Lessor may reserve the right to recover all or any part thereof in a separate suit. If a notice and grace period required under Paragraph 13.1 was not previously given, a notice to pay rent or quit, or to perform or quit given to Lessee under the unlawful detainer statute shall also constitute the notice required by Paragraph 13.1. In such case, the applicable grace period required by Paragraph 13.1 and the unlawful detainer statute shall run concurrently, and the failure of Lessee lo cure the Default within the greater Of the two such grace periods shall constitute both an unlawful detainer and a Breach of this Lease entitling Lessor to the remedies provided for in this Lease and/or by said statute.

(b) Continue the Lease and Lessee's right to possession and recover the Rent as it becomes due, in which event Lessee may sublet or assign, subject only to reasonable limitations. Acts of maintenance, efforts to relet, and/or the appointment of a receiver to protect the Lessors Interests, shall not constitute a termination of the Lessee's right to possession.

(c) Pursue any other remedy now or hereafter available under the laws or Judicial decisions of the state wherein the Premises are located. The expiration or termination of this Lease and/or the termination of Lessee's right to possession shall not relieve Lessee from liability under any indemnity provisions of this Lease as to matters occurring or accruing during the term hereof or by reason of Lessee's occupancy of the Premises.

13.3 **Inducement Recapture**. Any agreement for free or abated rent or other charges, or for the giving or paying by Lessor to or for Lessee of any cash or other bonus, inducement or consideration for Lessee's entering into this Lease, all of which concessions are hereinafter referred to as "**Inducement Provisions**," shall be deemed conditioned upon Lessee's full and faithful performance of all of the terms, covenants and conditions of this Lease. If Lessor terminates the Lease due to a Breach of this Lease by Lessee, any such Inducement Provision shall automatically be deemed deleted from this Lease and of no further force or effect, and any rent, other charge, bonus, inducement or consideration theretofore abated, given or paid by Lessor under such an inducement Provision shall be immediately due and payable by Lessee to Lessor, notwithstanding any subsequent cure of said Breach by Lessee. The acceptance by Lessor of rent or the cure of the Breach which initiated the operation of this paragraph shall not be deemed a waiver by Lessor of the provisions of this paragraph unless specifically so stated in writing by Lessor at the time of such acceptance.

13.4 **Late Charges**. Lessee hereby acknowledges that late payment by Lessee of Rent and/or monthly Operating Expenses will cause Lessor to incur costs not contemplated by this Lease, the exact amount of which will be extremely difficult to ascertain. Such costs include, but are not limited to, processing and accounting charges, and late charges which may be imposed upon Lessor by any Lender. Accordingly, if any Rent shall not be received by Lessor within 5 days after such amount shall be due, then, without any requirement for notice to Lessee, Lessee shall immediately pay to Lessor a one-time late charge equal to 10% of each such overdue amount or $100, whichever is greater. The Parties hereby agree that such late charge represents a fair and reasonable estimate of the costs Lessor will incur by reason of such late payment. Acceptance of such late charge by Lessor shall in no event constitute a waiver of Lessee's Default or Breach with respect to such overdue amount, nor prevent the exercise of any of the other rights and remedies granted hereunder. In the event that a late charge is payable hereunder, whether or not collected, for 3 consecutive installments of Base Rem, then notwithstanding any provision of this Lease to the contrary, Base Rent shall, at Lessors option, become due and payable quarterly in advance.

13.5 **Interest** Any monetary payment due Lessor hereunder, other than late charges, not received by Lessor, when due as to scheduled payments (such as Base Rent) or within 30 days following the date on which It was due for non-scheduled payment, shall bear interest from the date when due, as to scheduled payments, or the 31st day after it was due as to non-scheduled payments. The interest ("**Interest**") charged shall be computed at the rate of 10% per annum but shall not exceed the maximum rate allowed by law. Interest is payable in addition to the potential late charge provided for in Paragraph 13.4.

13.6 **Breach by Lessor**.

(a) **Notice of Breach**. Lessor shall not be deemed in breach of this Lease unless Lessor fails within a reasonable time to perform an obligation required to be performed by Lessor. For purposes of this Paragraph, a reasonable time shall in no event be less than 30 days after receipt by Lessor, and any Lender whose name and address shall have been furnished Lessee in writing for such purpose, of written notice specifying wherein such obligation of Lessor has not been performed; provided, however, that if the nature of Lessors obligation is such that more than 30 days are reasonably required for its performance, then Lessor shall not be in breach If performance is commenced within such 30 day period and thereafter diligently pursued to completion.

(b) **Performance by Lessee on Behalf of Lessor**. In the event that neither Lessor nor Lender cures said breach within 30 days after receipt of said notice, or it having commenced said cure they do not diligently pursue it to completion, then Lessee may elect to cure said breach at Lessee's expense and offset from Rent the actual and reasonable cost to perform such cure, provided, however, that such offset shall not exceed an amount equal to the greater of one month's Base Rent or the Security Deposit, reserving Lessee's right to seek reimbursement from Lessor for any such expense in excess of such offset. Lessee shall document the cost of said cure and supply said documentation to Lessor.

14. Condemnation. If the Premises or any portion thereof are taken under the power of eminent domain or sold under the threat of the exercise of said power (collectively "**Condemnation**"), this Lease shall terminate as to the part taken as of the date the condemning authority takes title or possession, whichever first occurs, if more than 10% of the Building, or more than 25% of that portion of the Premises not occupied by any building, is taken by Condemnation, Lessee may, at Lessee's option, to be exercised in writing within 10 days after Lessor shall have given Lessee written notice of such taking (or in the absence of such notice, within 10 days after the condemning authority shall have taken possession) terminate this Lease as of the date the condemning authority takes such possession. If Lessee does not terminate this Lease in accordance with the foregoing, this Lease shall remain in full force and effect as to the portion of the Premises remaining, except that the Base Rent shall be reduced In proportion to the reduction in utility of the Premises caused by such Condemnation. Condemnation awards and/or payments shall be the property of Lessor, whether such award shall be made as compensation for diminution in value of the leasehold, the value of the part taken, or for severance damages; provided, however, that Lessee shall be entitled to any compensation paid by the condemn nor for Lessee's relocation expenses, loss of business goodwill and/or Trade Fixtures, without regard to whether or not this Lease is terminated pursuant to the provisions of this Paragraph. All Alterations and Utility Installations made to the Premises by Lessee, for purposes of Condemnation only, shall be considered the property of the Lessee and Lessee shall be entitled to any and all compensation which is payable therefor. In the event that this Lease is not terminated by reason of the Condemnation, Lessor shall repair any damage to the Premises caused by such Condemnation.

15. Brokerage Fees.

Assumption of Obligations. Any buyer or transferee of Lessors interest in this Lease shall be deemed to have assumed Lessors obligation hereunder. Brokers shall be third party beneficiaries of the provisions of Paragraphs 1.9,15, 22 and 31. If Lessor fails to pay to Brokers any amounts due as and for brokerage fees pertaining to this Lease when due, then such amounts shall accrue Interest, in addition, It Lessor falls to pay any amounts to Lessee's Broker when due, Lessee's Broker may send written notice to Lessor and Lessee of such failure and if Lessor fails to pay such amounts within 10 days after said notice, Lessee shall pay said monies to its Broker and offset such amounts against Rent. In addition, Lessee's Broker shall be deemed to be a third party beneficiary of any commission agreement entered into by and/or between Lessor and Lessors Broker for the limited purpose of collecting any brokerage fee owed.

15.1 **Representations and Indemnities of Broker Relationships**. Lessee and Lessor each represent and warrant to the other that it has had no dealings with any person, firm, broker or finder (other than the Brokers, if any) in connection with this Lease, and that no one other than said named Brokers is entitled to any commission or finder is fee in connection herewith. Lessee and Lessor do each hereby agree to indemnify, protect, defend and hold the other harm less from and against liability for compensation or charges which may be claimed by any such unnamed broker, finder or other similar party by reason of any dealings or actions of the indemnifying Party, including any costs, expenses, attorneys' fees reasonably incurred with respect thereto.

16. Estoppel Certificates.

(a) Each Party (as "**Responding Party**") shall within 10 business days after written notice from the other Party (the "**Requesting Party**") execute, acknowledge and deliver to the Requesting Party a statement In writing In form similar to the then most current "**Estoppel Certificate**" form published by the AIR Commercial Real Estate Association, plus such additional information, confirmation and/or statements as may be reasonably requested by the Requesting Party.

(b) If the Responding Party shall fail to execute or deliver the Estoppel Certificate within such 10 business day period, the Requesting Party may execute an Estoppel Certificate stating that: (i) the Lease is in full force and effect without modification except as may be represented by the Requesting Party, (ii) there are no uncured defaults in the Requesting Party's performance, and (iii) if Lessor is the Requesting Party, not more than one month's rent has been paid in advance. Prospective purchasers and encumbrancers may rely upon the Requesting Party's Estoppel Certificate, and the Responding Party shall be estopped from denying the truth of the facts contained in said Certificate.

(c) If Lessor desires to finance, refinance, or sell the Premises, or any part thereof, Lessee and all Guarantors shall deliver to any potential lender or purchaser designated by Lessor such financial statements as may be reasonably required by such lender or purchaser, including but not limited to Lessee's financial statements for the past 3 years. All such financial statements shall be received by Lessor and such lender or purchaser In confidence and shall be used only for the purposes herein set forth.

17. Definition of Lessor. The term "**Lessor**" as used herein shall mean the owner or owners at the time in question of the fee title to the Premises, or, if this is a sublease, of the Lessee's interest in the prior lease. In the event of a transfer of Lessor's title or interest in the Premises or this Lease, Lessor shall deliver to the transferee or assignee (in cash or by credit) any unused Security Deposit held by Lessor. Upon such transfer or assignment and delivery of the Security Deposit, as aforesaid, the prior Lessor shall be relieved of all liability with respect to the obligations and/or covenants under this Lease thereafter to be performed by the Lessor. Subject to the foregoing, the obligations and/or covenants in this Lease to be performed by the Lessor shall be binding only upon the Lessor as hereinabove defined.

18. Severability. The invalidity of any provision of this Lease, as determined by a court of competent jurisdiction, shall in no way affect the validity of any other provision hereof.

19. Days. Unless otherwise specifically indicated to the contrary, the word "days' as used in this Lease shall mean and refer to calendar days.

20. Limitation on Liability. The obligations of Lessor under this Lease shall not constitute personal obligations of Lessor or its partners, members, directors, officers or shareholders, and Lessee shall look to the Premises and all proceeds thereof and to no other assets of Lessor, for the satisfaction of any liability of Lessor with respect to this Lease, and shall not seek recourse against Lessor's partners, members, directors, officers or shareholders, or any of their personal assets for such satisfaction.

21. Time of Essence. Time is of the essence with respect to the performance of all obligations to be performed or observed by the Parties under this Lease.

22. No Prior or Other Agreements; Broker Disclaimer. This Lease contains all agreements between the Parties with respect to any matter mentioned herein, and no other prior or contemporaneous agreement or understanding shall be effective. Lessor and Lessee each represents and warrants to the Brokers that it has made, and is relying solely upon, its own investigation as to the nature, quality, character and financial responsibility of the other Party to this Lease and as to the use, nature, quality and character of the Premises. Brokers have no responsibility with respect thereto or with respect to any default or breach hereof by either Party.

23. Notices.

23.1 **Notice Requirements**. All notices required or permitted by this Lease or applicable law shall be in writing and may be delivered in person (by hand or by courier) or may be sent by regular, certified or registered mail or U.S. Postal Service Express Mail, with postage prepaid, or by facsimile transmission, and shall be deemed sufficiently given if served in a manner specified in this Paragraph 23. The addresses noted adjacent to a Party's signature on this Lease shall be that Party's address for delivery or mailing of notices. Either Party may by written notice to the other specify a different address for notice, except that upon Lessee's taking possession of the Premises, the Premises shall constitute Lessee's address for notice. A copy of all notices to Lessor shall be concurrently transmitted to such party or parties at such addresses as Lessor may from time to time hereafter designate in writing.

23.2 **Date of Notice**. Any notice sent by registered or certified mail, return receipt requested, shall be deemed given on the date of delivery shown on the receipt card, or If no delivery date is shown, the postmark thereon. If sent by regular mail the notice shall be deemed given 72 hours after the same fs addressed as required herein and mailed with postage prepaid. Notices delivered by United Stales Express Mail or overnight courier that guarantee next day delivery shall be deemed given 24 hours after delivery of the same to the Postal Service or courier. Notices transmitted by facsimile transmission, electronic mail (email) or similar means shall be deemed delivered upon telephone confirmation of receipt (confirmation report from fax machine is sufficient), provided a copy Is also delivered via delivery or mail and provided notices of default may not be sent via email. If notice is received on a Saturday, Sunday or legal holiday.it shall be deemed received on the next business day.

24. Waivers-Mutual.

(a) No waiver by Lessor or Lessee of the Default or Breach of any term, covenant or condition hereof by the other party, shall be deemed a waiver of any other term, covenant or condition hereof, or of any subsequent Default or Breach by such party of the same or of any other term, covenant or condition hereof. Lessors consent to, or approval of, any act shall not be deemed to render unnecessary the obtaining of Lessors consent to, or approval of, any subsequent or similar act by Lessee, or be construed as the basis of an estoppel to enforce the provision or provisions of this Lease requiring such consent.

(b) The acceptance of Rent by Lessor shall not be a waiver of any Default or Breach by Lessee. Any payment by Lessee may be accepted by Lessor on account of moneys or damages due Lessor, notwithstanding any qualifying statements or conditions made by Lessee In connection therewith, which such statements and/or conditions shall be of no force or effect whatsoever unless specifically agreed to in writing by Lessor at or before the time of deposit of such payment.

(c) THE PARTIES AGREE THAT THE TERMS OF THIS LEASE SHALL GOVERN WITH REGARD TO ALL MATTERS RELATED THERETO AND HEREBY WAIVE THE PROVISIONS OF ANY PRESENT OR FUTURE STATUTE TO THE EXTENT THAT SUCH STATUTE IS INCONSISTENT WITH THIS LEASE.

25. Disclosures Regarding The Nature of a Real Estate Agency Relationship.

(a) When entering into a discussion with a real estate agent regarding a real estate transaction, a Lessor or Lessee should from the outset understand what type of agency relationship or representation ii has with the agent or agents in the transaction. Lessor and Lessee acknowledge being advised by the Brokers In this transaction, as follows:

(i) Lessor's Agent. A Lessor's agent under a listing agreement with the Lessor acts as the agent for the Lessor only. A Lessor's agent or subagent has the following affirmative obligations: To the Lessor: A fiduciary duty of utmost care, integrity, honesty, and loyalty in dealings with the Lessor. To the Lessee and the Lessor: a. Diligent exercise of reasonable skills and care in performance of the agent's duties, b. A duty of honest and fair dealing and good faith, c. A duty to disclose all facts known to the agent materially affecting the value or desirability of the property that are not known to, or within the diligent attention and observation of, the Parties. An agent is not obligated to reveal to either Party any confidential information obtained from the other Party which does not Involve the affirmative duties set forth above.

(ii) Lessee's Agent. An agent can agree to act as agent for the Lessee only. In these situations, the agent is not the Lessor's agent, even if by agreement the agent may receive compensation for services rendered, either in full or in part from the Lessor. An agent acting only for a Lessee has the following affirmative obligations: To the Lessee: A fiduciary duty of utmost care, integrity, honesty, and loyalty in dealings with the Lessee. To the Lessee and the Lessor: a. Diligent exercise of reasonable skills and care in performance of the agent's duties, b. A duty Of honest and fair dealing and good faith, c. A duty to disclose all facts known to the agent materially affecting the value or desirability of the property that are not known to, or within the diligent attention and observation of, the Parties. An agent is not obligated to reveal to either Party any confidential information obtained from the other Party which does not Involve the affirmative duties set forth above.

(iii) Agent Representing Both Lessor and Lessee. A real estate agent, either acting directly or through one or more associate licenses, can legally be the agent or both the Lessor and the Lessee in a transaction, but only with the knowledge and consent of both the Lessor and the Lessee. In a dual agency situation, the agent has the following affirmative obligations to both the Lessor and the Lessee: a. A fiduciary duty of utmost care, integrity, honesty and loyalty in the dealings with either Lessor or the Lessee, b. Other duties to the Lessor and the Lessee as stated above in subparagraphs (i) or (ii). In representing both Lessor and Lessee, the agent may not without the express permission of the respective Party, disclose to the other Party that the Lessor will accept rent in an amount less than that indicated in the listing or that the Lessee is willing to pay a higher rent than that offered. The above duties of the agent in a real estate transaction do not relieve a Lessor or Lessee from the responsibility to protect their own interests. Lessor and Lessee should carefully read all agreements to assure that they adequately express their understanding of the transaction. A real estate agent is a person qualified to advise about real estate. If legal or tax advice is desired, consult a competent professional.

(b) Brokers have no responsibility with respect to any default or breach hereof by either Party. The Parties agree that no lawsuit or other legal proceeding involving any breach of duty, error or omission relating to this Lease may be brought against Broker more than one year after the Start Date and that the liability (including court costs and attorneys' fees), of any Broker with respect to any such lawsuit and/or legal proceeding shall not exceed the fee received by such Broker pursuant to this Lease; provided, however, that the foregoing limitation on each Brokers liability shall not be applicable to any gross negligence or willful misconduct of such Broker.

(c) Lessor and Lessee agree to identify to Brokers as "Confidential" any communication or information given Brokers that is considered by such Party to be confidential.

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26. No Right To Holdover. Lessee has no right to retain possession of the Premises or any part thereof beyond the expiration or termination of this Lease. In the event that Lessee holds over, then the Base Rent shall be increased to 150% of the Base Rent applicable immediately preceding the expiration or termination. Nothing contained herein shall be construed as consent by Lessor to any holding over by Lessee.

27. Cumulative Remedies. No remedy or election hereunder shall be deemed exclusive but shall, wherever possible, be cumulative with all other remedies at law or in equity.

28. Covenants and Conditions; Construction of Agreement. All provisions of this Lease to be observed or performed by Lessee are both covenants and conditions. In construing this Lease, all headings and titles are for the convenience of the Parties only and shall not be considered a part of this Lease. Whenever required by the context, the singular shall include the plural and vice versa. This Lease shall not be construed as if prepared by one of the Parties, but rather according to its fair meaning as a whole, as if both Parties had prepared it.

29. Binding Effect; Choice of Law. This Lease shall be binding upon the Parties, their personal representatives, successors and assigns and be governed by the laws of the State in which the Premises are located. Any litigation between the Parties hereto concerning this Lease shall be initiated In the county in which the Premises are located.

30. Subordination; Attornment; Non-Disturbance.

30.1 **Subordination**. This Lease and any Option granted hereby shall be subject and subordinate to any ground lease, mortgage, deed of trust, or other hypothecation or security device (collectively, "**Security Device**"), now or hereafter placed upon the Premises, to any and all advances made on the security thereof, and to all renewals, modifications, and extensions thereof. Lessee agrees that the holders of any such Security Devices (in this Lease together referred to as "**Lender**") shall have no liability or obligation to perform any of the obligations of Lessor under this Lease. Any Lender may elect to have this Lease and/or any Option granted hereby superior to the lien of Its Security Device by giving written notice thereof to Lessee, whereupon this Lease and such Options shall be deemed prior to such Security Device, notwithstanding the relative dates of the documentation or recordation thereof.

30.2 **Attornment**. In the event that Lessor transfers title to the Premises, or the Premises are acquired by another upon the foreclosure or termination of a Security Device to which this Lease is subordinated (i) Lessee shall, subject to the non-disturbance provisions of Paragraph 30.3, attorn to such new owner, and upon request, enter Into a new lease, containing all of the terms and provisions of this Lease, with such new owner for the remainder of the term hereof, or, at the election of the new owner, this Lease will automatically become a new lease between Lessee and such new owner, for the remainder of the term hereof, and (ii) Lessor shall thereafter be relieved of any further obligations hereunder and such new owner shall assume all of Lessor's obligations, except that such new owner shall not: (a) be liable for any act or omission of any prior lessor or with respect to events occurring prior to acquisition of ownership; (b) be subject to any offsets or defenses which Lessee might have against any prior lessor, (c) be bound by prepayment of more than one month's rent, or (d) be liable for the return of any security deposit paid to any prior lessor.

30.3 **Non-Disturbance**. With respect to Security Devices entered into by Lessor after the execution of this Lease, Lessee's subordination of this Lease shall be subject to receiving a commercially reasonable non-disturbance agreement (a "**Non-Disturbance Agreement**") from the Lender which Non-Disturbance Agreement provides that Lessee's possession of the Premises, and this Lease, including any options to extend the term hereof, will not be disturbed so long as Lessee is not in Breach hereof and attorns to the record owner of the Premises. Further, within 60 days after the execution of this Lease, Lessor shall, if requested by Lessee, use its commercially reasonable efforts to obtain a Non-Disturbance Agreement from the holder of any pre-existing Security Device which is secured by the Premises. In the event that Lessor is unable to provide the Non-Disturbance Agreement within said 60 days, then Lessee may, at Lessee's option, directly contact Lender and attempt to negotiate for the execution and delivery of a Non-Disturbance Agreement.

30.4 **Self-Executing**. The agreements contained in this Paragraph 30 shall be effective without the execution of any further documents; provided, however, that, upon written request from Lessor or a Lender in connection with a sale, financing or refinancing of the Premises, Lessee and Lessor shall execute such further writings as may be reasonably required to separately document any subordination, attornment and/or Non-Disturbance Agreement provided for herein.

31. Attorneys' Fees. If any Party or Broker brings an action or proceeding involving the Premises whether founded in tort, contract or equity, or to declare rights hereunder, the Prevailing Party (as hereafter defined) In any such proceeding, action, or appeal thereon, shall be entitled to reasonable attorneys' fees. Such fees may be awarded in the same suit or recovered in a separate suit, whether or not such action or proceeding is pursued to decision or judgment. The term, "**Prevailing Party**" shall include, without limitation, a Party or Broker who substantially obtains or defeats the relief sought, as the case may be, whether by compromise, settlement, judgment, or the abandonment by the other Party or Broker of its claim or defense. The attorneys' fees award shall not be computed in accordance with any court fee schedule, but shall be such as to fully reimburse all attorneys' fees reasonably incurred. In addition, Lessor shall be entitled to attorneys' fees, costs and expenses incurred in the preparation and service of notices of Default and consultations in connection therewith, whether or not a legal action is subsequently commenced in connection with such Default or resulting Breach ($200 Is a reasonable minimum per occurrence for such services and consultation).

32. Lessor's Access; Showing Premises; Repairs. Lessor and Lessor's agents shall have the right to enter the Premises at any time, in the case of an emergency, and otherwise at reasonable times after reasonable prior notice of at least 24 hours as is feasible for the purpose of showing the same to prospective purchasers, lenders, or up until 6 months prior to the end of the Term to tenants, and making such alterations, repairs, improvements or additions to the Premises as Lessor may deem necessary (to the extent expressly permitted by this Lease) and the erecting, using and maintaining of utilities, services, pipes and conduits through the Premises and/or other premises as long as there is no material adverse effect to Lessee's use of the Premises. All such

activities shall be without abatement of rem or liability to Lessee; as long as Lessee's use and enjoyment of the Premises for the intended Agreed Uses Is not unreasonably disturbed. Both Parties agree Lessor or Lessor property manager may need access afterhours and/or weekend hours for access to maintain or repair items including light bulbs replacement, cleaning Inspection and shall use best effort to provide Lessee 24 hour prior notice.

33. Auctions. Lessee shall not conduct, nor permit to be conducted, any auction upon the Premises without Lessor's prior written consent. Lessor shall not be obligated to exercise any standard of reasonableness in determining whether to permit an auction.

34. Signs. Lessor may place on the premises ordinary "For Sale" signs at any time and ordinary "For Lease" signs during the last 6 months of the term hereof. Except for ordinary "for sublease" signs, Lessee shall not place any sign upon the Premises without Lessor's prior written consent, All signs must comply with all Applicable Requirements.

35. Termination; Merger. Unless specifically stated otherwise in writing by Lessor, the voluntary or other surrender of this Lease by Lessee, the mutual termination or cancellation hereof, or a termination hereof by Lessor for Breach by Lessee, shall automatically terminate any sublease or lesser estate in the Premises; provided, however, that Lessor may elect to continue any one or all existing subtenancies. Lessor's failure within 10 days following any such event to elect to the contrary by written notice to the holder of any such lesser interest, shall constitute Lessor's election to have such event constitute the termination of such Interest.

Consents. Except as otherwise provided herein, wherever in this Lease the consent of a Party is required to an act by or for the other Party, such consent shall not be unreasonably withheld or delayed. Lessor's actual reasonable costs and expenses (including but not limited to architects', attorneys', engineers' and other consultants' fees) incurred in the consideration of, or response to, a request by Lessee for any Lessor consent, including but not limited to consents to an assignment, a subletting or the presence or use of a Hazardous Substance, shall be paid by Lessee upon receipt of an invoice and supporting documentation therefor. Lessor's consent to any act, assignment or subletting shall not constitute an acknowledgment that no Default or Breach by Lessee of this Lease exists, nor shall such consent be deemed a waiver of any then existing Default or Breach, except as may be otherwise specifically stated in writing by Lessor at the time of such consent. The failure to specify herein any particular condition to Lessor's consent shall not preclude the imposition by Lessor at the time of consent of such further or other conditions as are then reasonable with reference to the particular matter for which consent is being given. In the event that either Party disagrees with any determination made by the other hereunder and reasonably requests the reasons for such determination, the determining party shall furnish its reasons in writing and In reasonable detail within 10 business days following such request.

36. Guarantor.

36.1 **Execution**. The Guarantors, If any, shall each execute a guaranty in the form most recently published by the AIR Commercial Real Estate Association, and each such Guarantor shall have the same obligations as Lessee under this Lease.

36.2 **Default**. It shall constitute a Default of the Lessee if any Guarantor fails or refuses, upon request to provide; (a) evidence of the execution of the guaranty, Including the authority of the party signing on Guarantor's behalf to obligate Guarantor, and in the case of a corporate Guarantor, a certified copy of a resolution of its board of directors authorizing the making of such guaranty, (b) current financial statements, (c) an Estoppel Certificate, or (d) written confirmation that the guaranty is still in effect.

37. Quiet Possession. Subject to payment by Lessee of the Rent and performance of all of the covenants, conditions and previsions on Lessee's part to be observed and performed under this Lease, Lessee shall have quiet possession and quiet enjoyment of the Premises during the term hereof.

38. Options. If Lessee is granted an Option, as defined below, then the following provisions shall apply;

38.1 **Definition**. "**Option**" shall mean: (a) the right to extend the term of or renew this Lease or to extend or renew any lease that Lessee has on other property of Lessor; (b) the right of first refusal or first offer to lease either the Premises or other property of Lessor; (c) the right to purchase or the right of first refusal to purchase the Premises or other property of Lessor.

38.2 **Options Personal To Original Lessee**. Any Option granted to Lessee in this Lease is personal to the original Lessee and cannot be assigned or exercised by anyone other than said original Lessee and only while the original Lessee is In full possession of the Premises and, if requested by Lessor, with Lessee certifying that Lessee has no intention of thereafter assigning or subletting.

38.3 **Multiple Options**. In the event that Lessee has any multiple Options to extend or renew this Lease, a later Option cannot he exercised unless the prior Options have been validly exercised.

38.4 **Effect of Default on Options**.

(a) Lessee shall have no right to exercise an Option: (i) during the period commencing with the giving of any notice of Default and continuing until said Default is cured, (ii) during the period of time any Rent is unpaid (without regard to whether notice thereof Is given Lessee), (iii) during the time Lessee is in Breach of this Lease, or (iv) in the event that Lessee has been given 3 or more notices of separate Default for failure to pay Rent, whether or not the Defaults are cured, during the 12 month period immediately preceding the exercise of the Option.

(b) The period of time within which an Option may be exercised shall not be extended or enlarged by reason of Lessee's inability to exercise an Option because of the provisions of Paragraph 39.4(a).

(c) An Option shall terminate and be of no further force or effect, notwithstanding Lessee's due and timely exercise of the Option, if, after such exercise and prior to the commencement of the extended term or completion of the purchase, (i) Lessee fails to pay Rem for a period of 30 days after such Rent becomes due (without any necessity of Lessor to give notice thereof), or (ii) if Lessee commits a Breach of this Lease.

39. Multiple Buildings. If the Premises are a part of a group of buildings controlled by Lessor, Lessee agrees that it will abide by and conform to all reasonable rules and regulations which Lessor may make from time to time for the management, safety, and care of said properties, Including the care and cleanliness of the grounds and including the parking, loading and unloading of vehicles, and to cause its employees, suppliers, shippers, customers, contractors and invitees to so abide and conform. Lessee also agrees to pay its fair share of common expenses incurred in connection with such rules and regulations.

40. Security Measures. Lessee hereby acknowledges that the Rent payable to Lessor hereunder does not include the cost of guard service or other security measures, and that Lessor shall have no obligation whatsoever to provide same. Lessee assumes all responsibility for the protection of the Premises, Lessee, Its agents and invitees and their property from the acts of third parties.

41. Reservations. Lessor reserves to itself the right, from time to time, to grant, without the consent or joinder of Lessee, such easements, rights and dedications that Lessor deems necessary, and to cause the recordation of parcel maps and restrictions, so long as such easements, rights, dedications, maps and restrictions do not unreasonably interfere with the use of the Premises by Lessee. Lessee agrees to sign any documents reasonably requested by Lessor to effectuate any such easement rights, dedication, map or restrictions, provided Lessee shall not be required to incur any cost or expense.

42. Performance Under Protest. If at any time a dispute shall arise as to any amount or sum of money to be paid by one Party to the other under the provisions hereof, the Party against whom the obligation to pay the money is asserted shall have the right to make payment "under protest" and such payment shall not be regarded as a voluntary payment and there shall survive the right on the part of said Party to Institute suit for recovery of such sum. If it shall be adjudged that there was no legal obligation on the part of said Party to pay such sum or any part thereof, said Party shall be entitled to recover such sum or so much thereof as it was not legally required to pay. A Party who does not initiate suit for the recovery of sums paid "under protest" with 6 months shall be deemed to have waived its right to protest such payment.

43. Authority; Multiple Parties; Execution.

(a) If either Party hereto is a corporation, trust, limited liability company, partnership, or similar entity, each individual executing this Lease on behalf of such entity represents and warrants that he or she is duly authorized to execute and deliver this Lease on its behalf. Each Party shall, within 30 days after request, deliver to the other Party satisfactory evidence of such authority.

(b) If this Lease is executed by more than one person or entity as "Lessee", each such person or entity shall be jointly and severally liable hereunder. It is agreed that any one of the named Lessees shall be empowered to execute any amendment to this Lease, or other document ancillary thereto and bind all of the named Lessees, and Lessor may rely on the same as if all of the named Lessees had executed such document.

(c) This Lease may be executed by the Parties in counterparts, each of which shall be deemed an original and all of which together shall constitute one and the same Instrument.

44. Conflict. Any conflict between the printed provisions of this Lease and typewritten or handwritten provisions shall be controlled by the typewritten or handwritten previsions.

45. Offer. Preparation of this Lease by either Party or their agent and submission of same ID the other Party shall not be deemed an offer to lease to the other Party. This Lease is not Intended to be binding until executed and delivered by all Parties hereto.

46. Amendments. This Lease may be modified only in writing, signed by the Parties In Interest at the time of the modification. As long as they do not materially change Lessor or Lessee's obligations hereunder, Lessee agrees to make such reasonable non-monetary modifications to this Lease as may be reasonably required by a Lender in connection with the obtaining of normal financing or refinancing of the Premises.

47. Waiver Of Jury Trial. **THE PARTIES HEREBY WAIVE THEIR RESPECTIVE RIGHTS TO TRIAL BY JURY IN ANY ACTION OR PROCEEDING INVOLVING THE PROPERTY OR ARISING OUT OF THIS AGREEMENT.**

48. Mediation and Arbitration of Disputes. An Addendum requiring the Mediation and/or the Arbitration of all disputes between the Parties and/or Brokers arising out of this Lease ☒ is ☐ is not attached to this Lease.

49. Americans with Disabilities Act. Since compliance with the Americans with Disabilities Act (ADA) is dependent upon Lessee's specific use of the Premises, Lessor makes no warranty or representation as to whether or not the Premises comply with ADA or any similar legislation. In the event that Lessee's use of the Premises requires modifications or additions to the Premises in order to be in ADA compliance, Lessee agrees to make any such necessary modifications and/or additions at Lessee's expense. Notwithstanding the foregoing, Lessee shall not be required to perform any upgrades or alterations to the Premises to cure pre-existing violations of ADA associated with general office use as of the Commencement Date.

50. Repair Maintenance. Lessor or Lessor's property manager if applicable, shall oversee and arrange for all work to be performed to meet Lessee's obligations under section 7 herein. Lessor shall promptly arrange for all repairs provided the cost of such repairs is reasonable and consistent with the condition of the Premises and consistent with the estimated Operating Expenses. To the extent an expenditure will exceed $5,000 and is not covered by insurance or operating expense estimate, Lessor, at Lessor option, may provide Lessee with the cost of repair and collect said estimated amount for an amount that exceed $5,000.00 from Lessee thirty (30) days after making the repair. Lessor shall obtain at least two (2) bids for any one repair cost that exceeds $5,000.

51. Operating Expense (Exhibit C) and Article 50. Lessor agrees to expedite the repair of any item which is necessary to Lessee's use and enjoyment of the Premises (e.g. repairs to the HVAC, etc). To the extent the repair of any item noted in Section 7 is covered by a manufacturing or other warranty, Lessor shall tender to such warranty for the repair.

52. Smoke Free Environment. The Lessee shall maintain the building interior and the entire property exterior as a smoke-free environment.

53. Mediation. The parties agree to submit all disputes to mediation facilitated by a retired judge prior to commencing litigation. If a party fails to participate in mediation, they relinquish their right to recover attorney fees in the event they are the prevailing party. In the event the parties fail to resolve the dispute after participating in mediation, then the parties are governed by the arbitration provisions of this Agreement.

54. FF&E/Personal Property. The parties shall sign-off on the Exhibit B Items belonging to Lessor to be left in the Premises for the use of Lessee during the term of the tenancy. The list is attached hereto as Exhibit B and be incorporated herein by this reference.

55. Payments Due. Unless specified otherwise, any monies due to Lessor shall be paid within thirty (30) days of Lessor invoice or written notice to Lessee.

LESSOR AND LESSEE HAVE CAREFULLY READ AND REVIEWED THIS LEASE AND EACH TERM AND PROVISION CONTAINED HEREIN, AND BY THE EXECUTION OFTHIS LEASE SHOW THEIR INFORMED AND VOLUNTARY CONSENT THERETO. THE PARTIES HEREBY AGREE THAT, AT THE TIME THIS LEASE IS EXECUTED, THE TERMS OF THIS LEASE ARE COMMERCIALLY REASONABLE AND EFFECTUATE THE INTENT AND PURPOSE OF LESSOR AND LESSEE WITH RESPECT TO THE PREMISES.

ATTENTION: NO REPRESENTATION OR RECOMMENDATION IS MADE BY THE AIR COMMERCIAL REAL ESTATE ASSOCIATION OR BY ANY BROKER AS TO THE LEGAL SUFFICIENCY, LEGAL EFFECT, OR TAX CONSEQUENCES OF THIS LEASE OR THE TRANSACTION TO WHICH IT RELATES. THE PARTIES ARE URGED TO:

1. SEEK ADVICE OF COUNSEL AS TO THE LEGAL AND TAX CONSEQUENCES OF THIS LEASE.

2. RETAIN APPROPRIATE CONSULTANTS TO REVIEW AND INVESTIGATE THE CONDITION OF THE PREMISES. SAID INVESTIGATION SHOULD INCLUDE BUT NOT BE LIMITED TO: THE POSSIBLE PRESENCE OF HAZARDOUS SUBSTANCES, THE ZONING OF THE PREMISES,

THE STRUCTURAL INTEGRITY, THE CONDITION OF THE ROOF AND OPERATING SYSTEMS, AND THE SUITABILITY OF THE PREMISES FOR LESSEE'S INTENDED USE.

WARNING: IF THE PREMISES IS LOCATED IN A STATE OTHER THAN CALIFORNIA, CERTAIN PROVISIONS OF THE LEASE MAY NEED TO BE REVISED TO COMPLY WITH THE LAWS OF THE STATE IN WHICH THE PREMISES IS LOCATED.

The parties hereto have executed this Lease at the place and on the dates specified above their respective signatures.

Executed at:
On: 3/24/2017

By LESSOR:
Michael J. Harbour

By: /s/ Michael J. Harbour
Name Printed: MICHAEL J. HARBOUR

Address: 480 Palo Alto Avenue
Palo Alto California 94301

Telephone: (650) 224.4171
Facsimile: (_____)
Federal ID No.
Email: dr.mharbour@gmail.com

Executed at: 3/23/2017
On: 03/23/2017

By LESSEE:
BridgeBio, Inc., a Delaware company

By: /s/ Neil Kumar
Name Printed: Neil Kumar
Title: CEO

Address: 7 Sandstone Street
Portola Valley, CA 94028

Telephone: (___)
Facsimile: (___)
Federal ID No.

BROKER:
Cornish & Carey Commercial dba
Newmark Cornish & Carey
Attn: Cherie Wittry
Title: Senior Managing Director
Address: 245 Lytton Avenue, Suite 150
Palo Alto, California 94301
Telephone: (650) 688.8523
Facsimile: (_____)
Federal ID No.

BROKER
T3 Advisors

Attn: Rollins Stallworth & Andrew Zink
Title:
Address: 137 Forest Avenue
Palo Alto, California 94301
Telephone: (___)
Facsimile: (___)
Federal ID No.

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RULES AND REGULATIONS FOR
STANDARD OFFICE LEASE

Dated: March 23, 2017

By and Between Michael J. Harbour as Lessor and BridgeBio, Inc., a Delaware company as Lessee for the Premises located at 421 Kipling Street, (AKA 421-423 Kipling Street) Palo Alto, California

GENERAL RULES

1. Lessee shall not suffer or permit the obstruction of any Common Areas, Including driveways, walkways and stairways.

2. Lessor reserves the right to refuse access to any persons Lessor In good faith judges to be a threat to the safety and reputation of the Project and Us occupants.

3. Lessee shall not make or permit any noise or odors that annoy or interfere with other lessees or persons having business within the Project.

4. Lessee shall not keep animals or birds within the Project, and shall not bring bicycles, motorcycles or other vehicles into areas not designated as authorized for same.

5. Lessee shall not make, suffer or permit litter except In appropriate receptacles for that purpose.

6. Lessee shall not alter any lock or install new or additional locks or bolts.

7. Lessee shall be responsible for the inappropriate use of any toilet rooms, plumbing or other utilities. No foreign substances of any kind are to be inserted therein.

8. Lessee shall not deface the walls, partitions or other surfaces of the Premises or Project.

9. Lessee shall not suffer or permit anything in or around the Premises or Building that causes excessive vibration or floor loading in any part of the Project.

10. Furniture, significant freight and equipment shall be moved into or out of the building only with the Lessor's knowledge and consent, and subject to such reasonable limitations, techniques and timing, as may be designated by Lessor. Lessee shall be responsible for any damage to the Office Building Project arising from any such activity.

11. Lessee shall not employ any service or contractor for services or work to be performed in the Building, except as approved by Lessor.

12. Lessor reserves the right to close and lock the Building on Saturdays, Sundays and Building Holidays, and on other days between the hours of N/A P.M. and N/A A.M. of the following day. If Lessee uses the Premises during such periods, Lessee shall be responsible for securely locking any doors it may have opened for entry.

13. Lessee shall return all keys at the termination of its tenancy and shall be responsible for the cost of replacing any keys that am lost.

14. No window coverings, shades or awnings shall be installed or used by Lessee without Lessor's consent.

15. No Lessee, employee or invitee shall go upon the roof of the Building.

16. Lessee shall not suffer or permit smoking or carrying of lighted cigars or cigarettes in areas reasonably designated by Lessor or by applicable governmental agencies as non-smoking areas.

17. Lessee shall not use any method of heating or air conditioning other than as provided by Lessor.

18. Lessee shall not install, maintain or operate any vending machines upon the Premises without Lessor's written consent.

19. The Premises shall not be used for lodging or manufacturing, cooking or food preparation, other than associated with use of the kitchen.

20. Lessee shall comply with all safety, fire protection and evacuation regulations established by Lessor or any applicable governmental agency.

21. Lessor reserves the right to waive any one of these rules or regulations, and/or as to any particular Lessee, and any such waiver shall not constitute a waiver of any other rule or regulation or any subsequent application thereof to such Lessee.

22. Lessee assumes all risks from theft or vandalism and agrees to keep Its Premises locked as may be required.

23. Lessor reserves the right to make such other reasonable rules and regulations as it may from time to time deem necessary for the appropriate operation and safety of the Project and its occupants. Lessee agrees to abide by these and such rules and regulations.

Parking RULES

1. Users of the parking area will obey all posted signs and park only in the areas designated for vehicle parking.

2. Unless otherwise instructed, every person using the parking area is required to park and lock his own vehicle. Lessor will not be responsible for any damage to vehicles, injury to persons or loss of property, all of which risks are assumed by the party using the parking area.

3. The maintenance, washing, waxing or cleaning of vehicles In the parking structure or Common Areas Is prohibited.

4. Lessee shall be responsible for seeing that all of its employees, agents and invitees comply with the applicable parking rules, regulations, laws and agreements.

5. Lessee shall only use the parking on site and parking area for Lessee or Lessee invitees use. Lessee will not be permitted to sublet the parking stalls or have the parking area used by third parties.

EXHIBIT B

Furniture, Fixtures and Equipment (FFE)
Personal Property
421-423 Kipling Street
Palo Alto, CA 94301

A. Lighting—all lighting is in new condition

- a. Two front porch—"Wellesley Collection" purchased from Restoration Hardware
- b. Two exterior Black Lanterns with seeded glass panels on brick columns with custom hand-forged posts and bases—Maris Lighting
- c. Rear outdoor pocket wall light—Maris
- d. Entry Hall multi-pronged —Estituz
- e. Two sconces in conference room —(I.E. company)
- f. Clear glass hallway sconce under stairwell—Tech Lighting
- g. Four individual room lights on first floor—Estiluz
- h. Two rear hallway lights—Estiluz
- i. Downstairs bathroom light—Tech
- j. Rear office Yellow — Vibia
- k. Square Metal and Glass Kitchen Light
- l. Break Room Light—Aluminun YoYo Grande Wire Globe Light with Crystal bulbs
- m. First floor custom curved hallway light—Tech Lighting
- n. Second Floor custom curved hallway light—Tech Lighting
- o. Single "Jack" light on landing between first and second floor—Tech Lighting
- p. Four Second Floor Office Lights—Estiluz
- q. Four sconces on Third Floor—WAC
- r. Glass wall light on third floor landing

B. Custom made draperies for three windows in living room in light olive, cream and tan colors with Orion Custom Made Nickel Curtain Rods and Rings

C. Hunter Douglas Window Coverings-all window coverings in new condition

- a. Four Hunter Douglass 2" Metal Blinds with fabric tapes in three offices on first floor
- b. Seven Hunger Douglass 2" Metal Blinds with fabric tapes in three offices on second floor
- c. Three Hunter Douglass 2" Metal Blinds in kitchen area
- d. One Hunter Douglass 2" Metal Blind in bathroom on second floor
- e. Seven Hunter Douglass 1" Metal Blinds in three office first floor and hallway
- f. One Hunter Douglass 1" Metal Blinds on closet window second floor
- g. One Hunter Douglass 1" Metal Blind on third floor office
- h. Two Hunter Douglass Real Wood Blinds with black fabric tapes in reception

D. Sunscreen Roller Shades in White-Grey located in Break room

E. Appliances

- a. KitchenAide Dual Drawer Refrigerator
  - i. Model KDDA27TRS00
  - ii. Serial SS3329173
- b. GE Profile Spacemake II Sensor Microwave
  - i. Model JEM31SF01
  - ii. Serial SH902296B
- c. Franke Little Buttler Hot Water Dispensor
  - i. Model HT200
  - ii. Serial BOCS00432-1
- d. Franke Triflow Water Filter Serial # 121226
- e. Kitchen Aide Disposal Imperial % Horsepower

F. Cabinetry, Countertops, and Plumbing—All Cabinetry custom made by City Cabinets of San Francisco. Corian countertops and integrated sinks from Accent Counters. Formica countertops in reception area from Halverson Plastics— Honed Granite countertop form Canada Marble

a. Reception—Maple cabinetry with black Formica countertop and custom hardware and cherry reception counter with black honed granite counter
b. Kitchen Cabinetry in light mustard color with clear class cabinets
c. Rooms in light moss color with Corian countertops and integrated sink with polished chrome Grohe plumbing fixtures

G. Other items
a. Three glass panels (materials only) for conference room—from West Coast Glass
b. Limestone Fireplace (materials only) from Canada Marble
c. Solstice Fireplace Insert
d. Refinished original Clawfoot Bathtub with Chrome feet in second floor bathroom
e. Chrome shower curtain rod suspended from ceiling for clawfoot tub
f. Shower curtain and custom curtain rings
g. Custom made white board with maple frame in conference room
h. White board in 1st floor office (rear of building)

i. White table with drawers (2) in each bathroom

j. Automatic sensor opening garbage can in kitchen

k. Trash cans (3)

l. Gunlocke “Converge” Conference Table with technology integration features

m. Gunlocke “Alti” leather executive office chairs (8) in light cream color

n. Large Seagrass Rug in conference room

ARBITRATION AGREEMEN
TStandard Lease Addendum Dated

Dated	March 23, 2017
By and Between (Lessor)	Michael J. Harbour
(Lessee)	BridgeBio, Inc., a Delaware company
Address Of Premises:	421 Kipling Street (AKA 421-423 Kipling Street) Palo Alto, CA 94301

Paragraph 48

A. ARBITRATION OF DISPUTES:

Except as provided in Paragraph B below, the Parties agree to resolve any and all claims, disputes or disagreements arising under this Lease, including, but not limited to any matter relating to Lessor's failure to approve an assignment, sublease or other transfer of Lessee's Interest in the Lease under Paragraph 12 of this Lease, any other defaults by Lessor, or any defaults by Lessee by and through arbitration as provided below and irrevocably waive any and all rights to The contrary. The Parties agree to at all times conduct themselves in strict, full, complete and timely accordance with the terms hereof and that any attempt to circumvent the terms of this Arbitration Agreement shall be absolutely null and void and of no force or effect whatsoever.

B. DISPUTES EXCLUDED FROM ARBITRATION:

The following claims, disputes or disagreements under this Lease are expressly excluded from the arbitration procedures set forth herein: 1. Disputes for which a different resolution determination is specifically set forth in this Lease, 2. All claims by either party which (a) seek anything other than enforcement or determination of rights under this Lease, or (b) are primarily founded upon matters of fraud, willful misconduct, bad faith or any other allegations of tortious action, and seek the award of punitive or exemplary damages, 3. Claims relating to (a) Lessor's exercise of any unlawful detainer rights pursuant to applicable law or (b) rights or remedies used by Lessor to gain possession of the Premises or terminate Lessee's right of possession to the Premises, all of which disputes shall be resolved by suit filed in the applicable court of jurisdiction, the decision of which court shall be subject to appeal pursuant to applicable law and 4. All claims arising under Paragraph 39 of this Lease.

C. APPOINTMENT OF AN ARBITRATOR:

All disputes subject to this Arbitration Agreement, shall be determined by binding arbitration before: ☒ a retired judge of the applicable court of jurisdiction (e.g., the Superior Court of the State of California) affiliated with Judicial Arbitration & Mediation Sen/Ices, Inc. ("**JAMS**"), ☒ the American Arbitration Association ("**AAA**") under its commercial arbitration rules, ☒

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or as may be otherwise mutually agreed by Lessor and Lessee (the "**Arbitrator**"). Such arbitration shall be initiated by the Parties, or either of them, within ten (10) days after either party sends written notice (the "Arbitration Notice") of a demand to arbitrate by registered or certified mail to the other party and to the Arbitrator. The Arbitration Notice shall contain a description of the subject matter of the arbitration, the dispute with respect thereto, the amount involved, if any, and the remedy or determination sought. If the Parties have agreed to use JAMS they may agree on a retired judge from the JAMS panel. If they am unable to agree within ten days, JAMS will provide a list of three available judges and each party may strike one. The remaining judge (or if there are two, the one selected by JAMS) will serve as the Arbitrator. If the Parties have elected to utilize AAA or some other organization, the Arbitrator shall be selected in accordance with said organization's rules. In the event the Arbitrator Is not selected as provided for above for any reason, the party initiating arbitration shall apply to the appropriate Court for the appointment of a qualified retired judge to act as the Arbitrator.

D. ARBITRATION PROCEDURE:

1. **PRE-HEARING ACTIONS**. The Arbitrator shall schedule a pro-hearing conference to resolve procedural matters, arrange for the exchange of information, obtain stipulations, and narrow the issues. The Parties will submit proposed discovery schedules to the Arbitrator at the prehearing conference. The scope and duration of discovery will be within the sole discretion of the Arbitrator. The Arbitrator shall have the discretion to order a pre-hearing exchange of information by the Parties, including, without limitation, production of requested documents, exchange of summaries of testimony of proposed witnesses, and examination by deposition of parties and third-party witnesses. This discretion shall be exercised In favor of discovery reasonable under the circumstances. The Arbitrator shall issue subpoenas and subpoenas duces tecum as provided for In the applicable statutory or case law (e.g., in California Code of Civil Procedure Section 1282.6).

2 THE DECISION. The arbitration shall be conducted in the city or county within which the Premises are located at a reasonably convenient site. Any Party may be represented by counsel or other authorized representative. In rendering a decision(s), the Arbitrator shall determine the rights and obligations of the Parties according to the substantive laws and the terms and provisions of this Lease. The Arbitrator's decision shall be based on the evidence introduced at the hearing, Including all logical and reasonable inferences therefrom, The Arbitrator may make any determination and/or grant any remedy or relief that is just and equitable. The decision must be based on, and accompanied by, a written statement of decision explaining the factual and legal basis for the decision as to each of the principal controverted issues. The decision shall be conclusive and binding, and it may thereafter be confirmed as a judgment by the court of applicable Jurisdiction, subject only to challenge on the grounds set forth in the applicable statutory or case law (e.g., in California Code of Civil Procedure Section 1288.2). The validity and enforceability of

the Arbitrator's decision is to be determined exclusively by the court of appropriate jurisdiction pursuant to the provisions of this Lease. The Arbitrator may award costs, including without limitation, Arbitrator's fees and costs, attorneys' fees, and expert and witness costs, to the prevailing party, if any as determined by the Arbitrator in his discretion.

Whenever a matter which has been submitted to arbitration involves a dispute as to whether or not a particular act or omission (other than a failure to pay money) constitutes a Default, the time to commence or cease such action shall be tolled from the date that the Notice of Arbitration is served through and until the date the Arbitrator renders his or her decision. Provided, however, that this provision shall NOT apply in the event that the Arbitrator determines that the Arbitration Notice was prepared in bad faith.

Whenever a dispute arises between the Parties concerning whether or not the failure to make a payment of money constitutes a default, the service of an Arbitration Notice shall NOT toll the time period in which to pay the money. The Party allegedly obligated to pay the money may, however, elect to pay the money "under protest" by accompanying said payment with a written statement setting forth the reasons for such protest. If thereafter, the Arbitrator determines that the Party who received said money was not entitled to such payment, said money shall be promptly returned to the Party who paid such money under protest together with Interest thereon as defined in Paragraph 13.5. If a Party makes a payment "under protest" but no Notice of Arbitration is filed within thirty days, then such protest shall be deemed waived. (See also Paragraph 42 or 43)

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First Addendum to Lease

FIRST ADDENDUM TO THAT CERTAIN LEASE DATED MARCH 23, 2017 BY AND BETWEEN **MICHAEL J. HARBOUR AS LESSOR (AKA LANDLORD)** AND **BRIDGEBIO, INC., A DELAWARE COMPANY AS LESSEE (AKA TENANT)** FOR APPROXIMATELY 3,900 RENTABLE SQUARE FEET FREE STANDING BUILDING LOCATED AT 421 KIPLING STREET (AKA 421-423), PALO ALTO, CALIFORNIA 94301

1. Early Access:

Lessee shall have early access of the Premises following the signing of a lease and Lessor receipt of Lessee insurance certificate for the purpose of preparing the Premises for occupancy and Lessee taking occupancy. Lessee shall not be responsible for rent or operating expenses during this early access period, except Lessee shall be responsible for utilities and janitorial.

2. Base Rate:

The monthly triple net (NNN) base rent shall be paid according to the following schedule, beginning on the commencement date, due and payable the first of each month, except as otherwise defined below. The following is the rent schedule:

Months	NNN Monthly Base Rent Per RSF
April 14, 2017 - April 30, 2017*	$7.15 $15,801.50
May 1, 2017 - April 30,2018	$7.15 ($27,885.00)
May 1, 2018 - April 30,2019	$7.36 ($28,721.55)
May 1, 2019 - April 30, 2020	$7.59 ($29,583.20)

If the Lease does not commence by April 14, 2017, then the foregoing dates shall be adjusted to commence as of the actual Commencement Date.

3. Operating Expenses & Taxes:

Lessee shall be responsible for all Operating Expenses for the building, (the calendar year 2017 CAM is estimated at $1.45/rsf/month ($5,655.00) which shall be paid monthly with the Base Rent. In addition Lessee is responsible to contract for and pay directly for Utilities (that includes trash) and interior Janitorial service to the Premises. Attached as Exhibit C is a list of Operating Expenses from calendar year 2016 and an estimate for calendar year 2017. Exhibit C includes all categories of Operating Expenses as defined in the lease.

Lessee shall pay the Operating Expenses monthly on the same day as when the Base Rent is due hereunder. The amount of such payments identified above is based on Lessor's estimate of the annual Operating Expenses.

By May 1 of each year during the Term, Lessor shall deliver to Lessee a reasonably detailed statement ("**Statement**") showing Lessee's Share of the actual Operating Expenses for the preceding year. If Lessee's payments during such year exceed Lessee's Share, Lessor shall credit the amount of such over-payment against Lessee's future payments or if this Lease has terminated, Lessor shall refund such overpayment within 30 days. If Lessee's payments during such year were less than Lessee's Share, Lessee shall pay to Lessor the amount of the deficiency within 30 days after delivery by Lessor to Lessee of the statement and if at the end of the term, Lessor shall deduct Lessee amount due from the Security Deposit.

Within 60 days after receipt of a Statement by Lessee (the "**Review Period**"), if Lessee disputes the amount of Operating Expenses and Taxes set forth in the Statement, Lessee may elect to have an independent certified public accountant, designated and paid for by Lessee ("**Lessee's Accountant**"), may, after reasonable notice to Lessor and at reasonable times, inspect Lessor's records with respect to the Statement at Lessor's offices. If such review determines that Lessee was overcharged or undercharged, an appropriate adjustment shall be made between Lessor and Lessee to reflect any overpayment or underpayment within thirty (30) days after delivery of such audit to Lessor. If the overcharge to Lessee exceeds the actual Operating Expenses by more than three percent (3%), Lessor shall pay the reasonable costs of conducting such audit; otherwise, Lessee shall pay the costs of the audit.

Utilities transfer: Lessee to contact Palo Alto Utilities at (650) 329-2161 and Green Waste (trash) at (650) 483-4894 to make arrangements for transfer of utilities billing into their name before occupying the building. The building has 2 addresses for the services and will need to transfer accounts for both 421 and 423 Kipling St. accordingly.

Trash: is collected on Friday mornings. Lessee will need to bring the garbage and recycling bins to the street in front of the building on Thursday at the end of the day. The bins will then need to be returned to the rear of the building after collection is complete on Friday morning.

Other contact information: The alarm is wired and serviced by Bay Alarm at (800) 470-1000. Lessee may elect to use and contract for.

IT: High speed internet service (and phone) service in the building is provided by COMCAST. The Lessor does not want the wiring for alarm or Comcast removed if Lessee elects to use a different service.

4. Rent Payment:

Lessee shall pay rent as an electronic transfer such as wire transfer or ACH transfer. Lessor shall provide Lessor information following receipt of Lessee decision.

5. Condition of the Premises:

Landlord shall deliver the Premises “as is” in broom clean condition and in good operating condition and shall include the conference room furniture as listed on the attached Exhibit B. Upon lease commencement, Lessor shall deliver the premises with the property framework, foundation, roof, walls, doors, windows, HVAC system, electrical, plumbing, and lighting in good working condition

6. Surrender of Premises:

Tenant will surrender the Premises and Exhibit B items at the end of the Lease Term in the condition Tenant received the Premises at the lease commencement date or early access whichever occurs first, broom clean., normal wear and tear excepted. Specific to the interior walls, doors, casings and baseboards, which Landlord had the interior premises detailed and painted prior to Tenant occupancy, Tenant shall return the Premises in the same condition at the end of the term such that the paint shall be free of marks, scratches, holes and visible dirt or shall be subject to touch up or repainting at Tenant cost.

Landlord recommends area rugs for the wood floors in high traffic area. Tenant shall be responsible for any damage to the wood floors in the same condition as received normal wear and tear excepted.

Landlord and Tenant to conduct a walk -through of the current condition of the Premises prior to execution of the lease and Lessee occupancy.

7. Service Animal:

In California, a disability includes any mental or physical disorder that makes it difficult to perform a major life activity, such as participating in social activities, walking, talking, or seeing. For further discussion of what counts as a mental disability under California law.

Should Lessee have a service dog, please provide Lessor written notification to include the following information:

1. Whether the dog is required because of a disability, and
2. What work the dog is trained to perform.

Lessee is responsible for any damage to the interior or the building property exterior caused by a service dog.

8. Signage:

Lessee shall be granted exclusive signage rights subject to the City of Palo Alto’s regulations. Lessee is responsible to install all signage at Lessee sole expense. Lessee shall maintain its signage in good condition, and shall remove all of its signage at the termination of this Agreement. Landlord can provide a signage vendor that had worked with the prior tenant. The current brick pillar brass signs have been approved by the Landlord and the city of Palo Alto. There shall be no signage allowed that penetrates the wood building exterior.

9. Assign/Sublease:

Notwithstanding the terms of the Lease, Lessee shall have the right to sublease/assign their premises at any time, subject to written approval from the Lessor, whose approval shall not be unreasonably withheld, conditioned or delayed beyond 10-business days. Furthermore, if Lessee elects to assign the Lease (except to an “Affiliate” as further defined below) or to sublease more than 30% of the Premises, Lessor shall have the right to terminate the Lease in lieu of consenting as long as Lessor notifies Lessee in writing of such election within ten (10) business days. Any proceeds over and above the Base Rent after deducting for any sublet costs that include their reasonable sublease costs if applicable, and with Lessee provision of invoices for the cost(s) incurred and paid, defined as and referred to as “Transfer Expenses; real estate commission, attorney fees and any improvements (not personal property)” associated with the sublet/assignment shall be provided to Lessor with any bonus rent amortized on a straight line basis over the term. Lessor shall not allow any penetration of the building structure.

However, with respect to subleases of 30% of the Premises or less, Lessee and Lessor shall split 50/50% the proceeds received by such subtenant over and above Base Rent and Operating Expenses after Lessee first deducts its Transfer Expenses as specifically defined above. All other terms and conditions of the Sublease and Assignment are defined in the Lease agreement.

Affiliates: Despite any other provision of the Lease, Lessor’s consent is not required for any assignment (“**Transfer**”) to an Affiliate, as defined below, as long as the following conditions are met: (i) At least ten (10) business days before the Transfer, Lessor receives written notice of the Transfer (as well as any documents or information reasonably requested by Lessor regarding the Transfer or the assignee (“**Transferee**”)); (ii) The Transfer is not a subterfuge by Lessee to avoid its obligations under the Lease; (iii) Transferee is qualified to conduct business in the State of California; (iv) Transferee Net Worth (as determined in accordance with GAAP, but excluding intellectual property and any other intangible assets) is equal to or greater than Lessee with Lessee additional funding due and approved by Landlord and the Transferee to provide current audited financial statement to Lessor for review and approval at the time of Lessee notification to Lessor. As used herein, “**Affiliate**” shall mean, (i) any entity which is controlled by, controls, or is under common control with, Lessee, (ii) any entity resulting from the merger or consolidation with Lessee or any entity that acquires all or substantially all of Lessee’s assets or acquires all or substantially all of Lessee’s stock or membership interest and is of equal or greater financial strength as Lessee as further defined in the Lease. Additionally, Lessee shall not be required to obtain Lessor’s consent in connection with the sale or transfer of the capital stock of Lessee associated with any bona fide financing or capitalization for the benefit of Lessee.

10. Advance Rent/Security Deposit:

Upon execution of Lease, Tenant shall deposit with Landlord the Security Deposit and April (partial month) and May Base rent and operating expense rent due for April and May accordingly. The Security Deposit is defined as Ninety Thousand Dollars ($90,000.00).

11. Building Security & Access:

Tenant's authorized employees shall have access to the Building and Premises twenty-four (24) hours per day, seven (7) days per week.

12. Notices:

Lessor:	**Lessee:**
Address: 480 Palo Alto Ave. Palo Alto, CA 94301	**Address:** 7 Sandstone Street Portola Valley, CA
Cell: (650) 224-4171	**Cell:** 9735191860
Email: dr.mharbour@gmail.com	**Email:** nk@bridgebio.com
Attn: Michael Harbour	**Attn:** Neil Kumar

13. Parking:

There is exclusive on -site parking for Tenant use at no additional cost. (The parking area can be used for parking or Tenant's sole designated use, such as Tenant outdoor events)

14. Brokerage Commission:

Landlord and Tenant acknowledge that Tenant is represented by T3 Advisors and Landlord is represented by Newmark Cornish & Carey. Subject to an executed lease, Landlord shall be responsible for the brokerage commission according to a separate agreement payable 50% on lease execution and 50% on the lease commencement date.

15. Confidentiality:

Lessee shall keep all information obtained from Lessor or relating to the Premises or the lease transaction confidential and shall not disclose any such confidential information to any other person or entity without obtaining the prior written consent of Lessor.

16. Effect of Addendum:

All terms with initial capital letters used herein as defined terms shall have the meanings ascribed to them in the Lease unless specifically defined herein. In the event of any inconsistency between this Addendum and the Lease, the terms of this Addendum shall prevail. As used herein, the term "Lease" shall mean the Lease, this Addendum and all riders, exhibits, rules, regulations, referred in the Lease or this Addendum.

Acknowledged and Agreed To:

LESSOR: MICHAEL J. HARBOUR

By: /s/ Michael J. Harbour
Print Name: Michael J. Harbour
Date: 3/24/2017

LESSEE: BRIDGEBIO, INC., A DELAWARE COMPANY

By: /s/ Neil Kumar
Print Name: Neil Kumar
Date: 3/23/2017

FLOOR PLAN

EXHIBIT A

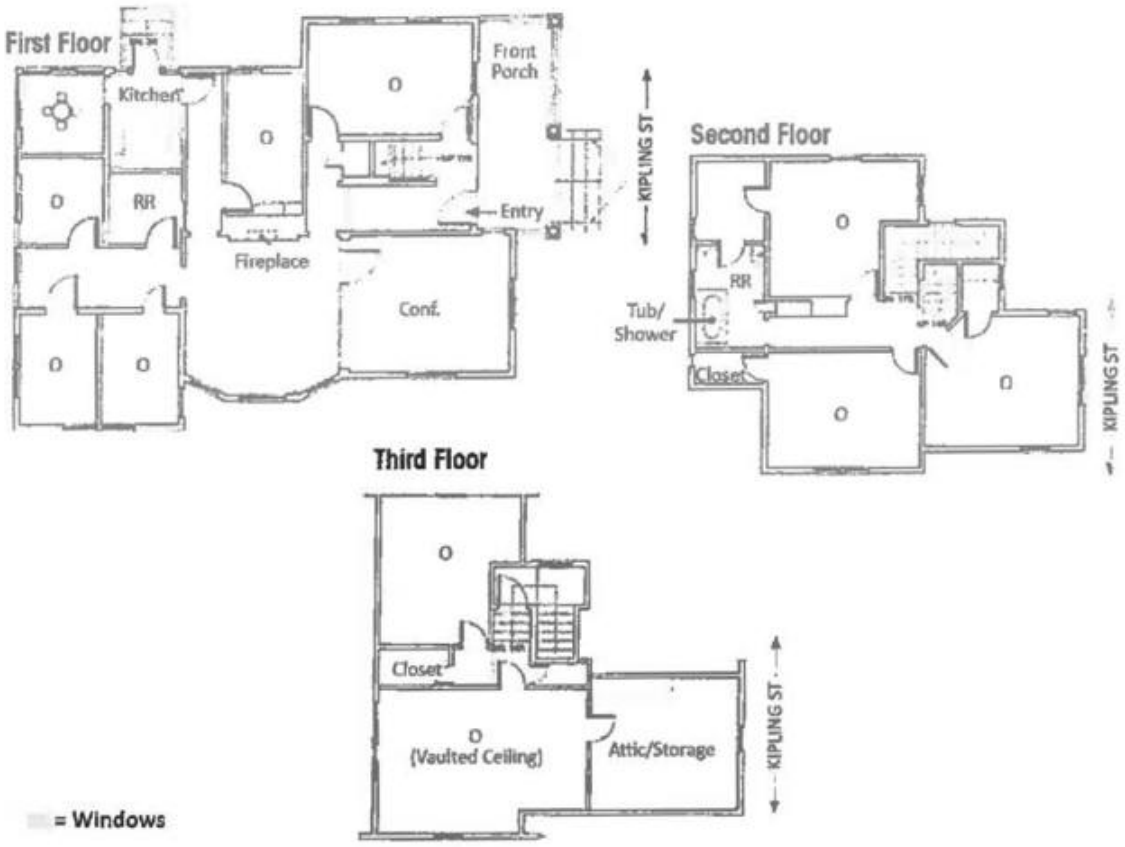
Premises: 421 Kipling Street, Palo Alto, California

Date: March 8,2017

By and Between:

Michael J. Harbour (Lessor)

BridgeBio, Inc., a Delaware company (Lessee)



INITIA **INITIA**

EXHIBIT C

OPERATING EXPENSES
421-423 Kipling St.,
Palo Alto, CA

Landscaping	$ 7,200.00
Bldg and Liability Insurance	$ 4,916.00
EQ Insurance	$10,300.00
Property Taxes	$20,100.00
Painting	$ 2,500.00
Management fee	$12,000.00
Pest and Termite Control	$ 770.00
Annual Backflow testing	$ 200.00
Fire Extinguisher recharge	$ 300.00
HVAC maintenance	$ 500.00
Quarterly Deep Cleaning (interior and exterior)	$ 2,200.00
Supplies	$ 600.00
general maintenance and repairs	$ 6,420.00
Total Annual Expenses	**$68,006.00**

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXCLUSIVE (EQUITY) AGREEMENT

This Exclusive (Equity) Agreement (this "Agreement") between THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY ("Stanford"), an institution of higher education having powers under the laws of the State of California, and Eidos Therapeutics, Inc. ("Eidos"), a corporation having a principal place of business at 12354 Skyline Boulevard, Woodside, CA 94062, is effective on the 10th day of April, 2016 ("Effective Date").

1. BACKGROUND

Stanford has an assignment of an invention entitled "Novel transthyretin aggregation inhibitors," which was invented in the laboratory of Dr. Isabella Graef, and is described in Stanford Docket S09-398. The invention was made in the course of research supported by the Hillblom Foundation, the Baxter Foundation and the SPARK program. Both Stanford and Eidos want to have the invention perfected and marketed as soon as possible so that resulting products may be available for public use and benefit, and Eidos has contributed materially to acquiring patent protection for the invention outside of the United States where there is a significant patient population that may benefit from the invention.

2. DEFINITIONS

2.1 **"Affiliate"** means any person, corporation, or other business entity which controls, is controlled by, or is under common control with Eidos; and for this purpose, "control" of a corporation means the direct or indirect ownership of 50% or more of its voting stock, and "control" of any other business entity means the direct or indirect ownership of 50% or more interest in the income of such entity.

2.2 **"Change of Control"** means the following, as applied only to the entirety of that part of Eidos' business that exercises all of the rights granted under this Agreement:

(A) acquisition of ownership—directly or indirectly, beneficially or of record—by any person or group (within the meaning of the Exchange Act and the rules of the SEC or equivalent body under a different jurisdiction) that is not an Eidos Affiliate of the capital stock of Eidos representing more than 45% of either the aggregate ordinary voting power or the aggregate equity value represented by the issued and outstanding capital stock of Eidos; and/or

(B) the sale of all or substantially all Eidos' assets and/or business in one transaction or in a series of related transactions other than to an Affiliate;

provided, however, that in no event shall the sale of equity or other securities for the primary purpose of financing Eidos be a Change of Control.

2.3 **"Exclusive"** means that, subject to Article 3, Stanford will not grant further licenses under the Licensed Patents in the Licensed Field of Use in the Licensed Territory.

2.4 **"Fully Diluted Basis"** means the total number of shares of Eidos's issued and outstanding common stock, assuming:

(A) the conversion of all issued and outstanding securities convertible into common stock;

(B) the exercise of all issued and outstanding warrants or options, regardless of whether then exercisable; and

(C) the issuance, grant, and exercise of all securities reserved for issuance pursuant to any Eidos stock or stock option plan then in effect.

2.5 **"Licensed Field of Use"** means all fields.

2.6 **"Licensed Patent"** means Stanford's Patent Applications:

[*****]

any foreign patent application corresponding thereto, and any divisional, continuation, or reexamination application, extension, and each patent that issues or reissues from any of these patent applications. Any claim of an unexpired Licensed Patent is presumed to be valid unless it has been held to be invalid by a final judgment of a court of competent jurisdiction from which no appeal can be or is taken. Neither Stanford nor Eidos will file any continuation-in-part applications without written consent from the other party.

2.7 **"Licensed Product"** means a product or part of a product in the Licensed Field of Use:

(A) the making, using, importing or selling of which, absent the license granted in Section 3.1, infringes, induces infringement, or contributes to infringement of a Licensed Patent.

2.8 **"Licensed Territory"** means worldwide.

2.9 **"Net Sales"** means all gross revenue derived by Eidos or its Affiliates or sublicensees, and their distributors or designees, from the sale, transfer or other disposition of Licensed Product to an end user. Net Sales excludes the following items (but only as they pertain to the making, using, importing or selling of Licensed Products, are included in gross revenue, and are separately billed):

(A) import, export, excise, sales and other similar taxes (excluding income taxes), and custom duties;

(B) costs of insurance, packing, and transportation from the place of manufacture to the customer's premises or point of installation;

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(C) costs of installation at the place of use;

(D) cash, trade and quantity discounts; and

(E) charge-back payments and credit for returns, allowances, or rebates.

Amounts received from the sale of Licensed Products among Eidos and its Affiliates and sublicensees shall not be included in Net Sales, unless such entity is the end user. Net Sales shall not include any amounts received for sales of Licensed Products supplied for use at or below cost, in clinical trials or under early access, compassionate use, named patient, indigent access, patient assistance or other reduced pricing programs, or donations to non-profit institutions or government agencies, as promotional free samples or the like.

2.10 **"Nonroyalty Sublicensing Consideration"** means any consideration received by Eidos from a sublicensee hereunder attributable to a sublicense under the Licensed Patents, but excluding any consideration for:

(A) royalties on products sales (royalties on product sales by sublicensees will be treated as if Eidos made the sale of such product; for clarity, no double payments will be made on such product sales);

(B) payments for the purchase of equity in Eidos;

(C) research and development expenses calculated on a fully burdened basis;

(D) debt; and

(E) reimbursement of out-of pocket patent prosecution and maintenance expenses for Patent Matters.

2.11 **"Patent Matters"** means preparing, filing, and prosecuting broad and extensive patent claims (including any interference or reexamination actions) for Stanford's benefit in the Licensed Territory and for maintaining all Licensed Patents.

2.12 **"Stanford Indemnitees"** means Stanford and Stanford Health Care, and their respective trustees, officers, employees, students, agents, faculty, representatives, and volunteers.

2.13 **"Sublicense"** means any agreement between Eidos or its Affiliates or sublicensees and a third party that contains a grant to Stanford's Licensed Patents regardless of the name given to the agreement by the parties; however, an agreement to make, have made, use or sell Licensed Products, or perform research or development services in furtherance of the development or commercialization of the Licensed Products, on behalf of Eidos, its Affiliates or its sublicensees is not considered a Sublicense.

3. GRANT

3.1 **Grant.** Subject to the terms and conditions of this Agreement, Stanford grants Eidos a license under the Licensed Patent in the Licensed Field of Use to make, have made, use, import, offer to sell and sell Licensed Product in the Licensed Territory.

3.2 **Exclusivity.** The license is Exclusive, including the right to sublicense under Article 4, in the Licensed Field of Use beginning on the Effective Date and ending when the last Licensed Patent expires.

3.3 **Retained Rights.** Stanford retains the right, on behalf of itself, Stanford Health Care, and all other non-profit research institutions, to practice the Licensed Patent for any non-profit purpose, including sponsored research and collaborations. Eidos agrees that, notwithstanding any other provision of this Agreement, it has no right to enforce the Licensed Patent against any such institution. Stanford and any such other institution have the right to publish any information included in a Licensed Patent.

3.4 **Specific Exclusion.** Stanford does not:

(A) grant to Eidos any other licenses, implied or otherwise, to any patents or other rights of Stanford other than those rights granted under the Licensed Patents, regardless of whether the patents or other rights are dominant or subordinate to any Licensed Patent, or are required to exploit any Licensed Patent;

(B) commit to Eidos to bring suit against third parties for infringement, except as described in Article 14; and

(C) agree to furnish to Eidos any technology or technological information or to provide Eidos with any assistance, except as expressly set forth in Section 10.1 and Article 14.

4. SUBLICENSING

4.1 **Permitted Sublicensing.** Eidos may grant Sublicenses through two tiers of sublicensees in the Licensed Field of Use only during the Exclusive term and only if Eidos is developing or selling Licensed Products directly or through its Affiliates or sublicensees. Sublicenses with any exclusivity must include diligence requirements commensurate with the diligence requirements of Appendix A. Stanford agrees that Eidos may apportion without discrimination between Eidos and Stanford patents a commercially reasonable percentage of sublicensing payments made to Stanford pursuant to Section 4.6, provided however that Eidos provides Stanford with the proposed apportionment and justification prior to Eidos's payment pursuant to Section 8.1. Stanford and Eidos agree to meet to discuss such proposed apportionment in good faith if in Stanford's opinion the apportionment does not reasonably reflect the value of the Licensed Patents.

4.2 **Required Sublicensing.** If Eidos directly or through its Affiliates or sublicensees is unable or unwilling to serve or develop a potential market or market territory for which there is a company willing to be a sublicensee for the Licensed Products, and which has adequate resources and a bona fide, detailed business plan to develop the Licensed Products for the potential market or market territory, Eidos will, at Stanford's request, and at Eidos' election, either negotiate in good faith a Sublicense with any such company; or demonstrate in a written document to Stanford that such company's proposed development is competitive with Eidos' current or planned Licensed Products.

Stanford would like licensees to address unmet needs, such as those of neglected patient populations or geographic areas, giving particular attention to improved therapeutics, diagnostics and agricultural technologies for the developing world.

4.3 **Sublicense Requirements.** Any Sublicense:

(A) is subject to this Agreement (it being understood that the financial terms may differ, provided that Eidos shall remain at all times responsible for all payments due to Stanford hereunder);

(B) will reflect that any sub-sublicensee will not further sublicense;

(C) will prohibit sublicensee from paying royalties on sales of Licensed Products to an escrow or other similar account;

(D) will expressly include the provisions of Sections 8.4, 8.5 and 8.6 and Articles 9, and 10 for the benefit of Stanford; and

(E) will include the provisions of Section 4.4 and require the transfer of all the sublicensee's obligations to Eidos relating to the Licensed Products, including the payment of royalties specified in the Sublicense (up to the royalty rates set forth in this Agreement), to Stanford or its designee, if this Agreement is terminated. If the sublicensee is a spin-out from Eidos, unless otherwise separately agreed by Stanford Eidos must guarantee the sublicensee's performance with respect to the payment of Stanford's share of Sublicense royalties. For clarity, an assignment in the context of a Change of Control of Eidos shall not be deemed a spin-out from Eidos.

4.4 **Litigation by Sublicensee.** Any Sublicense must include the following clauses:

(A) In the event sublicensee brings an action seeking to invalidate any Licensed Patent:

(1) sublicensee will double the payment of royalties paid to Eidos during the pendency of such action. Moreover, should the outcome of such action determine that any claim of a patent challenged by the sublicensee is both valid and infringed by a Licensed Product, following such determination sublicensee will [*****] the payment of royalties paid under the original Sublicense;

(2) sublicensee will have no right to recoup any royalties paid before or during the pendency of such action;

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(3) any dispute regarding the validity of any Licensed Patent shall be litigated in the courts located in Santa Clara County, and the parties agree not to challenge personal jurisdiction in that forum; and

(4) sublicensee shall not pay royalties into any escrow or other similar account.

(B) Sublicensee will provide written notice to Stanford at least three months prior to bringing an action seeking to invalidate a Licensed Patent. Sublicensee will include with such written notice an identification of all prior art it believes invalidates any claim of the Licensed Patent.

4.5 **Copy of Sublicenses and Sublicensee Royalty Reports.** Eidos will submit to Stanford a copy of each Sublicense, any subsequent amendments and all copies of sublicensees' royalty reports, which may in each case be reasonably redacted for information not relevant to this Agreement. Beginning with the first Sublicense, the Chief Financial Officer or equivalent of Eidos will certify annually regarding the name and number of sublicensees.

4.6 **Sharing of Sublicensing Income.** Eidos will pay to Stanford a portion of all Nonroyalty Sublicensing Consideration attributable to the Sublicense of Licensed Patents and Technology, as provided below:

(A) [*****]% if sublicensed in the [*****]

(B) [*****]% if sublicensed in the [*****]

(C) [*****]% if sublicensed in the [*****]

(D) [*****]% if sublicensed [*****]

4.7 **Royalty-Free Sublicenses.** If Eidos pays all royalties due Stanford from a sublicensee's Net Sales, Eidos may grant that sublicensee a royalty-free or non-cash:

(A) Sublicense or

(B) cross-license.

5. [INTENTIONALLY OMITTED.]

6. DILIGENCE

6.1 **Milestones.** Because the invention is not yet commercially viable as of the Effective Date, Eidos, directly or through its Affiliates and sublicensees, will use commercially reasonable efforts to diligently develop, manufacture, and sell Licensed Products and will use commercially reasonable efforts to diligently develop markets for Licensed Product. In addition, Eidos will meet the milestones shown in Appendix A, and notify Stanford in writing as each milestone is met. The parties acknowledge that (a) patient safety is of

paramount concern; (b) the Licensed Products are at an early experimental stage and the potential outcome of any future tests or studies of the Licensed Products are unknown; and (c) prudent development of the Licensed Products will be based on analyses of the actual results of such tests and studies, requiring Eidos to continually review and update its development plans for the Licensed Products based on such results and analyses, and, therefore, the timelines for development of the Licensed Products cannot be accurately predicted. Accordingly, if there are delays in any of the milestones shown in Appendix A for reasons beyond the reasonable control of Eidos, Stanford and Eidos agree in good faith to meet and discuss the timeframe for the performance of the milestones. Within 60 days of the meeting, Eidos will present Stanford with a written plan, reasonably acceptable to Stanford, to either meet such milestone or replace such milestone with a more appropriate milestone based on development results to date.

6.2 **Progress Report.** By March 1 of each year, Eidos will submit a written annual report to Stanford covering the preceding calendar year. The report will include information sufficient to enable Stanford to ascertain progress by Eidos toward meeting this Agreement's diligence requirements. Each report will describe, where relevant: Eidos's progress toward commercialization of Licensed Products, including work completed, key scientific discoveries, summary of work-in-progress, current schedule of anticipated events or milestones, market plans for introduction of Licensed Products, and significant corporate transactions involving Licensed Product. Eidos will specifically describe how each Licensed Product is related to each Licensed Patent.

6.3 **Clinical Trial Notice.** Eidos will notify the Stanford University Office of Technology Licensing prior to commencing any clinical trials of Licensed Products at Stanford.

7. ROYALTIES

7.1 **Issue Royalty.** Eidos will pay to Stanford a noncreditable, nonrefundable license issue royalty of $25,000; due within 60 days of signing the Agreement.

7.2 **Equity Interest.** As further consideration, Eidos will grant to Stanford 47,500 shares of common stock in Eidos. When issued, those shares will represent [*****]% of the common stock of Eidos on a Fully Diluted Basis on the date of the Agreement. Eidos agrees to provide Stanford with the summary capitalization table upon which the above calculation is made. Eidos will issue [*****]% of all shares granted to Stanford pursuant to this Section 7.2 and Section 7.3, if any, directly to and in the name of the inventors listed below allocated as stated below:

Dr. Isabella Graef – [*****]%

Dr. Mamoun Alhamadsheh – [*****]%

The remaining [*****]% of all shares granted to Stanford pursuant to this Section 7.2 and 7.3, if any, shall be issued to The Board of Trustees of the Leland Stanford Junior University.

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

7.3 **Anti-Dilution Protection.** Eidos will issue Stanford, without further consideration, that number of additional shares of Eidos common stock necessary to ensure that the number of shares issued Stanford pursuant to Section 7.2 and this Section 7.3 does not represent [*****] % of the shares issued and outstanding on a Fully-Diluted Basis, until such time as Eidos has raised [*****] pursuant that certain Series Seed Preferred Stock Purchase Agreement, dated April 5, 2016 (the "First Round"). Stanford's right pursuant to this Section 7.3 will expire at such time as [*****]

7.4 **Purchase Right.**

(A) Stanford shall have the right, but not the obligation, to purchase for cash up to its Share of the securities issued in any Qualifying Offering on the terms, and subject to the conditions, set forth in this Section 7.4 (the "Purchase Right"). For purposes of this Agreement:

(1) "Adjustment Event" means the final closing of the first Threshold Qualifying Offering occurring after the date of this Agreement.

(2) "Qualifying Offering" means a private offering of Eidos's equity securities (or securities convertible into or exercisable for Eidos's equity securities) for cash (or in satisfaction of debt issued for cash) having its final closing on or after the date of this Agreement and which includes investment by one or more venture capital, professional angel, corporate or other similar institutional investors other than Stanford.

(3) "Share" means:

(i) [*****]% with respect to any Qualifying Offering having a closing on or before the date of an Adjustment Event; or

(ii) with respect to any Qualifying Offering having a closing after an Adjustment Event, but before a Termination Event, the percentage necessary for Stanford to maintain its pro rata ownership interest in Eidos on a Fully-Diluted Basis.

(4) "Threshold Qualifying Offering" means any Qualifying Offering which either (i) is at least $[*****] in size or (ii) involves the sale to outside investors of at least [*****]% of the securities outstanding after such round on a Fully-Diluted Basis.

(B) The Purchase Right shall terminate upon the earliest to occur of the following (each a "Termination Event"):

(1) Stanford's execution of an investor rights agreement or similar agreement (each a "Rights Agreement") in connection with a Threshold Qualifying Offering so long the Rights Agreement satisfies the terms of this Section 7.4 and Section 7.5 below;

(2) Stanford purchases less than its entire Share of a Qualifying Offering; and

(3) Stanford fails to give an election notice within the Notice Period for a Qualifying Offering which has its final closing within 90 days of the date such notice is received by Stanford and which is closed on terms that are the same or less favorable to the investors as the terms stated in Eidos's notice to Stanford.

(C) The Purchase Right shall not apply to the issuance of securities: (i) to employees, current members of Eidos's Board of Directors and other service providers pursuant to a plan approved by Eidos's Board of Directors; or (ii) as additional consideration in lending or leasing transactions; or (iii) to an entity pursuant to an arrangement that Eidos's Board of Directors determines in good faith is a strategic partnership or similar arrangement of Eidos (i.e., an arrangement in which the entity's purchase of securities is not primarily for the purpose of financing Eidos); or (iv) to shareholders of another corporation in connection with the acquisition of that corporation by Eidos.

(D) For the avoidance of doubt: (i) any securities Stanford may acquire or have the right to acquire under Section 7.2 or 7.3 shall not reduce the number of securities Stanford may purchase under this Section 7.4 or under any applicable Rights Agreement; and (ii) Stanford shall not be obligated to purchase under this Section 7.4 any Company securities it has the right to acquire under Section 7.2 or 7.3 above.

(E) If Eidos has entered into more than one Exclusive (Equity) Agreement or other agreement to license intellectual property from Stanford, and Stanford has fully exercised its right to purchase its Share in connection with a Qualifying Offering under any such agreement, Stanford will waive its right to purchase its Share in connection with a Qualifying Offering under all other applicable agreements. In the event that Stanford has not fully exercised its right to purchase its Share in connection with a Qualifying Offering under any agreement, then Stanford may only exercise its right to purchase under a single agreement, and will waive its right to purchase under all others.

7.5 Rights Agreements; Information Rights; Notice; Elections.

(A) Eidos shall ensure that each Rights Agreement executed by Stanford in connection with a Qualifying Offering will grant to Stanford the same rights as all other investors who are parties to that Rights Agreement. In particular, Eidos shall ensure that each such Rights Agreement will grant to Stanford the same right to purchase additional securities in future offerings, the same information rights, and the same registration rights as are granted to other parties thereto, including all such rights granted to any investor designated as a "Major Investor" or other similar designation, even if Stanford is not so designated.

(B) Notwithstanding any terms to the contrary contained in any applicable Rights Agreement:

(1) Stanford shall not have any board representation or board meeting attendance rights;

(2) In connection with all Qualifying Offerings, Eidos shall give Stanford notice of the terms of the offering, including: (i) the names of the investors, the allocation of shares among them and the total amounts to be invested by each of them in such offering; (ii) pre- and post- (projected) financing capitalization table; (iii) investor presentation (if available); (iv) an introduction to the lead investor in such offering for the purpose of discussing the lead investor's due diligence process; and (v) such other documents and information as Stanford may reasonably request for the purpose of making an investment decision or verifying the number of shares it is entitled to purchase in such offering; and

(3) Stanford may elect to exercise its Purchase Right, in whole or in part, by notice given to Eidos within 15 Stanford business days (i.e., days other than Saturdays, Sundays, and holidays or other days on which Stanford is officially closed) after receipt of Eidos's notice ("Notice Period").

(C) If Stanford has no information rights under a Rights Agreement and to the extent that such information has been prepared by Eidos for other purposes, so long as Stanford holds Company securities, Eidos shall furnish to Stanford, upon request and as promptly as reasonably practicable, Eidos's annual consolidated financial statements and annual operating plan, including an annual report of the holders of Eidos's units and other securities, and such other information as Stanford may reasonably request from time to time for the purpose of valuing its interest in Eidos.

(D) Notwithstanding any notice provision in this Agreement to the contrary, any notice given under this Agreement that refers or relates to any of Section 7.4 above or this Section 7.5 shall be copied concurrently to [*****]; provided, however, that delivery of the copy will not by itself constitute notice for any purpose under this Agreement.

7.6 **License Maintenance Fee.** Beginning [*****] and each [*****] thereafter, Eidos will pay Stanford a yearly license maintenance fee as follows:

(A) $[*****] for the [*****]

(B) $[*****]

(C) $[*****]

Yearly maintenance payments are nonrefundable, but they are creditable each year as described in Section 7.11.

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

7.7 **Milestone Payments.** Milestone payments will only be payable if there is a claim within a Licensed Patent claiming the Licensed Product that achieved the applicable milestone. Eidos will pay Stanford the following milestone payments, whether milestone was achieved by Eidos or by an Affiliate or sublicensee:

(A) $[*****]

(B) $[*****]

(C) $[*****]

(D) $[*****]

In the event that a milestone payment is due to Stanford on account of an event for which Eidos receives a milestone payment from a sublicensee, the maximum amount payable by Eidos to Stanford on account of such event shall be the greater of (a) the milestone payment set forth above, or (b) the amount due under 4.6 on account of the milestone payment received by Eidos.

7.8 **Earned Royalty.** Eidos will pay Stanford earned royalties on Net Sales as follows:

Annual Net Sales (Per calendar year)	**Royalty Rate**
Portion between $[*****] - $[*****]	[*****]%
Portion between $[*****] - $[*****]	[*****]%
Portion greater than $[*****]	[*****]%

7.9 **Single Royalty**. No more than one royalty payment under this Agreement shall be due to Stanford with respect to a sale of a particular Licensed Product (e.g., even if such Licensed Product is covered by multiple Licensed Patents or because any Licensed Product, or its manufacture, sale or use, is covered by more than one claim within the Licensed Patents).

7.10 **Earned Royalty if Eidos Challenges the Patent.** Notwithstanding the above, should Eidos bring an action seeking to invalidate any Licensed Patent, Eidos will pay royalties to Stanford at the rate of [*****] during the pendency of such action. Moreover, should the outcome of such action determine that any claim of a Licensed Patent challenged by Eidos is both valid and infringed by a Licensed Product, Eidos will pay royalties at the rate of [*****] following such determination.

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

7.11 **Creditable Payments.** The license maintenance fee paid in a calendar year may be offset against earned royalty payments due on Net Sales occurring in that year.

For example:

(A) if Eidos pays Stanford a $10 maintenance payment for year Y, and according to Section 7.8 $15 in earned royalties are due Stanford for Net Sales in year Y, Eidos will only need to pay Stanford an additional $5 for that year's earned royalties.

(B) if Eidos pays Stanford a $10 maintenance payment for year Y, and according to Section 7.8 $3 in earned royalties are due Stanford for Net Sales in year Y, Eidos will not need to pay Stanford any earned royalty payment for that year. Eidos will not be able to offset the remaining $7 against a future year's earned royalties.

7.12 **Obligation to Pay Royalties.** A royalty is due Stanford under this Agreement for any activity conducted under the licenses granted. For convenience's sake, the amount of that royalty is calculated using Net Sales. Nonetheless, if certain Licensed Products are made, used, imported, or offered for sale before the date this Agreement terminates, and those Licensed Products are sold after the termination date, Eidos will pay Stanford an earned royalty for its exercise of rights based on the Net Sales of those Licensed Products.

7.13 **No Escrow.** Eidos shall not pay royalties into any escrow or other similar account.

7.14 **Currency.** Eidos will calculate the royalty on sales in currencies other than U.S. Dollars using the appropriate foreign exchange rate for the currency quoted by the Wall Street Journal on the close of business on the last banking day of each calendar quarter. Eidos will make royalty payments to Stanford in U.S. Dollars.

7.15 **Non-U.S. Taxes.** Eidos will pay all non-U.S. taxes related to royalty payments. These payments are not deductible from any payments due to Stanford.

7.16 **Interest.** Any payments not made when due will bear interest at the lower of (a) [*****] or (b) the maximum rate permitted by law.

8. ROYALTY REPORTS, PAYMENTS, AND ACCOUNTING

8.1 **Quarterly Earned Royalty Payment and Report.** Beginning with the first sale of a Licensed Product by Eidos or an Affiliate or sublicensee, Eidos will submit to Stanford a written report (even if there are no sales) and an earned royalty payment within, as applicable, the earlier of: (a) 30 days after the receipt of a royalty report from any sublicensee following the end of each calendar quarter, or (b) 60 days after the end of each calendar quarter. This report will be in the form of Appendix B and will state the number, description, and aggregate Net Sales of Licensed Product during the completed calendar quarter. The report will include an overview of the process and documents relied upon to permit Stanford to understand how the earned royalties are calculated. With each report Eidos will include any earned royalty payment due Stanford for the completed calendar quarter (as calculated under Section 7.8).

8.2 **No Refund.** In the event that a validity or non-infringement challenge of a Licensed Patent brought by Eidos is successful, Eidos will have no right to recoup any royalties paid before or during the period challenge.

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

8.3 **Termination Report.** Eidos will pay to Stanford all applicable unpaid royalties accrued as of the date of termination and submit to Stanford a written report within 90 days after the license terminates. Eidos will continue to submit earned royalty payments and reports to Stanford after the license terminates, until all Licensed Products made or imported under the license have been sold.

8.4 **Accounting.** Eidos will maintain records showing manufacture, importation, sale, and use of a Licensed Product for 5 years from the date of sale of that Licensed Product. Records will include general-ledger records showing cash receipts and expenses, and records that include: production records, customers, invoices, serial numbers, and related information in sufficient detail to enable Stanford to determine the royalties payable under this Agreement.

8.5 **Audit by Stanford.** Eidos will allow Stanford or its designee to examine Eidos's records to verify payments made by Eidos under this Agreement once per fiscal year. Stanford will provide reasonable prior notice when Stanford desires to audit, and Eidos will provide access at a mutually agreeable time.

8.6 **Paying for Audit.** Stanford will pay for any audit done under Section 8.5. But if the audit reveals an underreporting of earned royalties due Stanford of [*****] for the period being audited, [*****].

8.7 **Self-audit.** Eidos will conduct an independent audit of sales and royalties at least every [*****] years if [*****] sales of Licensed Product are [*****]. The audit will address, at a minimum, the amount of gross sales by or on behalf of Eidos during the audit period, the amount of funds owed to Stanford under this Agreement, and whether the amount owed has been paid to Stanford and is reflected in the records of Eidos. Eidos will submit the auditor's report promptly to Stanford upon completion. [*****] will pay for the entire cost of the audit.

9. EXCLUSIONS AND NEGATION OF WARRANTIES

9.1 **Negation of Warranties.** Stanford provides Eidos the rights granted in this Agreement AS IS and WITH ALL FAULTS. Stanford makes no representations and extends no warranties of any kind, either express or implied. Among other things, Stanford disclaims any express or implied warranty:

(A) of merchantability, of fitness for a particular purpose;

(B) of non-infringement; or

(C) arising out of any course of dealing.

9.2 **No Representation of Licensed Patent.** Eidos also acknowledges that Stanford does not represent or warrant:

(A) the validity or scope of any Licensed Patent; or

(B) that the exploitation of Licensed Patent or Technology will be successful.

10. INDEMNITY

10.1 **Indemnification.** Eidos will indemnify, hold harmless, and defend all Stanford Indemnitees against any claim of any kind arising out of or related to the exercise of any rights granted Eidos under this Agreement or the breach of this Agreement by Eidos. Stanford agrees to inform Eidos promptly in writing of any claim or threatened claim that may give rise to an obligation of indemnity under this Agreement of which Stanford becomes aware. Eidos's obligations to a Stanford Indemnitee under this section shall be relieved only to the extent that Eidos can demonstrate material prejudice caused by (1) Stanford's failure to provide adequate or timely notice of the claim; (2) the Stanford Indemnitee making an admission regarding such claim without the prior written consent of Eidos, which consent shall not be unreasonably withheld; and (3) the gross negligence or willful misconduct of the Stanford Indemnitee. Stanford will provide Eidos with the first right to defend and settle and exclusive control of the defense or settlement of each such claim, provided that Eidos must do so in a manner that does not adversely affect Stanford's interests and it must obtain Stanford's prior consent to any settlement (such consent not to be unreasonably withheld, delayed or conditioned).

10.2 **No Indirect Liability.** Neither party is liable for any special, consequential, lost profit, expectation, punitive or other indirect damages in connection with any claim arising out of or related to this Agreement, whether grounded in tort (including negligence), strict liability, contract, or otherwise, except with respect to an indemnified claim pursuant to Section 10.1.

10.3 **Workers' Compensation.** Eidos will comply with all statutory workers' compensation and employers' liability requirements for activities performed under this Agreement.

10.4 **Insurance.** During the term of this Agreement, Eidos will maintain Comprehensive General Liability Insurance, including Product Liability Insurance, with a reputable and financially secure insurance carrier to cover the activities of Eidos and its sublicensees. Prior to the first use of Licensed Products in human patients, the insurance will provide minimum limits of liability of $[*****] and thereafter the insurance will provide minimum limits of liability of $[*****] The insurance will include all Stanford Indemnitees as additional insureds. Insurance must cover claims incurred, discovered, manifested, or made during or after the expiration of this Agreement and must be placed with carriers with ratings of at least A- as rated by A.M. Best. Within 30 days of the Effective Date of this Agreement and prior to the commencement of the first clinical trial of any Licensed Product, Eidos will furnish a Certificate of Insurance evidencing primary coverage and additional insured requirements. Eidos will provide to Stanford 30 days prior written notice of cancellation or material change to this insurance coverage. Eidos will advise Stanford in writing that it maintains excess liability coverage (following form) over primary insurance for at least the minimum limits set forth above. All insurance of Eidos will be primary coverage; insurance of Stanford Indemnitees will be excess and noncontributory.

11. EXPORT

Eidos and its Affiliates and sublicensees shall comply with all United States laws and regulations controlling the export of licensed commodities and technical data. (For the purpose of this paragraph, “licensed commodities” means any article, material or supply but does not include information; and “technical data” means tangible or intangible technical information that is subject to U.S. export regulations, including blueprints, plans, diagrams, models, formulae, tables, engineering designs and specifications, manuals and instructions.) These laws and regulations may include, but are not limited to, the Export Administration Regulations (15 CFR 730-774), the International Traffic in Arms Regulations (22 CFR 120-130) and the various economic sanctions regulations administered by the U.S. Department of the Treasury (31 CFR 500-600).

Among other things, these laws and regulations prohibit or require a license for the export or retransfer of certain commodities and technical data to specified countries, entities and persons. Eidos hereby gives written assurance that it will comply with, and will cause its Affiliates and sublicensees to comply with all United States export control laws and regulations, that it bears sole responsibility for any violation of such laws and regulations by itself or its Affiliates or sublicensees, and that it will indemnify, defend and hold Stanford harmless for the consequences of any such violation.

12. MARKING

To the extent required by the applicable patent marking laws, (i) before any Licensed Patent issues, Eidos will mark Licensed Product with the words “Patent Pending.”, and (ii) otherwise, Eidos will mark Licensed Product claimed by an issued Licensed Patent(s) with the number of such issued Licensed Patent(s).

13. STANFORD NAMES AND MARKS

Eidos will not use (i) Stanford’s name or other trademarks, (ii) the name or trademarks of any organization related to Stanford, or (iii) the name of any Stanford faculty member, employee, student or volunteer without the prior written consent of Stanford. Permission may be withheld at Stanford’s sole discretion. This prohibition includes, but is not limited to, use in press releases, advertising, marketing materials, other promotional materials, presentations, case studies, reports, websites, application or software interfaces, and other electronic media. Notwithstanding the foregoing, Eidos may, without prior permission of Stanford, reasonably utilize Stanford’s name in statements of fact (provided such statements do not imply endorsement of Eidos’s products), in legal proceedings, patent filings, and regulatory filings. In addition, Dr. Isabella Graef may be identified as a Stanford faculty member as part of biographical statements.

14. PROSECUTION AND PROTECTION OF PATENTS

14.1 **Patent Prosecution.**

(A) Following the Effective Date and subject to Stanford's approval, not to be unreasonably withheld, delayed or conditioned, Eidos will be responsible for Patent Matters. Eidos will use its commercially reasonable efforts with respect to the Patent Matters and in doing so will act in good faith irrespective of other patents, patent applications, or other rights that Eidos may possess. Eidos will notify Stanford before taking any substantive actions in prosecuting the claims, and Stanford will have final approval on how to proceed with any such actions. To aid Eidos in this process, Stanford will provide information, execute and deliver documents and do other acts as Eidos shall reasonably request from time to time. If Stanford at any time believes that Eidos has failed to satisfy the standards of this Section 14.1(A), it may, upon 30 days' notice, terminate this Section 14.1(A) unless Eidos cures such failure within such 30 day period.

(B) [*****] will reimburse [*****] for [*****] reasonable costs incurred in complying with [*****] under subsection (A) above. Stanford and Eidos agree that Stanford is the client of record for the attorney prosecuting the Licensed Patents and agree to have Appendix C fully executed by the appropriate parties upon execution of this Agreement. At Stanford's request, Eidos will provide all information and assistance reasonably requested by Stanford to ensure that Licensed Patent is as extensive as possible. If Stanford has terminated Section 14.1(A), any agreement in the form of Appendix C will be deemed to be amended immediately without prior action by any party to revise Appendix C, Section 1 to require the Firm (as defined in Appendix C) to interact directly with Stanford only.

14.2 **Patent Costs.** Within 30 days after receiving a statement from [*****], [*****] will reimburse [*****]

(A) $[*****] to offset Licensed Patent's patenting expenses, including any interference or reexamination matters, incurred by [*****] before [*****], to be paid within 30 days of the Effective Date;

(B) for all Licensed Patent's patenting expenses, including any interference or reexamination matters, incurred by [*****] after [*****]. In all instances, [*****] must preapprove all patent expenses, such approval not to be unreasonably withheld, delayed or conditioned, and [*****] will pay the fees prescribed for large entities to the United States Patent and Trademark Office.

14.3 **Infringement Procedure.** Eidos will promptly notify Stanford if it believes a third party infringes a Licensed Patent or if a third party files a declaratory judgment action with respect to any Licensed Patent. During the Exclusive term of this Agreement and if Eidos is developing Licensed Product, Eidos may have the right to institute a suit against or defend any declaratory judgment action initiated by this third party as provided in Section 14.4 through and including Section 14.8.

14.4 **Stanford Suit.** If Eidos does not exercise its first right pursuant to Section 14.6 or the Parties do not agree to enter into a joint action pursuant to Section 14.5, then Stanford shall have the first right to institute suit, and may name Eidos as a party for standing

purposes. If Stanford decides to institute suit, it will notify Eidos in writing. If Eidos does not notify Stanford in writing that it desires to jointly prosecute the suit within 15 days after the date of the notice, Eidos will assign and hereby does assign to Stanford all rights, causes of action, and damages resulting from the alleged infringement. Stanford will bear the entire cost of the litigation and, following reimbursement of any legal fees, pre-approved by Stanford, incurred by Eidos in cooperating with such action by Stanford, Stanford will retain the entire amount of any recovery or settlement.

14.5 **Joint Suit.** If Stanford and Eidos so agree, they may institute suit or defend the declaratory judgment action jointly. If so, they will:

(A) prosecute the suit in both their names;

(B) bear the out-of-pocket costs equally;

(C) share any recovery or settlement equally; and

(D) agree how they will exercise control over the action.

14.6 **Eidos Suit.** Eidos shall have the first right to institute and prosecute a suit or defend any declaratory judgment action so long as it conforms with the requirements of this Section and Eidos is diligently using commercially reasonable efforts in developing or selling Licensed Product. Eidos will diligently pursue the suit and Eidos will bear the entire cost of the litigation, including expenses and counsel fees incurred by Stanford. Eidos will keep Stanford reasonably apprised of all developments in the suit, and will seek Stanford's input and approval on any substantive submissions or positions taken in the litigation regarding the scope, validity and enforceability of the Licensed Patent. Eidos will not prosecute, settle or otherwise compromise any such suit in a manner that adversely affects Stanford's interests without Stanford's prior written consent. Stanford may be named as a party only if

(A) Eidos's and Stanford's respective counsel recommend that such action is necessary in their reasonable opinion to achieve standing;

(B) Stanford is not the first named party in the action; and

(C) the pleadings and any public statements about the action state that Eidos is pursuing the action and that Eidos has the right to join Stanford as a party.

14.7 **Recovery.** If Eidos sues under Section 14.6, then any recovery in excess of any litigation costs and fees will be shared with Stanford as follows:

(A) any payment for past sales will be deemed Net Sales, and Eidos will pay Stanford royalties at the rates specified in Section 7.8;

(B) any payment for future sales will be deemed a payment under a Sublicense, and royalties will be shared as specified in Article 4; and

(C) Eidos and Stanford will negotiate in good faith appropriate compensation to Stanford for any non-cash settlement or non-cash cross-license.

14.8 **Abandonment of Suit.** If either Stanford or Eidos commences a suit and then wants to abandon the suit, it will give timely notice to the other party. The other party may continue prosecution of the suit after Stanford and Eidos agree on the sharing of expenses and any recovery in the suit.

15. TERMINATION

15.1 **Termination by Eidos.** Eidos may terminate this Agreement by giving Stanford written notice at least 30 days in advance of the effective date of termination selected by Eidos.

15.2 Termination by Stanford.

(A) Stanford may also terminate this Agreement if Eidos:

(1) is delinquent on any report or payment under this Agreement;

(2) is not diligently using commercially reasonable efforts in developing and commercializing Licensed Product (directly or through an Affiliate or sublicensee);

(3) misses a milestone described in Appendix A, provided that parties have completed the process set forth in Section 6.1

(4) is in material breach of any material provision of this Agreement; or

(5) knowingly provides any false report to Stanford under this Agreement.

(B) Termination under this Section 15.2 will take effect 30 days after written notice by Stanford unless Eidos remedies the problem in that 30-day period.

15.3 **Surviving Provisions.** Surviving any termination or expiration are:

(A) Eidos's obligation to pay royalties accrued or accruable;

(B) any claim of Eidos or Stanford, accrued or to accrue, because of any breach or default by the other party; and

(C) the provisions of Section 19.1 and Articles 8, 9, and 10 and any other provision that by its nature is intended to survive.

16. CHANGE OF CONTROL AND ASSIGNMENT

16.1 **Change of Control.** If there is a Change of Control, Eidos will pay Stanford a fee of $250,000 ("Change of Control Fee") within thirty (30) days of assignment of this Agreement per Section 16.2.

16.2 **Conditions of Assignment under Change of Control.** Eidos may assign this Agreement as part of a Change of Control upon prior and complete performance of the following conditions:

(A) Eidos must give Stanford 30 days prior written notice of the assignment, including the new assignee's contact information; and

(B) the new assignee must agree in writing to Stanford to be bound by this Agreement; and

(C) Stanford must have received the full Change of Control Fee.

16.3 **Other Permitted Assignment by Eidos.** Subject to Section 16.4, Eidos may assign this Agreement to an Affiliate, provided that Eidos gives Stanford prompt written notice thereof.

16.4 **After the Assignment.** Upon a permitted assignment of this Agreement pursuant to this Article 16, Eidos will be released of liability under this Agreement and the term "Eidos" in this Agreement will mean the assignee.

16.5 **Bankruptcy.** In the event of a bankruptcy or insolvency, assignment is permitted only to a party that can provide adequate assurance of future performance, including diligent development and sales of Licensed Product.

16.6 **Nonassignability of Agreement.** Except in conformity with Sections 16.2, 16.3 and 16.5, this Agreement is not assignable by Eidos under any other circumstances and any attempt to assign this Agreement by Eidos is null and void.

17. DISPUTE RESOLUTION

17.1 **Dispute Resolution by Arbitration.** Any dispute between the parties regarding any payments made or due under this Agreement will be settled by confidential arbitration in accordance with the JAMS Arbitration Rules and Procedures. The parties are not obligated to settle any other dispute that may arise under this Agreement by arbitration.

17.2 **Request for Arbitration.** Either party may request such arbitration. Stanford and Eidos will mutually agree in writing on a third party arbitrator within 30 days of the arbitration request. The arbitrator's decision will be final and nonappealable and may be entered in any court having jurisdiction.

17.3 **Discovery.** The parties will be entitled to discovery as if the arbitration were a civil suit in the California Superior Court. The arbitrator may limit the scope, time, and issues involved in discovery.

17.4 **Place of Arbitration.** The arbitration will be held in Stanford, California unless the parties mutually agree in writing to another place.

17.5 **Patent Validity.** Any dispute regarding the validity of any Licensed Patent shall be litigated in the courts located in Santa Clara County, California, and the parties agree not to challenge personal jurisdiction in that forum.

18. NOTICES

18.1 **Legal Action.** Eidos will provide written notice to Stanford at least three months prior to bringing an action seeking to invalidate any Licensed Patent or a declaration of non-infringement. Eidos will include with such written notice an identification of all prior art it believes invalidates any claim of the Licensed Patent.

18.2 **All Notices.** All notices under this Agreement are deemed fully given when written, addressed, and delivered (with delivery confirmed in writing) as follows:

All general notices to Eidos are mailed to:

Eidos Therapeutics, Inc.
[*****]

With a copy, which shall not constitute notice, to:

Barbara A. Kosacz
Cooley LLP
3175 Hanover Street
Palo Alto, CA 94304

All financial invoices to Eidos (i.e., accounting contact) are e-mailed to:

Mamoun Alhamadsheh
[*****]

All progress report invoices to Eidos (i.e., technical contact) are e-mailed to:

Mamoun Alhamadsheh
[*****]

All general notices to Stanford are e-mailed or mailed to:

Office of Technology Licensing
3000 El Camino Real
Building 5, Suite 300
Palo Alto, CA 94306-2100
[*****]

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

All payments to Stanford are mailed to:

Stanford University
Office of Technology Licensing
Department #44439
P.O. Box 44000
San Francisco, CA 94144-4439

All progress reports to Stanford are e-mailed or mailed to:

Office of Technology Licensing
3000 El Camino Real
Building 5, Suite 300
Palo Alto, CA 94306-2100
[******]

Any notice related to Section 7.4 or Section 7.5 (Stanford Purchase Rights) shall be copied concurrently to [*****]

Either party may change its address with written notice to the other party.

19. MISCELLANEOUS

19.1 **Confidentiality**. Stanford shall maintain the terms of this Agreement as well as the reports and any information provided by Eidos to Stanford hereunder, including information provided pursuant to Sections 4.5, 6.2, 7.2, 7.4, 7.5, 8.1, 8.3, 8.5, 8.7 and 10.1, Articles 15 and 17, and Appendix A of this Agreement, in confidence and not disclose such information or reports to any third party, except as required by law. Stanford shall not use such information except in accordance with the terms of this Agreement and for Stanford's internal reporting purposes. Stanford's obligation of confidentiality hereunder shall be fulfilled by using at least the same degree of care with Eidos's confidential information as Stanford uses to protect its own confidential information. Stanford shall have no obligation hereunder to refrain from disclosing or using the following:

(A) Information that, at the time of disclosure, is generally available to the public;

(B) Information that becomes part of the public domain or publicly known or available by publication or otherwise, not due to any unauthorized act or omission on the part of Stanford;

(C) Information that is disclosed to the Stanford by third parties who was not under a duty of confidentiality to Eidos;

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(D) Information that has been independently developed by Stanford without use of or reference to information provided by Eidos; and

(E) Information that is required to be disclosed by a court of competent jurisdiction.

19.2 **Waiver.** No term of this Agreement can be waived except by the written consent of the party waiving compliance.

19.3 **Choice of Law.** This Agreement and any dispute arising under it is governed by the laws of the State of California, United States of America, applicable to agreements negotiated, executed, and performed within California.

19.4 **Entire Agreement.** The parties have read this Agreement and agree to be bound by its terms, and further agree that it constitutes the complete and entire agreement of the parties and supersedes all previous communications, oral or written, and all other communications between them relating to the license and to the subject hereof. This Agreement may not be amended except by writing executed by authorized representatives of both parties. No representations or statements of any kind made by either party, which are not expressly stated herein, will be binding on such party.

19.5 **Exclusive Forum.** The state and federal courts having jurisdiction over Stanford, California, United States of America, provide the exclusive forum for any court action between the parties relating to this Agreement. Eidos submits to the jurisdiction of such courts, and waives any claim that such a court lacks jurisdiction over Eidos or constitutes an inconvenient or improper forum.

19.6 **Headings.** No headings in this Agreement affect its interpretation.

19.7 **Force Majeure**. Neither party shall be held liable to the other party nor be deemed to have defaulted under or breached this Agreement for failure or delay in performing any obligation under this Agreement to the extent such failure or delay is caused by or results from causes beyond the reasonable control of the affected party, potentially including embargoes, war, acts of war (whether war be declared or not), acts of terrorism, insurrections, riots, civil commotions, strikes, lockouts or other labor disturbances, fire, floods, earthquakes or other acts of god, or acts, generally applicable action or inaction by any governmental authority, or omissions or delays in acting by the other party, or unavailability of materials related to the manufacture of Licensed Products. The affected party shall notify the other party in writing of such force majeure circumstances as soon as reasonably practical, and shall promptly undertake and continue diligently all reasonable efforts necessary to cure such force majeure circumstances or to perform its obligations in spite of the ongoing circumstances.

19.8 **Electronic Copy.** The parties to this document agree that a copy of the original signature (including an electronic copy) may be used for any and all purposes for which the original signature may have been used. The parties further waive any right to challenge the admissibility or authenticity of this document in a court of law based solely on the absence of an original signature.

The parties execute this Agreement in duplicate originals by their duly authorized officers or representatives.

THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

Signature:	/s/ Mona Wan
Name:	Mona Wan
Title:	Associate Director
Date:	4/15/2016

EIDOS THERAPEUTICS

Signature:	/s/ Mamoun Alhamadsheh
Name:	Mamoun Alhamadsheh
Title:	Professor
Date:	Apr 12, 2016

Appendix A - Milestones

Business Milestones

1. Eidos has already provided Stanford a preliminary business plan. By [*****], Eidos will provide Stanford a detailed document covering Eidos's plans as to projected product development, markets and sales forecasts, manufacturing and operations, and financial forecasts until [*****] ("Business Plan"). Stanford will treat this Business Plan as confidential information and protect it as Stanford would its own confidential information.

2. By [*****], Eidos will have $[*****] of available non-contingent, operating capital to proceed with the exploration and development of Licensed Product. Capital will be from a third party who may or may not be an investor in Eidos and unused capital will be on deposit at [*****].

3. By [*****], Eidos will provide to Stanford a listing of the management team or a schedule for the recruitment of key management positions.

Development Milestones

1. By [*****], Eidos will commence scale-up of AG-10 to undertake [*****] and [*****].

2. By [*****], Eidos will commence a [*****]

By [*****] the parties will agree on additional development milestones in writing. The parties will revisit the milestones in good faith after every Progress Report is submitted pursuant to Section 6.2 in light of the development results to date. If there are changes to the milestones, they will be mutually agreed to in writing.

1.

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Appendix B – Sample Reporting Form

Stanford Docket No. S09-398

This report is provided pursuant to the license agreement between Stanford University and Eidos

License Agreement Effective Date:

Name(s) of Licensed Products being reported:

Report Covering Period	
Yearly Maintenance Fee	$
Number of Sublicenses Executed	
Gross Revenue	
U.S. Gross Revenue	$
Non-U.S. Gross Revenue	$
Net Sales	
U.S. Net Sales	$
Non-U.S. Net Sales	$
Royalty Calculation	
Royalty Subtotal	$
Credit	$
Royalty Due	$

Comments:

Appendix C – Client and Billing Agreement

The Board of Trustees of the Leland Stanford Junior University ("STANFORD"); and Eidos, a Corporation of the State of _____, with a principal place of business at _____, ("Eidos"); have agreed to use the law firm of _____ ("FIRM") to prepare, file and prosecute the pending patent applications listed in Exhibit A attached hereto and maintain the patents that issue thereon ("Patents").

WHEREAS, FIRM desires to perform the legal services related to obtaining and maintaining the Patents; and

WHEREAS, STANFORD remains the client of the FIRM; and

WHEREAS, Eidos is the licensee of STANFORD's interest in the Patents;

NOW THEREFORE, in consideration of the premises and the faithful performance of the covenants herein contained, IT IS AGREED:

1. FIRM can interact directly with Eidos on all patent prosecution matters related to the Patents and will copy STANFORD on all correspondence. STANFORD will be notified by FIRM prior to any substantive actions and will have final approval on proceeding with such actions. In addition, as prosecution proceeds, FIRM will notify STANFORD if there is any change in inventorship from the originally filed application.

2. [*****] is responsible for the payment of all charges and fees by FIRM related to the prosecution and maintenance of the Patents. FIRM will invoice [*****] and [*****] must pay FIRM directly for all charges. If [*****] requests, [*****] will be copied on all invoices and payments. FIRM must inform [*****] within 90 days if the licensee is delinquent on payment. Otherwise, [*****] will not be responsible for those expenses.

3. Notices and copies of all correspondence should be sent to the following:

To Eidos:

Name, Title
Eidos
Address

To STANFORD:

Name
Office of Technology Licensing
Stanford University
3000 El Camino Real
Building 5, Suite 300
Palo Alto, CA 94306-2100

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

To FIRM:

Edward J. Baba
Bozicevic, Field & Francis LLP
235 Montgomery St, 29th Floor
San Francisco, CA 94104

4. The parties to this document agree that a copy of the original signature (including an electronic copy) may be used for any and all purposes for which the original signature may have been used. The parties further waive any right to challenge the admissibility or authenticity of this document in a court of law based solely on the absence of an original signature.

ACCEPTED AND AGREED TO:

STANFORD

By: _____

Name:

Title:

Date: _____

Eidos

By: _____

Name:

Title:

Date: _____

Law Firm Name

By: _____

Name:

Title:

Date: _____

Stanford patent applications:

[*****]

and any foreign patent application corresponding thereto, and any divisional, continuation, or reexamination application, extension, and each patent that issues or reissues from any of these patent applications.

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

AMENDMENT No 1

TO THE

LICENSE AGREEMENT EFFECTIVE THE 10TH DAY OF April 2016

BETWEEN

STANFORD UNIVERSITY

AND

EIDOS THERAPEUTICS, INC.

Effective the 25th day of September 2017, THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY ("Stanford"), an institution of higher education having powers under the laws of the State of California, and Eidos Therapeutics, Inc. ("Eidos"), a corporation having a principal place of business at 421 Kipling Street, Palo Alto, CA 94301, agree as follows:

1. BACKGROUND

Stanford and Eidos are parties to a License Agreement effective the 10th day of April 2016 ("Original Agreement") covering an invention entitled "Novel transthyretin aggregation inhibitors," disclosed in Stanford docket S09-398, from the laboratory of Dr. Isabella Graef.

Stanford and Eidos wish to amend the Original Agreement to update diligence milestones set forth in Appendix A to the Original Agreement.

2. AMENDMENT

Appendix A to the Original Agreement is hereby amended and restated in its entirety to read as set forth in Appendix A to this Amendment.

3. OTHER TERMS

3.1 Stanford acknowledges that Eidos has met each of the milestones set forth in Appendix A to the Original Agreement and that Eidos has complied with its obligations under Article 6 of the Original Agreement through the effective date of this Amendment.

3.2 Except as expressly amended herein, all other terms of the Original Agreement remain unchanged and in full force and effect.

3.3 The parties to this document agree that a copy of the original signature (including an electronic copy) may be used for any and all purposes for which the original signature may have been used. The parties further waive any right to challenge the admissibility or authenticity of this document in a court of law based solely on the absence of an original signature.

3.4 This Amendment and any dispute arising under it is governed by the laws of the State of California, applicable to agreements negotiated, executed and performed within California.

The parties execute this Amendment No 1 by their duly authorized officers or representatives.

THE BOARD OF TRUSTEES OF THE LELAND STANFORD JUNIOR UNIVERSITY

Signature: /s/ Mona Wan
Name: Mona Wan
Title: Associate Director
Date: Sep 22, 2017

EIDOS THERAPEUTICS, INC.

Signature: /s/ Neil Kumar
Name: Neil Kumar
Title: CEO
Date: Sep 22, 2017

Appendix A—Milestones

Since the execution of the Exclusive License Agreement in April 2016, Eidos has achieved the following significant milestones and fulfilled each of the business diligence milestones 1-3 and each of the development milestones 1 and 2 set forth in Appendix A to the Original Agreement.

1. Eidos has provided Stanford a preliminary development plan for AG10 for familial amyloid cardiomyopathy and wild-type TTR amyloidosis. The executive summary includes development path and costs, market estimates, and management team members.

2. Eidos has raised over $1,000,000 of available non-contingent, operating capital to proceed with the exploration and development of Licensed Product: BridgeBio has invested $4M between April 2016 and Jan 2017.

3. Eidos has commenced scale-up of AG-10 to undertake [*****]. Also, Eidos has begun a [*****]

Moving forward, Eidos agrees to the following diligence milestone obligations:

1. By [*****], Eidos will have achieved:

   [*****]

2. By [*****], Eidos will have initiated:

   [*****]

3. By [*****], Eidos will have completed [*****]

4. By [*****], Eidos will [*****]

By [*****], the parties will agree on additional milestones in writing. The parties will revisit the milestones in good faith after every Progress Report is submitted pursuant to Section 6.2 in light of the development results to date. If there are changes to the milestones, they will be mutually agreed to in writing.

[*****] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

LICENSE AGREEMENT

This License Agreement ("Agreement"), made as of January 29, 2018 ("Effective Date"), is by and between Novartis International Pharmaceutical Ltd., a for-profit corporation with its principal place of business at Lichtstrasse 35, CH-4056 Basel, Switzerland ("Novartis") and QED Therapeutics, Inc., a Delaware corporation located at 421 Kipling Street, Palo Alto, CA 94301 USA ("QED"). Novartis and QED are each referred to individually as a "Party" and together as the "Parties."

Background

Novartis Controls (as defined below) the Novartis Patents and Know-How (each as defined below) relating to the Compound (as defined below). BridgeBio (as defined below) has caused QED to be incorporated under the laws of the State of Delaware. QED wishes to obtain, and Novartis wishes to grant, rights under the Novartis Technology (as defined below) to develop, make, use and sell Products (as defined below) incorporating the Compound.

For good and valuable consideration, the Parties agree as follows:

1. DEFINITIONS AND INTERPRETATION

1.1 **Definitions**. Unless the context otherwise requires, the terms in this Agreement with initial letters capitalized, will have the meanings set forth below, or the meaning as designated in the indicated places throughout this Agreement.

"Accounting Standards" means, with respect to QED, US GAAP (United States Generally Accepted Accounting Principles) and means, with respect to Novartis, IFRS (International Financial Reporting Standards), in each case as generally and consistently applied throughout the Party's organization. Each Party will promptly notify the other Party in the event that it changes the Accounting Standards pursuant to which its records relating to this Agreement are maintained; *provided*, *however*, that each Party may only use internationally recognized accounting principles (*e.g.*, IFRS or US GAAP).

"Affiliate" means, with respect to a particular entity or Person, any Person that controls, is controlled by, or is under common control with that Party. For the purpose of this definition, "control" will mean, direct or indirect ownership of 50% or more of the shares of stock entitled to vote for the election of directors, in the case of a corporation, or 50% or more of the equity interest in the case of any other type of legal entity, status as a general partner in any partnership, or any other arrangement whereby the entity or Person controls or has the right to control the board of directors or equivalent governing body of a corporation or other entity, or the ability to cause the direction of the management or policies of a

corporation or other entity. In the case of entities organized under the laws of certain countries, the maximum percentage ownership permitted by law for a foreign investor may be less than 50%, and in such case such lower percentage will be substituted in the preceding sentence, *provided* that such foreign investor has the power to direct the management and policies of such entity. For the avoidance of doubt, BridgeBio and QED shall be deemed to be Affiliates of each other, but any portfolio company in which BridgeBio is an investor shall not be deemed to be an Affiliate of QED.

"Alliance Manager" will have the meaning set forth in Section 3.1.

"Ancillary Agreement" has the meaning set forth in Section 2.5.

"Applicable Law" means any federal, state, local or foreign law (including, common law), statute or ordinance, or any rule, regulation, judgment, order, writ or decree of or from any court, or other Regulatory Authority having jurisdiction over or related to the subject item that may be in effect from time to time, including GCP, GLP and GMP.

"Array" has the meaning set forth in Section 2.4(a).

"Array Combination Therapies" has the meaning set forth in Section 2.4(a).

"[***]" means the compound described as [***] in *Exhibit A-2* to this Agreement, whether produced by chemical synthesis or otherwise, and [***].

"BridgeBio" means BridgeBio Pharma, LLC, a Delaware limited liability company with its principal place of business at 421 Kipling St, Palo Alto, CA 94301 USA.

"Calendar Quarter" means the respective periods of three consecutive calendar months ending on March 31, June 30, September 30 and December 31.

"Calendar Year" means a period of twelve consecutive calendar months ending on December 31.

"Claims" means all Third Party demands, claims, actions, proceedings and liability (whether criminal or civil, in contract, tort or otherwise) for losses, damages, reasonable legal costs, and other reasonable expenses of any nature whatsoever.

"Clinical Site Agreements" means the agreements set forth on Schedule A to the Ancillary Agreement.

"CMO" has the meaning set forth in Section 2.5.

"Code" means Title 11 of the U.S. Code.

"Commercialize" means to market, promote, distribute, import, export, offer to sell and/or sell Product, and "Commercialization" means commercialization activities relating to Product, including activities relating to marketing, promoting, distributing, importing, exporting, offering for sale and/or selling Product.

"Commercially Reasonable Efforts" means, with respect to a Party, [***].

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"Compound" means the compound described as BGJ398 in *Exhibit A-1* to this Agreement, whether produced by chemical synthesis or otherwise, which is owned or Controlled by Novartis or its Affiliates, and any radioisomer, stereoisomer, racemates, solvates, salt forms, bases, anhydrides, hydrates, polymorphs, ester forms or pro drugs of such compound.

"Control" or "Controlled" means, with respect to any Know-How, Patent Rights, other intellectual property rights, or any proprietary or trade secret information, the legal authority or right (whether by ownership, license or otherwise, other than by a license granted under this Agreement) of a Party or its Affiliates, to grant a license or a sublicense of or under such Know-How, Patent Rights, or intellectual property rights to another Person, or to otherwise disclose such proprietary or trade secret information to another Person, without breaching the terms of any agreement with a Third Party or misappropriating the proprietary or trade secret information of a Third Party.

"Develop" or "Development" means drug development activities, including, without limitation, test method development and stability testing, assay development and audit development, toxicology, formulation, quality assurance/quality control development, statistical analysis, clinical studies, packaging development, regulatory affairs, and the preparation, filing and prosecution of INDs, NDAs, and MAAs.

"Development Plan" has the meaning set forth in Section 3.2.

"Effective Date" has the meaning in the preamble (*i.e.*, in the first paragraph of this Agreement).

"Encumbrance" means any claim, charge, equitable interest, hypothecation, lien, mortgage, pledge, option, license, assignment, power of sale, retention of title, right of pre-emption, right of first refusal or security interest of any kind.

"European Regulatory and Reimbursement Approval" means, with respect to a Product, **(a)** MAA approval from the European Commission (*i.e.*, European Union-wide) and pricing and reimbursement approval in three of the Major European Countries, or **(b)** marketing, pricing, and reimbursement approvals in three of the Major European Countries.

"FDA" means the United States Food and Drug Administration or any successor entity thereto.

"Field" means all fields of use.

"First Commercial Sale" means, with respect to a Product in a particular country, the first arm's length sale to a Third Party for value for use or consumption of any such Product following receipt of Regulatory Approval and Pricing Reimbursement Approval (to the extent commercially applicable) of such Product in such country.

"GCP" means the ethical, scientific, and quality standards required by FDA or European Commission for designing, conducting, recording, and reporting trials that involve the participation of human subjects, as set forth in FDA regulations in 21 C.F.R. Parts 11, 50, 54, 56, and 312 and related FDA guidance documents, and by the International Conference on Harmonization E6: Good Clinical Practices Consolidated Guideline (the "ICH Guidelines"), or as otherwise required by Applicable Laws.

"Generic Equivalent" means, with respect to a particular Product in a country, any product that **(a)** has Regulatory Approval for use in such country pursuant to a regulatory process governing approval of generic, interchangeable, or biosimilar pharmaceutical or biological product based on the then-current standards for Regulatory Approval in such country, where such Regulatory Approval relied on or incorporated clinical data generated by either Party to this Agreement or their Affiliates or licensees, or was obtained using an abbreviated, expedited, or other similar process; **(b)** during the Royalty Term, is not owned or licensed by QED under this Agreement; and **(c)** is sold in the same country as the relevant Product by a Third Party that is not a sublicensee or Affiliate of QED, and that did not purchase such product in a chain of distribution that included QED, or its Affiliates or its or their sublicensees.

"GLP" means good laboratory practice as required by the FDA under 21 C.F.R. part 58 and all applicable FDA rules, regulations, orders and guidances, and the requirements with respect to current good laboratory practices prescribed by the European Community, the OECD (Organization for Economic Cooperation and Development Council) and the ICH Guidelines, or as otherwise required by Applicable Laws.

"GMP" means good manufacturing practices and regulations as required by the FDA under provisions of 21 C.F.R. parts 210 and 211 and all applicable FDA rules, regulations, orders and guidances, and the requirements with respect to current good manufacturing practices prescribed by the European Community under provisions of "The Rules Governing Medicinal Products in the European Community, Volume 4, Good Manufacturing Practices, Annex 13, Manufacture of Investigational Medicinal Products, July 2003," or as otherwise required by Applicable Laws.

"Inserm Transfert" means Inserm Transfert SA, a limited company (*société anonyme à directoire et conseil de surveillance*) organized under the laws of France, [***].

"IIT" has the meaning set forth in Section 5.1(d).

"IIT Agreements" means the Investigator Initiated Trial Agreements identified on *Exhibit F*.

"IND/CTA" means an Investigational New Drug application in the US filed with the FDA or the corresponding application (*e.g.*, a clinical trial authorisation) for the investigation of Products in any other country or group of countries, as defined in the Applicable Laws and filed with the Regulatory Authority of a given country or group of countries.

"Indication" means a specific disease, impairment, medical condition, or symptom thereof that is the intended subject of a Product. For purposes of the Milestones set forth in Section 8.2, a "Second Indication" shall mean an intended subject of a Product that is a different disease, impairment, medical condition, or symptom thereof than the subject of the first Indication for a Product and for which a separate NDA/MAA or a supplement (or other addition) to an existing NDA/MAA is required for the purpose of obtaining Regulatory Approval in a country.

"Information" means all Know-How and other confidential or proprietary information and data of a financial, commercial or technical nature which the disclosing Party, its Affiliates, or its or their licensors has supplied or otherwise made available to the other Party or its Affiliates, prior to or during the Term, whether made available orally, in writing or in electronic form, including information comprising or relating to concepts, discoveries, inventions, data, designs or formulae in relation to this Agreement.

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"Insolvency Event" means **(a)** QED ceases to function as a going concern by suspending or discontinuing its business; **(b)** QED is the subject of voluntary or involuntary bankruptcy proceedings instituted on behalf of or against QED (except for involuntary bankruptcy proceedings that are dismissed within 90 days); **(c)** an administrative receiver, receiver and manager, interim receiver, custodian, sequestrator, or similar officer is appointed for QED; **(d)** a resolution to wind up QED is passed at a meeting of the directors or shareholders of QED; **(e)** a resolution shall have been passed by QED or QED's directors to make an application for an administration order or to appoint an administrator for all of QED's assets; or **(f)** QED makes any general assignment for the benefit of all of its creditors.

"Invoice" means an invoice in a form reasonably acceptable to QED and to Novartis.

"Know-How" means all proprietary or confidential technical information, know-how and data, including inventions (whether patentable or not), discoveries, trade secrets, specifications, instructions, processes, formulae, materials, expertise and other technology applicable to the Compound or Products or to its or their manufacture, Regulatory Approval, Pricing Reimbursement Approval, Development, or Commercialization, or methods of assaying or testing the Compound or Products, compositions incorporating or comprising the Compound, formulation of any Product, and including all biological, chemical, pharmacological, biochemical, toxicological, pharmaceutical, physical and analytical, safety, quality control, manufacturing, preclinical and clinical data, instructions, processes, formulae, expertise and information, regulatory filings and copies thereof.

"MAA" means an application for the authorization to market the Product in any country or group of countries outside the United States, as defined in the Applicable Laws and filed with the Regulatory Authority of a given country or group of countries.

"Major European Countries" means France, Germany, Italy, Spain, and the United Kingdom.

"Milestones" means the milestones relating to the Product as set forth in Sections 8.2 and 8.3.

"Milestone Payments" means the payments to be made by QED to Novartis upon the achievement of the corresponding Milestones as set forth in Sections 8.2 and 8.3.

"NDA" means a New Drug Application, as described in the FDA regulations, 21 CFR Section 314.50, submitted to the FDA.

"Net Sales" means [***].

"Novartis Know-How" means the Know-How Controlled by Novartis or any of its Affiliates as of the Effective Date that is identified on *Exhibit C*.

"Novartis Patents" means the Patent Rights Controlled by Novartis or any of its Affiliates as of the Effective Date that are set forth on *Exhibit B-1* and *Exhibit B-2*.

"Novartis Additional Patents" means Patent Rights Controlled by Novartis or any of its Affiliates after the Effective Date, but during the Term, to the extent that such Patent Rights

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

are necessary to make use, sell, offer for sale, or import the Compound or Products in the Field. For this purpose, a Patent Right will be deemed "necessary" if, but for a license to the relevant Patent Right, QED cannot manufacture, use, sell, offer for sale, or import the Compound or the Products without infringement. For the avoidance of doubt, Novartis Additional Patents do not include Novartis Patents.

"Novartis Technology" means the Novartis Know-How and Novartis Patents.

"Patent Rights" means **(a)** all patent applications, including any provisional patent applications, in any country; **(b)** any patent application claiming priority from such patent application or provisional application, including all divisionals, continuations, substitutions, continuations-in-part, provisionals, converted provisionals and continued prosecution applications; **(c)** any patent that has issued or in the future issues from any of the foregoing patent applications, ((a) and (b)), including any utility model, petty patent, design patent and certificate of invention; **(d)** any re-examinations, reissues, additions, renewals, extensions, registrations, supplemental protection certificates of any of the foregoing patents or patent applications ((a), (b), and (c)); and **(e)** any similar rights, including so-called pipeline protection, or any importation, revalidation, confirmation or introduction patent or registration patent or patent of additions to any such foregoing patent application or patent.

"Party" or "Parties" has the meaning set forth in the preamble.

"Person" means any individual, partnership, limited liability company, firm, corporation, association, trust, unincorporated organization or other entity.

"Pharmacovigilance Agreement" has the meaning set forth in Section 5.2.

"Phase III Clinical Trial" means a controlled clinical study of a Product in patients designed to establish efficacy and safety of such Product for the purpose of preparing and submitting an NDA/MAA or supplement to an MAA/NDA for Regulatory Approval of a Product for use in a clinical indication that satisfies the requirements of 21 C.F.R. § 312.21(c) or its foreign equivalent. For clarity, a Phase II/III shall not be considered a Phase III unless it satisfies or will satisfy the requirements of 21 C.F.R. § 312.21(c) or its foreign equivalent.

"Pricing Reimbursement Approval" means the authorization or approval of reimbursement in a country or jurisdiction by the relevant Regulatory Authority, government agency, or other body responsible for such activities in such jurisdiction(s) under Applicable Law.

"Prior Confidentiality Agreement" means the [***].

"Product" means a therapeutic product incorporating or comprising the Compound, **(i)** the Development, manufacture, preparation, use or Commercialization of which would, but for the license granted hereunder, infringe a Valid Claim of the Novartis Patents; and/or **(ii)** that is Developed using, incorporates, or embodies Novartis Know-How.

"Regulatory Approval" means, with respect to a product in any country or jurisdiction, any approval, registration, license or authorization from a Regulatory Authority in a country or other jurisdiction that is reasonably necessary to market and sell a Product in such country or jurisdiction.

"Regulatory Authority" means any governmental authority or agency responsible for authorizing or approving the marketing and/or sale of products in a jurisdiction (*e.g.*, the FDA, European Commission, the Japanese Ministry of Health, Labour and Welfare, and corresponding national or regional regulatory agencies or organizations).

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"Regulatory Exclusivity" means with respect to a Product in a country, the period of time during which **(a)** a Party or its Affiliate or sublicensee has been granted the exclusive legal right by a Regulatory Authority (or is otherwise entitled to the exclusive legal right by operation of Applicable Law) in such country to market and sell the Product; or **(b)** the data and information submitted by a Party or its Affiliate or sublicensee to the relevant Regulatory Authority in such country for purposes of obtaining Regulatory Approval and Pricing Reimbursement Approval may not be disclosed, referenced, or relied upon in any way by a Third Party or such Regulatory Authority (including by relying upon the Regulatory Authority's previous findings regarding the safety or effectiveness of the Product) to support the Regulatory Approval and Pricing Reimbursement Approval or marketing of any product by a Third Party in such country.

"Regulatory Filings" means, with respect to the Compound or a Product, any submission to a Regulatory Authority of any appropriate regulatory application, and will include, without limitation, any submission to a regulatory advisory board, marketing authorization application, and any supplement or amendment thereto. For the avoidance of doubt, Regulatory Filings will include any IND/CTA, NDA, MAA or the corresponding application in any other country or group of countries.

"Royalty Term" means the period commencing on the First Commercial Sale of a Product in a specified country until the latest of **(a)** the expiration of the last to expire Valid Claim of the Novartis Patents that, but for the licenses granted in this Agreement, would be infringed by the Development, manufacture, use, importation or other Commercialization of such Product in such country; **(b)** the expiration of any Regulatory Exclusivity for such Product in such country; or **(c)** the ten year anniversary of the First Commercial Sale of the Product in the relevant country.

"Sales & Royalty Report" means a written report or reports showing each of: **(a)** the gross and Net Sales of each Product, on a country-by-country basis, during the reporting period by QED and its Affiliates and sublicensees (in all cases itemizing the various deductions taken from gross to compute Net Sales as set forth in the definition of Net Sales, above); and **(b)** the royalties payable, in USD, which will have accrued hereunder with respect to such Net Sales;.

"Senior Officers" means, for Novartis, the Global Head, Business Development & Licensing of Novartis Institutes for BioMedical Research, or his or her designee, and for QED, its Chief Executive Officer or his or her designee.

"Term" with reference to this Agreement shall mean the period of time beginning on the Effective Date and ending upon the expiration of the Royalty Term for the last Product with a Royalty Term.

"Territory" means worldwide.

"Third Party" means any Person other than a Party or an Affiliate of a Party.

"United States" or "US" means the United States of America, its territories and possessions.

"Valid Claim" means **(a)** claim of an issued and unexpired patent included within the Novartis Patents that **(i)** covers the practice of the relevant Compound or Product in the relevant jurisdiction; **(ii)** has not been irrevocably or unappealably disclaimed or abandoned, or been held unenforceable, unpatentable or invalid by a decision of a court or other governmental agency of competent jurisdiction; and **(iii)** has not been admitted to be invalid or unenforceable through reissue, disclaimer, or otherwise; or **(b)** a claim included in a patent application included within the Novartis Patents that **(i)** would cover the practices of the relevant Product in the relevant jurisdiction if such claim was to issue; and **(ii)** has not been cancelled, withdrawn or abandoned, nor been pending for more than [***] from the earliest filing date to which such patent application or claim is entitled.

"Vendors" has the meaning set forth in Section 2.5.

1.2 **Interpretation**. In this agreement unless otherwise specified:

(a) "includes" and "including" will mean respectively includes and including without limitation;

(b) a Party includes its permitted assignees and/or the respective successors in title to substantially the whole of its undertaking;

(c) a statute or statutory instrument or any of their provisions is to be construed as a reference to that statute or statutory instrument or such provision as the same may have been or may from time to time hereafter be amended or re-enacted;

(d) words denoting the singular will include the plural and vice versa and words denoting any gender will include all genders;

(e) the Exhibits and other attachments form part of the operative provision of this Agreement and references to this Agreement shall, unless the context otherwise requires, include references to the Exhibits and attachments;

(f) the headings in this Agreement are for information only and will not be considered in the interpretation of this Agreement;

(g) general words will not be given a restrictive interpretation by reason of their being preceded or followed by words indicating a particular class of acts, matters or things;

(h) references to "days" will mean calendar days unless otherwise indicated; and

(i) the terms and conditions of this Agreement are the result of negotiations between the Parties and that this Agreement will not be construed in favor of or against any Party by reason of the extent to which any Party participated in the preparation of this Agreement.

2. LICENSE; SUBLICENSES; GRANT BACKS

2.1 **License Grant**.

(a) Subject to the terms and conditions of this Agreement, Novartis hereby grants to QED a sub-licensable (pursuant to Section 2.2) license, under Novartis' and its

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Affiliates' interest in the Novartis Technology, to research, Develop, make, have made, use, import, offer for sale, sell, have sold and otherwise Commercialize the Compound and Products in the Field in the Territory; *provided, however,* that for the avoidance of doubt, this license does not include the right to Develop or Commercialize the compound referred to as [***], and Novartis will retain all such rights with respect to [***].

(b) Subject to the retained supply right and contingent reversionary right set forth in Section 2.4, the license set forth in Section 2.1(a) shall be exclusive (even as to Novartis and its Affiliates) to QED with respect to the Development and Commercialization of the Compound and the Product, it being understood that Novartis and its Affiliates will retain the right (with no ability to sublicense such right) to continue to make and use Compound solely in connection with its and their internal research (but not Development or Commercialization) activities.

(c) Subject to the terms and conditions of this Agreement, effective upon QED's written request, Novartis hereby grants to QED a sub-licensable (pursuant to Section 2.2) non-exclusive license, under Novartis' and its Affiliates' interest in the Novartis Additional Patents, to research, Develop, make, have made, use, import, offer for sale, sell, have sold and otherwise Commercialize the Compound or Products; [***]. To the extent that any such license would require any payment to a Third Party as a result of QED's, its Affiliates', or their sublicensees' practice of the Novartis Additional Patents (*e.g.*, with respect to Novartis Additional Patents that have been licensed by Novartis or its Affiliates from a Third Party), Novartis will inform QED of any financial or other applicable restrictions, limitations, and obligations arising from the practice of the relevant Novartis Additional Patents. The grant described in this Section 2.1(c) is conditioned on **(i)** the assumption and continued prompt payment of obligations to such Third Party licensors (to the extent the such obligations arise from QED's, its Affiliates', or their sublicensees' practice of the Novartis Additional Patents with respect to the Compound or Products); and **(ii)** compliance with any applicable restrictions, limitations, and obligations included in the relevant license agreement between Novartis (or its Affiliates, as applicable) and the relevant Third Party licensors.

(d) The Parties acknowledge that Novartis' Affiliate, Novartis Pharma AG, has rights and an option to patent rights, know-how, data, findings, results and any other intellectual property rights concerning the Compound that are generated by or on behalf [***] pursuant to that certain Materials Transfer Agreement by and between [***]. Novartis hereby acknowledges and agrees that that any and all rights that Novartis or its Affiliates have in and to any Discoveries (as defined in the [***]) are licensed to QED as part of the Novartis Technology hereunder and such Patent Rights covering such Discoveries will be deemed to be listed in *Exhibit B-1*. Within thirty (30) days of the Effective Date, QED and Novartis Pharma AG will execute an agreement by and among QED, Novartis Pharma AG and [***] confirming such rights, including confirmation that [***].

2.2 **Sublicense Rights**. QED may sublicense (through multiple tiers) the rights granted to it by Novartis under this Agreement at any time at its sole discretion, but subject to the applicable terms of this Agreement. QED may exercise its rights and perform its rights and obligations under this Agreement itself or through any of its Affiliates. In addition, QED

may subcontract to Third Parties the performance of any Development or Commercialization of the Compounds or Products as it deems appropriate. QED shall provide Novartis with a copy of any sublicense agreement it enters into with a Third Party with respect to the Novartis Technology or Novartis Additional Patents, as applicable, [***], *provided* that such copy may be subject to redaction as QED reasonably believes appropriate to protect confidential business information, including financial provisions and other sensitive information as applicable. Each such sublicense agreement shall be considered confidential Information of QED and subject to Article 10 of this Agreement and the Ancillary Agreement. Each sublicense of the Novartis Technology or Novartis Additional Patents, as applicable, shall be consistent with the terms and conditions of this Agreement. Upon the termination of this Agreement, at the written request of any sublicensee who is not then in breach of its sublicense agreement, Novartis agrees to enter into a direct license agreement with such sublicensee under the same terms and conditions of this agreement (except for Section 8.1), effective upon the date that notice of such written request. QED will remain liable for the acts and omissions of its sublicensees and Affiliates as if such sublicensees and Affiliates were QED hereunder. Further, QED will use Commercially Reasonable Efforts to include in each such sublicense a requirement that upon any termination of such sublicense agreement, such sublicensee will grant rights to QED (or directly to Novartis) that are substantially similar to the rights granted by QED to Novartis under Sections 12.2(b), to the extent applicable.

2.3 **Non-Assertion.** During the Term of this Agreement (and with respect to a sublicensee, during the term of its sublicense surviving pursuant to Section 2.2), Novartis covenants that it and its Affiliates **(a)** will not assert rights to the Novartis Technology or any Patent Rights covering [***] against QED, its Affiliates, (sub)licensees, or any of their respective distributors, resellers or customers; **(b)** will not otherwise participate in any such action or proceeding against QED, its Affiliates and (sub)licensees, or any of their respective distributors, resellers or customers; and **(c)** will not support or encourage any Third Party to sue for infringement or misappropriation of any Patent Rights covering [***], in each case ((a), (b), and (c)), [***]. Novartis will cause its (sub)licensees to be bound by the terms of this Section 2.3.

2.4 **Obligations to** [***].

(a) The Parties acknowledge that Novartis has certain obligations to manufacture and supply Compound to a Third Party, [***], and notwithstanding the provisions this Article II, **(i)** Novartis, its Affiliates, and their agents will retain the right to manufacture and supply Compound to [***] and to otherwise [***]; and **(ii)** [***], and nothing in this Agreement will restrict or conflict with Novartis' obligations with respect to such matters.

(b) The Parties also acknowledge that [***] under certain specified circumstances. Accordingly, from time to time during the Term, Novartis may request QED and/or its sublicensees to inform Novartis if QED and/or its sublicensees intends to seek Regulatory Approval for and Commercialize and pursue Commercialization of the Compound for various Indications, including to the extent that such indications are the subject of [***], and QED and/or its sublicensees shall, within [***] after receipt of Novartis' inquiry, inform Novartis whether it intends to seek such Regulatory Approval for and Commercialize and pursue Commercialization of the Compound for such Indication and provide its anticipated plan for such activities; *provided,*

however, that if QED and/or its sublicensees notifies Novartis of its intent to seek Regulatory Approval and Commercialize and pursue Commercialization of the Compound and/or Product for such Indication, but thereafter makes a determination not to Commercialize such Compound and/or Product for such Indication, then prior to ceasing to pursue the Development of the Compound it will provide at least [***] prior notice to Novartis of such determination. If QED and/or its sublicensees does not intend to seek Regulatory Approval for and Commercialize and pursue Commercialization of the Compound for the relevant Indication, does not provide to Novartis a plan that Novartis determines is a commercially reasonable plan for such activity within such [***] period, Novartis determines in its sole discretion that QED has failed to sufficiently pursue such plan (including pursuing Regulatory Approval and Commercializing the Compound and/or Product for such Indication), or thereafter makes a determination not to Commercialize or pursue Commercialization for such Compound and/or Product for such Indication, then notwithstanding any provision of this Agreement to the contrary, [***].

2.5 **Authorization; Ancillary Agreement**.

(a) Within [***] of the Effective Date, Novartis will provide a notice of authorization to Third Party contract manufacturing organizations ("CMOs") and Third Party vendors, including contract research organizations ("Vendors") selected by QED, which will authorize such CMOs and Vendors to conduct work on the Compound with QED under separate agreements to be negotiated between QED and such CMOs and Vendors.

(b) Within [***] of the Effective Date, the Parties will execute an ancillary agreement regarding the transfer of the Clinical Site Agreements and Investigator Initiated Trial Agreements to the extent relating to the Compound or the Products (the "Ancillary Agreement"). If, after the effective date of the Ancillary Agreement, the Parties, through their Alliance Managers, mutually agree that additional related agreements should be transferred to QED and obligations of cooperation relating to [***], the Parties shall amend the Ancillary Agreement to include such additional agreements.

3. GOVERNANCE

3.1 **Alliance Managers**. Within [***] after the Effective Date, each Party will appoint (and notify the other Party of the identity of) a senior representative having a general understanding of pharmaceutical development and commercialization issues to act as its alliance manager under this Agreement ("Alliance Manager"). The Alliance Managers will **(a)** serve as the contact point between the Parties for the purpose of providing Novartis with information on the progress of QED's Development and Commercialization of Products; **(b)** be primarily responsible for facilitating the flow of information and otherwise promoting communication, coordination and collaboration between the Parties, including in particular the transfer of information and Know-How from Novartis to QED; **(c)** provide a single point of communication for seeking consensus both internally within the respective Party's organization and facilitating review of external corporate communications; and **(d)** raise cross-Party and/or cross-functional disputes in a timely manner. Each Party may replace its Alliance Manager on written notice to the other Party.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

3.2 **Development Information**. Within [***] after the Effective Date, QED will provide Novartis with a high level summary development plan setting forth the anticipated Development activities to be conducted by QED and its Affiliates and sublicensees related to the Compound and Products during the following 18 month period (the "Development Plan"). No later than [***] after each anniversary of the Effective Date, until the approval of the first NDA or MAA for a Product, QED will provide Novartis an updated Development Plan providing, in reasonable detail, the Development activities conducted by QED and its Affiliates and sublicensees related to the Compound and Products during the immediately preceding year and its anticipated plans for Development of the Compound and Products for next 18 month period. In addition to this annual report, QED will provide to Novartis a high level summary of all Development activities that QED, its agents, or their sublicensees have conducted in the prior six month period until the approval of the first NDA or MAA for a Product. QED may revise the Development Plan or any update thereto in its sole discretion, subject to satisfaction of its obligations under Section 5.2. All such reports shall include sufficient detail to permit Novartis to determine QED's compliance with its obligations set forth in Section 5.2.

3.3 **Meetings**. During the period from the Effective Date until the first NDA or MAA filing for a Product, the Alliance Managers will meet (either in person or by teleconference) at least twice per year, to review and discuss progress made under, and any changes to, the Development, Plan, including the Development work performed, clinical trials, Milestones, any key issues and the overall status of Development.

4. DISCLOSURE OF LICENSOR KNOW-HOW & COOPERATION

4.1 **Technology Transfer.** Novartis shall provide to QED, on or before [***] following the Effective Date, with a copy (in electronic format if available, or a hard copy if not available in electronic format) of the documentation as listed in *Exhibit C.* For clarity, any other documentation, to the extent such documentation is related to the Compound and/or any drug substance or drug product manufactured therefrom, including the BGJ398 Material, for use in the Field owned or Controlled by Novartis or its Affiliates in its global databases and archives will be transferred by Novartis or its Affiliates upon QED's request, but only to the extent that such information and data would be accessible by Novartis using Commercially Reasonable Efforts. In addition, any additional information that is maintained by Novartis on a country-level may be transferred by Novartis or its Affiliates to the extent such effort is commercially reasonable for Novartis upon QED's written request and [***] as soon as reasonably possible. Any request for transfer of local data must be submitted not later than six months after the Effective Date. Notwithstanding the forgoing, if the Alliance Managers both agree that the provision of additional documentation or information is necessary or reasonable useful after such six-month period, Novartis will transfer or make accessible to QED such additional documentation and information.

4.2 **Know-How Transfer Assistance.** For [***] after the Effective Date of this Agreement and upon QED's reasonable request, Novartis shall use Commercially Reasonable Efforts to answer questions and provide clarifications to QED related to the Know-How to be transferred to QED pursuant to Section 4.1. Such assistance will be provided [***] to QED for **(a)** one (1) weekly hour-long transition meeting for each function set forth on *Exhibit C*, including clinical operations, regulatory operations, data, quality and any other required function, for the first two (2) months following the Effective Date, and bi-weekly (*i.e.*, every other week) calls for each such function thereafter, in both cases (clauses (a) and (b))

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not to exceed a total of [***] hours; **(b)** one (1) transition meeting for each active clinical site (in the form of a co-monitoring visit or remote monitoring visit), and **(c)** a total of three visits by QED to Novartis' Basel and/or East Hanover facility. With respect to any additional assistance (in excess of the amounts set forth in clauses (a), (b), and (c)) that is requested by QED, **(i)** the relevant activities must be agreed upon by the Parties in a written task order describing the scope of the agreed upon activities; and **(ii)** Novartis will charge QED at the rate of [***] for such services. For clarity, except as set forth herein and as otherwise agreed to by the Parties, all assistance pursuant to this Section 4.2 will be provided remotely (*e.g.*, e-mail, telephone or video conferences) and shall not require travel by Novartis personnel

4.3 **Database Transfer**. Notwithstanding anything in this Agreement to the contrary, the Parties acknowledge that the transfer by Novartis of data from its relevant databases will include data residing in such databases, but not any database architecture. QED shall be solely responsible for establishing appropriate database structures for receipt of the relevant data, which it shall complete not later than [***] after QED's receipt of the trial master file for the Compound. With respect to any clinical trial for the Compound that is ongoing as of the Effective Date, until the transfer by Novartis of data from its relevant databases is complete, Novartis will use reasonable efforts to provide QED with access to information in Novartis' relevant databases for such clinical trial, related documentation, data validation tools and SAS datasets. The Alliance Managers shall mutually agree on the appropriate scope of such access and shall coordinate QED's access thereof.

5. DEVELOPMENT AND REGULATORY; PHARMACOVIGILENCE

5.1 **Transfer of Sponsorship of INDs; Array.**

(a) Except as otherwise noted in *Exhibit F* and as set forth in Section 5.1(c) of this Agreement, within [***] after the later of **(i)** the execution of the Pharmacovigilance Agreement; or **(ii)** the completion of clinical data transfer (which, for clarity, will not include the Novartis' safety database architecture) (the "Transfer Deadline"), Novartis and its Affiliates shall assign and transfer to QED the sponsorship of Regulatory Filings identified in *Exhibit F* (the "Transferred IND/CTAs").

(b) Upon the transfer described in Section 5.1(a), Novartis shall file with relevant Regulatory Authorities a notification that the sponsorship of the Transferred IND/CTAs are being transferred from Novartis to QED. QED will submit to the relevant Regulatory Authorities a notification that it is assuming the sponsorship of the Transferred IND/CTAs. These notifications shall be filed simultaneously by the Parties unless otherwise required by local Applicable Law. Thereafter, QED shall be responsible for all future communications with the relevant Regulatory Authorities regarding the Transferred IND/CTAs and any and all subsequent Regulatory Filings relating to the Compound under those Transferred IND/CTAs. If, at any time after the Transferred IND/CTAs are transferred to QED, a Regulatory Authority requests information, data, or documentation Controlled by Novartis or its Affiliates, Novartis will provide such information, data, or documentation, to the extent that such information, data and documentation is accessible by Novartis using Commercially Reasonable Efforts, and shall reasonably cooperate with QED with respect to responding to requests from Regulatory Authorities.

(c) Notwithstanding the foregoing, **(i)** it is understood that QED is in the process of identifying appropriate CROs to manage the (ex-US) CTAs, and that transfer of the ex-US CTAs might take place in a staggered fashion, on a country by country basis; **(ii)** QED will use Commercially Reasonable Efforts to assume sponsorship of the (ex-US) CTAs on or before the "Transfer Deadline" as defined in Section 5.1(a); and **(iii)** QED hereby grants to Novartis all the necessary rights to remain the sponsor of such trials, including the right to take any action in consultation with QED that might be necessary to comply with its regulatory and legal obligations as sponsor of such CTAs, solely until QED is able to assume the sponsorship of such CTAs.

(d) The Parties also acknowledge that Novartis has certain obligations regarding clinical studies for the [***]. In order to allow for Novartis to comply with these contractual obligations, without limiting any additional obligations under the Ancillary Agreement:

(i) QED will, simultaneous with the filings described in Section 5.1(b) by which QED will assume the sponsorship of [***]; and

(ii) [***].

(e) In order to allow for continuation of on-going clinical investigations sponsored by other institutions and/or investigators which were previously authorized by Novartis ("IITs"), simultaneously with the filings described in Section 5.1(b) by which QED will assume the sponsorship for [***], QED will provide the sponsors of such IITs with a written authorization to cross-reference the data contained in such IND/CTA, in part or in its totality (as necessary) for the purpose of allowing the continuation of those studies. As of the date of transfer of [***] and for as long as such investigations are not terminated by the respective sponsors, QED will **(A)** promptly provide any future updated version of the BGJ398 investigator brochure to those IIT sponsors; **(B)** respond to requests and questions received by those IIT sponsors from any Regulatory Authority in any country which requires BGJ398 information transferred to and in the possession of QED, in a timeframe commensurate with the preparation and timely submission of responses; **(C)** promptly and directly inform those IIT sponsors upon becoming aware of any material issue that might warrant disclosure to Regulatory Authorities, including but not limited to safety measures, aggregate safety findings or quality defects (if applicable); and (**D**) inform the IIT sponsors of any change in quality aspects of the drug substance or drug product utilized in the clinical supplies provided by QED to such sponsors, should this be the case. QED will also provide those Sponsors with any necessary CMC documentation in QED's Control that might be required to allow for continuation of the clinical investigations, as per Applicable Law.

5.2 **Adverse Event Reporting and Safety Data Exchange.** QED and Novartis shall cooperate with regard to the reporting and handling of safety information involving or relating to the Compound and/or the Products at least to the extent required by Applicable Laws. Subject to the Ancillary Agreement, in time to ensure that all regulatory requirements are met, and at least to the extent required by Applicable Laws or any Regulatory Authority, QED will enter into written agreements containing customary terms that will govern the exchange of adverse event and other safety information reporting obligations relating to the Compound

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or the Products (the "Pharmacovigilance Agreement(s)") with Novartis and its Affiliates, and where requested by Novartis [***], to ensure that adverse events and other safety information is exchanged and reported to the relevant Regulatory Authorities in compliance with the Applicable Laws and requirements of Regulatory Authorities in the Territory. The Pharmacovigilance Agreement to be entered into with Novartis or its Affiliates, will govern the exchange of adverse event and other safety information until completion of the transfer of Regulatory Filings, transfer of sponsorship or Novartis completion of the clinical trials/programs, transfer of or completion of Novartis supported IIT agreements in accordance with *Exhibit F*, whichever is later, [***]. Additionally, without limiting the foregoing, the Novartis Alliance Manager shall promptly inform QED if at any time during the Term, any of the following occur: **(a)** Novartis terminates its development program for [***] for safety reasons, **(b)** Novartis receives notice from any Regulatory Authority of a clinical hold on the development program for [***], or **(c)** a data safety monitor board terminates a clinical trial for [***].

5.3 **Obligation to Develop and Obtain Regulatory Approval**. Subject to the obligations set forth in this Agreement, following the date of transfer of the INDs, QED will be solely responsible for all regulatory matters arising in connection with the Development of the Compound and Product(s) at its own cost and expense. QED will itself, or through its Affiliates or sublicensees, use Commercially Reasonable Efforts to Develop the Compound and Product(s) in the Field and shall use Commercially Reasonable Efforts to obtain Regulatory Approval (and, if applicable, Pricing Reimbursement Approval) for at least one Product in the United States and the European Union.

6. MATERIAL TRANSFER; MANUFACTURING.

6.1 **Transfer of BGJ398.** Within [***] after the written request of QED (or as may be otherwise set forth in *Exhibit D*), but in no event earlier than the later of **(i)** the execution of the Pharmacovigilance Agreement; or **(ii)** the completion of database transfer, and subject to the reservation described in Section 6.4, Novartis will make available for pick-up (ex works, Incoterms 2010) the material identified on *Exhibit D* (the "BGJ398 Material"), in the form as currently exists, from Novartis' facilities where BGJ398 Material is currently stored, at no additional cost to QED. The pick-up of the BGJ398 Material must be completed within [***] after the date that Novartis notifies such BGJ398 Material is available for pick up. Any BGJ398 Material not picked up by the end of that [***] period may be disposed of by Novartis in its sole discretion.

6.2 **Description of Material.** BGJ398 Material is divided into three categories: reference samples, non-GMP technical batches, and previously released GMP clinical batches (*see Exhibit D*). Novartis represents and warrants that released clinical study BGJ398 Material (and not the non-GMP technical batches or reference samples) was manufactured in accordance with Applicable Laws (including GMP) where the relevant study was to be conducted at the time of release and QED shall be provided with documentation signed by an authorized representative of Novartis, certifying that such BGJ398 Material was manufactured in accordance with its specifications and all Applicable Law, including GMP; no such representation or warranty is given with respect to the Applicable Law of any other country or jurisdiction or to any changes to Applicable Law following the release date. Except as provided above, the BGJ398 Material is provided "as is" and "where is", and without representation or warranty of any kind.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

6.3 **Documentation and Transfer Process.** In connection with the transfer of the BGJ398 Material as described in Section 6.1, the following shall apply:

(a) Novartis will share with QED any MSDSs and customs value information that is readily available to Novartis (and not otherwise available to QED), in particular Compound-specific information, as is reasonably necessary to permit QED to pick up the BGJ398 Material;

(b) QED will be solely responsible for any re-testing associated with the BGJ398 Material prior to use;

(c) with respect to the released clinical study BGJ398 Material, Novartis will provide the certificate of analysis associated with its release;

(d) QED will be responsible for all documentation, licenses, customs clearance, costs, *etc.* that are needed for and related to the pick-up, transport, and subsequent delivery of the BGJ398 Material to the first destination as designated by QED;

(e) the BGJ398 Material will be picked up in not more than one installment;

(f) the BGJ398 Material made available by Novartis will only be used according to its specifications, especially release specifications, and in accordance with Applicable Laws, and Novartis will have no further obligation with respect to the BGJ398 Material, except with respect to providing any documentation relating to the BGJ398 pursuant to Section 4.1 and as otherwise set forth in this Section 6.3;

(g) prior to the BGJ398 Material being made available by Novartis, Novartis will provide QED with copies of any GMP certificates issued by Regulatory Authorities for the Novartis manufacturing facilities used for manufacturing the BGJ398 Material; and

(h) Novartis shall promptly notify QED of any notice received by a Regulatory Authority regarding regulatory actions of Novartis manufacturing facilities used for manufacturing the BGJ398 Material, where such action is related to the BGJ398 Material. Novartis shall provide QED with copies of specific correspondence relating to such regulatory action pertaining to BGJ398 and shall cooperate with the applicable Regulatory Authority, including by providing any requested documentation related to the BGJ398 Material directly to such Regulatory Authority.

6.4 **Drug Product Supply; Reservation for Novartis Obligations.** Within [***] after the Effective Date, the Parties will agree upon a transfer plan for the transfer of Compound drug product inventory controlled or owned by Novartis or its Affiliates as of the Effective Date and the stability programs related to the Compound conducted by or on behalf of Novartis or its Affiliates as of the Effective Date, in each case, as identified on *Exhibit D*. This transfer plan shall take into account Novartis' obligations to manufacture and supply Compound to Array as described in Section 2.4 and reserve a reasonable portion of the material described in *Exhibit D* to satisfy such obligations.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

6.5 **Manufacturing**. Subject to Novartis' obligations set forth in Section 4, QED will be solely responsible for and shall, subject to the terms of this Agreement, have final decision-making authority with respect to the manufacturing of the Compound or the Products in the Field in the Territory, at its sole cost and expense.

7. COMMERCIALIZATION

7.1 **Commercialization**. Unless the contingent reversionary rights set forth in Section 2.4(b) are invoked, QED will be solely responsible for all aspects of Commercialization of the Products, including planning and implementation, distribution, booking of sales, pricing, and reimbursement. QED will itself, or through its Affiliates or sublicensees, use Commercially Reasonable Efforts to Commercialize at least one Product in the United States and the European Union. Notwithstanding the foregoing, QED's application of Commercially Reasonable Efforts will not require QED to Commercialize a Product in any particular country or territory if QED reasonably determines that it is not commercially reasonable to do so for such Product. Subject to compliance with the foregoing, the Commercialization of the Product will be in QED's sole discretion.

8. FINANCIAL PROVISIONS

8.1 **Upfront and Equity in QED.** In consideration of the licenses and rights granted to QED hereunder,

(a) QED will make a one-time payment to Novartis in the amount of USD $15,000,000 *via* wire transfer within 15 days after the Effective Date; an

(b) Novartis will be granted a number of shares of Series A Preferred Stock of QED upon the initial closing of QED's issuance and sale of Series A Preferred Stock, representing a fully-diluted (*i.e.*, the total number of shares that would be outstanding if all possible sources of conversion, such as convertible debt, preferred stock, and stock options (taking into account unallocated shares reserved for issuance under an equity incentive plan), are exercised or converted into common stock) ownership percentage of [***] of QED immediately following the funding of the initial tranche of preferred stock financing of QED from BridgeBio, which shall be in the amount of [***]. The shares issued to Novartis will be subject to the terms and conditions of the documents attached as *Exhibits E-1* and *E-2*.

8.2 **Milestone Payments**.

(a) In further consideration of the licenses and rights granted to QED hereunder, upon achievement of each of the following Milestones set forth below for a Product by QED, its Affiliates, or its sublicensees (as applicable), the corresponding Milestone Payments will be payable to Novartis:

Milestone	Milestone Payment (in US Dollars)
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(b) Each Milestone Payment will be deemed earned as of the first achievement of the corresponding Milestone, and will be paid within [***] after the relevant Milestone is achieved. QED will provide Novartis with written notice of the achievement of each Milestone within 15 days after such Milestone is determined to have been achieved.

(c) Each Milestone in the table above will be paid only once. The total potential Milestone Payments that may be paid under this Section 8.2 is $60,000,000. For the avoidance of doubt, no additional Milestone Payments will be due for Milestones completed for the Development and Commercialization of Products that were previously achieved by a different Product for the same Indication, or for any Product intended to treat any additional Indications (by the same Product) (after the first two indications).

8.3 **Sales Milestones.**

(a) QED will make each of the following one time payments when worldwide Annual Net Sales of all Products in a given Calendar Year by it, its Affiliates, or their sublicensees first meet the corresponding thresholds:

Aggregate Net Sales of Products in any Calendar Year during the Royalty Term (in US Dollars)	**Sales Milestone Payment (in US Dollars)**
Annual Net Sales equal to or greater than [***]	[***]
Annual Net Sales equal to or greater than [***]	[***]
Annual Net Sales equal to or greater than [***]	[***]

(b) For example, if Annual Net Sales of Products in the first Calendar Year of Net Sales equals [***], then both the first and second Sales Milestone Payments will be made in that year.

(c) Each Milestone Payment in the table above will be paid only once. The total potential Milestone Payments that may be paid under this Section 8.3 is $35,000,000.

(d) Each Milestone Payment will be deemed earned as of the first achievement of the corresponding sales milestone, and will be paid within [***] after the relevant sales milestone is achieved. QED will provide Novartis with written notice of the achievement of each Milestone within 15 days after such sales milestone is determined to have been achieved.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

8.4 **Royalty Payments**.

(a) In consideration of the licenses and rights granted to QED hereunder, during the Royalty Term, QED will make royalty payments to Novartis on Net Sales of Products by QED, its Affiliates and sublicensees, at the rates set forth below:

Aggregate Net Sales of Product in any Calendar Year during the Royalty Term (in US Dollars)	Royalty Rate
Portion of Net Sales less than or equal to [***]	[***]
Portion of Net Sales greater than [***] up to [***]	[***]
Portion of Net Sales greater than [***] up to [***]	[***]
Portion of Net Sales greater than [***]	[***]

(b) For example, if Net Sales in a Calendar Year are [***], the royalty on such Net Sales will be equal to [***] (computed as follows: [***]).

(c) Royalties will be payable on a Product-by-Product and country-by-country basis during the Royalty Term for such Product in such country. Following the expiration of the applicable Royalty Term for a Product in a country, QED licenses under this Agreement with respect to such Product in such country will continue in effect, but will become fully paid-up, royalty-free, transferable, perpetual and irrevocable. For the avoidance of doubt, royalties will be payable only once with respect to the same unit of Product.

(d) Within 30 days after each Calendar Quarter during the term of this Agreement following the First Commercial Sale of a Product, QED will provide to Novartis a Sales & Royalty Report. Novartis will submit an Invoice to QED with respect to the royalty amount shown therein. QED will pay such royalty amount within 30 days after receipt of the Invoice.

(e) Notwithstanding anything to the contrary herein, in the event that, with respect to a Product in a specified country, if **(i)** the Royalty Term for such Product in such country continues solely due to clause (b) or clause (c) of the definition of Royalty Term (*i.e.*, there is no Valid Claim of a Patent Right included in the Novartis Technology covering the Product), or **(ii)** a Generic Equivalent exists with respect to such Product in the Field in such country in a Calendar Year, then the royalty rates in such country for such Product will thereafter be reduced to [***] of the amounts set forth in the table above, in the case of clause (ii), solely for as long as such Generic Equivalent continues to be marketed in the relevant country.

8.5 **Third Party Obligations; Set Off**.

(a) If QED reasonably determines that, in order to avoid infringement or misappropriation of any Patent Right or Know-How not licensed hereunder that covers the composition of matter or method of use of a Compound or that is reasonably necessary for the research, Development, manufacture, preparation, use or Commercialization of the Compound or Products, to the extent that QED or any of its Affiliates or sublicensees acquires or licenses rights under a Third Party's Patent Rights or Know-How, and is required to pay a royalty or other payments to such Third Party (including in connection with the settlement of a

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patent infringement claim), QED will have the right to deduct [***] of the licensing payments actually paid by QED to such Third Party under such license from the royalty due to Novartis under Section 8.4.

(b) In no event will any royalty payment due to Novartis from QED be reduced by more than [***] any Calendar Quarter through operation of Section 8.4(e) or Section 8.5(a). Any amount that QED is entitled to deduct that is reduced by this limitation will be carried forward and QED may deduct such amount from royalty payments due to Novartis until the full amount that QED was entitled to deduct is deducted.

8.6 **Payments.**

(a) All payments from QED to Novartis will be made by wire transfer in US Dollars to the credit of such bank account as may be designated by Novartis in this Agreement or in writing to QED. Any payment which falls due on a date which is not a business day in the location from which the payment may be made on the next succeeding business day in such location.

(b) All payments under this Agreement will be payable in US Dollars. When conversion of payments from any foreign currency is required to be undertaken by QED, the US Dollar equivalent will be calculated using QED's then-current standard exchange rate methodology as applied in its external reporting. If there is no standard exchange rate methodology applied by QED in its external reporting in accordance with Accounting Standards, then any amount in a currency other than US Dollars shall be converted to US Dollars using the exchange rate most recently quoted in the *Wall Street Journal* in New York as of the last business day of the applicable Calendar Quarter.

(c) [***] will pay any and all taxes levied on account of any payments made to it under this Agreement. If any taxes are required to be withheld by [***], [***] will: **(i)** deduct such taxes from the payment made to [***]; **(ii)** timely pay the taxes to the proper taxing authority; **(iii)** send proof of payment to [***]; and **(iv)** reasonably assist [***] in its efforts to obtain a credit for such tax payment. Each Party will reasonably assist the other Party in lawfully claiming exemptions from and/or minimizing such deductions or withholdings under double taxation laws or similar circumstances.

(d) Without limiting any other rights or remedies available to Novartis hereunder, if QED does not pay any amount due on or before the due date, any such payment shall bear interest at a rate of four percentage points above the six months LIBOR for US Dollars on the date the payment was due or the highest rate permitted by law (whichever is lower), computed from the date such payment was due until the date QED makes the payment.

8.7 **Records and Audit Rights**.

(a) QED will keep, and will cause its Affiliates and sublicensees to keep, complete, true and accurate books and records in accordance with its Accounting Standards in relation to Net Sales and royalties payable to Novartis hereunder. QED will keep, and will cause its Affiliates and sublicensees to keep, such books and records for at least three years following the Calendar Quarter to which they pertain.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(b) Novartis may, upon written notice to QED, appoint an internationally-recognized independent accounting firm (which is reasonably acceptable to QED) (the "Auditor") to inspect the relevant reports, statements, records or books of accounts (as applicable) of QED or its Affiliates or sublicensees to verify the accuracy of any Sales & Royalty Report. Before beginning its audit, the Auditor will execute an undertaking reasonably acceptable to QED by which the Auditor will keep confidential all Information reviewed during such audit. The Auditor will have the right to disclose to Novartis its conclusions regarding any payment owed under this Agreement.

(c) QED will, and will cause its Affiliates and sublicensees to make their records available for inspection by such Auditor during regular business hours at such place or places where such records are customarily kept, upon receipt of reasonable advance notice from Novartis. The records will be reviewed solely to verify the accuracy of the Sales & Royalty Reports. Such inspection right will not be exercised more than once in any Calendar Year and not more frequently than once with respect to records covering any specific period of time. In addition, Novartis will only be entitled to audit the relevant books and records of QED relating to a Sales & Royalty Report for a period of three Calendar Years after receipt of the applicable Sales & Royalty Report. Novartis will hold in confidence all Information received and all Information learned in the course of any audit or inspection, except to the extent necessary to enforce its rights under this Agreement or if disclosure is required by law, regulation or judicial order.

(d) The Auditor will provide its audit report and basis for any determination to QED at the time such report is provided to Novartis, before it is considered final. QED will have the right to request a further determination by such Auditor as to matters which QED disputes within [***] following receipt of such report. QED will provide Novartis and the Auditor with a reasonably detailed statement of the grounds upon which it disputes any findings in the audit report and the Auditor will undertake to complete such further determination within [***] after the dispute notice is provided, which determination will be limited to the disputed matters. Any matter that remains unresolved will be resolved in accordance with the dispute resolution procedures contained in Section 15.5.

(e) In the event that the final result of the inspection reveals an undisputed underpayment or overpayment by QED, the underpaid or overpaid amount will be settled promptly.

(f) [***] will pay for any such audits, as well as its own expenses associated with enforcing its rights with respect to any payments hereunder, except that in the event there is any upward adjustment in aggregate amounts payable for any Calendar Quarter shown by such audit of [***].

8.8 **No Projections**. Novartis and QED acknowledge that nothing in this Agreement will be construed as representing an estimate or projection of anticipated sales of any Product, and that the Milestones and Net Sales levels set forth above or elsewhere in this Agreement or

that have otherwise been discussed by the Parties are merely intended to define the Milestone Payments and royalty obligations to Novartis in the event such Milestones or Net Sales levels are achieved. *QED MAKES NO REPRESENTATION OR WARRANTY, EITHER EXPRESS OR IMPLIED, THAT IT WILL BE ABLE TO SUCCESSFULLY COMMERCIALIZE ANY PRODUCT OR, IF COMMERCIALIZED, THAT ANY PARTICULAR NET SALES LEVEL OF SUCH PRODUCT WILL BE ACHIEVED.*

9. INTELLECTUAL PROPERTY.

9.1 **Inventions and Know-How.** All inventions, whether or not reduced to practice, and know-how arising from QED's activities under this Agreement, including any Patent Rights covering such inventions that arise after the Effective Date, will be owned by QED.

9.2 **Ownership of Results and Data.** All data and results arising from QED's activities under this Agreement, including but not limited to Development, clinical and regulatory data and Information generated for regulatory purposes relating to a Product will be owned by QED.

9.3 **Patent Prosecution**. QED will have the right to control Prosecution and Maintenance of the Novartis Patents on *Exhibit B-1* at QED's expense. Novartis will have the initial right to control Prosecution and Maintenance of the Novartis Patents on *Exhibit B-2* and Novartis Additional Patents at Novartis' expense, using counsel reasonably acceptable to QED. Novartis will keep QED informed of important issues relating to the Prosecution and Maintenance of the Novartis Patents on *Exhibit B-2*, and will furnish to QED copies of documents relevant to such Prosecution and Maintenance in sufficient time, but no later than 14 days, prior to the filing of such document to allow for review and comment by QED and Novartis will reasonably consider all of such comments. Novartis will notify QED of any decision not to continue to pay the expenses of Prosecution and Maintenance of any Novartis Patent on *Exhibit B-2* or any Novartis Additional Patent that has been identified in writing by QED pursuant to Section 2.1(c) (or to otherwise abandon their prosecution or maintenance), which notice must be delivered at least 60 days prior to any payment due date or the relevant action's due date. In such event, QED, at its sole discretion and expense, shall have the right to continue Prosecution and Maintenance of such Novartis Patent on *Exhibit B-2* or such Novartis Additional Patents (as applicable) in such country. If QED undertakes such Prosecution and Maintenance, **(a)** Novartis will provide QED all reasonable assistance and cooperation in relation thereto, including providing any necessary powers of attorney and any other required documents or instruments; and **(b)** with respect to Novartis Additional Patents, such Patent Rights shall be thereafter be deemed to be Novartis Patents and deemed to be included in Exhibit *B-1*.

9.4 **Third Party Infringement**.

(a) Each Party will promptly notify the other of any infringement in the Field by a Third Party of any of the Novartis Patents or misappropriation of any Novartis Know-How in the Field of which it becomes aware, including any filing of an Abbreviated New Drug Application in the United States or such similar filing under Applicable Law in jurisdictions other than the United States. Each Party shall provide the other Party with all available evidence supporting such infringement, suspected infringement, unauthorized use or misappropriation or suspected unauthorized use or misappropriation (collectively, "Third Party Infringement").

(b) QED will have the first right to bring and control any legal action in connection with the Third Party Infringement relating to any Novartis Patent set forth on *Exhibit B-1* in the Field at its own expense as it reasonably determines appropriate, and Novartis will have the right, at its own expense, to be represented in any such action by counsel of its own choice. If QED fails to bring an action or proceeding with respect to, or to terminate, infringement of any Novartis Patent set forth on *Exhibit B-1* **(i)** within [***] following the notice of alleged infringement (or [***] after QED receives the relevant ANDA notification), or **(ii)** prior to [***] before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such actions, whichever comes first, Novartis will have the right to bring and control any such action at its own expense and by counsel of its own choice, and QED will have the right, at its own expense, to be represented in any such action by counsel of its own choice; *provided, however*, that if QED notifies Novartis in writing prior to [***] before such time limit for the filing of any such action that QED intends to file such action before the time limit, then QED will be obligated to file such action before the time limit, and Novartis will not have the right to bring and control such action. Novartis will have the first right to bring and control any legal action in connection with the Third Party Infringement relating to any Novartis Patent set forth on *Exhibit B-2* in the Field at its own expense as it reasonably determines appropriate, and QED will have the right, at its own expense, to be represented in any such action by counsel of its own choice. If Novartis fails to bring an action or proceeding with respect to, or to terminate, infringement of any Novartis Patent set forth on *Exhibit B-2* **(i)** within [***] following the notice of alleged infringement (or [***] after Novartis receives the relevant ANDA notification), or **(ii)** prior to [***] before the time limit, if any, set forth in the appropriate laws and regulations for the filing of such actions, whichever comes first, QED will have the right to bring and control any such action at its own expense and by counsel of its own choice, and Novartis will have the right, at its own expense, to be represented in any such action by counsel of its own choice; *provided, however*, that if Novartis notifies QED in writing prior to [***] before such time limit for the filing of any such action that Novartis intends to file such action before the time limit, then Novartis will be obligated to file such action before the time limit, and QED will not have the right to bring and control such action.

(c) At the request of the Party controlling the Third Party Infringement claim, the other Party will provide assistance in connection therewith, including by executing reasonably appropriate documents, access to such Party's premises and employees, cooperating reasonably in discovery and joining as a party to the action if required.

(d) In connection with any such proceeding, neither Party will enter into any settlement admitting the invalidity of, or otherwise impairing such Party's rights in, the Novartis Technology without the prior written consent of the other Party, which will not be unreasonably withheld or delayed.

(e) Any recoveries resulting from such an action relating to a Third Party Infringement will be first applied against payment of each Party's costs and expenses in connection therewith. In the event that QED brought such action, any remainder will be retained by QED; *provided, however*, any such amount

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will be considered Net Sales hereunder and will be subject to a royalties and sales milestones (as applicable) to Novartis under this Agreement. In the event that Novartis brought such action, the remainder will be retained by Novartis.

9.5 **Third Party Patent Invalidity Claim**. If a Third Party at any time asserts a claim that any Novartis Patent on *Exhibit B-1* is invalid or otherwise unenforceable (an "Invalidity Claim"), whether as a defense in an infringement action brought by a Party pursuant to Section 9.4, in a declaratory judgment action or any patent office proceeding anywhere in the world (*e.g.*, inter-partes review or European opposition) relating to the Field, QED shall have the first right, but not the obligation, to defend such Invalidity Claim and Novartis shall cooperate with QED in preparing and formulating a response to such Invalidity Claim. If QED does not defend an Invalidity Claim brought against a Novartis Patent on *Exhibit B-1*, Novartis may defend such Invalidity Claim and the coordination provisions of Section 9.4(c) will apply to such Invalidity Claim, *mutatis mutandis* as they apply to Third Party Infringement suits. If a Third Party at any time asserts an Invalidity Claim against any on *Exhibit B-2*, whether as a defense in an infringement action brought by a Party pursuant to Section 9.4, in a declaratory judgment action or any patent office proceeding anywhere in the world (*e.g.*, inter-partes review or European opposition) relating to the Field, Novartis shall have the first right, but not the obligation, to defend such Invalidity Claim and QED shall cooperate with Novartis in preparing and formulating a response to such Invalidity Claim. If Novartis does not defend an Invalidity Claim brought against a Novartis Patent on *Exhibit B-2*, QED may defend such Invalidity Claim and the coordination provisions of Section 9.4(c) will apply to such Invalidity Claim, *mutatis mutandis* as they apply to Third Party Infringement suits. No Party may, without the consent of each other Party, settle or compromise any Invalidity Claim in any manner which would **(a)** have an adverse effect on such other Party's rights or obligations hereunder or **(b)** be an admission of liability on behalf of the other Party (*provided*, *however*, that the Party initiating such suit may settle such suit without such consent if such settlement involves only the receipt of money from, or the payment of money to, such Third Party and the Party settling such suit makes all such payments to such Third Party). To the extent such Invalidity Claim is raised as a defense in an infringement action brought by a Party pursuant to Section 9.4, the expense provisions of Section 9.4 will apply and counsel to the Party controlling the infringement action shall act as the ministerial liaison with the court.

9.6 **QED Patent Invalidity Claim**. The Parties have determined the value of the Novartis Technology based on their understanding of the validity and enforceability of the relevant Patent Rights and Know-How. If QED at any time asserts an Invalidity Claim in a declaratory judgment action or any patent office proceeding anywhere in the world and such challenge does not result in a material diminution of the scope of the relevant Novartis Patent, then the terms of this Agreement shall continue in full force and effect, [***].

9.7 **Defense of Infringement Claims of Licensed IP.** If any Third Party asserts a claim, demand, action, suit or proceeding against a Party (or any of its Affiliates), alleging that any Product or the use or practice of the Novartis Technology infringes, misappropriates or violates the intellectual property rights of any Person (any such claim, demand, action, suit or proceeding being referred to as an "Infringement Claim"), the Party first having notice of the Infringement Claim shall promptly notify the other Party thereof in writing specifying the facts, to the extent known, in reasonable detail and the following shall apply:

(a) in the case of any such Infringement Claim against either Party individually or against both Novartis and QED, in each case, with respect to the Product in the

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Field in the Territory, QED shall assume control of the defense of such Infringement Claim. Novartis, upon request of QED and if required by Applicable Law, agrees to join in any such litigation QED's expense, and in any event to reasonably cooperate with QED at QED's expense. Novartis will have the right to consult with QED concerning such Infringement Claim and to participate in and be represented by independent counsel in any litigation in which QED is a party, at its own expense. QED shall not have the right to settle any Infringement Claim without the written consent of Novartis; and

(b) during the period in which such Infringement Claim is pending and following the resolution thereof, QED shall bear all costs incurred in connection therewith (including litigation costs, attorneys fees, costs of settlement) including damage awards, and any other payment resulting therefrom. If QED is required to obtain a license from any unaffiliated third party or parties under any patent or other intellectual property right of such third party or parties, QED shall further be solely responsible for any costs, fees, royalties, damages or other payments associated with such license.

9.8 **Trademarks**. QED will have the right to brand the Products using QED related trademarks and any other trademarks and trade names it determines appropriate for the Products, which may vary by country or within a country ("Product Marks"). QED will own all rights in the Product Marks and register and maintain the Product Marks in the countries and regions it determines reasonably necessary.

9.9 **Patent Extensions**.

(a) If requested by QED, Novartis will cooperate in obtaining patent term restoration (under but not limited to the Drug Price Competition and Patent Term Restoration Act), supplemental protection certificates or their equivalents, and patent term extensions with respect to the Novartis Patents on *Exhibit B-1* in any country and/or region where applicable. Novartis will provide all reasonable assistance requested by QED, including permitting QED to proceed with applications for such in the name of Novartis, if deemed appropriate by QED, and executing documents and providing any relevant information to QED.

(b) As between the Parties, QED will in its sole discretion determine which, if any, Novartis Patents on *Exhibit B-1*, it will apply to extend; *provided*, *however*, that QED will give Novartis [***] notice before doing so and reasonably consider any input from Novartis with respect to the extension of any Novartis Patents.

10. CONFIDENTIALITY

10.1 **Duty of Confidence**.

(a) Subject to the other provisions of this Section 10, all Information disclosed by a Party or its Affiliates under this Agreement will be maintained in confidence and otherwise safeguarded by the recipient Party. The recipient Party may only use the Information for the purposes of this Agreement and pursuant to the rights granted to the recipient Party under this Agreement. Subject to the other provisions of this Section 10, each Party will hold as confidential such Information of the other Party or its Affiliates in the same manner and with the

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same protection as such recipient Party maintains its own confidential information. Subject to the other provisions of this Section 10, a recipient Party may only disclose Information of the other Party to employees, agents, contractors, consultants and advisers of the Party and its Affiliates and sublicensees and to Third Parties to the extent reasonably necessary for the purposes of, and for those matters undertaken pursuant to, this Agreement; *provided* that such Persons are bound to maintain the confidentiality of the Information in a manner consistent with the confidentiality provisions of this Agreement.

(b) With respect to Novartis' obligations under this Section 10, all Novartis Know-How, to the extent relating to the Compound and Products in the Field, will be considered Information of QED during the Term of the Agreement and Novartis will maintain in confidence and otherwise safeguard such Novartis Know-How as such in accordance with this Section 10 (it being understood that the exception in Section 10.2(b) will not apply to Novartis with respect to Novartis Know-How).

10.2 **Exceptions**. The obligations under this Section 10 will not apply to any information to the extent the recipient Party can demonstrate by competent evidence that such information:

(a) is (at the time of disclosure) or becomes (after the time of disclosure) known to the public or part of the public domain through no breach of this Agreement by the recipient Party or its Affiliates;

(b) was known to, or was otherwise in the possession of, the recipient Party or its Affiliates prior to the time of disclosure by the disclosing Party or any of its Affiliates;

(c) is disclosed to the recipient Party or an Affiliate on a non-confidential basis by a Third Party who is entitled to disclose it without breaching any confidentiality obligation to the disclosing Party or any of its Affiliates; or

(d) is independently developed by or on behalf of the recipient Party or its Affiliates, as evidenced by its written records, without reference to the Information disclosed by the disclosing Party or its Affiliates under this Agreement.

Specific aspects or details of Information will not be deemed to be within the public domain or in the possession of the recipient Party merely because the Information is embraced by more general information in the public domain or in the possession of the recipient Party. Further, any combination of Information will not be considered in the public domain or in the possession of the recipient Party merely because individual elements of such Information are in the public domain or in the possession of the recipient Party unless the combination and its principles are in the public domain or in the possession of the recipient Party.

10.3 **Authorized Disclosures**.

(a) On or following the Effective Date, QED shall issue the press release set forth on *Exhibit G*. Neither Party shall issue any other press release, trade announcement or make any other public announcement or statement with regard

to the transactions contemplated by this Agreement without the other Parties' prior written consent; *provided, however*, that information previously disclosed in the press release set forth on *Exhibit G* may be further disclosed without restriction. Where consent is forthcoming, the Parties will consult with each other regarding the content of any such press release or other announcement. The aforementioned restriction shall not apply to announcements required by any Regulatory Authority, security exchanges as required by applicable; *provided* that in such event the Parties shall coordinate the wording and QED shall take into consideration any requests of Novartis.

(b) In addition to disclosures allowed under Section 10.1 and 10.2, either Party may disclose Information belonging to the other Party or its Affiliates to the extent such disclosure is necessary in the following instances: **(i)** filing or prosecuting Patent Rights as permitted by this Agreement; **(ii)** in connection with Regulatory Filings for Products; **(iii)** prosecuting or defending litigation as permitted by this Agreement; **(iv)** complying with applicable court orders, governmental regulations, or the inquiries of Regulatory Authorities; **(v)** in connection with an offering of securities or securities law disclosure requirements if counsel determines that such disclosure is required; or **(vi)** to the extent otherwise necessary or appropriate in connection with exercising the license and other rights granted to it hereunder.

(c) In addition, QED and its Affiliates and sublicensees may disclose Information of Novartis to Third Parties as may be necessary or useful in connection with the Development, manufacture or Commercialization of the Compound and/or Product(s) as permitted by this Agreement, including in connection with subcontracting transactions.

(d) In addition, either Party may disclose the terms of this Agreement and Information pertaining to Products in connection with an assignment or potential assignment of this Agreement, a loan, financing or investment transaction, or an acquisition, merger, consolidation or similar transaction (or for such Persons to determine their interest in performing such activities or entering into such transactions), in each case on the condition that any Third Parties to whom such disclosures are made agree to be bound by confidentiality and non-use obligations no less rigorous than those contained in this Agreement (but which obligations may be of shorter duration for Third Parties).

(e) In the event the recipient Party is required to disclose Information of the disclosing Party by law or in connection with *bona fide* legal process, such disclosure will not be a breach of this Agreement; *provided* that the recipient Party **(i)** informs the disclosing Party as soon as reasonably practicable of the required disclosure; **(ii)** limits the disclosure to the required purpose; and **(iii)** at the disclosing Party's request and expense, assists in an attempt to object to or limit the required disclosure or to otherwise receive "confidential" or "trade secret" treatment with respect to relevant portions of such disclosure.

10.4 **Ongoing Obligation for Confidentiality**. Upon early termination of this Agreement for any reason, each Party and its Affiliates will immediately return to the other Party or destroy any Information disclosed by the other Party, except for one copy which may be retained in its confidential files for archive purposes.

11. TERM AND TERMINATION

11.1 **Term**. The term of this Agreement will commence upon the Effective Date and continue on a Product-by-Product and country-by-country basis until the expiry of the Royalty Term for such Product in such country, unless earlier terminated as permitted by this Agreement.

11.2 **Termination for Cause**. If either Novartis or QED is in material breach of any material obligation hereunder, the non-breaching Party may give written notice to the breaching Party specifying the claimed particulars of such breach, and in the event such material breach is not cured within [***] after such notice, the non-breaching Party will have the right (but not the obligation) thereafter to terminate this Agreement immediately by giving written notice to the breaching Party to such effect; *provided, however*, that if such breach is capable of being cured but cannot be cured within such [***] period and the breaching Party initiates actions to cure such breach within such period and thereafter diligently pursues such actions, the breaching Party will have an additional [***] (or such longer period agreed upon by the Parties) to cure such breach. Any termination by any Party under this Section and the effects of termination provided herein will be without prejudice to any damages or other legal or equitable remedies to which it may be entitled.

11.3 **Insolvency.** If an Insolvency Event occurs, **(a)** QED will give immediate (not longer than three business days') notice to Novartis of such occurrence, and **(b)** Novartis will have the right to immediately terminate this Agreement by written notice to QED**.**

11.4 **Termination by QED Without Cause**. QED may terminate this Agreement without cause at any time after the Effective Date in its entirety or on a Product-by-Product or country-by-country basis at any time on [***] prior written notice.

11.5 **Rights in Bankruptcy**. The Parties acknowledge that this Agreement constitutes an executory contract under Section 365 of the Code for the license of "intellectual property" as defined under Section 101 of the Code and constitutes a license of "intellectual property" for purposes of any similar laws in any other country. The Parties further acknowledge that QED, as licensee of such rights under this Agreement, will retain and may fully exercise all of its protections, rights and elections under the Code, including, but not limited to, Section 365(n) of the Code, and any similar laws in any other country. In the event of the commencement of a bankruptcy proceeding by or against Novartis under the Code and any similar laws in any other country, QED will be entitled to a complete duplicate of (or complete access to, as appropriate) any such intellectual property and all embodiments of such intellectual property, and the same, if not already in its possession, will be promptly delivered to it **(a)** upon any such commencement of a bankruptcy proceeding upon its written request therefor, unless Novartis elects to continue to perform all of its obligations under this Agreement, or **(b)** if not delivered under (a) above, following the rejection of this Agreement by or on behalf of Novartis upon written request therefor by QED. All rights, powers and remedies of QED provided for in this Section 11.5 are in addition to and not in substitution for any and all other rights, powers and remedies now or hereafter existing at law or in equity (including, without limitation, under the Code and any similar laws in any other country).

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12. EFFECT OF TERMINATION

12.1 **Termination by QED for Cause**. Upon termination of this Agreement by QED pursuant to Section 11.2:

(a) the licenses and other rights granted by Novartis to QED under the Novartis Technology will terminate and QED shall not have any rights to use or exercise any rights under the Novartis Technology; and

(b) except as set forth in this Section and in Section 12.3, the rights and obligations of the Parties hereunder will terminate as of the date of such termination.

12.2 **Termination by Novartis for Cause or by QED Without Cause**. Upon termination of this Agreement by Novartis pursuant to Section 11.2 or Section 11.3 or by QED pursuant to Section 11.4:

(a) all licenses and other rights granted by Novartis to QED under the Novartis Technology will terminate and QED shall not have any rights to use or exercise any rights under the Novartis Technology;

(b) at Novartis' written request, which must be delivered to QED not later than 60 days after receipt of QED's or Novartis' (as applicable) notice of termination, the following provisions shall apply:

(i) within [***] after receipt of such notice, QED will provide to Novartis a fair and accurate summary report of the status of the Development, manufacture and Commercialization of the Compound and Products in the Field in each country through the effective date of termination;

(ii) QED will grant, and hereby does grant (effective on delivery of the notice), and will cause its Affiliates to, and subject to Section 2.2, its sublicensees to, grant to Novartis and its Affiliates, solely for the Development, manufacture and Commercialization of Products in the Field, a perpetual, irrevocable, exclusive, worldwide, fully paid-up license (subject to the remainder of this Section 12.2(b)(ii)), with the right to grant sublicenses, under all Patent Rights and Know-How Controlled by QED and its Affiliates and sublicensees (subject to Section 2.2) as of the effective date of termination, that are specifically related to, and actually used and applied as of the date of such termination in the Development, manufacture and Commercialization of Products in the Field, to Develop, manufacture and Commercialize Products in the Field; provided that with respect to any Patent Rights and Know-How that is Controlled by QED and its Affiliates and sublicensees (subject to Section 2.2) pursuant to an agreement with a Third Party, Novartis will pay all amounts due under any such agreement as a result of Novartis' exercise of the rights granted thereunder;

(iii) to the extent permitted by Applicable Law, QED will, and will cause its Affiliates to, and subject to Section 2.2, its sublicensees to, promptly transfer to Novartis or its designee, solely for the Development, manufacture and Commercialization of Products in the Field, all right, title, and interest in and to all preclinical and clinical data, and all other supporting data, including

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pharmacology, toxicology, chemistry and biology data, and documented technical and other information or materials Controlled by QED and its Affiliates and sublicensees (subject to Section 2.2) to the extent related solely to the Development, manufacture and Commercialization of Products in the Field; *provided* that QED may retain a single copy of such items for its records as required by Applicable Law;

(iv) to the extent permitted by Applicable Law, QED will, and will cause its Affiliates to, and subject to Section 2.2, its sublicensees to, promptly transfer to Novartis or its designee all Regulatory Filings, Regulatory Approvals and Pricing Reimbursement Approvals, the contents of any global safety database, records of all interactions with Regulatory Authorities, in each case to the extent related solely to Products in the Field, that QED and its Affiliates and sublicensees (subject to Section 2.2) Control as of the effective date of such termination; *provided, however*, that if QED is restricted under Applicable Law from transferring ownership of any of the foregoing items to Novartis or its designee, QED will grant, and hereby does grant, to Novartis (or its designee) a right of reference or use to such item. QED will take all permitted actions reasonably necessary to effect such transfer or grant of right of reference or use to Novartis or its designee;

(v) to the extent reasonably requested by Novartis, QED will use Commercially Reasonable Efforts to transfer to Novartis any license agreements or other contracts between QED or any of its Affiliates and any Third Party that are solely related to the Products in the Field (including, as applicable, clinical trial and manufacturing agreements), to the extent such agreements are in effect as of the effective date of termination and such assignment or transfer is permitted at no cost or expense to QED, and to facilitate introductions of Novartis to the applicable subcontractors, licensors, manufacturing vendors, clinical trial sites, clinical trial investigators and the like;

(vi) Novartis will have the right to purchase from QED all of the inventory of the Products held by QED and its Affiliates as of the effective date of termination at a price equal to QED's actual manufacturing cost, determined in accordance with Accounting Standards, but only if such Products meet the applicable release specifications;

(vii) for a period of six months following the delivery of such notice, QED will provide such assistance as may be reasonably necessary to transfer manufacturing documents and materials that are Controlled by QED and its Affiliates (or their subcontractor(s)) and actually used and applied as of the date of such termination in the manufacture of Products, and cooperate with Novartis in reasonable respects to transfer to Novartis, or Novartis' designated contract manufacturer, the manufacturing technologies (including all relevant Know-How) that are used in the manufacture of the Products. Novartis shall reimburse QED for such assistance at QED's standard rates;

(viii) Novartis will thereafter indemnify, defend and hold QED and the QED Indemnitees harmless in the manner forth in Section 14.2(a) as if Novartis were QED and the QED Indemnitees were the Novartis Indemnitees, *mutatis mutandis* for all claims arising after the effective date of such termination, and QED's indemnification obligations under that Section 14.2(a) shall thereupon cease for claims arising after the effective date of such termination; and

(ix) if Novartis exercises the right provided in this Section 12.2(b), Novartis will pay to QED, in consideration of the rights granted to Novartis, an amount to be negotiated by the Parties, taking into account the relative contribution of the Parties to the Development of the Product and the Product's potential commercial value given its state of development; *provided, however*, that if the Parties cannot agree upon the financial terms within three months after the date of Novartis' notice, **(I)** the Parties will refer the matter to arbitration before a mutually acceptable independent arbitrator, who shall be experienced in the pharmaceutical business; **(II)** each Party will submit its final proposed terms to the other Party at least 30 days prior to submission to the independent arbitrator; **(III)** the independent arbitrator will select between the two sets of terms (*i.e.*, the independent arbitrator will select the more suitable set of terms submitted by the Parties, and will not propose a third set of terms), and shall render his or her opinion within 30 days after the final arbitration hearing; and **(IV)** the decision of the arbitrator shall be final and binding on the Parties, and shall not be subject to the dispute resolution provisions set forth in Section 15.5; and

(c) except as set forth in this Section and in Section 12.3, the rights and obligations of the Parties hereunder will terminate as of the date of such termination;

12.3 **Survival**. Expiration or termination of this Agreement will not relieve the Parties of any obligation accruing prior to such expiration or termination. Without limiting the foregoing, the provisions of Article 1, 2.2, 8.7 (for the time period specified therein), 9.1, 9.2, 10, 11, 12, 14, and 15 will survive expiration or termination of this Agreement. The provisions of Article 10 (Confidentiality) will survive the termination or expiration of this Agreement for a period of ten years.

12.4 **Termination Not Sole Remedy**. Termination is not the sole remedy under this Agreement and, whether or not termination is effected and notwithstanding anything contained in this Agreement to the contrary, all other remedies will remain available except as agreed to otherwise herein. For the avoidance of doubt, nothing in this Agreement shall obligate a Party to terminate this Agreement in the event that the other Party breaches any obligation of this Agreement, and failure to terminate this Agreement shall not prohibit or modify the recovery of damages pursuant to Section 15.5.

13. REPRESENTATIONS, WARRANTIES AND COVENANTS

13.1 **Representations and Warranties by Each Party**. Each Party represents and warrants to the other as of the Effective Date that:

(a) it is a corporation duly organized, validly existing, and in good standing under the laws of its jurisdiction of formation;

(b) it has full corporate power and authority to execute, deliver, and perform this Agreement, and has taken all corporate action required by law and its organizational documents to authorize the execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement;

(c) this Agreement constitutes a valid and binding agreement enforceable against it in accordance with its terms, except as enforceability may be limited by bankruptcy, fraudulent conveyance, insolvency, reorganization, moratorium and other laws relating to or affecting creditors' rights generally and by general equitable principles and public policy constraints (including those pertaining to limitations and/or exclusions of liability, competition laws, penalties and jurisdictional issues including conflicts of laws);

(d) all consents, approvals and authorizations from all governmental authorities or other Third Parties required to be obtained by such Party in connection with this Agreement have been obtained;

(e) the execution and delivery of this Agreement and all other instruments and documents required to be executed pursuant to this Agreement, and the consummation of the transactions contemplated hereby do not and will not **(i)** conflict with or result in a breach of any provision of its organizational documents; **(ii)** result in a breach of any agreement to which it is a party; or **(iii)** violate any law; and

(f) neither such Party nor, to the actual knowledge of such Party, any employee, agent or subcontractor of such Party involved or to be involved in the Development or manufacture of the Compound or the Products has been debarred under Subsection (a) or (b) of Section 306 of the Federal Food, Drug and Cosmetic Act (21 U.S.C. 335a).

13.2 **Representations and Warranties by QED**. QED represents and warrants to Novartis as of the Effective Date that the fair market value of the exclusive pharmaceutical patent license granted pursuant to Section 2.1 of this Agreement is less than [***] as determined in accordance with the requirements of 16 C.F.R. s. 801.10(c)(3).

13.3 **Covenants by QED**. QED covenants that:

(a) no Person who is known by QED **(a)** to have been debarred under Subsection (a) or (b) of Section 306 of said Act, or **(b)** to be on any of the FDA clinical investigator enforcement lists will be employed by or on behalf of QED or its Affiliates or otherwise participate in the performance of any activities hereunder;

(b) QED will maintain, general liability insurance with limits not less than those reasonably suited to address claims that could reasonably arise from the Development and Commercialization of pharmaceutical products (and in any event with combined limits of not less than [***] per occurrence and [***] per accident for bodily injury, including death, and property damage). At Novartis' written request, QED will provide Novartis with evidence of QED's insurance. QED will name Novartis as an additional insured party under such insurance policy, and will provide to Novartis at least 30 days prior written notice of any change or cancellation to QED's insurance program; and

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(c) QED will conduct its Development, manufacturing, and Commercialization activities relating to the Compound and/or Product(s) in accordance with Applicable Law (including data privacy laws, current international regulatory standards, including, as applicable, GMP, GLP, GCP, and other rules, regulations and requirements), and will cause any collaborators and sublicensees to comply with such Applicable Laws.

13.4 **Representations and Warranties by Novartis**. Novartis represents and warrants to QED as of the Effective Date that:

(a) *Exhibit B* sets forth a true, complete and correct list of all Patent Rights Controlled by Novartis or its Affiliates as of the Effective Date that claim the Compound or the Products, or use, formulations or manufacture thereof in the Field, or are necessary for the research, Development, manufacture, preparation, use or Commercialization of the Compound or Products;

(b) *Exhibit C* sets forth a true, complete and correct list of all Know-How Controlled by Novartis or its Affiliates as of the Effective Date that relates to the Compound or the Products, or use, formulations or manufacture thereof in the Field, or is necessary for the research, Development, manufacture, preparation, use or Commercialization of the Compound or Products;

(c) Novartis is the sole and exclusive owner, or exclusive licensee of all of the rights, title and interest in and to all Novartis Technology free from Encumbrances (other than [***]) that would interfere with QED's rights under this Agreement;

(d) *Exhibit F* sets forth a true, complete, and correct list of all Regulatory Filings (including Transferred INDs) Controlled by Novartis or its Affiliates relating to the Compound or Products.

(e) Novartis has the right to grant to QED the licenses under the Novartis Technology that it purports to grant hereunder;

(f) Novartis has the right to use and disclose and to enable QED to use and disclose (in each case under appropriate conditions of confidentiality) the Novartis Know-How free from encumbrances;

(g) Novartis has filed and prosecuted patent applications within the Novartis Patents in good faith and complied with all duties of disclosure with respect thereto;

(h) Novartis has not granted to any Third Party, including any academic organization or agency, any license, option or other rights to research, Develop, manufacture, use or Commercialize the Compound or the Products in the Field other than [***];

(i) No Third Party has any license, option or other rights or interest in or to the Novartis Technology other than [***];

(j) Novartis has not received, nor is aware, of any claims or allegations (including threatened interference actions or oppositions) alleging that the **(1)** research, Development, registration, manufacture, use or Commercialization of the

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Compound or Products infringes the Patent Rights or misappropriates the know-how of any Third Party, **(2)** that a Third Party has any right or interest in or to the Novartis Technology, or **(3)** that any of the Novartis Patents are invalid or unenforceable;

(k) To the knowledge of the Novartis associates responsible for such matters, there are no facts that could form the basis for the invalidation or unenforceability of the Novartis Patents;

(l) Novartis has not initiated or been involved in any proceedings or Claims in which it alleges that any Third Party is or was infringing or misappropriating any Novartis Technology relating the Compound or the Products;

(m) To Novartis' knowledge, there are no activities by Third Parties that would constitute infringement or misappropriation of the Novartis Technology (in the case of pending claims, evaluating them as if issued);

(n) the knowledge of the Novartis associates responsible for such matters, Novartis has taken precautions, consistent with its usual business practice, to preserve the confidentiality of the Novartis Know-How;

(o) Novartis has not entered into a government funding relationship that would result in rights to the Compound, Products or any Novartis Patents or Novartis Additional Patents" residing in the US Government, National Institutes of Health, National Institute for Drug Abuse or other agency, and the licenses granted hereunder are not subject to overriding obligations to the US Government as set forth in 35 USC §§ 200 to 204, as amended, or any similar obligations under the laws of any other country; and

(p) Novartis has not entered into any agreement with any Third Party that is in conflict with the rights granted to QED under this Agreement, and has not taken any action that would in any way prevent it from granting the rights granted to QED under this Agreement, or that would otherwise materially conflict with or adversely affect the rights granted to QED under this Agreement.

13.5 **Covenants of Novartis**. Novartis covenants that:

(a) it will not grant any interest in the Novartis Technology that is inconsistent with the terms and conditions of this Agreement;

(b) it shall not enter into any agreement with any Third Party that is in conflict with the rights granted to QED under this Agreement, and shall not take any action that would in any way prevent it from granting the rights granted to QED under this Agreement, or that would otherwise materially conflict with or adversely affect the rights granted to Licensee under this Agreement;

(c) if, at any time after execution of this Agreement, it becomes aware that it or any employee, agent or subcontractor of Novartis who participated in the Development or manufacture of a Compound or Product is on, or is being added to the FDA Debarment List or to any of the FDA clinical investigator enforcement lists ,will it will provide written notice of this to QED within five days of its becoming aware of this fact; and

(d) The BGJ398 Materials provided to QED hereunder have been manufactured in accordance with Applicable Law, including GMP at the time and in the location of manufacture, and will not have been produced in violation of any applicable provision of the United States Fair Labor Standards Act, as amended.

13.6 **No Other Warranties**. Except as expressly provided in this Article 13, (and, with respect to the BGJ398 Material, except as expressly provided in Section 6.2), the Novartis Technology is licensed hereunder "as is". Nothing in this Agreement shall be construed as a representation made or warranty given by Novartis that it will be successful in prosecuting any Novartis Patents or Novartis Additional Patents, that any patents will issue based on pending applications or that any such pending applications or patents issued thereon will be valid. *EXCEPT AS EXPRESSLY STATED IN THIS SECTION 13, **(A)** NO REPRESENTATION, CONDITION OR WARRANTY WHATSOEVER IS MADE OR GIVEN BY OR ON BEHALF OF NOVARTIS OR NOVARTIS; AND **(B)** ALL OTHER CONDITIONS AND WARRANTIES WHETHER ARISING BY OPERATION OF LAW OR OTHERWISE ARE HEREBY EXPRESSLY EXCLUDED, INCLUDING ANY CONDITIONS AND WARRANTIES OF MERCHANTABILITY, FITNESS FOR A PARTICULAR PURPOSE OR NON-INFRINGEMENT*.

14. INDEMNIFICATION; LIABILITY

14.1 **Indemnification by Novartis**. Novartis will indemnify and hold QED, its Affiliates, and their respective officers, directors and employees ("QED Indemnitees") harmless from and against any Claims against them to the extent arising or resulting from:

(a) the breach of any of the obligations, covenants, warranties or representations made by Novartis to QED under this Agreement;

(b) the infringement or misappropriation of any Third Party's intellectual property rights by Novartis' research and Development activities with respect to the Compound or Products;

(c) any activities conducted by Novartis or its Affiliates or licensees with respect to the Compound or Products on or prior to the Effective Date;

(d) the research, development, manufacture, sale, commercialization or other exploitation of the metabolite of the Compound [***], or any product incorporating or comprising the metabolite; by Novartis, any of its Affiliates or licensees or sublicensees; or

(e) the research, development, manufacture, sale, commercialization or other exploitation of the Compound or any Product by [***];

provided, however, that Novartis will not be obliged to so indemnify, defend and hold harmless the QED Indemnitees for any Claims for which QED has an obligation to indemnify Novartis Indemnitees pursuant to Section 14.2 or to the extent that such Claims arise from the breach, negligence or willful misconduct of QED or the QED Indemnitees.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

14.2 **Indemnification by QED**. QED will indemnify and hold Novartis, its Affiliates, and their respective officers, directors and employees ("Novartis Indemnitees") harmless from and against any Claims against them to the extent arising or resulting from:

(a) actions by QED, its Affiliates and sublicensees, and their respective employees, agents and subcontractors, in connection with the Development, manufacture or Commercialization of the Compound or Products, including, for the avoidance of doubt, all product liability claims (whether arising during Development or Commercialization) relating to any Compound or Product (whether pursuant to design defect, manufacturing defect, failure to notify, or otherwise); or

(b) the breach of any of the obligations, covenants, warranties, or representations made by QED to Novartis under this Agreement;

provided, however, that QED will not be obliged to so indemnify, defend and hold harmless the Novartis Indemnitees for any Claims for which Novartis has an obligation to indemnify QED Indemnitees pursuant to Section 14.1 or to the extent that such Claims arise from the breach, negligence or willful misconduct of Novartis or the Novartis Indemnitees.

14.3 **Indemnification Procedure**.

(a) For the avoidance of doubt, all indemnification claims in respect of a QED Indemnitee or Novartis Indemnitee will be made solely by QED or Novartis, respectively.

(b) A Party seeking indemnification hereunder ("Indemnified Party") will notify the other Party ("Indemnifying Party") in writing reasonably promptly after the assertion against the Indemnified Party of any Claim or fact in respect of which the Indemnified Party intends to base a claim for indemnification hereunder ("Indemnification Claim Notice"), but the failure or delay to so notify the Indemnifying Party will not relieve the Indemnifying Party of any obligation or liability that it may have to the Indemnified Party, except to the extent that the Indemnifying Party demonstrates that its ability to defend or resolve such Claim is adversely affected thereby. The Indemnification Claim Notice will contain a description of the claim and the nature and amount of the Claim (to the extent that the nature and amount of such Claim is known at such time). Upon the request of the Indemnifying Party, the Indemnified Party will furnish promptly to the Indemnifying Party copies of all correspondence, communications and official documents (including court documents) received or sent in respect of such Claim.

(c) Subject to the provisions of Sections (d) and (e) below, the Indemnifying Party will have the right, upon written notice given to the Indemnified Party within 30 days after receipt of the Indemnification Claim Notice to assume the defense and handling of such Claim, at the Indemnifying Party's sole expense, in which case the provisions of Section 14.3(d) below will govern. The assumption of the defense of a Claim by the Indemnifying Party will not be construed as acknowledgement that the Indemnifying Party is liable to indemnify any indemnitee in respect of the Claim, nor will it constitute a waiver by the Indemnifying Party of any defenses it may assert against any Indemnified Party's claim for indemnification. In the event that it is ultimately decided that

the Indemnifying Party is not obligated to indemnify or hold an Indemnitee harmless from and against the Claim, the Indemnified Party will reimburse the Indemnifying Party for any and all costs and expenses (including attorneys' fees and costs of suit) and any losses incurred by the Indemnifying Party in its defense of the Claim. If the Indemnifying Party does not give written notice to the Indemnified Party, within 30 days after receipt of the Indemnification Claim Notice, of the Indemnifying Party's election to assume the defense and handling of such Claim, the provisions of Section 14.3(e) below will govern.

(d) Upon assumption of the defense of a Claim by the Indemnifying Party: **(i)** the Indemnifying Party will have the right to and will assume sole control and responsibility for dealing with the Claim; **(ii)** the Indemnifying Party may, at its own cost, appoint as counsel in connection with conducting the defense and handling of such Claim any law firm or counsel reasonably selected by the Indemnifying Party; **(iii)** the Indemnifying Party will keep the Indemnified Party informed of the status of such Claim; and **(iv)** the Indemnifying Party will have the right to settle the Claim on any terms the Indemnifying Party chooses; *provided, however*, that it will not, without the prior written consent of the Indemnified Party, agree to a settlement of any Claim which could lead to liability or create any financial or other obligation on the part of the Indemnified Party for which the Indemnified Party is not entitled to indemnification hereunder or which admits any wrongdoing or responsibility for the claim on behalf of the Indemnified Party. The Indemnified Party will cooperate with the Indemnifying Party and will be entitled to participate in, but not control, the defense of such Claim with its own counsel and at its own expense. In particular, the Indemnified Party will furnish such records, information and testimony, provide witnesses and attend such conferences, discovery proceedings, hearings, trials and appeals as may be reasonably requested in connection therewith. Such cooperation will include access during normal business hours by the Indemnifying Party to, and reasonable retention by the Indemnified Party of, records and information that are reasonably relevant to such Claim, and making the Indemnified Party, the Indemnitees and its and their employees and agents available on a mutually convenient basis to provide additional information and explanation of any records or information provided.

(e) If the Indemnifying Party does not give written notice to the Indemnified Party as set forth in Section 14.3(c) or fails to conduct the defense and handling of any Claim in good faith after having assumed such, the Indemnified Party may, at the Indemnifying Party's expense, select counsel reasonably acceptable to the Indemnifying Party in connection with conducting the defense and handling of such Claim and defend or handle such Claim in such manner as it may deem appropriate. In such event, the Indemnified Party will keep the Indemnifying Party timely apprised of the status of such Claim and will not settle such Claim without the prior written consent of the Indemnifying Party, which consent will not be unreasonably withheld. If the Indemnified Party defends or handles such Claim, the Indemnifying Party will cooperate with the Indemnified Party, at the Indemnified Party's request but at no expense to the Indemnified Party, and will be entitled to participate in the defense and handling of such Claim with its own counsel and at its own expense.

14.4 **Mitigation of Loss**. Each Indemnified Party will take and will procure that its Affiliates take all such reasonable steps and action as are necessary or as the Indemnifying Party may reasonably require in order to mitigate any Claims (or potential losses or damages) under this Section 14. Nothing in this Agreement will or will be deemed to relieve any Party of any common law or other duty to mitigate any losses incurred by it.

14.5 **Special, Indirect and Other Losses**. *NO PARTY NOR ANY OF SUCH PARTY'S AFFILIATES SHALL BE LIABLE IN CONTRACT, TORT, NEGLIGENCE BREACH OF STATUTORY DUTY OR OTHERWISE FOR ANY SPECIAL, INDIRECT, INCIDENTAL, PUNITIVE OR CONSEQUENTIAL DAMAGES OR FOR ANY ECONOMIC LOSS OR LOSS OF PROFITS SUFFERED BY THE OTHER PARTY, EXCEPT TO THE EXTENT ANY SUCH DAMAGES ARE REQUIRED TO BE PAID TO A THIRD PARTY AS PART OF A CLAIM FOR WHICH A PARTY PROVIDES INDEMNIFICATION UNDER THIS SECTION 14.*

15. GENERAL PROVISIONS

15.1 **Assignment**. No Party may assign its rights and obligations under this Agreement without the other Party's prior written consent, except that either Party may **(i)** assign its rights and obligations under this Agreement or any part hereof to one or more of its Affiliates; or **(ii)** assign this Agreement in its entirety to a successor to all or substantially all of its business or assets to which this Agreement relates. Any permitted assignee will assume all obligations of its assignor under this Agreement and the corresponding obligations under the Ancillary Agreement (or related to the assigned portion in case of a partial assignment). Any attempted assignment in contravention of the foregoing will be void. Subject to the terms of this Agreement, this Agreement will be binding upon and inure to the benefit of the Parties and their respective successors, heirs and permitted assigns. For clarity, (1) if QED is involved in a change of control with a Third Party, then: **(a)** the Patent Rights, Know-How and data controlled by such Third Party (or any Affiliate thereof, excluding QED as a result of such transaction) existing as of the date of closing of such change of control (if such Third Party becomes the assignee of this Agreement); or **(b)** the Patent Rights, Know-How and data controlled by such Third Party (if such Third Party remains an Affiliate of QED), in each case, will not be considered "Controlled" by QED or its Affiliates, unless QED or its Third Party acquirer actually uses or applies any such Patent Rights, Know-How and data to manufacture, Develop or Commercialize the Compound or a Product (which such Patent Rights or Know-How will be considered "Controlled" by QED or its Affiliates, as applicable, for purposes of this Agreement). Any assignment or attempted assignment by either Party in violation of the terms of this Section 15.1 will be null, void, and of no legal effect.

15.2 **Extension to Affiliates**. QED will have the right to extend the rights, immunities and obligations granted in this Agreement to one or more of its Affiliates. All applicable terms and provisions of this Agreement will apply to any such Affiliate to which this Agreement has been extended to the same extent as such terms and provisions apply to QED. QED will remain primarily liable for any acts or omissions of its Affiliates.

15.3 **Severability**. Should one or more of the provisions of this Agreement become void or unenforceable as a matter of law, then this Agreement will be construed as if such provision were not contained herein and the remainder of this Agreement will be in full force and effect, and the Parties will use their commercially reasonable efforts to substitute for the invalid or unenforceable provision a valid and enforceable provision which conforms as nearly as possible with the original intent of the Parties.

15.4 **Governing Law and Jurisdiction**. This Agreement will be governed by and construed under the laws of the Commonwealth of Massachusetts, USA, without giving effect to the conflicts of laws provision thereof. The United Nations Convention on Contracts for the International Sale of Goods (1980) will not apply to the interpretation of this Agreement.

15.5 **Dispute Resolution**.

(a) In the event of a dispute under this Agreement, the Parties will refer the dispute to the Alliance Managers for discussion and resolution. If the Alliance Managers are unable to resolve such a dispute within 30 days of the dispute being referred to them, either Party may require that the Parties forward the matter to the Senior Officers (or designees with similar authority to resolve such dispute), who will attempt in good faith to resolve such dispute. If the Senior Officers cannot resolve such dispute within [***] of the matter being referred to them, either Party will be free to initiate the arbitration proceeding outlined in Section 15.5(b) to resolve the matter.

(b) Any unresolved disputes between the Parties relating to, arising out of or in any way connected with this Agreement or any term or condition hereof, or the performance by either Party of its obligations hereunder, whether before or after termination of this Agreement, will be resolved by final and binding arbitration. Whenever a Party decides to institute arbitration proceedings, it will give written notice to that effect to the other Party. Arbitration will be held in [***], in accordance with the commercial arbitration rules of the International Chamber of Commerce ("ICC"). The arbitration will be conducted by a panel of [***] arbitrators appointed in accordance with ICC rules; *provided* that each Party will within [***] after the institution of the arbitration proceedings appoint [***], and each arbitrator will have significant experience in the biopharmaceutical industry. If the [***] in accordance with ICC rules. The arbitrators will render their opinion within [***] of the final arbitration hearing. No arbitrator (nor the panel of arbitrators) will have the power to award punitive damages or to award costs and expenses of the proceeding or reasonable attorney's fees to any Party under this Agreement and such award is expressly prohibited. Decisions of the panel of arbitrators will be final and binding on the Parties. Judgment on the award so rendered may be entered in any court of competent jurisdiction.

(c) Notwithstanding Section 15.5(b), any dispute, controversy or claim relating to the scope, validity, enforceability or infringement of any Patent Right covering the manufacture, use, importation, offer for sale or sale of any Compound or Product or of any trademark rights relating to any Product shall be submitted to a court of competent jurisdiction in the country in which such Patent Right or trademark rights were granted or arose.

15.6 **Force Majeure**. In the event that either Party is prevented from performing its obligations under this Agreement as a result of any contingency beyond its reasonable control ("Force Majeure"), including but not limited to, any actions of governmental authorities or agencies, war, hostilities between nations, civil commotions, riots, national industry strikes, lockouts, sabotage, shortages in supplies, energy shortages, fire, floods and acts of nature

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

such as typhoons, hurricanes, earthquakes, or tsunamis, the Party so affected will not be responsible to the other Party for any delay or failure of performance of its obligations hereunder, for so long as Force Majeure prevents such performance. In the event of Force Majeure, the Party immediately affected thereby will give prompt written notice to the other Party specifying the Force Majeure event complained of, and will use commercially reasonable efforts to resume performance of its obligations. Notwithstanding the foregoing, if such a Force Majeure induced delay or failure of performance continues for a period of more than three consecutive months, either Party may terminate this Agreement upon written notice to the other Party.

15.7 **Waivers and Amendments**. The failure of any Party to assert a right hereunder or to insist upon compliance with any term or condition of this Agreement will not constitute a waiver of that right or excuse a similar subsequent failure to perform any such term or condition by the other Party. No waiver will be effective unless it has been given in writing and signed by the Party giving such waiver. No provision of this Agreement may be amended or modified other than by a written document signed by authorized representatives of each Party.

15.8 **Relationship of the Parties**. Nothing contained in this Agreement will be deemed to constitute a partnership, joint venture, or legal entity of any type between Novartis and QED, or to constitute one as the agent of the other. Moreover, each Party will not construe this Agreement, or any of the transactions contemplated hereby, as a partnership for any tax purposes. Each Party will act solely as an independent contractor, and nothing in this Agreement will be construed to give any Party the power or authority to act for, bind, or commit the other.

15.9 **Notices**. All notices, consents, waivers, and other communications under this Agreement must be in writing and will be deemed to have been duly given when: **(a)** delivered by hand (with written confirmation of receipt); or **(b)** when received by the addressee, if sent by an internationally recognized overnight delivery service (receipt requested), in each case to the appropriate addresses set forth below (or to such other addresses as a Party may designate by notice):

If to QED:

QED
421 Kipling Street
Palo Alto, CA 94301 USA
Attn: Chief Executive Officer

with a required copy to:

Goodwin Procter
Three Embarcadero Center
28th Floor
San Francisco, CA 94111
Attn: Maggie L. Wong, Esq.

If to Novartis:

Novartis International Pharmaceutical Ltd
Lichtstrasse 35
CH-4056 Basel
Switzerland

with a required copy to:

Novartis Institutes for BioMedical Research, Inc.
250 Massachusetts Avenue
Cambridge, MA 02139 USA
Attn: General Counsel

15.10 **Further Assurances**. QED and Novartis will execute, acknowledge and deliver any and all such other documents and take any such other action as may be reasonably necessary to carry out the intent and purposes of this Agreement.

15.11 **Compliance with Law**. Each Party will perform its obligations under this Agreement in accordance with all Applicable Laws. No Party will, or will be required to, undertake any activity under or in connection with this Agreement which violates, or which it believes, in good faith, may violate, any Applicable Law.

15.12 **No Third Party Beneficiary Rights**. The provisions of this Agreement are for the sole benefit of the Parties and their successors and permitted assigns, and they will not be construed as conferring any rights to any Third Party (including any third party beneficiary rights).

15.13 **Expenses**. Except as otherwise expressly provided in this Agreement, each Party will pay the fees and expenses of its respective lawyers and other experts and all other expenses and costs incurred by such Party incidental to the negotiation, preparation, execution and delivery of this Agreement.

15.14 **Entire Agreement**. This Agreement, together with its Exhibits and schedules, sets forth the entire agreement and understanding of the Parties as to the subject matter hereof and supersedes all proposals, oral or written, and all other prior communications between the Parties with respect to such subject matter, including the Prior Confidentiality Agreement. In the event of any conflict between a substantive provision of this Agreement and any Exhibit or schedule hereto, the substantive provisions of this Agreement will prevail.

15.15 **Counterparts**. This Agreement may be executed in two or more counterparts, each of which will be deemed an original, but all of which together will constitute one and the same instrument. Signatures provided by facsimile transmission or in Adobe Portable Document Format (.pdf) sent by electronic mail shall be deemed to be original signatures.

15.16 **Cumulative Remedies**. No remedy referred to in this Agreement is intended to be exclusive, but each will be cumulative and in addition to any other remedy referred to in this Agreement or otherwise available under law.

IN WITNESS WHEREOF, the Parties, intending to be bound, have caused this Agreement to be executed by their duly authorized representatives.

NOVARTIS INTERNATIONAL PHARMACEUTICAL LTD.

By: /s/ Simone Pfirter
Name: Simone Pfirter
Title: Authorized Signatory

By: /s/ Lars Windhorn
Name: Lars Windhorn
Title: Authorized Signatory

QED THERAPEUTICS, INC.

By: /s/ Neil Kumar
Name: Neil Kumar
Title: President

COMPOUND

***Exhibit A-1** - [***]*

[***]

Laboratory codes

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT B

NOVARTIS PATENTS

Exhibit B-1

[***]

Exhibit B-2

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

NOVARTIS KNOW-HOW

1 Regulatory Documentation

Source: Novartis Regulatory documentum archive

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

DRUG SUBSTANCE INVENTORY

[***]

DRUG PRODUCT INVENTORY – manufactured under GMP

[***]

Drug Substance and Drug Product Stability Programs:

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

INVESTMENT DOCUMENTS

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

PRESS RELEASE

BridgeBio Pharma Licenses Late-Stage Oncology Drug Infigratinib to Tackle FGFR-Driven Maladies; Establishes New Subsidiary QED Therapeutics with $65 Million in Initial Financing

PALO ALTO, Calif., Jan. XX, 2018 — BridgeBio Pharma today announced that it is has licensed infigratinib (BGJ398), a highly potent and selective inhibitor of the tyrosine kinase receptor FGFR, from Novartis. In addition, BridgeBio announced that it was launching new subsidiary QED Therapeutics to drive development of infigratinib with an initial financial commitment of $65 million.

FGFR has been implicated as a driver mutation across multiple oncologies – including roughly one out of every five cases of cholangiocarcinoma and urothelial carcinoma – and in multiple forms of pediatric skeletal dysplasias, namely achondroplasia, which affects one out of every 20,000 live births.

Infigratinib is currently in a Phase 2 clinical trial for patients with chemotherapyrefractory bile duct cancer (cholangiocarcinoma) containing FGFR2 fusions. Early clinical results, recently published in the *Journal of Clinical Oncology*, demonstrated that the compound showed meaningful activity in this population.

“We are committed to moving this compound forward in late-stage development and further proving the strong efficacy in cancer that has already been demonstrated across multiple trials,” said Daniel Hoth, M.D., QED’s chief medical officer, who has devoted over three decades to drug development, including time as chief of the Investigational Drug Branch of the National Cancer Institute (NCI).

Cholangiocarcinoma affects approximately 6,000 to 8,000 patients a year in the United States. Treatment options are limited, and survival rates vary depending on whether cholangiocarcinoma is found on the bile duct branches within the liver versus those outside of the liver.

“Despite immense strides in studying potential drugs in cholangiocarcinoma, there remains significant need to provide options to these patients,” said Stacie Lindsey, president of the Cholangiocarcinoma Foundation. “The patients and caregivers we work with are very hopeful given data already generated with infigratinib, and we are excited that the passionate team at BridgeBio and QED are working to advance this drug.”

BridgeBio co-founder and investor Frank McCormick, Ph.D., head of the NCI’s Ras initiative and former CSO and co-founder of Onyx Pharmaceuticals, remarked “Infigratinib embodies the crux of what we set out to do at BridgeBio: develop targeted therapies for genetically-driven tumors and monogenic disorders.”

In addition to its clinical data in FGFR-driven cancer, infigratinib has demonstrated potential in skeletal dysplasias, including achondroplasia. In the early work published in the *Journal of Clinical Investigation*, researchers demonstrated that low doses of infigratinib corrected pathological hallmarks of achondroplasia in mouse models.

Neil Kumar, Ph.D., chief executive officer of BridgeBio, noted that with infigratinib, "We have a late-stage, targeted oncology compound that has demonstrated clear efficacy in the clinic. With the same molecule, we have a potential best-in-class therapy to treat achondroplasia, a monogenic pediatric condition that can have devastating associated health problems, at its source."

While specific terms of the deal have not been disclosed, BridgeBio has committed $65 million in financing to QED, which is inclusive of a substantial upfront payment to Novartis as well as equity in QED. Novartis will also receive additional payments upon the realization of development and sales milestones as well as royalties.

About BridgeBio Pharma

BridgeBio is a clinical-stage biotech company developing novel, genetically targeted therapies to improve the lives of patients. The BridgeBio approach combines a traditional focus on drug development with a unique corporate model, allowing rapid translation of early stage science into medicines that treat disease at its source. Founded in 2015 by a team of industry veterans, the company has built a robust portfolio of fifteen transformative assets, each housed in its own subsidiary, ranging from pre-clinical to late stage development in multiple therapeutic areas including oncology, cardiology, neurology, dermatology and endocrinology. The company's focus on scientific excellence and rapid execution aims to translate today's discoveries into tomorrow's medicines.

About QED Therapeutics

QED Therapeutics, a subsidiary of BridgeBio Pharma, is a biotechnology company focused on precision medicine for FGFR-driven disorders. Our lead candidate is infigratinib, a best-in-class FGFR kinase inhibitor that has shown meaningful clinical activity in chemotherapy-refractory cholangiocarcinoma with FGFR2 fusions. QED is also evaluating infigratinib in preclinical studies for the treatment of achondroplasia. We plan to develop infigratinib in additional FGFR-driven tumor types and rare disorders.

BridgeBio Pharma Contact:

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

[***]	**Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.**

ASSET PURCHASE AGREEMENT

between

ALEXION PHARMA HOLDING UNLIMITED COMPANY,

ORIGIN BIOSCIENCES, INC.,

and

BRIDGEBIO PHARMA, LLC (SOLELY FOR THE PURPOSES OF SECTION 6.14)

DATED AS OF June 7, 2018

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ASSET PURCHASE AGREEMENT

This Asset Purchase Agreement, dated as of June 7, 2018 (the "Effective Date"), by and between Alexion Pharma Holding Unlimited Company, an unlimited liability company incorporated under the laws of Ireland ("Seller"), Origin Biosciences, Inc., a Delaware corporation ("Purchaser") and BridgeBio Pharma, LLC, a Delaware limited liability company ("BridgeBio") (solely for the purposes of Section 6.14).

W I T N E S S E T H:

WHEREAS, Seller, directly and indirectly through certain of its Affiliates (as defined below), is in the business of researching, developing, manufacturing or having made, marketing, distributing and selling, as the case may be, products (including pharmaceutical drugs) for use in health care; and

WHEREAS, Seller desires to sell (or to cause to be sold), and Purchaser desires to purchase, the Purchased Assets (as defined below), and Purchaser is willing to assume the Assumed Liabilities (as defined below), in each case, on the terms and subject to the conditions set forth herein;

NOW, THEREFORE, in consideration of the foregoing and the representations, warranties, covenants and agreements contained herein, the Parties hereby agree as follows:

ARTICLE I.
DEFINITIONS AND TERMS

Section 1.01 Definitions. As used in this Agreement, the following terms shall have the meanings set forth or as referenced below:

"Accounts Receivable" means all accounts receivable, notes receivable and other indebtedness due and owed by any Third Party to Seller or its Affiliates as of the end of the day immediately prior to the Closing Date, including all trade accounts receivable representing amounts receivable in respect of goods shipped, products sold or services rendered prior to the day immediately prior to the Closing Date and the full benefit of any security for such accounts or debts.

"Action" means any proceedings, investigations, audits, claims, arbitrations, litigations, inquiries, demands, actions, suits and causes of action, whether class, individual or otherwise in nature, and whether in law or in equity by or before a Governmental Authority.

"Affiliate" means, with respect to any Person, any other Person directly or indirectly controlling, controlled by, or under common control with, such Person at any time during the period for which the determination of affiliation is being made. For purposes of this definition, "control" of a Person means the power, direct or indirect, to direct or cause the direction of the management and policies of such Person whether by contract or otherwise and, in any event and, without limitation of the previous sentence, any Person owning more than fifty percent (50%) or more of the voting securities of another Person shall be deemed to control that Person. Notwithstanding the foregoing, the Parties acknowledge and agree that:
(a) BridgeBio

shall not be deemed an Affiliate of Purchaser; and (b) any other subsidiary of BridgeBio shall not be deemed an Affiliate of Purchaser unless such company directly or indirectly, controls, is controlled by, or is under common control with Purchaser without regard to their respective relationships with BridgeBio.

"Agreement" means this Asset Purchase Agreement, including all Schedules and Exhibits attached hereto, as the same may be amended, modified or supplemented from time to time in accordance with the terms hereof.

"ALXN1101 Molecule" means (a) [***] and (b) [***].

"Apportioned Obligations" has the meaning set forth in Section 6.12(b).

"Assumed Liabilities" has the meaning set forth in Section 2.04.

"Basket" has the meaning set forth in Section 8.06(a).

"Bill of Sale and Assignment and Assumption" has the meaning set forth in Exhibit A.

"BridgeBio" has the meaning set forth in the Preamble of this Agreement.

"Business" means the research, development (including regulatory activities), use, manufacture and commercialization of the ALXN1101 Molecule or any Products as conducted or contemplated to be conducted by Seller, the Divesting Entities or their Affiliates as of the Effective Date.

"Business Day" means any day other than a Saturday, a Sunday or a day on which banks in New York City, New York and San Francisco California are authorized or obligated by law or executive order to close.

"Calendar Quarter" means the respective periods of three (3) consecutive calendar months ending March 31, June 30, September 30 and December 31.

"Calendar Year" shall mean a period of twelve (12) consecutive months corresponding to the calendar year commencing on the first day of January, except that the first Calendar Year following the Closing Date shall commence on the Closing Date and end on December 31 of the year in which the Closing Date occurs.

"Claim" has the meaning set forth in Section 8.03.

"Claims Period" has the meaning set forth in Section 8.05.

"Closing" means the consummation of the Transactions pursuant to the terms of this Agreement.

"Closing Date" has the meaning set forth in Section 3.01(a).

"Closing Legal Impediment" has the meaning set forth in Section 7.01(c).

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"Code" means the U.S. Internal Revenue Code of 1986, as amended.

"Combination Product" means a product that includes a Product and at least one additional active ingredient (whether co-formulated or co-packaged) other than a Product.

"Commercialize" means, solely for the purposes of Section 6.09, any and all activities directed to the promotion, marketing, distribution or sale (and offer for sale or import or export for sale) for a Product.

"Commercially Reasonable Efforts" means, [***].

"Confidentiality Agreement" means that certain letter agreement dated August 15, 2017, between Alexion Pharmaceuticals, Inc. and BridgeBio.

"Confidential Information" has the meaning set forth in Section 6.13.

"Contract" means any written legally binding contract, agreement or other legally binding commitment.

"Copyrights" means all copyrights or other works of authorship (whether or not copyrightable), and all applications, registrations and renewals in connection therewith, and all moral rights and data, databases and database rights.

"Data Room" means the electronic data room containing documents and materials relating to the Purchased Assets.

"Development Milestone Events" has the meaning set forth in Section 2.08(a).

"Development Milestone Payments" has the meaning set forth in Section 2.08(a).

"Divesting Entities" means, collectively, all Affiliates of Seller that have any right, title or interest in, to or under the Purchased Assets.

"Drug Access Obligations" has the meaning set forth in Section 10.09(d).

"Effective Date" has the meaning set forth in the Preamble of this Agreement.

"EMA" means the European Medicines Agency, and any successor agency having substantially the same functions and jurisdiction.

"European Union" or "EU" means the European Union, as its membership may be constituted from time to time, and any successor thereto, and which, as of the date of this Agreement, consists of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and United Kingdom.

"Excluded Assets" has the meaning set forth in Section 2.03.

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"FDA" means the United States Food and Drug Administration, and any successor agency having substantially the same functions and jurisdiction.

"First Commercial Sale" means, with respect to any Product, the first sale for use or consumption of such Product by Purchaser, one of Purchaser's Affiliates or a licensee of Purchaser or one of Purchaser's Affiliates to a Third Party in any country after such Product has been granted Regulatory Approval in such country.

"Forward-Looking Statements" has the meaning set forth in Section 6.02(d).

"Fraud" means, with respect to any Party, common law fraud, as interpreted under the laws and by the courts of the State of Delaware; provided that Fraud shall only be deemed to exist if such Party had the specific intent to deceive and mislead the other Party.

"Fundamental Representations" shall mean any representations and warranties contained in [***].

"GAAP" means accounting principles and practices generally accepted in the United States, as in effect on the Effective Date.

"Governmental Authority" means any supranational, national, federal, provincial, state or local judicial (including any arbitration panel), legislative, executive or regulatory authority, agency, commission, body or instrumentality with competent jurisdiction, including the FDA, or quasi-governmental, self-regulatory organization, commission, body, authority or agency.

"Governmental Authorizations" means all licenses, permits and other authorizations, consents and approvals (including NDAs and MAAs, if any) of any Governmental Authority.

"Governmental Order" means any order, writ, judgment, injunction, decree, stipulation, determination or award entered by or with any Governmental Authority.

"Guaranteed Obligations" has the meaning set forth in Section 6.14.

"IND" means an Investigational New Drug Application filed with the FDA pursuant to Part 312 of Title 21 of the U.S. Code of Federal Regulations (or its successor regulation) with respect to a Product, or the equivalent application or filing filed with any equivalent agency or Governmental Authority outside the United States of America (including any supra-national agency such as the EMA), and all supplements, amendments, variations, extensions and renewals thereof that may be filed with respect to the foregoing.

"Indemnified Party" has the meaning set forth in Section 8.03.

"Indemnifying Party" has the meaning set forth in Section 8.03.

"Indication" means a specific disease or condition experienced by a specific human patient population.

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"Intellectual Property" means all Patent Rights, Trademarks, Internet Domain Name Registrations, Copyrights and Know-How and all other intellectual property and all copies and tangible embodiments or descriptions of any of the foregoing (in whatever form or medium) and all goodwill associated with, and all rights related to or otherwise associated with, any of the foregoing in any jurisdiction in the world (including all rights to collect royalties, products and proceeds in connection with any of the foregoing, and to sue and bring other claims for past, present and future infringement, misappropriation or other violation of any of the foregoing, and to recover damages (including attorneys' fees and expenses) and lost profits in connection therewith).

"Internet Domain Name Registrations" means all IP addresses identified via a name format, and all goodwill associated with, and all rights related to or otherwise associated with the foregoing, including all generic top-level domains (gTLDs) and country code top-level domains (ccTLDs).

"Inventories" means all inventories of finished goods, packaging, raw materials, components and work-in-process, used in or relating to a Product, to the extent owned by Seller or any Divesting Entity as of the Closing Date.

"IRS" means the U.S. Internal Revenue Service.

"Judgment" means any judgment, order, writ, injunction, legally binding agreement, stipulation or decree from a Governmental Authority.

"Know-How" means any data, results, and information of any type whatsoever, whether tangible or intangible and regardless of the form or medium, including any know-how, trade secrets, expertise, knowledge, practices, techniques, concepts, methodologies, methods, processes, protocols, designs, ideas, inventions (whether or not patentable or reduced to practice), improvements, industrial designs and models, discoveries, developments, unpublished patent applications, specifications, formulations, formulae, materials or compositions of matter of any type or kind (patentable or otherwise), assays, screens, software, algorithms, models, data, databases, database rights, chemistry, manufacturing and control (CMC) information and data, lab notebooks, patent data, stability, technology, test data and results (including pharmacological, biological, chemical, biochemical, toxicological, pre-clinical and clinical test data), analytical and quality control data, results or descriptions, studies and procedures, development, manufacturing and distribution costs, information contained in submissions to and information from regulatory authorities, and marketing and other reports.

"Knowledge of Seller" means the actual knowledge of Eric Watsky and Karen-Leigh Edwards after reasonable inquiry.

"Laws" means any federal, state, provincial, foreign or local law, common law, statute, ordinance, rule, regulation, code of any Governmental Authority or any Governmental Order.

"Liabilities" means any and all debts, liabilities, costs, guarantees, commitments, assessments, expenses, claims, losses, damages, deficiencies and obligations, whether accrued or fixed, accrued or not accrued, due or to become due, direct or indirect, whenever or however arising (including whether arising out of any contract, common law or tort based on negligence or strict liability).

"Lien" means, with respect to any property or asset, any lien, security interest, mortgage, pledge, assessment, restriction, adverse claim, levy, charge, encumbrance or other similar claim of any kind, character or description, whether of record or not, or any contract to give any of the foregoing, in respect of such property or asset.

"Losses" means losses, liabilities, damages, expenses, penalties, assessments, interest, awards, fines, fees, suits, actions, causes of action, judgments, Taxes and awards directly incurred or suffered (and, if applicable, reasonable consultants' and attorneys' fees associated therewith) including any such fees and expenses incurred in connection with investigating, defending against or settling any of the foregoing and the reasonable costs and expenses of enforcing the indemnification rights of the Indemnified Party hereunder.

"MAA" means an EU marketing authorization application.

"Material Adverse Effect" means, with respect to Seller, any change, effect, event, circumstance, occurrence or state of facts that is or would reasonably be expected (a) to have a material adverse effect on the Purchased Assets, taken as a whole, or (b) to have a material adverse effect on the ability of Seller to perform its obligations under this Agreement and to consummate the Transactions, provided that none of the following changes, effects, events, circumstances, occurrences or states of facts shall be deemed, either alone or in combination, to constitute a Material Adverse Effect, or be taken into account in determining whether there has been or would reasonably be expected to be a Material Adverse Effect: (i) changes or effects in the general business, economic, social, political or legal conditions or the securities, syndicated loan, credit or financial markets; (ii) changes or proposed changes in applicable Law or GAAP (or any applicable accounting standards in any jurisdiction outside the United States) or the enforcement thereof; (iii) changes to Law that generally affect the industries in which the Seller or its Affiliates operate; (iv) changes or effects that arise out of or are attributable to the commencement, occurrence, continuation or intensification of any war, sabotage, armed hostilities or acts of terrorism; (v) earthquakes, hurricanes or other natural disasters; (vi) changes or effects that arise out of or are attributable to the negotiation, execution, announcement or pendency of the Transactions; (vii) currency fluctuations; or (viii) any action or inaction Seller is required to take or refrain from taking under this Agreement.

"Milestone Events" has the meaning set forth in Section 2.08(b).

"Milestone Payments" has the meaning set forth in Section 2.08(b).

"Net Sales" means [***].

"Non-assigned Asset" has the meaning set forth in Section 2.02(a).

"Outside Date" means July 21, 2018.

"Party" means Seller or Purchaser individually, as the context so requires, and the term "Parties" means, collectively, Seller and Purchaser.

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"Patent Assignment" has the meaning set forth in Exhibit A.

"Patent Rights" means all (a) issued patents; (b) pending patent applications and any related patent applications filed in the future claiming priority thereto, including all provisional applications, non-provisional applications, international (PCT) applications, substitutions, continuations, continuations in part, divisions, renewals, and all patents granted thereon or issuing therefrom; (c) all patents of addition, reissues, re-examinations and extensions or restorations by existing or future extension or restoration mechanisms, including supplementary protection certificates or the equivalent thereof; (d) registration patents, inventor's certificates or confirmation patents; (e) all inventions disclosed in each such patent or patent application, and all rights and priorities in any of the foregoing; and (f) any form of government-issued right substantially similar to any of the foregoing, in each case in any country or patent examining or granting jurisdiction.

"Permitted Liens" means (a) all Liens approved in writing by Purchaser as Permitted Liens; (b) statutory Liens arising out of operation of Law with respect to a Liability incurred in the ordinary course of business and which is not delinquent; (c) Liens for Taxes not yet due, payable, delinquent or subject to penalties for nonpayment, or which are being contested in good faith through appropriate proceedings; and (d) mechanics', materialmens', carriers', workmens', warehousemens', repairmens', landlords' or other like Liens and security obligations that are incurred in the ordinary course of business and are not delinquent.

"Person" means an individual, a limited liability company, a joint venture, a corporation, a partnership, an association, a trust, a division or an operating group of any of the foregoing or any other entity or organization.

"Post-Closing Apportioned Period" has the meaning set forth in Section 6.12(b)

"Pre-Closing Apportioned Period" has the meaning set forth in Section 6.12(b).

"Priority Review Voucher" means a voucher issued by the FDA that entitles the holder of such voucher to priority review of, and action upon, an NDA by the FDA not later than six (6) months after the filing of such application to the FDA.

"Product" means any pharmaceutical product containing the ALXN1101 Molecule.

"PRV Sale" has the meaning set forth in Section 2.07(a).

"Purchase Price" means an aggregate amount equal to the sum of: (i) the Upfront Payment *plus* (ii) all Royalty Payments that are actually earned by Seller *plus* (iii) all Milestone Payments that are actually earned by Seller.

"Purchased Assets" has the meaning set forth in Section 2.01.

"Purchaser" has the meaning set forth in the Preamble of this Agreement.

"Purchaser Indemnitees" has the meaning set forth in Section 8.01(a).

"Purchaser Material Adverse Effect" means, with respect to Purchaser, any change, effect, event, circumstance, occurrence or state of facts that is or would reasonably be expected to have a material adverse effect on the ability of Purchaser to perform its obligations under this Agreement and to consummate the Transactions, provided that none of the following changes, effects, events, circumstances, occurrences or states of facts shall be deemed, either alone or in combination, to constitute a Purchaser Material Adverse Effect, or be taken into account in determining whether there has been or would reasonably be expected to be a Purchaser Material Adverse Effect: (i) [***]; (ii) [***]; (iii) [***]; (iv) [***]; (v) [***]; (vi) [***]; (vii) changes or effects that arise out of or are attributable to the negotiation, execution, announcement or pendency of the Transactions; or (viii) any action or inaction Purchaser is required to take or refrain from taking under this Agreement.

"Purchaser Transfer Letter to FDA" means the letter(s) from Purchaser to the FDA, duly executed by Purchaser, notifying the FDA of the transfer of the rights to the appropriate Transferred Governmental Authorizations to Purchaser in the United States.

"Regulatory Approval" means the approval of the applicable Governmental Authority necessary for the marketing and sale of a Product, including any separate pricing and/or reimbursement approvals that may be required.

"Regulatory Exclusivity" means any exclusive marketing rights or data exclusivity rights conferred by a Governmental Authority, or otherwise by Law, with respect to a Product other than Patent Rights.

"Regulatory Information" means (a) any applications, filings, submissions, approvals, minutes of meetings or telephone conversations or correspondence between Seller or any of the Divesting Entities or any of their Affiliates and any Governmental Authority, that relate to the Business or the Purchased Assets, including, all INDs, establishment license applications, drug master files, applications for designation as an "Orphan Product" under the Orphan Drug Act, for "Fast Track" status under Section 506 of the FFDCA (21 U.S.C. § 356), for "Breakthrough Therapy" status under Section 506 of the FFDCA (21 U.S.C. § 356), as a "rare pediatric disease" under Section 529 of the FFDCA (21 U.S.C. 360ff) or for a Special Protocol Assessment under Section 505(b)(5)(B) and (C) of the FFDCA (21 U.S.C. § 355(b)(5)(B) and (C)), manufacturing approvals, technical, medical, and scientific licenses, and pre-clinical, clinical and non-clinical study authorization applications or notifications), all amendments, supplements, supporting files, data, studies, and reports relating thereto (in hard and electronic form); and (b) all technical and other information contained therein, and all correspondence with the FDA and other Governmental Authority relating to the foregoing, that, in each case, are in the possession of or controlled by, or held by or for Seller, the Divesting Entities or their Affiliates, whether generated, filed or held by or for Seller, the Divesting Entities or their Affiliates.

"Representatives" means, with respect to either Party, such Party's Affiliates and their respective parents, directors, officers, employees, attorneys, accountants, representatives, financial advisors, lenders, consultants, advisors and other agents.

"Retained Liabilities" has the meaning set forth in Section 2.05.

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"Retained Taxes" means (i) all Taxes of Seller, the Divesting Entities or any of their respective Affiliates, or for which Seller, the Divesting Entities or any of their respective Affiliates is otherwise liable, for any taxable period, (ii) all Taxes relating to the Excluded Assets or Retained Liabilities for any taxable period; and (iii) all Taxes relating to the Purchased Assets or the Assumed Liabilities for any taxable period ending on or prior to the Closing Date and, with respect to any taxable period beginning before and ending after the Closing Date, for the portion of such taxable period ending on the Closing Date, except as provided in Section 6.12(b).

"Royalty Payments" has the meaning set forth in Section 2.09.

"Royalty Term" has the meaning set forth in Section 2.09.

"Sales Milestone Events" has the meaning set forth in Section 2.08(b).

"Sales Milestone Payments" has the meaning set forth in Section 2.08(b).

"Scheduled Intellectual Property" has the meaning set forth in Section 4.08(a)

"SEC" has the meaning set forth in Section 6.03.

"Seller" has the meaning set forth in the Preamble of this Agreement.

"Seller Indemnitees" has the meaning set forth in Section 8.02(a).

"Seller Transfer Letter to FDA" means the letter(s) from Seller to the FDA, duly executed by Seller (or any Affiliate of Seller, as applicable), notifying the FDA of the transfer of the rights to the appropriate Transferred Governmental Authorizations to Purchaser in the United States.

"Services Agreement" means the [***].

"Solvent" has the meaning set forth in Section 5.07.

"Tax Contest" has the meaning set forth in Section 8.04(b).

"Tax Return" means any return, report, declaration, information return, statement or other document filed or required to be filed with any Taxing Authority in connection with the determination, assessment or collection of any Tax or the administration of any Laws relating to any Tax.

"Taxes" means all taxes, including income, gross revenue, excise, property, sales or use, value added, profits, license, withholding (with respect to compensation or otherwise), payroll, employment, net worth, capital gains, transfer, stamp, social security, occupation and franchise taxes, imposed by any Taxing Authority, and including any interest, penalties and additions attributable thereto.

"Taxing Authority" means any Governmental Authority, exercising any authority to impose, regulate or administer the imposition of Taxes.

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"Third Party" means any Person other than Purchaser, Seller and each of their respective Affiliates.

"Third Party Claim" has the meaning set forth in Section 8.03.

"Third Party Claim Notice" has the meaning set forth in Section 8.03.

"Trademarks" means all trademarks, service marks, designs, trade dress, logos, slogans, trade names, business names, corporate names and all other indicia of origin, together with all translations, adaptations, derivations and combinations thereof, and all social media handles associated therewith and all applications for registration, registrations and renewals of any of the foregoing and all goodwill associated therewith.

"Transactions" means, collectively, the transactions contemplated by this Agreement, including the purchase and sale of the Purchased Assets and the assumption of the Assumed Liabilities.

"Transfer Letters to FDA" means the Purchaser Transfer Letter to FDA and the Seller Transfer Letter to FDA.

"Transfer Taxes" means any federal, state, county, local, foreign and other sales, use, transfer, value added, conveyance, documentary transfer, stamp duty, recording or other similar Tax, fee or charge imposed in connection with the Transactions or the recording of any sale, transfer or assignment of property (or any interest therein) effected pursuant to this Agreement.

"Transferred Books and Records" has the meaning set forth in Section 2.01(g).

"Transferred Contracts" has the meaning set forth in Section 2.01(h).

"Transferred Copyrights" has the meaning set forth in Section 2.01(d).

"Transferred Governmental Authorizations" has the meaning set forth in Section 2.01(f).

"Transferred Intellectual Property" means the Transferred Patents, Transferred Trademarks, Transferred Copyrights and Transferred Internet Domain Names.

"Transferred Internet Domain Names" has the meaning set forth in Section 2.01(e).

"Transferred Patents" has the meaning set forth in Section 2.01(b).

"Transferred Trademarks" has the meaning set forth in Section 2.01(c).

"Upfront Payment" has the meaning set forth in Section 2.06.

"Valid Claim" means a claim (a) of any issued, unexpired U.S. or foreign Patent Right, which will not, in the country of issuance, have been rejected, revoked, nor held invalid or

unenforceable by a Governmental Authority of competent jurisdiction in an unappealed (within the time allowed for appeal) or final, unappealable decision, or (b) of any U.S. or foreign patent application within a Patent Right, which will not, in the country in question, have been cancelled, withdrawn, abandoned or finally rejected by a Judgment from which no appeal may be taken, nor been pending for more than [***].

Section 1.02 Other Definitional Provisions.

(a) The words "hereof", "herein", "hereto" and "hereunder" and words of similar import, when used in this Agreement, shall refer to this Agreement as a whole and not to any particular provision of this Agreement.

(b) The terms defined in the singular have a comparable meaning when used in the plural, and vice versa.

(c) The terms "U.S. Dollars" and "$" mean lawful currency of the United States.

(d) The terms "include," "includes" and "including" means "including, without limitation."

(e) The words "will" and "shall" have the same meaning.

(f) When a reference is made in this Agreement to an Article, a Section, an Exhibit or a Schedule, such reference shall be to an Article or a Section of, or an Exhibit or a Schedule to, this Agreement unless otherwise indicated.

(g) Time periods based on a number of days within or following which any payment is to be made or act is to be done shall be calculated by excluding the day on which the period commences and including the day on which the period ends and, if applicable, by extending the period to the next Business Day following if the last day of the period is not a Business Day.

(h) The term "United States" shall refer to the United States of America and its territories, including Puerto Rico.

ARTICLE II.
PURCHASE AND SALE

Section 2.01 Purchase and Sale of Assets. Upon the terms and subject to the conditions set forth herein, at the Closing, Seller shall, and shall cause the Divesting Entities to, sell, convey, assign and transfer to Purchaser, and Purchaser shall purchase, acquire and accept from Seller and the Divesting Entities, free and clear of all Liens (other than Permitted Liens), all of Seller's and the Divesting Entities' right title and interest in, to and under the assets, properties, goodwill and business of every kind and description and wherever located, whether tangible or intangible, real or personal set forth below (collectively, the "Purchased Assets"):

(a) the Inventories;

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(b) all Patent Rights set forth on Schedule 2.01(b) (the "Transferred Patents");

(c) all active Trademark registrations and Trademark applications and all material unregistered Trademarks set forth on Schedule 2.01(c) (the "Transferred Trademarks");

(d) all active Copyright registrations set forth on Schedule 2.01(d) (the "Transferred Copyrights");

(e) all active Internet Domain Name Registrations, together with all renewals thereof and all goodwill associated therewith, set forth on Schedule 2.01(e) (the "Transferred Internet Domain Names");

(f) all right and interest in all Governmental Authorizations set forth on Schedule 2.01(f) (collectively, the "Transferred Governmental Authorizations");

(g) subject to Section 6.04, all books and records (or portions of books and records), including laboratory notebooks and other records, pre-clinical and clinical studies lists, files (excluding patent prosecution files), documents, correspondence, studies, reports, data (including all pharmacological, pre-clinical, clinical, analytical, quality control and manufacturing data (including batch records and technical reports)) and other printed, written or electronic materials (in all cases, in any form or medium) that relate to, or that arise out of, the conduct of the Business or the Purchased Assets and in the possession or control of Seller or any of its Affiliates (the foregoing records and documents, collectively the "Transferred Books and Records");

(h) all proprietary rights to the information, data and work product proprietary to Seller, the Divesting Entities or any of their Affiliates related exclusively to the research and development activities and pre-clinical and clinical trials conducted or being conducted in connection with the ALXN1101 Molecule or any Products;

(i) all Contracts set forth on Schedule 2.01(i) (collectively, the "Transferred Contracts"); and

(j) all claims, counterclaims, defenses, causes of action, rights under express or implied warranties, rights of recovery, rights of set-off, rights of subrogation and all other rights of any kind against any Third Party, to the extent relating to any Assumed Liabilities or the ALXN1101 Molecule, any Products, or any Purchased Assets.

Section 2.02 Matters Related to Purchased Assets.

(a) Notwithstanding anything in this Agreement to the contrary, this Agreement shall not constitute an agreement to assign or transfer any Purchased Asset to the extent that such Purchased Asset is not assignable or transferable without the consent of any Person, other than Seller, Purchaser or any of their respective Affiliates, to the extent that such consent shall not have been given prior to the Closing (each, a "Non-assigned Asset"); provided that, subject to Section 6.05, Seller shall use, both prior to and for [***] after the Closing, commercially reasonable efforts to obtain, and Purchaser shall

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use its commercially reasonable efforts to assist and cooperate with Seller in connection therewith, all necessary consents to the assignment and transfer of each Non-assigned Asset; provided, further, that, subject to Section 6.05, none of Seller, Purchaser or any of their respective Affiliates shall be required to pay money to any Third Party, commence any litigation or offer or grant any accommodation (financial or otherwise) to any Third Party in connection with such efforts. With respect to any Non-assigned Asset, for a period beginning on the Closing Date and ending on the earlier of (i) [***] and (ii) the date that is [***] months after the Closing Date, Seller shall, and shall cause the Divesting Entities to, cooperate in any lawful and reasonable arrangement reasonably proposed by Purchaser under which Purchaser will obtain the economic claims, rights and benefits under the Non-Assigned Asset or related claim, right or benefit with respect to which the consent has not been obtained in accordance with this Agreement; [***]. Such reasonable arrangement may include (A) the subcontracting, sublicensing or subleasing to Purchaser of any and all rights of Seller or any of its Affiliates against the other party to a Third Party agreement arising out of a breach or cancellation thereof by the other party, and (B) the enforcement by Seller or any of its Affiliates of such rights.

(b) Seller provides no assurances to Purchaser that any consent, authorization, approval or waiver of a Third Party contemplated by this Section 2.02 will be granted. Subject to compliance by Seller with the provisions of this Section 2.02, the Parties acknowledge and agree that neither Seller nor its Affiliates shall be obligated to obtain any such authorization, approval, consent or waiver hereunder and neither (i) the failure to so actually obtain any such authorization, approval, consent or waiver in connection with the consummation of the Transactions in and of itself nor (ii) any default or termination or Action commenced or threatened by or on behalf of any Person to the extent arising out of any such failure to so actually obtain any such authorization, approval, consent or waiver in connection with the consummation of the Transactions in and of itself shall (to the extent that the necessity of such authorization, approval, consent or waiver was disclosed on the Schedules) be deemed (A) a breach of any representation, warranty or covenant of Seller contained in this Agreement or (B) to cause any condition to Purchaser's obligations to close the Transactions to be deemed not satisfied.

Section 2.03 Excluded Assets. Notwithstanding anything to the contrary contained in Section 2.01 or elsewhere in this Agreement, the following (collectively, the "Excluded Assets"): shall not be part of the sale and purchase contemplated hereunder and are excluded from the Purchased Assets, and shall remain the property of Seller or its Affiliates after the Closing:

(a) all cash and cash equivalents of Seller and any of its Affiliates;

(b) all Accounts Receivable;

(c) all Contracts other than the Transferred Contracts;

(d) all Governmental Authorizations of Seller or any of its Affiliates other than the Transferred Governmental Authorizations;

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(e) all intellectual property of Seller or any of its Affiliates other than the Transferred Intellectual Property;

(f) all of the following: (A) any records to the extent related to any Excluded Asset or Retained Liability, (B) any original tax records to the extent related to Taxes that constitute Retained Taxes (provided, however, that such Tax records shall be provided to Purchaser upon Purchaser's reasonable request), (C) any records of Seller or its Affiliates other than the Transferred Books and Records, (D) any attorney work product, attorney-client communications and other items protected by attorney-client or similar privilege and (E) any documents that were received from Third Parties in connection with their proposed acquisition of the Purchased Assets or that were prepared by Seller or any of its Affiliates in connection therewith;

(g) all rights and claims of Seller or any of its Affiliates to the extent relating to any Excluded Asset or any Retained Liability, including any such items arising under insurance policies and all guarantees, warranties, indemnities and similar rights in favor of Seller and its Affiliates in respect of any Excluded Asset or any Retained Liability;

(h) any refund or credit of Taxes to the extent attributable to any Retained Taxes;

(i) all rights of Seller and its Affiliates under this Agreement and the other agreements and instruments executed and delivered in connection with this Agreement;

(j) all land, buildings, improvements and fixtures thereon owned or leased by Seller or any of its Affiliates; and

(k) all tangible personal property and other fixed assets and interests therein, including all equipment, furnishings, furniture and fixtures, owned or leased by Seller or any of its Affiliates, including the tangible personal property and other fixed assets and interests therein, and any warranty rights applicable to such tangible personal property, fixed assets and equipment.

Section 2.04 Assumption of Certain Obligations. Purchaser agrees, effective at the Closing, to assume and to timely satisfy and discharge all Liabilities of Seller and its Affiliates, in each case other than the Retained Liabilities, solely to the extent arising out of or relating to the Purchased Assets after the Closing (all of the foregoing Liabilities being collectively referred to hereinafter as the "Assumed Liabilities").

Section 2.05 Retained Liabilities. Notwithstanding any other provision of this Agreement, Purchaser shall not assume any Liability of Seller and its Affiliates other than the Assumed Liabilities, each of which shall be retained and paid, performed and discharged when due by Seller and its Affiliates including but not limited to those set forth below (such Liabilities being collectively referred to hereinafter as the "Retained Liabilities"):

(a) all Liabilities to the extent arising out of or related to any Excluded Asset;

(b) all Accounts Payable, accrued expenses and other current liabilities to the extent arising out of services or goods provided prior to the Closing (whether or not yet billed an due);

(c) all Liabilities of Seller and its Affiliates relating to any present or former employees, officers, directors, retirees, independent contractors or consultants of Seller and its Affiliates, including any Liabilities associated with any claims for wages or other benefits, bonuses, accrued vacation, workers' compensation, severance, retention, termination or other payments;

(d) all Liabilities of Seller and its Affiliates arising out of or relating to the Purchased Assets, including any Retained Taxes, solely to the extent arising out of or relating to any actions or occurrence prior to the Closing; and

(e) any royalty or other similar payment related to the ALXN1101 Molecule to the extent incurred prior to the Closing Date.

Section 2.06 Purchase Price. In consideration of the sale and transfer of the Purchased Assets, Purchaser agrees to pay to Seller at the Closing, on behalf of Seller and each Divesting Entity, $1,000,000 (the "Upfront Payment"), exclusive of any Transfer Taxes, and to assume, satisfy and discharge when due all Assumed Liabilities. The Upfront Payment shall be paid in immediately available funds by wire transfer on the Closing Date, in accordance with written instructions given by Seller to Purchaser not less than two (2) Business Days prior to the Closing Date, in cash in U.S. Dollars.

Section 2.07 Priority Review Voucher.

(a) If Purchaser or one of its Affiliates or licensees receives a Priority Review Voucher from the FDA in respect of a Product and Purchaser, its Affiliate or licensee transfer the right to use such Priority Review Voucher to a Third Party in exchange for consideration (a "PRV Sale"), Purchaser shall, within [***] days following such PRV Sale, pay to Seller in cash an amount equal to [***] percent ([***]%) of the gross proceeds that are directly attributable to such PRV Sale.

(b) If Purchaser or one of its Affiliates or licensees receives a Priority Review Voucher from the FDA in respect of a Product and Purchaser, its Affiliate or licensee does not consummate a PRV Sale on or before the one hundred eightieth (180th) day following the receipt of such Priority Review Voucher, Purchaser shall, within [***] Business Days following such date, pay to Seller $18,750,000. If, following such payment, Purchaser or one of its Affiliates or licensees consummates a PRV Sale, any amounts paid to Seller pursuant to this Section 2.07(b) shall be offset against any amounts due pursuant to Section 2.07(a).

(c) Purchaser's payment obligations set forth in this Section 2.07 are payable without interest and only with respect to the first Priority Review Voucher received by Purchaser or one of its Affiliates or licensees.

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Section 2.08 Milestone Payments.

(a) Development Milestone Payments. Purchaser shall make the following one-time payments to Seller (the "Development Milestone Payments") after the achievement following the Closing Date by or on behalf of Purchaser of the applicable event set forth below by the first Product (collectively, the "Development Milestone Events").

Development Milestone Event	Development Milestone Payment
[***]	[***]
[***]	[***]

(b) Sales Milestones. Purchaser shall make the following one-time payments to Seller (the "Sales Milestone Payments", together with the Development Milestone Payments, the "Milestone Payments") after the achievement following the Closing Date by or on behalf of Purchaser of the applicable event set forth below by the first Product (collectively, the "Sales Milestone Events", together with the Development Milestone Events, the "Milestone Events").

Sales Milestone Event	Sales Milestone Payment
Occurrence of [***] of such first Product in [***]	[***]
Occurrence of [***] of such first Product in [***]	[***]
First occurrence of [***]	[***]
First occurrence of [***]	[***]

(c) Purchaser shall notify Seller in writing as soon as reasonably possible following the achievement of a Milestone Event. Purchaser shall pay to Seller the corresponding Milestone Payment within [***] days after achievement of the applicable Milestone Event. Each Milestone Payment shall be payable only once and without interest, and no amounts shall be due for subsequent or repeated achievements of any Milestone Event (whether by the same Product or a different Product). In accordance with the foregoing, the maximum total Milestone Payments payable by Purchaser to Seller under this Section 2.08 for all Products would be Twenty Million Dollars ($20,000,000). The Milestone Payments shall be non-refundable.

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Section 2.09 Royalties.

(a) Purchaser shall pay the following royalties to Seller (the "Royalty Payments") as set forth in the table below. The Royalty Payments shall be payable to Seller, on a Product-by-Product and country-by-country basis, until the last to occur of (i) the last to expire Valid Claim of a Transferred Patent that covers the composition of matter of such Product in such country, (ii) the expiration of Regulatory Exclusivity granted by the applicable Governmental Authority for such Product in such country, and (iii) the [***] anniversary of the First Commercial Sale of such Product in such country (the "Royalty Term"). The Royalty Payments shall be non-refundable. The Royalty Payments shall be payable to Seller within [***] days after the end of each Calendar Quarter. If the manufacture, use or sale of any Product is covered by more than one of the Transferred Patents, multiple royalties shall not be due.

Net Sales Tranche	**Royalty Rate for such Portion of Net Sales**	**Royalty Rate Floor**
For that portion of aggregate Net Sales of all Products on a worldwide basis per Calendar Year of [***]	[***]	[***]
For that portion of aggregate Net Sales of all Products on a worldwide basis per Calendar Year of [***]	[***]	[***]
For that portion of aggregate Net Sales of all Products on a worldwide basis per Calendar Year of [***]	[***]	[***]
For that portion of aggregate Net Sales of all Products on a worldwide basis per Calendar Year of greater than or equal to [***]	[***]	[***]

(b) Adjustments. Notwithstanding anything in Section 2.09(a) to the contrary,

(i) if at any time during the Royalty Term for a given Product in a particular country, there is both (A) no Valid Claim of any Transferred Patent covering the composition of matter of such Product in such country and (B) no Regulatory Exclusivity in respect of such Product in such country, the applicable royalty rate contemplated by Section 2.09(a) shall be reduced by [***] of the otherwise applicable royalty rate;

(ii) if at any time during the Royalty Term for a given Product in a particular country, there is no Valid Claim of any Transferred Patent covering the composition of matter of such Product in such country but there is Regulatory Exclusivity in respect of such Product in such country, the applicable royalty rate contemplated by Section 2.09(a) shall be reduced by [***] of the otherwise applicable royalty rate; and

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(iii) Purchaser will have the right to reduce the royalties payable to Seller pursuant to Section 2.09(a) by an amount equal to [***] of any royalty payments paid by Purchaser or its Affiliates or its licensees or sublicensees of rights to any Product to any Third Party to license any Patent Rights that are necessary to develop, manufacture, use, sell or otherwise commercialize the Products.

(c) Minimum Floor. In no event will any reductions under Section 2.09(b)(i), Section 2.09(b)(ii) and Section 2.09(b)(iii) for any Product in any given Calendar Quarter during the Royalty Term reduce (x) the royalty rate during such period to an amount that is less than the applicable royalty rate floor set forth in the table included in Section 2.09(a), or (y) the Royalty Payments due by Purchaser by more than [***] of the amount that otherwise would have been due and payable to Seller in such Calendar Quarter for such Product but for the reductions set forth in Section 2.09(b)(i), Section 2.09(b)(ii) and Section 2.09(b)(iii).

Section 2.10 Audits. Upon the written request of Seller, Purchaser and/or its Affiliates as applicable, shall permit an independent certified public accounting firm of nationally recognized standing selected by Seller and reasonably acceptable to Purchaser, to have access during normal business hours to such of the records of Purchaser as may be reasonably necessary for the sole purpose of verifying the basis and accuracy of payments made and other obligations under Section 2.07, Section 2.08 and Section 2.09. Seller shall treat all financial information subject to review under this Section 2.10 in accordance with the confidentiality and non-use provisions of this Agreement, and shall cause its accounting firm to enter into an acceptable confidentiality agreement with Purchaser obligating it to retain all such information in confidence pursuant to such confidentiality agreement. [***] The result of the audit shall, in the absence of manifest error, be final and binding on the Parties.

Section 2.11 Allocation of Purchase Price. Within [***] days after the Closing Date, Purchaser shall prepare and deliver to Seller a statement allocating the purchase price (including the assumed liabilities) for Tax purposes, as finally determined in accordance with this Section 2.11. The Parties covenant and agree (a) to report for Tax purposes the allocation of the purchase price (including assumed liabilities) among the Purchased Assets in a manner entirely consistent with such allocation, (b) that the Parties will cooperate with each other in connection with the preparation, execution and filing of all Tax Returns related to such allocation and will take no position inconsistent with such allocation in the filing of any Tax Return, except upon a final determination by an applicable Taxing Authority and (c) that the Parties will use commercially reasonable efforts to advise each other regarding the existence of any Tax audit, controversy or litigation related to such allocation.

Section 2.12 Transfer Taxes.

(a) All Transfer Taxes payable in connection with the transfer of the Purchased Assets to Purchaser under this Agreement and the Transactions shall be borne

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and paid solely by [***] when due in compliance with applicable Transfer Tax Laws; provided that, if [***] determines that it is required by applicable Law to pay any Transfer Taxes, then [***] shall pay such Transfer Taxes, and [***] shall, subject to receipt of satisfactory evidence of payment thereof, promptly reimburse [***] in U.S. Dollars.

(b) Purchaser and Seller shall cooperate in making and timely filing all Tax Returns as may be required to comply with the provisions of applicable Transfer Tax Laws.

Section 2.13 Risk of Loss; Casualty and Condemnation. Prior to the Closing, any loss or damage to the Purchased Assets from fire, casualty or otherwise shall be the sole responsibility of Seller. At the Closing, title to the Purchased Assets will be transferred to Purchaser and Purchaser will thereafter bear any risk of such loss or damage.

Section 2.14 Certain Costs. All costs and fees associated with (a) removing and moving any Purchased Asset to a location designated in writing by Purchaser and (b) transferring to Purchaser or one of its Affiliates the Transferred Patents and the Transferred Governmental Authorizations conveyed to Purchaser hereunder shall be borne and paid [***]; provided that if any such amount shall be incurred by Seller or Purchaser, the other Party shall, subject to receipt of satisfactory evidence of the payment thereof, promptly reimburse the other Party for the amount of such costs and expenses.

Section 2.15 Withholding. Purchaser shall be entitled to deduct and withhold from any amounts otherwise payable to Seller under this Agreement such amounts as Purchaser, in its reasonable judgment, determines must be deducted and withheld with respect to the making of such payment under the Code, or any applicable provisions of U.S. federal, state, or local or foreign Tax Law; provided, that prior to withholding, Purchaser shall use commercially reasonable efforts to provide prior notice to Seller to allow Seller an opportunity to provide the appropriate withholding certificate to prevent or minimize such withholding. Such amounts so deducted and withheld shall be treated for all purposes of this Agreement as having been paid to Seller in respect of which such deduction and withholding was made by Purchaser.

ARTICLE III.
CLOSING

Section 3.01 Closing.

(a) The Closing shall take place no later than three (3) Business Days after the satisfaction or waiver of the conditions precedent to Closing specified in ARTICLE VII (other than those conditions that, by their nature, cannot be satisfied until the Closing Date) at the offices of Ropes & Gray LLP, Prudential Tower, 800 Boylston St., Boston, Massachusetts (including any Persons connected by remote access to the Closing) or at such time and place as the Parties may mutually agree in writing. The date on which the Closing occurs is referred to as the "Closing Date." The Closing shall be deemed to occur and be effective as of 5 p.m. Boston time on the Closing Date.

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(b) At the Closing, Seller shall deliver, or cause to be delivered, to Purchaser the instruments and documents set forth on Exhibit A.

(c) At the Closing, Purchaser shall deliver to Seller (i) the Upfront Payment, by wire transfer in accordance with Section 2.06 and (ii) the instruments and documents set forth on Exhibit B.

ARTICLE IV.
REPRESENTATIONS AND WARRANTIES OF SELLER

As of the Effective Date, Seller hereby represents and warrants to Purchaser as follows:

Section 4.01 Organization. Seller is an unlimited liability company duly organized, validly existing and in good standing under the Laws of Ireland. Each Divesting Entity is duly organized, validly existing and, where applicable, in good standing under the Laws of the jurisdiction of its organization. Seller and each Divesting Entity is authorized to do business under the Laws of all jurisdictions in which it is required to be so authorized, except as would not, individually or in the aggregate, have a Material Adverse Effect.

Section 4.02 Authority; Binding Effect.

(a) Seller and each Divesting Entity has all requisite corporate, limited liability company or other similar organizational power and authority to own and operate its properties and assets and to carry on its business as it is now being conducted and as it is related to the Purchased Assets. Seller has all requisite corporate, limited liability company or other similar organizational power and authority to execute and deliver this Agreement, and to carry out, or to cause to be carried out, the Transactions. The execution and delivery by Seller of this Agreement, and the performance by Seller and each Divesting Entity of its obligations hereunder and thereunder, have been duly authorized by all requisite corporate action on the part of Seller and such Divesting Entity.

(b) This Agreement has been duly executed and delivered by Seller and, assuming the valid execution and delivery by Purchaser, constitutes a legal, valid and binding obligation of Seller, enforceable against Seller in accordance with its terms, except as enforcement may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar Laws affecting creditors' rights generally or by general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or law).

Section 4.03 Non-Contravention. The execution, delivery and performance of this Agreement by Seller, and the consummation of the Transactions, do not and will not (a) violate any provision of the certificate of incorporation or bylaws of Seller and the comparable organizational documents of any Divesting Entity; (b) subject to obtaining the consents set forth in Schedule 4.03, materially conflict with, or result in the breach of, constitute a default under, or result in the termination, cancellation or acceleration (whether after the giving of notice or the lapse of time or both) of any right or obligation of Seller or any Divesting Entity

under any Transferred Contract; (c) assuming compliance with the matters set forth in Section 4.04 and Section 5.03, violate or result in a breach of, or constitute a default under any Law or other restriction of any Governmental Authority to which the Purchased Assets, Seller or any Divesting Entity is subject; or (d) result in the creation of any Liens (other than Permitted Liens) upon the Purchased Assets, except, with respect to clauses (b) and (c), for any violations, breaches, conflicts, defaults, losses, Liens, terminations, cancellations or accelerations that would not, individually or in the aggregate, reasonably be expected to be material to the Purchased Assets.

Section 4.04 Governmental Authorization. Except as set forth on Schedule 4.04, and other than the Transfer Letters to FDA, comparable documents required to transfer all other Transferred Governmental Authorizations and the Patent Assignment, the execution and delivery of this Agreement by Seller, and the consummation of the Transactions, do not require any consent or approval of, or any notice to or other filing with, any Governmental Authority, except for consents, approvals, notices and filings the failure of which to obtain would not, individually or in the aggregate, be material to the Purchased Assets.

Section 4.05 No Litigation. There are no Actions pending or, to the Knowledge of Seller, threatened in writing against Seller or any Divesting Entity with respect to the Purchased Assets. This Section 4.05 does not relate to intellectual property, which is the subject of Section 4.08.

Section 4.06 Compliance with Laws.

(a) Seller and each Divesting Entity is and has been in compliance in all material respects with all Laws applicable to the ownership of the Purchased Assets; and

(b) Seller and each Divesting Entity possesses, and is and has been in compliance in all material respects with, all Governmental Authorizations necessary for the conduct of its business as it is currently conducted in respect of ALXN1101 and the other Purchased Assets.

(c) Seller and each Divesting Entity has not received any notice of proceedings relating to the revocation or modification of, or non-compliance with, any Governmental Authorizations which, singly or in the aggregate, if the subject of an unfavorable decision, ruling or finding, would result in a Material Adverse Effect.

Section 4.07 Contracts.

(a) Schedule 4.07 sets forth each Transferred Contract that is or contains:

(i) a covenant by Seller, any Divesting Entities or any of their Affiliates not to compete or other covenant restricting the research, development, product design, manufacturing, production, distribution, marketing, sale, commercialization or other similar activities relating to the ALXN1101 Molecule or any Product that materially impairs such activities as the Business is currently conducted;

(ii) (A) a continuing contract for the future purchase of materials, supplies or equipment (other than purchase contracts and orders for inventory in the ordinary course of business consistent with past practice) or (B) a management, service, consulting or other similar type of Contract (other than contracts for services in the ordinary course of business), in any such case which has an aggregate future liability to any person in excess of [***] and is not terminable by Seller, any Divesting Entities or any of their Affiliates, as applicable, by notice of not more than [***] days for a cost of less than [***];

(iii) any (A) Contract pursuant to which (1) Seller, any of the Divesting Entities or any of their Affiliates is granted by any other person any license or other right to use, or a covenant not to sue with respect to, or is assigned by any person, any Intellectual Property that relates to the ALXN1101 Molecule, any Product, or otherwise relates to the Business (other than shrink wrap agreements for off-the-shelf software with a replacement cost and/or annual license fees of less than [***]), (2) Seller, any of the Divesting Entities or any of their Affiliates grants to any other person, any license or other right to use, or a covenant not to sue with respect to, or assigns to any person, any Intellectual Property that relates to the ALXN1101 Molecule, any Product, or otherwise to the Business, or (3) any research or pre-clinical or clinical development activities are conducted with respect to the ALXN1101 Molecule, a Product or any Transferred Intellectual Property, and (B) any other agreement (including any option) relating in whole or in part to any Transferred Intellectual Property;

(iv) any arrangement, agreement or other Contract with any academic institution, research center or Governmental Authority (or any person working for or on behalf of any of the foregoing) that relates to the ALXN1101 Molecule, any Product, the Business or any Purchased Assets, including for the development or other creation of any Transferred Intellectual Property; or

(v) any other agreement, contract, lease, license, commitment or instrument to which Seller, any of the Divesting Entities or any of their Affiliates is a party and by or to which the Business, the ALXN1101 Molecule, any Product or any of the Purchased Assets is bound or subject which has an aggregate future liability to any person in excess of [***] and is not terminable by Seller, such Divesting Entity or such Affiliate, as applicable, by notice of not more than [***] days for a cost of less than [***].

(b) Seller has made available to Purchaser true and complete copies of all Transferred Contracts. (a) Each Transferred Contract is valid and binding on Seller or the Divesting Entity that is a party thereto and, to the Knowledge of Seller, the other party thereto, and is in full force and effect in accordance with its terms, subject to bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar Laws affecting creditors' rights generally or by general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or law), and (b) neither Seller nor any Divesting Entity or, to the Knowledge of Seller, any other party thereto is in material breach of, or material default under, any Transferred Contract, and no event has occurred that, with the giving of notice or lapse of time or both, would constitute a material breach or material default thereunder.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Section 4.08 Intellectual Property.

(a) Schedule 4.08(a) sets forth a complete and accurate list of all (i) Patent Rights, (ii) active Trademark registrations and applications for registration of any Trademarks, and (iii) active registered Copyrights, in each case included in the Transferred Intellectual Property, and specifies as to each such item: (A) the current owner(s) (including any co-owner) thereof (and, if the owner is not Seller or one of the Divesting Entities, the corresponding license agreement pursuant to which Seller and/or any of the Divesting Entities has the right to use such Intellectual Property), (B) the jurisdiction of each application and/or registration or issuance, (C) the issuance, serial, application and/or registration number, and (D) the date of issuance, application or registration (collectively, the "Scheduled Intellectual Property"). The Scheduled Intellectual Property is subsisting and in full force and effect, and all required actions and payments in respect of the Scheduled Intellectual Property have been taken or made in a timely manner (including, as applicable, with respect to the payment of filing, examination and maintenance fees, proofs of working or use, disclosure requirements, timely post-registration filing of affidavits of use and incontestability and renewal applications) and no filings, responses or other actions are required to be taken, and no renewal, maintenance or other fees are due, during the ninety (90) day period following the Closing Date.

(b) As of the Effective Date, to there is no objection or claim being asserted by any Person or threatened in writing, with respect to the ownership, validity, enforceability or use of any of the Transferred Intellectual Property (including any opposition, cancellation, interference, reissue, reexamination or other similar proceeding).

(c) On the Effective Date, Seller or one or more of the Divesting Entities is and, at the Closing, Seller or one or more of the Divesting Entities will be, the sole and exclusive owner of all right, title and interest in and to, or the holder of a valid and enforceable right or license pursuant to a written license agreement set forth in Schedule 4.07(a)(iii)(A)(1), the Transferred Intellectual Property, free and clear of all Liens, including any royalty payment or other obligations or contractual limitations (other than pursuant to the terms of any agreement set forth in Schedule 4.08(c)). The consummation of the transactions contemplated hereby will not conflict with, alter or impair any such rights of Seller or such Divesting Entities in or to any of the Transferred Intellectual Property (including not causing any supplemental payments of any kind to be due to any Person as a result of the Closing), and the Transferred Intellectual Property shall be solely and exclusively owned or available for use by Purchaser immediately after the Closing on terms and conditions identical to those under which Seller or such Divesting Entities owned and/or used the Transferred Intellectual Property immediately prior to the Closing.

(d) Neither Seller nor any of the Divesting Entities nor any of their Affiliates owns or otherwise possesses, any right, title or interest in or to any Patent Rights or other Intellectual Property that relate to the ALXN1101 Molecule or any Products, including any that relates to the exercise of any Transferred Patents, or that would be necessary for the research, development, use, manufacture, commercialization and/or other exploitation of the ALXN1101 Molecule or any Products, and not included in the Purchased Assets.

(e) (i) There have been no claims asserted since [***], and, as of the Effective Date, there are no claims pending or threatened, by Seller or any of the Divesting Entities or any of their Affiliates against any Person, and (ii) neither Seller nor any of the Divesting Entities nor any of their Affiliates has sent since [***] any written notice to any Person, in each case of (i) and (ii) regarding any actual or potential infringement, dilution, misappropriation or other unauthorized use of any Transferred Intellectual Property by such Person. To the Knowledge of Seller, no Person has infringed, misappropriated or otherwise violated any Transferred Intellectual Property.

(f) To the Knowledge of Seller, the conduct of the Business, including the research, development, manufacture and commercialization of ALXN1101 Molecule or Products by or on behalf of Seller, the Divesting Entities, or their Affiliates or licensees, has not infringed, misappropriated or otherwise violated, and will not constitute an infringement, misappropriation or otherwise violation of the Intellectual Property rights of any other Person. (i) There have been no adverse Third Party actions or claims against Seller or any of the Divesting Entities or any of their Affiliates by any Person in any court, arbitration or by or before any Governmental Authority since [***], and, as of the Effective Date, no such actions or claims are pending or, to the Knowledge of Seller, threatened against Seller or any of the Divesting Entities or any of their Affiliates, and (ii) neither Seller nor any of the Divesting Entities nor any of their Affiliates has received written notice of any such actions or claims, in each case of (i) and (ii), alleging that the development, manufacture, marketing or sale of the ALXN1101 Molecule or any Products infringes, misappropriates or otherwise violates, the Intellectual Property rights of any other Person.

(g) No Transferred Intellectual Property is subject to any outstanding consent, settlement, decree, order, injunction, judgment or ruling, or any Contract, restricting or otherwise limiting the use, ownership, validity, enforceability, disposition or exploitation thereof.

(h) To the Knowledge of Seller, no funding, Intellectual Property, facilities, personnel or other resources of any Governmental Authority or university or other academic institution or research center or of any other person has been used in connection with the conception, invention, reduction to practice, development or other creation of any Intellectual Property relating to the ALXN1101 Molecule or Products or otherwise included in the Transferred Intellectual Property, except for any such funding or use of Intellectual Property, facilities, personnel or other resources that has not resulted and would not result in such Governmental Authority or university or other academic institution or research center obtaining ownership rights or any other similar right, title or interest (including any “march in” rights) in or to any Intellectual Property relating to the ALXN1101 Molecule or Products or otherwise included in the Transferred Intellectual Property (including any claim or option to any of the foregoing).

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(i) Seller and the Divesting Entities have taken commercially reasonable steps to protect, maintain and enforce all Transferred Intellectual Property, including the secrecy, confidentiality and value of trade secrets and other confidential information included in the Purchased Assets. Seller and each of the Divesting Entities have required each of its current and former employees, consultants and independent contractors to enter into valid and enforceable agreements with Seller or such Divesting Entity pursuant to which such person or entity agreed to maintain and protect the confidential information of Seller or such Divesting Entity and made an assignment to Seller or such Divesting Entity of a present grant of ownership in all Intellectual Property authored, developed or otherwise created by such person or entity in the course of its employment or other engagement with Seller or such Divesting Entity.

(j) Seller and the Divesting Entities are and have been in compliance with (i) all applicable Laws relating to the privacy of patient medical records and all other personal information and data, including with respect to the collection, storage, use, sharing, transfer, disposition, protection and processing thereof (including in connection with any clinical trials conducted with respect to the ALXN1101 Molecule or any Product), and (ii) all privacy policies and other related policies, programs and other notices of Seller or any of the Divesting Entities relating to the privacy of patient medical records and all other personal information and data, in each case to the extent applicable to the Business or the Purchased Assets. Neither Seller nor any of the Divesting Entities has been subject to any security breaches with respect to any personal information or data, and there have not been any complaints, notices, audits, proceedings, investigations or claims conducted or asserted by any other Person (including any Governmental Authority) regarding any collection or use of any patient medical records or other personal information or data by or on behalf of Seller or any of the Divesting Entities in connection with the ALXN1101 Molecule, any Products or the conduct of the Business (including in connection with any clinical trials conducted with respect to the ALXN1101 Molecule or any Product) or any violation of applicable Laws, and neither Seller nor any of the Divesting Entities has received any notices, correspondence or other communications from any Person alleging any of the foregoing, and to the Knowledge of Seller, there is no reasonable basis for the same and no such claim has been threatened or is currently pending.

Section 4.09 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the Transactions based upon arrangements made by or on behalf of Seller or any of the Divesting Entities.

Section 4.10 Purchased Assets.

(a) Seller and the Divesting Entities are the sole owners of the Purchased Assets. Seller and the Divesting Entities have good and valid title to all the Purchased Assets free and clear of all Liens, except for Permitted Liens. This Section 4.10(a) does not relate to intellectual property, which is the subject of Section 4.08.

(b) The Purchased Assets constitute all of the assets, rights or properties (tangible or intangible) owned or controlled by, or in the possession of, Seller, the Divesting Entities or their respective Affiliates that are exclusively related to or necessary for the Business, other than those assets set forth on Schedule 4.10(b) or any Contract that Purchaser elects to remove from Schedule 2.01(i)(b) in accordance with Section 6.15. This Section 4.10(b) does not relate to intellectual property, which is the subject of Section 4.08.

Section 4.11 Inventories. All finished goods included in the Inventories as of such date consist in all material respects of inventory of a quality sufficient for use in the ordinary course of the business, including being manufactured in all material respects with current Good Manufacturing Practice (cGMP) requirements for the Products.

Section 4.12 Tax Representations.

(a) Seller and each of the Divesting Entities has timely filed all material Tax Returns with respect to the Purchased Assets which are required to be filed under applicable Law, and all such Tax Returns are true, correct and complete in all material respects.

(b) All Taxes due and payable by Seller and the Divesting Entities with respect to the Purchased Assets, whether or not shown or required to be shown on any Tax Return, have been timely paid to the appropriate Taxing Authority and no Taxes are delinquent.

(c) There are no Liens for Taxes upon any of the Purchased Assets, other than Permitted Liens.

(d) No deficiency for any amount of Tax in respect of the Purchased Assets has been asserted, written or orally, or assessed by a Taxing Authority against Seller or any of the Divesting Entities, and neither Seller nor any of the Divesting Entities reasonably expects that any such assertion or assessment of Tax liability will be made.

(e) There is no Action or any notice of inquiry of any of the foregoing pending against or with respect to Seller or any of the Divesting Entities regarding Taxes in respect of the Purchased Assets and, to the Knowledge of Seller, no Action or audit has been threatened against or with respect to Seller or any of the Divesting Entities regarding Taxes in respect of the Purchased Assets.

(f) No claim has ever been made by a Taxing Authority in a jurisdiction where Seller or any of the Divesting Entities does not file Tax Returns that Seller or any of the Divesting Entities is or may be subject to taxation by that jurisdiction or may be required to file a Tax Return in that jurisdiction.

(g) Neither Seller nor any of the Divesting Entities has any obligation for Taxes pursuant to any Contract that Purchaser is assuming as a result of the Transactions. None of the Contracts that are included in Purchased Assets is treated as a partnership or other entity for any applicable Tax purposes.

Section 4.13 Regulatory Matters.

(a) The ALXN1101 Molecule has been and is being developed, manufactured, packaged, labeled, stored, tested and distributed by Seller in material compliance with all applicable requirements under the Federal Food, Drug and Cosmetic Act, Public Health Service Act and their implementing regulations and all comparable state, local and foreign Laws.

(b) Except as set forth on Schedule 4.13(b), all nonclinical studies conducted by or on behalf of Seller and intended to be submitted in support of any Regulatory Approval of the ALXN1101 Molecule have been, and are being, conducted in material compliance with the requirements of Good Laboratory Practice as contained in 21 C.F.R. Part 58 and comparable foreign requirements, as applicable.

(c) All manufacturing operations conducted in respect of the production of clinical quantities of the ALXN1101 Molecule have been and are being conducted in material compliance with current Good Manufacturing Practices, as promulgated by the FDA under the Federal Food, Drug, and Cosmetic Act, as amended, 21 C.F.R. Parts 210 and 211, 21 C.F.R. Parts 600-610 and any successor legislation and/or regulations, and comparable foreign Laws, as applicable.

(d) All clinical trials conducted by or on behalf of Seller in connection with the ALXN1101 Molecule have been, and are being, conducted in material compliance with the applicable requirements of Good Clinical Practice, Informed Consent, and all other applicable requirements relating to protection of human subjects specifically contained in 21 C.F.R. Parts 312, 50, 54, 56, and 11 and all applicable Laws, including all comparable foreign Laws.

(e) Seller has an investigational new drug application in effect with the FDA and, as required by applicable Laws, similar foreign Governmental Authorizations in effect with applicable foreign Governmental Authorities for the ALXN1101 Molecule manufactured by synthetic means and not in recombinant form, and has conducted its clinical trial activities in connection with the ALXN1101 Molecule in accordance with such investigational new drug application and similar foreign authorizations or any amendment or supplement thereto. No clinical trials conducted by or on behalf of Seller in connection with the ALXN1101 Molecule is, or has been, subject to any clinical hold or suspension.

(f) Seller has not used in any capacity the services of any Person debarred under section 306 of the Federal Food, Drug, and Cosmetic Act or any similar state or foreign Law in connection with any work performed or to be performed on the ALXN1101 Molecule.

(g) There has not been, nor, to the Knowledge of Seller, is there currently under consideration by Seller or any Governmental Authority, any recall, market withdrawal, safety alert, “Dear Doctor” letter, public health notification or other safety communication in respect of the ALXN1101 Molecule, except for such instance which would not have a Material Adverse Effect.

(h) Except for ordinary course inquires, Seller has not received, with respect to the ALXN1101 Molecule, any notice or communication from the FDA or any comparable state, local or foreign Governmental Authority alleging noncompliance with any applicable Laws, except for such instances which would not have a Material Adverse Effect, and Seller is not subject to any enforcement proceedings by the FDA or any comparable state, local or foreign Governmental Authority and, to the Knowledge of Seller, no such proceedings have been threatened.

(i) The product registration files and dossiers of Seller in respect of the ALXN1101 Molecule have been maintained in accordance with all applicable Laws and guidance documents in all material respects.

Section 4.14 Disclosure. Seller has made available to Purchaser true and complete copies of all documents requested by Purchaser or listed in the Schedules to this Agreement (including any attachment thereto, such that the contents of such copies comprise the entire agreement between the parties thereto) or in any other Exhibit or Schedule called for by this Agreement.

Section 4.15 Exclusivity of Representations. The representations and warranties made by Seller in this ARTICLE IV and in any certificate, instrument or other document required to be delivered pursuant to this Agreement by Seller or any of the Divesting Entities are the exclusive representations and warranties made by Seller with respect to Seller and the Divesting Entities, including the ALXN1101 Molecule and the Purchased Assets. Seller hereby disclaims any other express or implied representations or warranties with respect to itself or any of the Divesting Entities, including the ALXN1101 Molecule and the Purchased Assets. It is understood that any other materials made available to Purchaser or its Affiliates do not, directly or indirectly, and shall not be deemed to, directly or indirectly, contain representations or warranties of Seller, the Divesting Entities or their respective Affiliates.

ARTICLE V.
REPRESENTATIONS AND WARRANTIES OF PURCHASER

As of the Effective Date, Purchaser hereby represents and warrants to Seller as follows:

Section 5.01 Organization. Purchaser is a corporation duly organized, validly existing and in good standing under the Laws of the State of Delaware. Purchaser is authorized to do business under the Laws of all jurisdictions in which it is required to be so authorized, except as would not reasonably be expected to have a Purchaser Material Adverse Effect.

Section 5.02 Authority; Binding Effect.

(a) Purchaser has all requisite power and authority to own and operate its properties and assets, to carry on its business as it is now being conducted and to execute and deliver this Agreement, and to carry out or cause to be carried out, the Transactions.

The execution and delivery by Purchaser of this Agreement, and the performance by Purchaser of its obligations hereunder and thereunder, have been duly authorized by all requisite corporate action on the part of Purchaser, including resolutions duly adopted and not subsequently rescinded or modified in any way by the Board of Directors of Purchaser (i) resolving that this Agreement, and the Transactions, are in the best interests of Purchaser and its shareholders and (ii) approving the execution, delivery and performance of this Agreement by Purchaser. No approval of Purchaser's equity interest holders is necessary for Purchaser to execute and deliver this Agreement or perform the Transactions.

(b) This Agreement has been duly executed and delivered by Purchaser and, assuming the valid execution and delivery by Seller, constitutes a legal, valid and binding obligation of Purchaser, enforceable against Purchaser in accordance with its terms, except as enforcement may be limited by bankruptcy, insolvency, reorganization, fraudulent conveyance, moratorium or similar Laws affecting creditors' rights generally or by general principles of equity (regardless of whether enforcement is sought in a proceeding in equity or law).

Section 5.03 Non-Contravention. The execution, delivery and performance by Purchaser of this Agreement, and the consummation of the Transactions, do not and will not (a) violate any provision of the certificate of incorporation, bylaws or other organizational documents of Purchaser; (b) conflict with, or result in a breach of, constitute a default under or result in the termination, cancellation or acceleration (whether after the giving of notice or the lapse of time or both) of any right or obligation of Purchaser or any of its Affiliates under, or to a loss of any benefit to which Purchaser or any of its Affiliates is entitled under, any agreement, lease of real estate or license of intellectual property to which Purchaser or any of its Affiliates is a party or to which its properties or assets are subject; or (c) assuming compliance with the matters set forth in Section 4.04 and Section 5.03, violate or result in a breach of or constitute a default under any Law or other restriction of any Governmental Authority to which Purchaser is subject, except, with respect to clauses (b) and (c), for any violations, breaches, defaults, conflicts, losses, Liens, terminations, cancellations or accelerations except as would not reasonably be expected to be material to Purchaser's ability to consummate the Transactions and to perform its obligations hereunder.

Section 5.04 Governmental Authorization. The execution and delivery of this Agreement by Purchaser, and the consummation of the Transactions, do not require any consent or approval of, or any notice to or other filing with, any Governmental Authority, except for consents, approvals, notices and filings the failure of which to obtain or make would not, reasonably be expected to be material to Purchaser's ability to consummate the Transactions and to perform its obligations hereunder.

Section 5.05 Brokers. No broker, finder or investment banker is entitled to any brokerage, finder's or other fee or commission in connection with the Transactions based upon arrangements made by or on behalf of Purchaser or any of its Affiliates.

Section 5.06 Financial Capability. Purchaser has, or has access to, sufficient cash to pay the Upfront Payment on the terms and conditions contemplated by this Agreement and to pay its fees and expenses related hereto, and, following the Closing, Purchaser will be able to satisfy its Liabilities as they become due.

Section 5.07 Solvency. As of the Effective Date, after giving effect to all of the Transactions contemplated by this Agreement, including without limitation the payment of the Upfront Payment, and assuming for these purposes the satisfaction of the conditions set forth in Section 7.01, as of the Effective Date the Purchaser shall be Solvent. For the purposes of this Section 5.07, the term "Solvent" when used with respect to any Person, means that, as of any date of determination, (a) the "fair saleable value" of the assets of such Person will, as of such date, exceed (i) the value of all "liabilities of such Person, including contingent and other liabilities," as of such date, as such quoted terms are generally determined in accordance with applicable federal laws governing determinations of the insolvency of debtors, and (ii) the amount that will be required to pay the probable liabilities of such Person on its existing debts (including contingent liabilities) as such debts become absolute and matured, (b) such Person will not have, as of such date, unreasonably small capital for the operation of the businesses in which it is engaged or proposed to be engaged following such date and (c) such Person will be able to pay its liabilities, including contingent and other liabilities, as they mature.

Section 5.08 Exclusivity of Representations. The representations and warranties made by Purchaser in this ARTICLE V and in any certificate, instrument or other document required to be delivered pursuant to this Agreement by the Purchaser, are the exclusive representations and warranties made by Purchaser with respect to the Transaction. It is understood that any other materials made available to Seller or its Affiliates do not, directly or indirectly, and shall not be deemed to, directly or indirectly, contain representations or warranties of the Purchaser.

ARTICLE VI.
COVENANTS

Section 6.01 Conduct of Business.

(a) From the Effective Date to the Closing Date, except as otherwise permitted by this Agreement or consented to by Purchaser in writing (which consent shall not be unreasonably withheld, conditioned or delayed), Seller shall use (and to cause each Divesting Entity to use) reasonable best efforts to:

(i) maintain the condition of the Purchased Assets;

(ii) with respect to Transferred Patents that are not subject to the Transferred Contracts, maintain in effect all Transferred Patents and applications and registrations included in the Transferred Patents, and maintain in effect all registrations and applications for all other registered Intellectual Property constituting the Transferred Intellectual Property; and

(iii) perform its obligations in all material respects under the Transferred Contracts.

(b) Seller shall not (and shall cause each Divesting Entity not to) without the prior written consent of Purchaser (which consent shall not be unreasonably withheld, conditioned or delayed):

(i) enter into any transaction or take any action that would reasonably be expected to result in any of Seller's representations and warranties in this Agreement or in any of the documents required to be delivered by this Agreement (disregarding any qualification as to materiality) not being true and correct in all material respects;

(ii) commence any Action with respect to the Purchased Assets;

(iii) pledge, sell, lease, transfer, license, assign or otherwise make subject to a Lien (other than any Permitted Liens) any interest in any Purchased Asset;

(iv) waive any material claims or rights of material value that relate exclusively to the Purchased Assets;

(v) transfer, assign, grant any license or sublicense, or otherwise dispose of any rights under or with respect to any Transferred Intellectual Property;

(vi) terminate, modify or amend in any material respect any Transferred Contract or Transferred Governmental Authorization;

(vii) enter into any Contract related to the Business or any of the Purchased Assets, or enter into any Contract regarding any clinical trial not ongoing as of the date of this Agreement;

(viii) make, or amend, any filings with the FDA, the EMA or any other Governmental Authority performing functions similar to those performed by the FDA, the EMA or such other Governmental Authority related to the Business or any of the Purchased Assets;

(ix) settle any claims, actions, arbitrations, disputes or other proceedings affecting the Purchased Assets or the Business; or

(x) agree, whether in writing or otherwise, to do any of the foregoing.

(c) Notwithstanding the foregoing, nothing herein prevents Seller or any of its Affiliates from taking actions, including (i) contributions, transfers, assignments and acceptances of assets and liabilities; (ii) the repayment of indebtedness and the extinguishment of Liens; and (iii) the cancellation of any intercompany contracts and any other agreements that will not constitute Transferred Contracts, in each case in order to facilitate the consummation of the Transactions.

Section 6.02 Condition of the Purchased Assets.

(a) In light of such inspections and investigations, and the representations and warranties expressly made to Purchaser by Seller in this Agreement and the certificates and other documents delivered pursuant hereto, **PURCHASER AGREES THAT THE REPRESENTATIONS AND WARRANTIES GIVEN HEREIN BY SELLER ARE IN LIEU OF, AND PURCHASER HEREBY EXPRESSLY WAIVES ALL RIGHTS TO, ANY IMPLIED WARRANTIES THAT MAY OTHERWISE BE APPLICABLE BECAUSE OF THE PROVISIONS OF THE UNIFORM COMMERCIAL CODE OR ANY OTHER LAWS, INCLUDING THE WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE**.

(b) Except in the event of Fraud, any claims Purchaser may have for breach of representation or warranty will be based solely on the representations and warranties of Seller or the Divesting Entities expressly set forth in this Agreement and the certificates and other documents delivered pursuant hereto or thereto.

(c) Except in the event of Fraud, Purchaser further acknowledges and agrees that neither Seller, its Affiliate, nor any other Person, has made any representation, warranty or statement, express or implied, regarding Seller, any of the Divesting Entities, the Purchased Assets or the Assumed Liabilities not expressly set forth in this Agreement or the certificates or other documents delivered pursuant hereto or thereto upon which Purchaser has relied, and neither Seller nor any of its Affiliates or any other Person will have, or be subject to, any liability to Purchaser or any other Person resulting from the distribution to Purchaser or its Representatives, or Purchaser's use of, any such information, including confidential memoranda distributed by or on behalf of Seller or any Divesting Entity relating to the ALXN1101 Molecule, the Purchased Assets or the Assumed Liabilities or any other publication, document or information provided in the Data Room or otherwise provided to Purchaser prior to the Closing Date.

(d) Without limiting the representations and warranties of the Seller in ARTICLE IV, Purchaser acknowledges and agrees that (i) it may have received from Seller various forward-looking statements (including estimates, assumptions, projections, forecasts and plans) regarding the ALXN1101 Molecule and the Purchased Assets (collectively, the "Forward-Looking Statements") in connection with Purchaser's investigation of the Purchased Assets; (ii) there are uncertainties inherent in attempting to make such Forward-Looking Statements; (iii) Purchaser is familiar with such uncertainties; (iv) Purchaser has made its own investigation, examination and valuation of the Purchased Assets, and has employed outside professionals to assist with such investigation, examination and valuation; (v) Purchaser is not relying on any Forward-Looking Statement in any manner whatsoever; and (vi) Purchaser has no claim against Seller or any of its Affiliates with respect to the foregoing. Without limiting the representations and warranties of the Seller in ARTICLE IV, Purchaser further acknowledges and agrees that Seller makes no representation or warranty hereunder with respect to (A) the reasonableness of the assumptions underlying any Forward-Looking Statement; or (B) any Forward-Looking Statement made in any materials in the Data Room, any supplemental due diligence information provided or made available to Purchaser, any of Purchaser's discussions with management regarding the ALXN1101 Molecule or the Purchased Assets, any negotiations leading to this Agreement, or any other circumstance.

Section 6.03 Publicity. No Party to this Agreement shall originate any publicity, news release or other public announcement, written or oral, whether relating to this Agreement or the existence of any arrangement between the Parties, without the prior written consent of the other Party (whether such other Party is named in such publicity, news release or other public announcement or not), except where such publicity, news release or other public announcement is required by Law or any listing or trading agreement concerning its publicly traded securities, provided that, in such event, the Party issuing the same shall still be required to consult with the other Party (whether such other Party is named in such publicity, news release or public announcement or not) at a reasonable time prior to its release to allow the other Party to comment thereon and, after its release, shall provide the other Party with a copy thereof. If Purchaser, based on the advice of its counsel, determines that this Agreement must be filed with the United States Securities and Exchange Commission ("SEC") or any other similar Governmental Authority, then Purchaser, prior to making any such filing, shall provide Seller and its counsel with a redacted version of this Agreement which it intends to file and any draft correspondence with the SEC requesting the confidential treatment by the SEC of those redacted sections of the Agreement, and will give due consideration to any comments provided by Seller or its counsel and use commercially reasonable efforts to ensure the confidential treatment by the SEC of those sections specified by Seller or its counsel.

Section 6.04 Books and Records; Regulatory Information. Seller shall use commercially reasonable efforts to transfer to Purchaser on the Closing Date (or as soon as reasonably practicable after the Closing Date) the Transferred Books and Records and Regulatory Information in the possession or under the control of Seller and its Affiliates. Seller may transfer copies or originals of the Transferred Books and Records and Regulatory Information at its election.

Section 6.05 Further Assurances; Transition Plan.

(a) From time to time after the Closing, and for no further consideration (other than reimbursement for expenses incurred in packing or shipping any Purchased Asset), each of the Parties shall, and shall cause its Affiliates to, execute, acknowledge and deliver such assignments, transfers, consents, assumptions and other documents and instruments and take such other commercially reasonable actions as may reasonably be requested to more effectively assign, convey or transfer to or vest in: (a) Purchaser and its designated Affiliates, all rights, title and interests in, to and under the Purchased Assets and the Assumed Liabilities contemplated by this Agreement to be transferred or assumed at the Closing and (b) Seller, any rights, title or interests in, to or under any Excluded Asset that may have been transferred to Purchaser at Closing; provided that the foregoing obligations with respect to the transfer to Purchaser of the Transferred Patents shall terminate [***] months after the Closing Date. Purchaser agrees that, following the Closing, it shall prepare any such additional instruments or documents necessary to assign, convey or transfer the Transferred Patents and the Transferred Governmental Authorizations [***].

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(b) From time to time after the Closing and through December 31, 2018, and for no additional consideration, Seller shall provide or cause to be provided, access to qualified personnel from Seller or any of its Affiliates familiar with the Business and make such personnel available at Purchaser's reasonable advance request to meet and participate in telephone conference calls with personnel from Purchaser or Purchaser's designee at such times, and in the case of in-person meetings, at such venues, to be agreed upon by the Parties, as reasonably requested by Purchaser. From time to time after the Closing and through December 31, 2018, Seller shall use commercially reasonable efforts to respond to reasonable document and other information requests related to the Purchased Assets with copies of such requested materials (or redacted portions thereof), to the extent within Seller's possession or control; provided that Seller may restrict the foregoing access to the extent that (i) such restriction is required by applicable Law, (ii) such access or provision of information would reasonably be expected to result in a violation of confidentiality obligations to a third party, (iii) disclosure of any such information would result in the loss or waiver of the attorney-client privilege or (iv) such information constitutes an Excluded Asset. Notwithstanding the foregoing, personnel from Seller and its Affiliates shall not be obligated to spend more than an aggregate of [***] hours providing the services required by this Section 6.05(b) during the [***] month-period immediately following the Closing nor more than [***] hours in any subsequent [***] month-period. Seller and Purchaser shall each designate a transition manager to act as the primary contact person with respect to all matters relating to this Section 6.05. Each Party may replace its transition manager at any time upon written notice to the other Party.

(c) Following the Closing, and for no additional consideration, Seller shall supply, or cause to be supplied, to Purchaser the inventory for use in or relating to a Product in the quantities and upon the terms set forth in Schedule 6.05(c), subject to final release of Product in Seller's sole discretion in accordance with its quality standards. In no event shall Seller be responsible for providing Purchaser with replacement lots of Product in the event of any manufacturing failure.

(d) No later than [***] days after the date hereof, each Party shall prepare and deliver the Transfer Letters to FDA and, following such submission to FDA, Purchaser, or its Affiliates, shall prepare and deliver comparable documents required to transfer all other Transferred Governmental Authorizations to the applicable Governmental Authorities. Until each Party executes and delivers to FDA the Transfer Letters to FDA and the ALXN1101 Molecule investigational new drug application is transferred to Purchaser, for no additional consideration, Seller shall continue to act as sponsor, as that term is defined in 21 C.F.R. § 312.3(b), and Seller shall use, and cause its Affiliates to use, commercially reasonable efforts to continue to: (i) comply with all applicable Laws; (ii) fulfill all other requirements and conditions pursuant to the ALXN1101 Molecule investigational new drug application or any amendment or supplement thereto, including but not limited to: (1) conducting and monitoring all ongoing clinical trials and studies in respect of the ALXN1101 Molecule that are being conducted by or on behalf of Seller or its Affiliates as of the Closing Date; and (2) submitting all required reports, including investigational new drug safety reports and investigational new drug annual reports; and (iii) provide the ALNX1101 Molecule for use in the United States in any compassionate

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use or named patients access programs in which Seller or its Affiliates participate. For each of the Transferred Governmental Authorizations required to conduct clinical trials in the applicable foreign country, until the Transferred Governmental Authorization is effectively transferred to Purchaser, for no additional consideration, Seller shall continue to act as sponsor, or foreign equivalent, in that foreign country, and Seller shall use, and cause its Affiliates to use, commercially reasonable efforts to continue to: (i) comply with all applicable Laws; (ii) fulfill all other requirements and conditions pursuant to the ALXN1101 Molecule Transferred Governmental Authorization or any amendment or supplement thereto, including but not limited to: (*a*) maintaining the Transferred Governmental Authorization; (*b*) conducting and monitoring all ongoing clinical trials and studies in respect of the ALXN1101 Molecule that are being conducted by or on behalf of Seller or its Affiliates as of the Closing Date; and (*c)* submitting all required reports; and (iii) provide the ALNX1101 Molecule for use in the foreign country in any compassionate use or named patients access programs in which Seller or its Affiliates participate.

Section 6.06 Bulk Transfer Laws. The Parties hereby waive compliance with the provisions of applicable bulk sale or bulk transfer Laws or similar Laws that may otherwise be applicable with respect to the sale of any or all of the Purchased Asset.

Section 6.07 Non-Competition. In connection with the consideration to be paid by Purchaser to Seller hereunder and as an inducement to Purchaser to enter into this Agreement and consummate the transactions contemplated hereby, from the Closing Date until the [***] anniversary of the Closing Date, Seller shall not, and shall cause its Affiliates not to, engage or participate (whether as an owner, operator, director, employee, officer, manager, consultant, advisor, representative or otherwise), directly or indirectly anywhere in the world in any research, development, manufacture, or commercialization of any product with a similar mechanism of action for [***] (the "Restricted Field"); provided, [***]. Subject to the foregoing, Purchaser acknowledges and agrees that: (a) [***]; and (b) [***].

Section 6.08 Insurance. As of the Closing Date, the coverage under all insurance policies of Seller and its Affiliates shall continue in force only for the benefit of the Seller and its Affiliates, and not for the benefit of Purchaser or any of its Representatives. As of the Closing Date, Purchaser agrees to arrange for its own insurance policies (to the extent such policies are obtainable) with respect to the Purchased Assets covering all periods and agrees not to seek, through any means, to benefit from any of Seller's or its Affiliates' insurance policies which may provide coverage for claims relating in any way to the Purchased Assets. For the avoidance of doubt, nothing contained in this Section 6.08 will adversely impact either Party's rights to indemnification under ARTICLE VIII.

Section 6.09 Diligence. Following the Closing, Purchaser shall use, and shall cause its Affiliates and licensees to use, Commercially Reasonable Efforts to: [***]. Notwithstanding anything in this Agreement to the contrary, Seller acknowledges and agrees that notwithstanding anything in this Agreement to the contrary, (A) upon the Closing, Purchaser shall have the right to own, operate, use, license, develop and otherwise commercialize the Products, in any way that Purchaser and its Affiliates deem appropriate, in its sole discretion, (B) Purchaser has no obligation to own, operate, use, license, develop or otherwise commercialize

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the Product, in order to maximize or expedite the Milestone Payments or the Royalty Payments, (C) Purchaser has the exclusive right to determine the terms and conditions of the development and commercialization of the Products and any and all sales of the Products, including the determination of whether or not to develop or commercialize the Products or the indications for which the Products may be developed or commercialized, (D) there is no assurance that Seller will receive any Milestone Payments or Royalty Payments, (E) Purchaser has not promised or projected any amounts to be received by Seller in respect of any Milestone Payments or Royalty Payments, and Seller has not relied on any statements or information provided by Purchaser with respect to the potential sales or value of the Product and (F) Purchaser owes no fiduciary duty to Seller, and Seller hereby expressly waives any fiduciary duty of Purchaser to Seller; provided, however, that (I) clauses (A) through (F) shall not apply to Purchaser's obligations pursuant to Section 6.09(a) and (II) Purchaser shall not take any actions or make any operational changes with the specific intent to eliminate or otherwise minimize Net Sales or the development of any Product for the specific purposes of avoiding achievement of Milestone Events or the payment of Royalty Payments.

Section 6.10 Clinical Trials and Product Supply. From and after the Closing, Purchaser shall, or shall cause its Affiliates to continue to (a) conduct the clinical trials and studies in respect of the ALXN1101 Molecule that are being conducted by or on behalf of Seller or its Affiliates as of the Closing Date and (b) Purchaser shall, or shall cause its Affiliates, to continue to provide the ALXN1101 Molecule for use in any compassionate use or named patient access programs in which Seller or its Affiliates participate as of the Closing for as long as indicated, in the medical judgment of the treating physician, for each Person participating in such programs, in each case of subsections (a) and (b), in a manner and quantity substantially consistent with Seller's current practice.

Section 6.11 Payments from Third Parties. In the event that, on or after the Closing Date, either Party shall receive any payments or other funds due to the other pursuant to the terms of this Agreement, then the Party receiving such funds shall promptly forward such funds to the proper Party. The Parties acknowledge and agree that there is no right of offset regarding such payments and a Party may not withhold funds received from Third Parties for the account of the other Party in the event there is a dispute regarding any other issue under this Agreement.

Section 6.12 Tax Matters.

(a) Tax Deficiencies. Neither Seller nor any of the Divesting Entities shall permit to exist any Tax deficiencies (including penalties and interest) of any kind assessed against or relating to Seller or any of the Divesting Entities with respect to any taxable periods ending on or before, or including, the Closing Date of a character or nature that could reasonably be expected to result in Liens (other than Permitted Liens) or claims on any of the Purchased Assets or on Purchaser's title or use of the Purchased Assets following the Closing or that would reasonably be expected to result in any claim against Purchaser.

(b) Apportioned Taxes. Subject to Section 2.12, all real property Taxes, personal property Taxes and similar ad valorem obligations levied with respect to the

Purchased Assets for a taxable period which includes (but does not end on) the Closing Date (collectively, the "Apportioned Obligations") shall be apportioned between Seller and Purchaser as of the Closing Date based on the number of days of such taxable period ending on and including the Closing Date (the "Pre-Closing Apportioned Period") and the number of days of such taxable period beginning from the day after the Closing Date through the end of such taxable period (the "Post-Closing Apportioned Period"). Seller shall be liable for the proportionate amount of Apportioned Obligations that is attributable to the Pre-Closing Apportioned Period. Purchaser shall be liable for the proportionate amount of the Apportioned Obligations that is attributable to the Post-Closing Apportioned Period.

Section 6.13 Confidentiality. From and after the Closing Date, Seller and the Divesting Entities will, and will cause their Affiliates and Representatives to, treat and hold as confidential, and not use or disclose any nonpublic or confidential information relating to the ALXN1101 Molecule, any Products or the Purchased Assets (collectively, the "Confidential Information") to any person (including any of their Affiliates); provided, however, that Confidential Information shall not include information which (a) is or becomes generally available to the public other than as a result of a disclosure by Seller, the Divesting Entities or their Affiliates or any Representatives of the foregoing in violation of this Section 6.13; or (b) is legally required to be disclosed in accordance with this Section 6.13. In the event that Seller or any Divesting Entity is required by request for information or documents in any legal proceeding, interrogatory, subpoena, civil investigative demand or similar process or as otherwise required by applicable Law to disclose any Confidential Information, Seller will promptly notify Purchaser of the request so that Purchaser may seek, at its expense, an appropriate protective order or waive compliance with the provisions of this Section 6.13. If in the absence of a protective order or the receipt of a waiver hereunder Seller or any Divesting Entity is compelled to disclose any Confidential Information to any Governmental Authority, it may disclose the Confidential Information to the Governmental Authority; provided, however, that Seller or such Divesting Entity shall use its commercially reasonable efforts to obtain, at the request, and at the expense of Purchaser, an order or other assurance that confidential treatment will be afforded to such portion of the Confidential Information to be disclosed as Purchaser shall designate.

Section 6.14 Guarantee. BridgeBio guarantees irrevocably, absolutely and unconditionally and as a primary obligation that Purchaser shall fully, completely and timely pay and perform all of its obligations and discharge all its Liabilities contained in this Agreement (the "Guaranteed Obligations"). This Section 6.14 is a guaranty of payment and not of collection. There are no conditions precedent to the enforcement of this Section 6.14. The obligations of BridgeBio hereunder shall be continuing, absolute and unconditional and, without limiting the generality of the foregoing, shall not be released, discharged or otherwise affected by any invalidity, illegality or unenforceability against Purchaser of this Agreement or any agreement executed by Purchaser pursuant to this Agreement, any change in the corporate existence structure or ownership of Purchaser, or otherwise. This Section 6.14 shall continue to be effective, or be automatically reinstated, as the case may be, if at any time performance of any of the Guaranteed Obligations is rescinded or must otherwise be restored, returned or rejected by Seller for any reason, including, upon the insolvency, bankruptcy, dissolution, liquidation or reorganization of Purchaser.

Section 6.15 Transferred Contracts Schedule Updates. After the Effective Date but prior to the Closing Date, Schedule 2.01(i)(b) may be updated from time to time as follows: (i) in the event Purchaser provides notice of such at least [***] Business Days prior to the Closing Date any Contract listed on Schedule 2.01(i)(b) may be removed therefrom and (ii) in the event Purchaser and Seller shall so agree in writing any Contract not previously contained on Schedule 2.01(i)(a) may be added thereto. In the event a Contract is removed from Schedule 2.01(i)(b) pursuant to this Section 6.15, such Contract shall no longer be considered a "Transferred Contract" and shall instead be an "Excluded Asset" and all liabilities with respect thereto shall be considered "Retained Liabilities" hereunder. In the event a Contract is added to Schedule 2.01(i)(a) pursuant to this Section 6.15, such Contract shall be considered a "Transferred Contract" for all purposes hereunder. For the avoidance of doubt, notwithstanding anything else to the contrary contained herein, any update pursuant to this Section 6.15 will not be taken into account in determining the truth of any representation or warranty in Article IV hereof.

ARTICLE VII.
CLOSING CONDITIONS

Section 7.01 Conditions Precedent to Purchaser's Obligations on the Closing Date. All of the obligations of Purchaser hereunder are subject to fulfillment, prior to or at the Closing, of the following conditions (compliance with which or the occurrence of which may be waived in whole or in part by Purchaser in writing):

(a) The representations and warranties of Seller contained in this Agreement and in any certificate delivered by them pursuant hereto, to the extent not qualified by materiality, shall have been true and correct in all material respects as of the date hereof and shall be true and correct in all material respects at and as of the Closing Date as if made at and as of such date and the representations and warranties of Seller contained in this Agreement and in any certificate or other writing delivered by them pursuant hereto, to the extent qualified by materiality, shall have been true and correct in all respects as of the date hereof and at and as of the Closing Date as if made at and as of such date.

(b) Seller shall have performed and complied in all material respects with all of its covenants and agreements under this Agreement to be complied with and performed by Seller at or before the Closing.

(c) No Law or Judgment enacted, entered, promulgated, enforced or issued by any Governmental Authority or other legal restraint or prohibition preventing the consummation of any of the Transactions (each, a "Closing Legal Impediment") shall be in effect; provided that Purchaser shall have used commercially reasonable efforts to prevent the occurrence or entry of any such Closing Legal Impediment and to remove or appeal as promptly as possible any such Closing Legal Impediment.

(d) Since the Effective Date, there shall have been no events or occurrences that have resulted in a Material Adverse Effect.

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(e) Seller shall have signed and delivered, or caused one or more of its Affiliates, to sign and deliver the instruments and documents set forth on Exhibit A.

(f) The consents set forth on Schedule 7.01(f) shall have been obtained.

(g) The actions set forth in Section 3.01(b) shall have been completed.

Section 7.02 Conditions Precedent to Seller's Obligations on the Closing Date. All of the obligations of Seller hereunder are subject to the fulfillment, prior to or at the Closing, of the following conditions (compliance with which or the occurrence of which may be waived in whole or in part by Seller in writing):

(a) The representations and warranties of Purchaser contained in this Agreement and in any certificate delivered by them pursuant hereto, to the extent not qualified by materiality, shall have been true and correct in all material respects as of the date hereof and shall be true and correct in all material respects at and as of the Closing Date as if made at and as of such date and the representations and warranties of Purchaser contained in this Agreement and in any certificate or other writing delivered by them pursuant hereto, to the extent qualified by materiality, shall have been true and correct in all respects as of the date hereof and at and as of the Closing Date as if made at and as of such date.

(b) Purchaser shall have performed and complied in all material respects with all of its covenants and agreements under this Agreement to be complied with and performed by Purchaser at or before the Closing.

(c) No Closing Legal Impediment shall be in effect; provided that Seller shall have used its commercially reasonable efforts to prevent the occurrence or entry of any such Closing Legal Impediment and to remove or appeal as promptly as possible any such Closing Legal Impediment.

(d) Purchaser shall have signed and delivered, or caused one or more of its Affiliates to sign and deliver, the instruments and documents set forth on Exhibit B.

(e) The actions set forth in Section 3.01(c) shall have been completed.

ARTICLE VIII.
INDEMNIFICATION

Section 8.01 Indemnification by Seller.

(a) Subject to the provisions of this ARTICLE VIII, Seller agrees, from and after the Closing, to defend, indemnify and hold harmless Purchaser and its Affiliates and, if applicable, their respective directors, officers, agents, employees, successors and assigns (collectively, the "Purchaser Indemnitees"), from and against any and all Losses to the extent arising from or relating to (i) any Retained Liability; (ii) any breach by Seller or any Divesting Entity of any of its covenants or agreements contained in this Agreement; (iii) any breach of any warranty or representation of Seller or any Divesting Entity contained in this Agreement or in any other certificate or document delivered by Seller or any Divesting Entity pursuant to the Transactions or (iv) any Third Party Claim.

(b) Purchaser shall take, and shall cause the other Purchaser Indemnitees to take, all commercially reasonable steps mitigate any Loss upon becoming aware of any event that would reasonably be expected to, or does, give rise thereto, provided that the foregoing shall not be deemed to limit the ability of Purchaser and the other Purchaser Indemnitees to incur reasonable costs and expenses in connection therewith. For purposes of calculating or determining the amount of Losses paid, incurred or sustained by a Purchaser Indemnitee, there shall be deducted from any Losses an amount equal to any third-party insurance, indemnification or contribution payments actually received by such Purchaser Indemnitee in respect of such Losses (net of applicable costs of recovery or collection, retention, deductible, retroactive premium adjustment, reimbursement or other cost related to such insurance, indemnification or contribution arrangement in respect of Losses thereof); provided, however, that no Purchaser Indemnitee shall have any obligation to claim, seek or otherwise obtain any such insurance, indemnification or contribution proceeds to which it may be entitled, and the failure of an Purchaser Indemnitee to seek any such proceeds shall not in any way affect or modify such Purchaser Indemnitee's rights, or the Seller's or Divesting Entities' obligations, under and subject to the terms of this ARTICLE VIII.

Section 8.02 Indemnification by Purchaser.

(a) Subject to the provisions of this ARTICLE VIII, Purchaser agrees, from and after the Closing, to defend, indemnify and hold harmless Seller and its Affiliates and, if applicable, their respective directors, officers, agents, employees, successors and assigns (collectively, the "Seller Indemnitees"), from and against any and all Losses to the extent arising from or relating to (i) any Assumed Liability; (ii) any breach by Purchaser of any of its covenants or agreements contained in this Agreement; (iii) any breach of any warranty or representation of Purchaser contained in this Agreement; (iv) any event occurring on or after the Closing in connection with use, ownership, possession, operation, management, business integration, or transfer of any Purchased Asset on or after the Closing or (v) any Third Party Claim.

(b) Seller shall take, and shall cause the other Seller Indemnitees to take, all commercially reasonable steps (including making claims under any applicable insurance policies) to mitigate any Loss upon becoming aware of any event that would reasonably be expected to, or does, give rise thereto, provided that the foregoing shall not be deemed to limit the ability of Seller and the other Seller Indemnitees to incur reasonable costs and expenses in connection therewith. For purposes of calculating or determining the amount of Losses paid, incurred or sustained by a Seller Indemnitee, there shall be deducted from any Losses an amount equal to any third-party insurance, indemnification or contribution payments actually received by such Seller Indemnitee in respect of such Losses (net of applicable costs of recovery or collection, retention, deductible, retroactive premium adjustment, reimbursement or other cost related to such insurance, indemnification or contribution arrangement in respect of Losses thereof).

Section 8.03 Notice of Claims. Any Purchaser Indemnitee or Seller Indemnitee claiming that it has suffered or incurred any Loss for which it may be entitled to indemnification under this ARTICLE VIII (the "Indemnified Party") shall give prompt written notice to the Party from whom indemnification is sought (the "Indemnifying Party") of the matter, action, cause of action, claim, demand, fact or other circumstances upon which a claim for indemnification under this ARTICLE VIII (each, a "Claim") may be based, provided, however, that the failure to give such notice shall not affect the indemnification provided hereunder unless the Party who was entitled to receive such notice has been materially prejudiced by such failure. Such notice shall contain, with respect to each Claim, such facts and information as are then reasonably available with respect to such Claim, including a description of the Losses suffered or incurred by the Indemnified Party, the amount or estimated amount of such Losses (if known or reasonably capable of estimation) and the method of computation of such Losses, and a reference to the provisions of this Agreement or any other agreement, instrument or certificate delivered pursuant hereto in respect of which such Loss shall have occurred. If any Claim is based on any Action (in equity or at law) instituted by a Third Party with respect to which the Indemnified Party intends to claim any Loss under this ARTICLE VIII (a "Third Party Claim"), the Indemnified Party shall promptly notify (the "Third Party Claim Notice") the Indemnifying Party of such Third Party Claim and offer to tender to the Indemnifying Party the defense of such Third Party Claim. A failure by the Indemnified Party to give written notice of any Claim or to offer to tender the defense of any Third Party Claim in a timely manner pursuant to this Section 8.03 shall not limit the obligation of the Indemnifying Party under this ARTICLE VIII, except (a) to the extent such Indemnifying Party is actually prejudiced thereby or (b) as provided in Section 8.05.

Section 8.04 Third Party Claims.

(a) The Indemnifying Party shall have the right, but not the obligation, exercisable by written notice to the Indemnified Party within [***] days of receipt of a Third Party Claim Notice from the Indemnified Party with respect to a Third Party Claim, to assume the conduct and control, at the expense of the Indemnifying Party and through counsel of its choosing that is reasonably acceptable to the Indemnified Party, of such Third Party Claim. During such [***] day period, the Indemnified Party may not compromise or settle, nor assume the defense of, any Third Party Claim for which it is seeking indemnification hereunder without the prior written consent of the Indemnifying Party. The Indemnifying Party may compromise or settle any such Third Party Claim; provided that the Indemnifying Party shall give the Indemnified Party advance written notice of any proposed compromise or settlement and shall not, without the prior written consent of the Indemnified Party (which consent shall not be unreasonably withheld, conditioned or delayed), consent to or enter into any compromise or settlement with respect to such Third Party Claim that (i) commits the Indemnified Party to take, or to forbear to take, any action or (ii) does not provide for a full and complete written release by the applicable Third Party of the Indemnified Party. The Indemnifying Party shall permit the Indemnified Party to participate in, but not control, the defense of any such Third Party Claim through counsel chosen by the Indemnified Party, provided that the fees and expenses of such counsel shall be borne solely by the Indemnified Party. If the Indemnifying Party elects not to control or conduct the defense of a Third Party Claim, the Indemnifying Party nevertheless shall have the right to participate in the defense of

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any Third Party Claim and, [***] to employ counsel of its own choosing for such purpose. The Parties shall cooperate in the defense of any Third Party Claim, with such cooperation to include (i) the retention and the provision to the Indemnifying Party of records and information that are reasonably relevant to such Third Party Claim and (ii) reasonable access to employees on a mutually convenient basis for providing additional information and explanation of any material provided hereunder.

(b) Purchaser and Seller agree to cooperate and to cause their Affiliates to cooperate with each other to the extent reasonably required after the Closing Date in connection with any claims conducted by a Taxing Authority relating to any Taxes with respect to or in relation to any Purchased Asset for any Tax period ending on or before the Closing Date or, in the case of any Tax period that includes, but does not end on, the Closing Date, the portion of such period ending on the Closing Date (each a "Tax Contest"). Promptly (but no more than [***] days) after Purchaser or any of its Affiliates receives notice of any Tax Contest, Purchaser shall notify Seller in writing (which notice shall include copies of any notices, correspondence and any other documents received by Purchaser or its Affiliates with respect to such Tax Contest) of the Tax Contest; *provided*, that no failure or delay of Purchaser in providing such notice shall reduce or otherwise affect the obligations of Seller pursuant to this Agreement, except to the extent Seller is materially and adversely prejudiced as a result of such failure or delay. Notwithstanding anything to the contrary, if Seller's Tax liability or rights to any refunds (or the liability or rights of the Seller) could be affected by the Tax Contest or if Seller could have an indemnification obligation under this Agreement, Seller shall have the sole right to conduct, control, defend, settle or compromise the defense of the Tax Contest [***] whether the Tax Contest began before or after the Closing Date; and Purchaser shall provide Seller with all necessary powers of attorney and other necessary documents and assistance to allow Seller to effectively conduct and control such defense; provided that in the case of any Claims conducted by a Taxing Authority against the Purchaser that is a Tax Contest, the Purchaser shall have the right to control the defense against such Claim except that the Seller shall have the right to participate in such defense and the Purchaser shall not settle or resolve such Claim without the consent of Seller (which consent shall not be unreasonably withheld, conditioned or delayed).

Section 8.05 Expiration. If the Closing shall have occurred, all covenants, agreements, warranties and representations made herein or in any certificate or other document delivered pursuant hereto shall survive the Closing. Notwithstanding the foregoing, all representations, warranties, covenants and agreements made herein or in any certificate or other document delivered pursuant hereto, and all indemnification obligations under [***] with respect to any such representations, warranties, covenants and agreements, except [***], shall (a) in the case of any such representations or warranties by the Seller, other than the Fundamental Representations, terminate and expire on, and no action or proceeding seeking damages or other relief for breach of any thereof or for any misrepresentation or inaccuracy with respect thereto, shall be commenced after, the date that is [***] months after the Closing Date (the "Claims Period"), unless prior to such date a claim for indemnification with respect thereto shall have been made, with reasonable specificity, by written notice given in accordance with Section 8.03; and (b) in the case of any such covenants or agreements, terminate and expire on, and no action or proceeding seeking damages or other relief for breach of any thereof shall be commenced

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after, the date that is [***] days after the last date on which such covenant or agreement is to be performed, including for such covenants and agreements in which no date is specified, unless prior to such date a claim for indemnification with respect thereto shall have been made, with reasonable specificity, by written notice given in accordance with Section 8.03. The Claims Period for Losses arising or resulting from a breach of any Fundamental Representation will commence at the Closing and continue until [***]. All representations and warranties of Purchaser in this Agreement shall expire upon the end of the Claims Period. Third Party Claims alleging the occurrence of facts or circumstances that, if true, regardless of the outcome of such defense, would entitle a Purchaser Indemnitee to indemnification pursuant to Section 8.01(a)(iii) shall survive until the date [***]. It is the express intent of the Parties that, [***]. In the event of any Fraud, with respect to any representations or warranties set forth in this Agreement, such representations and warranties shall survive the Closing and shall remain in full force and effect until the date that is [***]. If a Claim has been delivered on or prior to the end of the applicable survival period, such the subject matter of such Claim shall survive beyond the applicable survival period until such Claim has been finally resolved.

Section 8.06 Certain Limitations.

(a) Notwithstanding the other provisions of this ARTICLE VIII, Seller shall not have any indemnification obligations for Losses under Section 8.01(a)(iii), other than with respect to Fraud or the Fundamental Representations, unless the aggregate amount of all such Losses exceeds [***], (the "Basket") and then Seller shall be required to pay [***].

(b) Notwithstanding the other provisions of this ARTICLE VIII, Seller shall not have any indemnification obligations for Losses under Section 8.01(a)(iii), other than with respect to Fraud or the Fundamental Representations, in excess, on a cumulative basis in respect of all such Claims, an amount equal to [***].

(c) Except in the event of Fraud, Seller's liability under (i) Section 8.01(a)(iii) with respect to Fundamental Representation, (ii) Section 8.01(a)(ii), and (iii) Section 8.01(a)(iv) shall not exceed, on a cumulative basis in respect of all such Claims, an amount equal to [***]. Notwithstanding anything else contained herein, Seller's indemnification obligations with respect to [***] shall be [***].

(d) Subject to Section 8.06(e), an Indemnified Party may assert a claim for indemnification based on or arising out of the same set of facts and circumstances under more than one provision of Section 8.01 or 8.02, as applicable, and an Indemnified Party shall not be foreclosed or limited from recovering under one or more such applicable provisions an amount of Losses that such Indemnified Party would not be entitled to recover under another applicable provision due to the application of a survival period, basket, or other limitation on such other applicable provision that differs from, or does not apply to, the first applicable provision.

(e) Notwithstanding anything to the contrary set forth herein, no Indemnified Party shall be entitled to double recovery for any Losses based on or arising out of the same set of facts or circumstances under more than one claim for indemnification regardless of whether such facts or circumstances would give rise to multiple bases for indemnification.

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(f) The amount of any Loss for which indemnification is provided under Section 8.01 or Section 8.02 shall be net of any amounts actually recovered by the Indemnified Party pursuant to any indemnification by or indemnification agreement with any nonaffiliated Third Party. If the amount to be netted hereunder from any payment required under Section 8.01 or Section 8.02 is determined after payment by the Indemnifying Party of any amount otherwise required to be paid to an Indemnified Party pursuant to this ARTICLE VIII, the Indemnified Party shall repay to the Indemnifying Party, promptly after such determination, any amount that the Indemnifying Party would not have had to pay pursuant to this ARTICLE VIII had such determination been made at the time of such payment. The Indemnifying Party may require, as a condition to the provision of any indemnification hereunder, that the Indemnified Party execute an undertaking consistent with its obligations set forth in this Section 8.06(f). Purchaser shall promptly assign or subrogate to Seller or its designated Affiliate any claim Purchaser acquired from Seller pursuant to Section 2.01(j), to the extent such claim may reasonably mitigate any Losses that Seller is liable for pursuant to Section 8.01.

Section 8.07 Materiality. Notwithstanding anything in this Agreement to the contrary, for purposes of the parties' indemnification obligations under this ARTICLE VIII, all of the representations and warranties set forth in this Agreement or any certificate or schedule that are qualified as to "material," "materiality," "material respects," "Material Adverse Effect", "Purchaser Material Adverse Effect", or words of similar import or effect shall be deemed to have been made without any such qualification for purposes of determining the amount of Losses resulting from, arising out of or relating to any breach of a representation or warranty.

Section 8.08 Sole Remedy/Waiver. This ARTICLE VIII provides the exclusive means by which a Party may assert and remedy Claims, and Section 10.09 provides the exclusive means by which a Party may bring actions against the other Party with respect to Claims under this Agreement. Except as set forth in Section 10.09(c) each Party hereby waives and releases any other remedies or claims that it may have against the other Party (or any of its Affiliates) with respect to the matters arising out of or in connection with this Agreement or relating to the ALXN1101 Molecule or the Purchased Assets, except that nothing herein shall limit the liability of any Party hereto for Fraud. With respect to any Losses arising under this Agreement, the Parties agree that they shall only seek such Losses from the other Party and hereby waive the right to seek Losses from or equitable remedies, such as injunctive relief, against any Affiliate of the other Party or any director, officer or employee of thereof (or any of its Affiliates).

Section 8.09 Indemnity Payments. In the event that either Party agrees to, or is determined to have an obligation to, reimburse the other Party for Losses as provided in this ARTICLE VIII, the Indemnifying Party shall promptly pay such amount to the Indemnified Party in U.S. Dollars via wire transfer of immediately available funds to the accounts specified in writing by the Indemnified Party. Upon written notice to Seller specifying in reasonable detail the basis therefor, if Seller has not satisfied any indemnification obligation conclusively owed by it to the Purchaser Indemnitees hereunder, Purchaser may set off the amount to which Purchaser is entitled from Seller against any indemnification obligation conclusively owed by Purchaser to

the Seller Indemnitees hereunder and against any Milestone Payment or Royalty Payments owed to Seller. Neither the exercise of, nor the failure to exercise such right of setoff, will constitute an election of remedies or limit Purchaser in any manner in the enforcement of any other remedies against Seller that may be available to Purchaser under this Agreement.

Section 8.10 Tax Treatment of Indemnity Payments. Any indemnity payment under this Agreement shall be treated as an adjustment to the Upfront Payment for Tax purposes unless otherwise required by applicable Law.

Section 8.11 No Consequential Damages. NOTWITHSTANDING ANYTHING TO THE CONTRARY CONTAINED HEREIN, WITH THE EXCEPTION OF RELIEF MANDATED BY STATUTE, (I) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR LOST REVENUES OR PROFITS DAMAGES OR INDIRECT, INCIDENTAL, CONSEQUENTIAL OR MULTIPLIED DAMAGES THAT ARISE OUT OF OR RELATE TO THIS AGREEMENT OR THE PERFORMANCE OR BREACH HEREOF OR ANY LIABILITY RETAINED OR ASSUMED HEREUNDER UNLESS SUCH LOST REVENUES OR PROFITS OR DAMAGES ARE NOT BASED ON ANY SPECIAL CIRCUMSTANCES OF THE PARTY ENTITLED TO INDEMNIFICATION AND ARE THE NATURAL, PROBABLE AND REASONABLY FORESEEABLE RESULT OF THE EVENT THAT GAVE RISE TO THE CLAIM FOR INDEMNIFICATION AND (II) NO PARTY TO THIS AGREEMENT SHALL BE LIABLE TO OR OTHERWISE RESPONSIBLE TO THE OTHER PARTY OR ANY AFFILIATE OF THE OTHER PARTY FOR PUNITIVE OR EXEMPLARY DAMAGES; PROVIDED THAT THE FOREGOING SHALL NOT BE CONSTRUED TO PRECLUDE RECOVERY IN RESPECT OF ANY LOSS DIRECTLY INCURRED OR SUFFERED FROM THIRD PARTY CLAIMS.

ARTICLE IX.
TERMINATION

Section 9.01 Termination.

(a) Mutual Termination. This Agreement may be terminated at any time prior to the Closing by mutual written agreement of Purchaser and Seller.

(b) Termination by Purchaser.

(i) This Agreement may be terminated by Purchaser at any time prior to the Closing, if (A) Seller shall have failed to comply, in any material respect, with any of Seller's covenants or agreements contained in this Agreement or (B) any one or more of the representations or warranties of Seller contained in this Agreement shall prove to have been inaccurate in any material respect, which, in each case, if not cured, would result in a failure of any of the conditions set forth in Section 7.01(a) or Section 7.01(b) to be satisfied, and such inaccuracy or breach shall not have been cured within [***] Business Days after receipt by the Seller of written notice of such inaccuracy or breach (provided that no such cure period shall be available or applicable to any such breach that by its nature cannot be cured by the Outside Date).

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(ii) This Agreement may be terminated by Purchaser if the Closing shall not have occurred on or before the Outside Date; provided that Purchaser may terminate this Agreement pursuant to this Section 9.01(b)(ii) only if at the time of termination Purchaser is not in material breach of any of its representations, warranties, covenants or agreements contained in this Agreement and Purchaser has satisfied those conditions set forth in Section 7.02 (other than those conditions that by their terms are to be satisfied by actions taken at the Closing and could have been satisfied or would have been waived assuming a Closing would occur).

(c) Termination by Seller.

(i) This Agreement may be terminated by Seller at any time prior to the Closing, if (A) Purchaser shall have failed to comply, in any material respect, with any of Purchaser's covenants or agreements contained in this Agreement or (B) any one or more of the representations or warranties of Purchaser contained in this Agreement shall prove to have been inaccurate in any material respect, which, in each case, if not cured, would result in a failure of any of the conditions set forth in Section 7.02(a) or Section 7.02(b) to be satisfied, and such inaccuracy or breach shall not have been cured within [***] Business Days after receipt by the Purchaser of written notice of such inaccuracy or breach (provided that no such cure period shall be available or applicable to any such breach that by its nature cannot be cured by the Outside Date).

(ii) This Agreement may be terminated by Seller if the Closing shall not have occurred on or before the Outside Date; provided that Seller may terminate this Agreement pursuant to this Section 9.01(c)(ii) only if at the time of termination Seller is not in material breach of any of its representations, warranties, covenants or agreements contained in this Agreement and Seller has satisfied those conditions set forth in Section 7.01 (other than those conditions that by their terms are to be satisfied by actions taken at the Closing and could have been satisfied or would have been waived assuming a Closing would occur).

Section 9.02 Effect of Termination.

(a) In the event of the termination of this Agreement in accordance with Section 9.01, this Agreement shall thereafter become void and have no effect, and neither Party shall have any liability to the other Party or to such other Party's Affiliates or Representatives in respect of this Agreement, except for the obligations of the Parties contained in this Section 9.02, and in Section 6.03 and ARTICLE X; provided that nothing herein shall limit the liability of any Party hereto for Fraud whereby the breaching Party both intended to take or fail to take the action giving rise to the breach and had knowledge that such action or inaction would constitute a breach of this Agreement.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(b) In the event this Agreement shall be terminated in accordance with Section 9.01 and, at such time, a Party is in material breach of or default under any term or provision hereof, such termination shall be without prejudice to, and shall not affect, any and all rights to damages and other equitable remedies that the other Party may have hereunder.

ARTICLE X.
MISCELLANEOUS

Section 10.01 Notices. All notices or other communications hereunder shall be deemed to have been duly given and made if in writing and if served by personal delivery upon the Party for whom it is intended, delivered by registered or certified mail, return receipt requested, or by a national overnight courier service, or sent by facsimile (provided that notice by facsimile is promptly confirmed by telephone confirmation thereof and receipt is confirmed by the sending facsimile machine), to the Person at the address set forth below, or such other address as may be designated in writing hereafter, in the same manner, by such Person:

to Seller and any Divesting Entity:

Alexion Pharma Holding Unlimited Company
c/o Alexion Pharmaceuticals, Inc.
100 College Street
New Haven, CT 06510
Attn: Chief Legal Officer

with copies to:

Ropes & Gray LLP
Prudential Tower
800 Boylston Street
Boston, MA 02199-3600
Telephone: (617) 235-9705
Facsimile: (617) 235-0223
Attn: Zachary R. Blume

to Purchaser:

Origin Biosciences, Inc.
421 Kipling St.
Palo Alto, CA 94301
Telephone: (650) 391-9740
Attn: Michael Henderson
Email: [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

with a copy to:

Goodwin Procter LLP
Three Embarcadero
San Francisco, California 94111
Attention: Maggie Wong
Facsimile No.: (415) 733-6071
E-Mail: [***]

All notices and other communications under this Agreement shall be deemed to have been received (a) when delivered by hand, if personally delivered; (b) one (1) Business Day after being sent, if delivered to a national overnight courier service; or (c) one (1) Business Day after being sent, if sent by facsimile, with a telephonic acknowledgment of sending and confirmation of receipt by the sending facsimile machine.

Section 10.02 Amendment; Waiver. Any provision of this Agreement may be amended or waived if, and only if, such amendment or waiver is in writing and signed (a) in the case of an amendment, by Purchaser and Seller and (b) in the case of a waiver, by the Party against whom the waiver is to be effective. No failure or delay by either Party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege.

Section 10.03 Assignment. Neither Party to this Agreement may assign any of its rights or obligations under this Agreement, including by sale of stock, operation of Law in connection with a merger or sale of substantially all of the assets, without the prior written consent of the other Party, except that (a) Seller may, without such consent, assign its rights or obligations to an Affiliate and (b) Purchaser may, without such consent, assign its rights to acquire the Purchased Assets hereunder, in whole or in part, to one or more of its Affiliates; provided that no such assignment by Purchaser shall relieve Purchaser of any of its obligations hereunder. Any permitted assignee shall assume all obligations of its assignor under this Agreement. Any purported assignment in violation of this Section 10.03 shall be null and void.

Section 10.04 Entire Agreement. This Agreement, together with the Exhibits and Schedules expressly contemplated hereby and attached hereto (which are hereby incorporated by reference), and the other agreements and certificates delivered in connection herewith (including the Confidentiality Agreement), contains the entire agreement between the Parties with respect to the Transactions and supersedes all prior agreements or understandings between the Parties. Other than the Confidentiality Agreement entered into between the Parties, this Agreement is intended to define the full extent of the legally enforceable undertakings and representations of the Parties, and no promise or representation, written or oral, which is not set forth explicitly in such agreements is intended by either Party to be legally binding. Each of the Parties acknowledges that, in deciding to enter into this Agreement and to consummate the Transactions, none of them has relied upon any statements or representations, written or oral, other than those explicitly set forth herein or therein.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Section 10.05 Fulfillment of Obligations. Any obligation of a Party to the other Party under this Agreement, which obligation is performed, satisfied or fulfilled by an Affiliate of such Party, shall be deemed to have been performed, satisfied or fulfilled by such Party.

Section 10.06 Parties in Interest. This Agreement shall inure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns. Nothing in this Agreement, express or implied, is intended to confer upon any Person other than Purchaser, Seller and the Divesting Entities, or their successors or permitted assigns, any rights or remedies under or by reason of this Agreement.

Section 10.07 Expenses. Except as otherwise expressly provided in this Agreement, whether or not the Transactions are consummated, all costs and expenses incurred in connection with this Agreement and the Transactions shall be borne solely by the Party incurring such expenses.

Section 10.08 Schedules. The disclosure of any matter in the Schedules to this Agreement shall be deemed to be a disclosure for the purposes of the Section or subsection of this Agreement to which it corresponds in number and each other Section and subsection of this Agreement to the extent such disclosure is reasonably apparent on the face thereof to be relevant to such other Section or subsection. The disclosure of any matter in any Schedule to this Agreement shall expressly not be deemed to constitute an admission by any Party, or to otherwise imply, that any such matter is material for the purposes of this Agreement, could reasonably be expected to have a Material Adverse Effect or a Purchaser Material Adverse Effect, as applicable, or is required to be disclosed under this Agreement.

Section 10.09 Governing Law; Jurisdiction; No Jury Trial; Specific Performance.

(a) This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the conflicts of law, principles or rules of such state, to the extent such principles or rules are not mandatorily applicable by statute and would permit or require the application of the laws of another jurisdiction.

(b) The Parties consent to the exclusive jurisdiction of the Federal and State courts located in the State of Delaware for the resolution of all disputes or controversies between the Parties. Each of the Parties (i) consents to the exclusive jurisdiction of each such court in any suit, action or proceeding relating to or arising out of this Agreement or the Transactions; (ii) waives any objection that it may have to the laying of venue in any such suit, action or proceeding in any such court; and (iii) agrees that service of any court paper may be made in such manner as may be provided under applicable Laws or court rules governing service of process. THE PARTIES HERETO HEREBY IRREVOCABLY WAIVE, AND AGREE TO CAUSE THEIR RESPECTIVE AFFILIATES TO WAIVE, THE RIGHT TO TRIAL BY JURY IN ANY ACTION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT, ANY RELATED AGREEMENTS OR ANY OF THE TRANSACTIONS.

(c) Purchaser acknowledges and agrees that Seller would be damaged irreparably in the event that any of Purchaser's obligations pursuant to Section 6.09 or Section 6.10(b) (the "Drug Access Obligations") are not performed. Accordingly, Purchaser agrees that, without posting bond or other undertaking, Seller shall be entitled to an injunction or injunctions to prevent breaches or violations of Section 6.09 or the Drug Access Obligations and to enforce specifically the obligations under Section 6.09 or the Drug Access Obligations in any action instituted in any court specified in Section 10.09(b) in addition to any other remedy to which Seller may be entitled, at law or in equity. Purchaser further agrees that, in the event of any action for an injunction or specific performance in respect of Section 6.09 or such Drug Access Obligations, it shall not assert that a remedy at law would be adequate.

Section 10.10 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, and together shall constitute one and the same agreement and shall become effective when one or more counterparts have been signed by each of the Parties and delivered to the other Party, it being understood that both Parties need not sign the same counterpart. This Agreement, following its execution, may be delivered via facsimile or other form of electronic delivery, which shall constitute delivery of an execution original for all purposes.

Section 10.11 Headings. The heading references herein and the table of contents hereto are for convenience purposes only, do not constitute a part of this Agreement and shall not be deemed to limit or affect any of the provisions hereof.

Section 10.12 Severability. The provisions of this Agreement shall be deemed severable and the invalidity or unenforceability of any provision shall not affect the validity or enforceability of the other provisions hereof. If any term or other provision of this Agreement, or the application thereof to any Person or any circumstance, is invalid, illegal or unenforceable, (a) a suitable and equitable provision shall be substituted therefore in order to carry out, so far as may be valid and enforceable, the intent and purpose of such invalid or unenforceable provision and (b) the remainder of this Agreement and the application of such provision to other Persons or circumstances shall not be affected by such invalidity, illegality or unenforceability, nor shall such invalidity, illegality or unenforceability affect the validity or enforceability of such provision, or the application thereof, in any other jurisdiction.

[remainder of page intentionally blank]

IN WITNESS WHEREOF, the undersigned have executed or caused this Agreement to be executed as of the Effective Date.

ALEXION PHARMA HOLDING UNLIMITED COMPANY

By: /s/ Christopher Brough
Name: Christopher Brough
Title: Director

[Signature Page to Asset Purchase Agreement]

IN WITNESS WHEREOF, the undersigned have executed or caused this Agreement to be executed as of the Effective Date.

ORIGIN BIOSCIENCES, INC.

By: /s/ Michael Henderson
Name: Michael Henderson
Title: Chief Executive Officer

[Signature Page to Asset Purchase Agreement]

IN WITNESS WHEREOF, the undersigned have executed or caused this Agreement to be executed as of the Effective Date.

BRIDGEBIO PHARMA, LLC, solely for the purposes of Section 6.14

By: /s/ Neil Kumar
Name: Neil Kumar
Title: Chief Executive Officer

Exhibit A

SELLER CLOSING DELIVERABLES

(a) A receipt for payment of the Upfront Payment at Closing;

(b) A certificate in the form attached hereto as Exhibit C, dated the Closing Date and executed by an authorized officer of Seller, to the effect that each of the conditions specified in Section 7.01(a) and Section 7.01(b) of the Agreement is satisfied in all respects;

(c) An executed bill of sale and assignment and assumption in the form attached hereto as Exhibit D (the "Bill of Sale and Assignment and Assumption"), dated the Closing Date;

(d) Executed patent assignments in the form attached hereto as Exhibit E (with assignments in recordable form to be delivered after the Closing) (the "Patent Assignment"), dated the Closing Date;

(e) In the case of (i) Seller and each non-U.S. Divesting Entity, a properly completed and executed IRS Form W-8BEN-E, establishing that Seller and each such non-U.S. Divesting Entity is eligible for applicable treaty benefits that reduce or eliminate any withholding in respect of royalty payments and (ii) each Divesting Entity that is a U.S. person (as defined in Section 7701(a)(30) of the Code), a properly completed and executed IRS Form W-9; and

(f) The executed Seller Transfer Letter to FDA, dated the Closing Date.

Exhibit B

PURCHASER CLOSING DELIVERABLES

(a) A good standing certificate for Purchaser;

(b) A certificate in the form attached hereto as Exhibit F, dated the Closing Date and executed by an authorized officer of Purchaser, to the effect that each of the conditions specified in Section 7.02(a) and Section 7.02(b) of the Agreement is satisfied in all respects;

(c) A certificate of a Secretary or an Assistant Secretary of Purchaser in the form attached hereto as Exhibit G enclosing a copy of (i) its certificate of incorporation certified by the Secretary of State of the State of Delaware, (ii) its by-laws and (iii) board of director resolutions authorizing Purchaser to enter into this Agreement and to consummate the Transactions;

(d) The executed Bill of Sale and Assignment and Assumption, dated the Closing Date;

(e) The executed Patent Assignment, dated the Closing Date; and

(f) The executed Purchaser Transfer Letter to FDA, dated the Closing Date.

Schedule 7.01(f)

Consents

1. The Services Agreement.

SCHEDULES

to the

ASSET PURCHASE AGREEMENT

between

ALEXION PHARMA HOLDING UNLIMITED COMPANY, ORIGIN BIOSCIENCES, INC.

and

BRIDGEBIO PHARMA, LLC (SOLELY FOR THE PURPOSES OF SECTION 6.14)

DATED AS OF JUNE 7, 2018

Capitalized terms used in the following schedules (these "**Schedules**") but not otherwise defined shall have the meanings ascribed to such terms in that certain Asset Purchase Agreement (the "**Agreement**") by and between Alexion Pharma Holding Unlimited Company (the "**Seller**"), Origin Biosciences, Inc. (the "**Purchaser**") and BridgeBio Pharma, LLC (solely for the purposes of Section 6.14) to which these Schedules are attached.

SCHEDULE 2.01(b)

TRANSFERRED PATENTS

Patent Ref.	Patent No.	Current Owner(s)	Jurisdiction	Issuance Date
[ ]	[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]	[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SCHEDULE 2.01(c)

TRANSFERRED TRADEMARKS

None.

SCHEDULE 2.01(d)

TRANSFERRED COPYRIGHTS

None.

SCHEDULE 2.01(e)

TRANSFERRED INTERNET DOMAIN NAMES

None.

SCHEDULE 2.01(f)

TRANSFERRED GOVERNMENTAL AUTHORIZATIONS

Country	Competent Authority	Subject	Date of Decision
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SCHEDULE 2.01(i)

TRANSFERRED CONTRACTS

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SCHEDULE 6.05(c)

SUPPLY OF PRODUCT

The following inventory is scheduled for manufacture in the remainder of 2018:

[Attached]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

DISCLOSURE SCHEDULES

to the

ASSET PURCHASE AGREEMENT

between

ALEXION PHARMA HOLDING UNLIMITED

COMPANY, ORIGIN BIOSCIENCES, INC.,

and

BRIDGEBIO PHARMA, LLC (SOLELY FOR THE PURPOSES OF SECTION 6.14) DATED AS OF

June 7, 2018

Capitalized terms used in the following schedules (these "**Schedules**") but not otherwise defined shall have the meanings ascribed to such terms in that certain Asset Purchase Agreement (the "**Agreement**") by and between Alexion Pharma Holding Unlimited Company (the "**Seller**"), Origin Biosciences, Inc. (the "**Purchaser**") and BridgeBio Pharma, LLC (solely for the purposes of Section 6.14) to which these Schedules are attached.

SCHEDULE 4.03

NON-CONTRAVENTION

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SCHEDULE 4.04

GOVERNMENTAL AUTHORIZATION

Authorization concerning Clinical Trial Applications in the following countries:

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SCHEDULE 4.05

NO LITIGATION

None.

SCHEDULE 4.06

COMPLIANCE WITH LAWS

None.

SCHEDULE 4.07

CONTRACTS

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SCHEDULE 4.08

INTELLECTUAL PROPERTY

None.

SCHEDULE 4.09

BROKERS

None.

SCHEDULE 4.10

PURCHASED ASSETS

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SCHEDULE 4.11

INVENTORIES

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SCHEDULE 4.12

TAX REPRESENTATIONS

None.

SCHEDULE 4.13

REGULATORY MATTERS

[***]

SCHEDULE 6.01

CONDUCT OF BUSINESS

None.

Exhibit C

OFFICER'S CERTIFICATE
OF
ALEXION PHARMA HOLDING UNLIMITED COMPANY

[***]

This certificate is being delivered pursuant to Section 7.01(e) of that certain Asset Purchase Agreement, by and among Alexion Pharma Holding Unlimited Company ("Seller"), Origin Biosciences, Inc. ("Purchaser") and BridgeBio Pharma, LLC (solely for the purposes of Section 6.14) dated as of June 7, 2018 (the "Asset Purchase Agreement"). All capitalized terms used but not defined herein shall have the meanings assigned to them in the Asset Purchase Agreement, unless they are specifically otherwise defined herein.

The undersigned, [***], in [***] capacity as [***] of the Seller, and not in [***] personal capacity and without personal liability, hereby certifies that:

1. The representations and warranties of Seller contained in the Asset Purchase Agreement and in any certificate delivered by Seller pursuant to the Asset Purchase Agreement, to the extent not qualified by materiality, are true and correct in all material respects as of the Effective Date and are true and correct in all material respects at and as of the Closing Date as if made at and as of such date and the representations and warranties of Seller contained in the Asset Purchase Agreement and in any certificate or other writing delivered by Seller pursuant to the Asset Purchase Agreement, to the extent qualified by materiality, are true and correct in all respects as of the Effective Date and at and as of the Closing Date as if made at and as of such date.

2. Seller has performed and complied in all material respects with all of its covenants and agreements under the Asset Purchase Agreement to be complied with and performed by Seller at or before the Closing.

[Signatures on following page]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

IN WITNESS WHEREOF, I cause this certificate to be executed as of the date first written above.

Name:
Title:

[Signature Page to Seller's Officer's Certificate]

Exhibit D

BILL OF SALE AND ASSIGNMENT AND ASSUMPTION

This BILL OF SALE AND ASSIGNMENT AND ASSUMPTION (this "Agreement") is dated as of [ ], 2018, by and between Alexion Pharma Holding Unlimited Company, [●] ***[Note to Draft: To be updated to include Divesting Entities.]*** (collectively, the "Sellers") and Origin Biosciences, Inc. (the "Purchaser").

RECITALS

WHEREAS, pursuant to that certain Asset Purchase Agreement by and among Alexion Pharma Holding Unlimited Company, Purchaser and BridgeBio Pharma, LLC (solely for the purposes of Section 6.14) dated as of June 7, 2018 (the "Asset Purchase Agreement"), Sellers have agreed to sell, convey, assign and transfer to Purchaser, and Purchaser has agreed to purchase, acquire and accept from Sellers, Sellers' right, title and interest in, to and under the Purchased Assets (as defined in the Asset Purchase Agreement), and (b) Sellers have agreed to sell, convey, assign and transfer to Purchaser, and Purchaser has agreed to accept and assume, the Assumed Liabilities (as defined in the Asset Purchase Agreement).

NOW, THEREFORE, in consideration of the Asset Purchase Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Sellers and the Purchaser agree as follows:

1. Definitions. All capitalized terms used but not defined herein shall have the meanings assigned to them in the Asset Purchase Agreement, unless they are specifically otherwise defined herein.

2. Bill of Sale of Purchased Assets. In accordance with terms and subject to the conditions of the Asset Purchase Agreement, effective as of the Closing, Sellers hereby do sell, convey, assign and transfer to Purchaser all of Sellers' right, title, and interest in, to and under each of the Purchased Assets.

3. Assignment and Assumption. In accordance with terms and subject to the conditions of the Asset Purchase Agreement, effective as of the Closing, Sellers hereby do sell, convey, assign and transfer to Purchaser all of Sellers' right, title, interest in, obligations and liabilities, to and under the Assumed Liabilities at the Closing pursuant to the Asset Purchase Agreement. In accordance with terms and subject to the conditions of the Asset Purchase Agreement, effective as of the Closing, Purchaser hereby accepts the foregoing assignment and transfer and agrees to accept, assume and undertake, and timely satisfy and discharge when due, Sellers' obligations, liabilities and responsibilities under or pursuant to such Assumed Liabilities arising from and after the date hereof as contemplated by the Asset Purchase Agreement.

4. Miscellaneous. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the conflicts of law, principles or rules of such state, to the extent such principles or rules are not mandatorily applicable by statute and would permit or require the application of the laws of another jurisdiction.

5. Additional Rights and Obligations. This Agreement is made subject to and with the benefit of the respective provisions of the Asset Purchase Agreement (including, without limitation, the schedules and exhibits thereto). Purchaser and Sellers hereby agree and acknowledge that the execution and delivery of this Agreement shall not expand, impair, supersede, modify, limit, extend, diminish, amend or in any way affect any of the rights, obligations, agreements, covenants, representations, warranties or indemnities contained in the Asset Purchase Agreement, which shall remain in full force and effect to the full extent provided therein. In the event of any conflict or inconsistency between the terms of the Asset Purchase Agreement and the terms hereof, the terms of the Asset Purchase Agreement shall govern.

6. Further Assurances. Sellers agree to cooperate with Purchaser and to execute and deliver such further instruments and documents and, at each Seller's expense, do all such further acts and things as Purchaser may reasonably be requested to do from time to time by Sellers in order to carry out the provisions and objectives of this Agreement in accordance with the terms of the Asset Purchase Agreement.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the undersigned have executed, made and entered into this Agreement under seal as of the date first set forth above.

ALEXION PHARMA HOLDING UNLIMITED COMPANY

By: _____
Name:
Title:

[Signature Page to Bill of Sale and Assignment and Assumption]

IN WITNESS WHEREOF, the undersigned have executed, made and entered into this Agreement under seal as of the date first set forth above.

[●]

By: _____
Name:
Title:

[Signature Page to Bill of Sale and Assignment and Assumption]

IN WITNESS WHEREOF, the undersigned have executed, made and entered into this Agreement under seal as of the date first set forth above.

ORIGIN BIOSCIENCES, INC.

By: _____
Name:
Title:

[Signature Page to Bill of Sale and Assignment and Assumption]

Exhibit E

PATENT ASSIGNMENT

This PATENT ASSIGNMENT ("Assignment") is dated as of [ ], 2018, by and between Alexion Pharmaceuticals, Inc. (the "Assignor") and Origin Biosciences, Inc. (the "Assignee").

RECITALS

WHEREAS, pursuant to that certain Asset Purchase Agreement by and among Alexion Pharma Holding Unlimited Company, Assignee and BridgeBio Pharma, LLC (solely for the purposes of Section 6.14) dated as of June 7, 2018 (the "Asset Purchase Agreement"), Assignor has agreed to assign to the Assignee all of the Assignor's right, title, and interest in, to and under the patents listed on Schedule A hereto (collectively, the "Patents").

NOW, THEREFORE, in consideration of the Asset Purchase Agreement and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the Assignor and the Assignee agree as follows:

1. Assignment. Assignor does hereby sell, assign, convey and transfer to the Assignee or its designee, and to their respective successors, assigns, or other legal representatives, Assignor's entire right, title, and interest in and to the Patents, together with the right to claim priority in the United States and before any international conventions and any other foreign jurisdictions, and continuations, continuations-in-part, divisionals, reissues, reexaminations, extensions, modifications, substitutions, and where relevant supplementary protection certificates, and the rights to all income, royalties, or payments due or payable as of the effective date of this assignment or thereafter, including, without limitation, all claims for damages by reason of past, present, or future infringement or other unauthorized use of the Patents with the right to sue for and collect the same for the Assignee's own use and enjoyment, and for the use and enjoyment of its successors, assigns, or other legal representatives.

2. Miscellaneous. This Assignment shall be governed by and construed in accordance with the laws of the State of Delaware, without regard to the conflicts of law, principles or rules of such state, to the extent such principles or rules are not mandatorily applicable by statute and would permit or require the application of the laws of another jurisdiction. In the event that any provision of this Assignment shall be construed to conflict with a provision in the Asset Purchase Agreement, the provision in the Asset Purchase Agreement shall control.

[Remainder of page intentionally left blank]

IN WITNESS WHEREOF, the undersigned have executed, made and entered into this Assignment under seal as of the date first set forth above.

ASSIGNOR:
ALEXION PHARMACEUTICALS, INC.

By: _____
Name:
Title:

[Jurisdiction]

_____ [city/county] _____, ss.

On this __ day of _____, 2018, before me, the undersigned notary public,
Day Month

personally appeared _____,
Name (s) of Signer(s)

proved to me through satisfactory evidence of identification, which
was/were _____,
Description of Evidence of Identity

to be the person(s) whose name(s) is/are signed on the preceding or attached document, and acknowledged to me that he/she/they signed it voluntarily for its stated purpose.

as _____ for
Title of Office

_____, a corporation.

_____
Signature of Notary Public

Place Notary Seal and/or Stamp above

IN WITNESS WHEREOF, the undersigned have executed, made and entered into this Assignment under seal as of the date first set forth above.

ASSIGNEE:
ORIGIN BIOSCIENCES, INC.

By: _____
Name:
Title:

[Jurisdiction]

_____ [city/county] _____, ss.

On this __ day of _____, 2018, before me, the undersigned notary public,
Day Month

personally appeared _____,
Name (s) of Signer(s)

proved to me through satisfactory evidence of identification, which
was/were _____,
Description of Evidence of Identity

to be the person(s) whose name(s) is/are signed on the preceding or attached document, and acknowledged to me that he/she/they signed it voluntarily for its stated purpose.

as _____ for
Title of Office

_____, a corporation.

_____
Signature of Notary Public

Place Notary Seal and/or Stamp above

Schedule A

Patents

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Exhibit F

OFFICER'S CERTIFICATE
OF
ORIGIN BIOSCIENCES, INC.

[***]

This certificate is being delivered pursuant to Section 7.02(d) of that certain Asset Purchase Agreement, by and among Alexion Pharma Holding Unlimited Company ("Seller"), Origin Biosciences, Inc. ("Purchaser") and BridgeBio Pharma, LLC (solely for the purposes of Section 6.14) dated as of June 7, 2018 (the "Asset Purchase Agreement"). All capitalized terms used but not defined herein shall have the meanings assigned to them in the Asset Purchase Agreement, unless they are specifically otherwise defined herein.

The undersigned, Neil Kumar, in his capacity as President of the Purchaser, and not in his personal capacity and without personal liability, hereby certifies that:

1. The representations and warranties of Purchaser contained in the Asset Purchase Agreement and in any certificate delivered by Purchaser pursuant to the Asset Purchase Agreement, to the extent not qualified by materiality, are true and correct in all material respects as of the Effective Date and are true and correct in all material respects at and as of the Closing Date as if made at and as of such date and the representations and warranties of Purchaser contained in the Asset Purchase Agreement and in any certificate or other writing delivered by them pursuant to the Asset Purchase Agreement, to the extent qualified by materiality, are true and correct in all respects as of the Effective Date and at and as of the Closing Date as if made at and as of such date.

2. Purchaser has performed and complied in all material respects with all of its covenants and agreements under the Asset Purchase Agreement to be complied with and performed by Purchaser at or before the Closing.

[Signatures on following page]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

IN WITNESS WHEREOF, I cause this certificate to be executed as of the date first written above.

Name: Neil Kumar
Title: President

[Signature Page to Purchaser's Officer's Certificate]

Exhibit G

SECRETARY'S CERTIFICATE
OF
ORIGIN BIOSCIENCES, INC.

[***]

This certificate is being delivered pursuant to Section 7.02(d) of that certain Asset Purchase Agreement, by and among Alexion Pharma Holding Unlimited Company ("Seller"), Origin Biosciences, Inc. ("Purchaser") and BridgeBio Pharma, LLC (solely for the purposes of Section 6.14) dated as of June 7, 2018 (the "Asset Purchase Agreement"). All capitalized terms used but not defined herein shall have the meanings assigned to them in the Asset Purchase Agreement, unless they are specifically otherwise defined herein.

The undersigned, being the Secretary of Purchaser, hereby certifies in its capacity as Secretary and not in its personal capacity and without personal liability, hereby certifies that:

1. The undersigned is the Secretary of the Purchaser and as such the undersigned is familiar with the corporate affairs and records of the Purchaser.

2. Attached hereto as Exhibit A is a true, complete and correct copy of the Certificate of Incorporation of the Purchaser and all amendments thereto, issued on [***] by the Delaware Secretary of State. There have been no further amendments to said Certificate of Incorporation since the said date, and said Certificate of Incorporation is in full force and effect as of the date hereof.

3. Attached here to as Exhibit B is a true, complete and correct copy of the current By-laws of the Purchaser adopted on [***]. There have been no amendments to said By-laws since said date, and said By-laws are in full force and effect as of the date hereof.

4. Attached hereto as Exhibit C is a true, complete and correct copy of the resolutions of the Board of Directors of the Purchaser effective as of [***] authorizing the Purchaser to enter into the Asset Purchase Agreement and to consummate the Transactions.

[Signatures on following page]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

IN WITNESS WHEREOF, I cause this certificate to be executed as of the date first written above.

ORIGIN BIOSCIENCES, INC.

By: _____
Name: Michael Henderson
Title: Secretary

[Signature Page to Purchaser's Secretary's Certificate]

Exhibit A

Certificate of Incorporation

Exhibit B

By-laws

Exhibit C

Resolution of the Board of Directors

[***] **Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.**

OPTION AGREEMENT

by and among

LEO PHARMA A/S

LEO SPINY MERGER SUB, INC.

AND

PELLEPHARM, INC.

Dated as of November 19, 2018

Table of Contents

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBITS

Exhibit A - Form of Merger Agreement

Exhibit B - Form of Support Agreement

Exhibit C - Form of Optionee Secretary's Certificate

Exhibit D - Form of Company Secretary's Certificate

Exhibit E - Form of Equity Investment Documents

Exhibit F - Budget

Exhibit G - Form of Research and Technical Development Plan

Exhibit H - SVB Term Sheet

Schedule 1.1 - SVB Top Line Data Requirement

Schedule 5.12 - Optionee Loan Terms

OPTION AGREEMENT

This Option Agreement (this "***Agreement***"), is entered into as of November 19, 2018 (the "***Agreement Date***"), by and among LEO Pharma A/S, a company organized under the laws of the Kingdom of Denmark (the "***Optionee***"), LEO Spiny Merger Sub, Inc., a Delaware corporation ("***Merger Sub***"), and PellePharm, Inc., a Delaware corporation (the "***Company***").

WHEREAS, upon the terms and subject to the conditions contained herein, the Company has agreed to grant to the Optionee during the period beginning on the Agreement Date and ending on the Option Exercise Termination Date (unless terminated prior to the Option Exercise Termination Date in accordance with the terms of this Agreement) an exclusive option to acquire the Company pursuant to a merger (the "Merger") of Merger Sub with and into the Company, with the Company continuing as the surviving corporation, all pursuant to the terms and conditions of this Agreement, the Merger Agreement, and the DGCL;

WHEREAS, the Company's board of directors ("***Company Board of Directors***") has determined that the Option and the Merger are each in the best interest of the Company and its Stockholders and has approved and declared advisable this Agreement, the Merger Agreement and the Merger (to the extent the Option is exercised on the terms hereof) and the other transactions contemplated hereby and thereby; and

WHEREAS, in accordance with the terms hereof, certain Stockholders representing at least the Required Stockholder Approval (as defined below in Section 1.1), shall enter into a stockholders' agreement with the Company, which includes an irrevocable proxy in favor of the Company, in the form attached hereto as Exhibit B (each, a "***Support Agreement***") pursuant to which, among other things, each such Stockholder will (a) agree to vote its shares of Capital Stock in favor of the adoption of the Merger Agreement, thereby approving the Merger and the other transactions contemplated thereby and (b) appoint the Company as its proxy to vote its shares of Capital Stock in favor of the adoption of the Merger Agreement, thereby approving the Merger and the other transactions contemplated thereby.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements herein contained, and intending to be legally bound hereby, the parties hereto hereby agree as follows:

ARTICLE 1
DEFINITIONS AND INTERPRETATIONS

1.1 Defined Terms. As used herein, the terms below shall have the following meanings.

"***Acquisition Proposal***" means any offer or proposal (other than the Merger contemplated by the Merger Agreement) relating to any of the following: (a) the sale, license or other disposition of all or a material portion of the Business or assets of the Company, (b) other than in accordance with Section 5.12, the issuance, disposition or acquisition of (i) any Capital Stock (other than in connection with the exercise of any Equity Incentive Options), (ii) any subscription, option, call, warrant, preemptive right, right of first refusal or any other right (whether or not exercisable) to acquire any Capital Stock (other than the grant of Equity

Incentive Options in the ordinary course of business consistent with past practices), or (iii) any security, instrument or obligation that is or may become convertible into or exchangeable for any Capital Stock or (c) any merger, consolidation, business combination, reorganization, liquidation, recapitalization, share exchange or similar transaction involving the Company.

"***Action***" means any action, claim, suit, litigation, proceeding, arbitration, or investigation pending before or brought by a Governmental Entity or arbitral body.

"***Additional Exclusivity Payment***" has the meaning specified in Section 2.5.

"***Additional Exclusivity Payment Milestone***" means the initial dosing of [***] patients in the Phase III Trial within [***] after the initial dosing of the first patient in the Phase III Trial by the Company.

"***Affiliate***" of a Person means any other Person which, directly or indirectly, controls, is controlled by, or is under common control with, such Person. The term "control" (including, with correlative meaning, the terms "controlled by" and "under common control with"), as used with respect to any Person, means the possession, directly or indirectly, of the power to direct or cause the direction of the management and policies of such Person, whether through the ownership of voting securities, by contract or otherwise.

"***Agreement***" has the meaning set forth in the Preamble.

"***Agreement Date***" has the meaning set forth in the Preamble.

"***Ancillary Documents***" has the meaning specified in Section 3.2(a).

"***Assets***" means the right, title and interest of the Company and/or any of its Subsidiaries in properties, assets and rights of any kind, whether tangible or intangible, real or personal.

"***Balance Sheet***" means the unaudited balance sheet of the Company as of September 30, 2018 and the footnotes thereto.

"***Balance Sheet Date***" means September 30, 2018.

"***Bringdown Budget***" has the meaning specified in Section 2.5.

"***Bringdown Certificate***" has the meaning specified in Section 2.5.

"***Budget***" has the meaning specified in Section 5.12(a) and as set out in Exhibit F.

"***Business***" means the development, manufacture and Commercialization of the Company Product and/or such other business and operations conducted by the Company.

"***Business Day***" means any day other than a Saturday, Sunday, or other day on which banks in California, Delaware or Denmark are required by applicable Laws to be closed.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"***Capital Stock***" means the Common Stock, the Preferred Stock and any other classes and series of capital stock of the Company authorized under the Company Certificate of Incorporation.

"***Certificate of Merger***" means a certificate of merger in substantially the form attached to the Merger Agreement.

"***Clinical Study***" means one or more of the following as each may be amended, supplemented, or modified, (i) the Phase III Trial, (ii) the HF-BCC Phase II Trial, and (ii) any clinical trial, research study in human subjects and/or clinical work sponsored by or performed by or on behalf of the Company in order to seek or support FDA approval of any FDA Application of patidegib topical gel for the treatment of Gorlin Syndrome and/or HF-BCC.

"***Closing***" has the meaning specified in the Merger Agreement.

"***CMS***" means the United States Centers for Medicare and Medicaid Services or any successor agency thereto.

"***Commercialization***" means any and all activities related to the commercial exploitation of the Company Product, including (a) commercial product packaging, branding, pricing, reimbursement and market access, scientific pre-launch communication, marketing, advertising, sales promotion and presentation at expert meetings of the Company Product including any clinical data in relation hereto, (b) importing the Company Product into a country or other jurisdiction and exporting the Company Product from a country or other jurisdiction and (c) distributing or selling, or offering to distribute or sell, the Company Product.

"***Commercially Reasonable Efforts***" [***].

"***Common Stock***" means the common stock, $0.0001 par value per share, of the Company.

"***Company***" has the meaning specified in the Preamble.

"***Company Board of Directors***" has the meaning specified in the Preamble.

"***Company Certificate of Incorporation***" means the Certificate of Incorporation of the Company, as amended.

"***Company Disclosure Schedule***" has the meaning specified in the Merger Agreement.

"***Company Indemnified Parties***" has the meaning specified in Section 6.2(b).

"***Company IP***" means all Intellectual Property Rights and Intellectual Property owned by or exclusively licensed to the Company.

"***Company Merger Representations***" means the representations and warranties set forth in Article 3 of the Merger Agreement.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"***Company Product***" means the product candidate that the Company is developing as of the Agreement Date known as patidegib in a topical gel formulation which is subject to IND #[***].

"***Company Secretary's Certificate***" has the meaning specified in Section 2.4(a)(iv).

"***Company Securities***" has the meaning specified in Section 3.3(b).

"***Confidentiality Agreement***" means that certain Confidentiality Agreement, dated as of February 23, 2015, by and between the Company and the Optionee, as amended.

"***Consents***" means any and all Permits and any and all notices to, consents, approvals, clearances, ratifications, permissions, authorizations or waivers from third Persons, including from any Governmental Entity.

"***Contracts***" mean all agreements, contracts, subcontracts, leases (whether for real or personal property), purchase orders, covenants not to compete, employment agreements, confidentiality agreements, licenses, instruments, notes, options and warranties to which the Company or any of its Subsidiaries is a party or by which the Company or any of its Subsidiaries or any of the Assets are bound, whether written or oral.

"***Court Order***" means any judgment, decision, decree, consent decree, injunction, ruling or order of any Governmental Entity that is binding on any Person or its property under applicable Laws.

"***Damages***" has the meaning specified in Section 6.2(a).

"***Data Monitoring Committee***" means the data monitoring committee established by the Company for purposes of the Phase III Trial.

"***DGCL***" means the General Corporation Law of the State of Delaware, as amended.

"***Employees***" mean all Persons employed by the Company on a full or part-time basis, whether on active status or on leaves of absence.

"***Equity Incentive Option Plan***" means the Company's 2014 Equity Incentive Plan and 2016 Equity Incentive Plan, each as amended from time to time, and any other plan for the issuance of equity compensation awards to purchase or receive Common Stock of the Company.

"***Equity Incentive Optionholders***" means, collectively, the holders of Equity Incentive Options.

"***Equity Incentive Options***" means options or other equity compensation awards to purchase or receive shares of Common Stock issued or issuable by the Company pursuant to the Equity Incentive Option Plan.

"***Equity Investment***" means the investment by the Optionee contemplated by the Equity Investment Documents.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"***Equity Investment Documents***" means the Common Stock Purchase Agreement, the Amended and Restated Investors' Rights Agreement, the Amended and Restated Right of First Refusal and Co-Sale Agreement and the Amended and Restated Voting Agreement, each dated as of even date herewith by and among the Company, the Optionee and the other parties thereto, and attached hereto as Exhibit E.

"***Exercise Withdrawal Notice***" has the meaning specified in Section 2.6.

"***Exclusivity Payment***" has the meaning specified in Section 2.2.

"***FDA***" means the United States Food and Drug Administration or any successor agency thereto.

"***FDA Act***" means the Federal Food, Drug, and Cosmetic Act, 21 U.S.C. § 301 et seq.

"***FDA Application***" means a new drug application as described in Code of Federal Regulations Title 21 (21 C.F.R.) § 314.50, submitted to the FDA under Section 505(b) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. § 355(b)) for approval to commercialize a drug product in the United States.

"***Financial Statements***" has the meaning specified in Section 3.6.

"***Fraud***" means any intentional misrepresentation, deceit or concealment of a material fact with the intention of depriving a Person of property or legal rights to the extent such intentional misrepresentation, deceit or concealment caused such Person, in justifiable reliance upon such intentional misrepresentation, deceit of concealment, to take or refrain from taking an action.

"***GAAP***" means generally accepted accounting principles as applied consistently in the U.S.

"***Gorlin Syndrome***" means Gorlin syndrome, also known as basal cell carcinoma nevoid syndrome, a rare autosomal dominant heritable disease characterized by numerous phenotypic abnormalities, most prominent among which is the development of numerous basal cell carcinomas over a lifetime.

"***Governmental Entities***" mean all agencies, authorities, bodies, boards, commissions, courts, instrumentalities, legislatures and offices of competent jurisdiction of any government, quasi-governmental unit or political subdivision, whether U.S. or foreign, federal, state, county, district, municipality, city or otherwise, including, as applicable, the FDA, CMS, and any Notified Body.

"***HF-BCC***" means [***].

"***HF-BCC Phase II Trial***" means [***].

"***HSR Act***" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976, as amended.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"***IND***" means an Investigational New Drug application (as defined in 21 C.F.R. § 312.3) filed or to be filed with the FDA.

"***Indemnified Party***" has the meaning specified in Section 6.2(b).

"***Indemnifying Party***" has the meaning specified in Section 6.3(a).

"***Initial Merger Agreement Company Disclosure Schedule***" has the meaning specified in Section 2.4(a)(ii).

"***Intellectual Property***" means and includes algorithms, APIs, apparatus, diagrams, inventions (whether or not patentable), invention disclosures, trade secrets, know-how, logos, trademarks, service marks and other brand elements (including brand names, product names, logos, and slogans), methods, network configurations and architectures, processes, proprietary information, protocols, schematics, specifications, technical data, software code (in any form, including source code and executable or object code), mask works, subroutines, techniques, user interfaces, URLs, domain names, web sites, works of authorship, documentation (including instruction manuals, samples, studies, and summaries), databases and data collections, any other forms of technology, and any goodwill associated with or symbolized by any of the foregoing, in each case whether or not embodied in any tangible form and including all tangible embodiments of any of the foregoing.

"***Intellectual Property Rights***" means and includes all past, present, and future rights of the following types, which may exist or be created under the Laws of any jurisdiction worldwide: (a) rights associated with works of authorship, including exclusive exploitation rights, copyrights, design rights, and moral rights; (b) trademark, trade name, service name, trade dress and service mark rights and similar rights and any goodwill associated with or symbolized by any of the foregoing; (c) trade secret rights; (d) patents and industrial property rights; (e) other proprietary rights in Intellectual Property of every kind and nature; and (f) rights in or relating to registrations, renewals, extensions, combinations, reexaminations, provisionals, continuations, continuations in-part, divisions, and reissues of, and applications for, any of the rights referred to in clauses "(a)" through "(e)" above.

"***Interim Analysis***" means the Required Top Line Data corresponding to a potential six (6) month analysis of new surgically eligible tumor development in all vehicle-treated vs. all patidegib topical gel-treated subjects, as defined in the Phase III Protocol [***] and Statistical Analysis Plan.

"***Joint Development Committee***" or "***JDC***" means the joint development committee established by Section 5.13.

"***Key Representative***" has the meaning specified in Section 5.14.

"***Knowledge***" means, when used with respect to the Company, the actual knowledge of any officer of the Company, Ervin Epstein or Jean Tang, in each case after due inquiry of their respective direct reports.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"***Laws***" means any federal, state, local, municipal, foreign or other law, statute, constitution, ordinance, code, edict, decree, Court Order, regulation, ruling or requirement issued, enacted, adopted, promulgated, implemented or otherwise put into effect by any Governmental Entity.

"***Lien***" means any mortgage, lien, claim, pledge, charge, assessment, lease, levy, community property interest, condition, equitable interest, right-of-way, easement, encroachment, security interest, preemptive right, right of first refusal or similar restriction or right, option, judgment, title defect or encumbrance of any kind.

"***Material Adverse Effect***" means any change event, circumstance, development occurrence or effect that individually or taken together with any other change event, circumstance, development occurrence or effect is, or would reasonably be expected to be, materially adverse to the Business, operations, condition (financial or otherwise), assets, or results of operations of the Company, taken as a whole; provided, however, that none of the following shall be deemed, either alone or in combination, to constitute, and no change, event, circumstance, development, occurrence or effect arising from or attributable or relating to any of the following shall be taken into account in determining whether there has been a Material Adverse Effect: (a) the public announcement or pendency of this Agreement, the Merger Agreement or any of the transactions contemplated herein, including the impact thereof on the relationships of the Company with suppliers, consultants, employees or independent contractors or other third parties with whom the Company has any relationship, (b) [***] (c) the taking of any action required by this Agreement, or otherwise taken with the written consent of Optionee, (d) any breach by Optionee or Merger Sub of this Agreement, the Merger Agreement or the Confidentiality Agreement, (e) [***] or (f) [***] or (g) [***].

"***Merger***" has the meaning specified in the Preamble.

"***Merger Agreement***" means the Agreement and Plan of Merger among the Company, the Optionee, Merger Sub, and the other parties named therein in the form attached hereto as Exhibit A.

"***Merger Agreement Effective Date***" has the meaning specified in Section 2.6.

"***Merger Sub***" has the meaning specified in the Preamble.

"***Missed Milestone Funding***" has the meaning specified in Section 2.5.

"***Notified Body***" means the BSI Group (and any successor thereto) and such other applicable European Union notified bodies, which are reasonably acceptable to the Optionee.

"***Option***" has the meaning specified in Section 2.1.

"***Option Agreement Bringdown Disclosure Schedule***" means the disclosure schedule delivered in connection with the Bringdown Certificate regarding this Agreement that has been provided by the Company to the Optionee. The Option Agreement Bringdown Disclosure Schedule shall include section headings corresponding to the numbered and lettered sections and subsections contained in this Article 3, and the disclosures in any section or subsection of the

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Option Agreement Bringdown Disclosure Schedule shall qualify other sections and subsections in this Article 3 only to the extent it is reasonably apparent from a reading of the disclosure that such a disclosure is applicable to such other sections and subsections.

"***Option Agreement Disclosure Schedule***" means the disclosure schedule dated the Agreement Date regarding this Agreement that has been provided by the Company to the Optionee.

"***Option Agreement Term***" means the period from the Agreement Date until the termination of this Agreement in accordance with Article 7.

"***Option Exercise Date***" has the meaning specified in Section 2.1.

"***Option Exercise Notice***" has the meaning specified in Section 2.1.

"***Option Exercise Period***" has the meaning specified in Section 2.1.

"***Option Exercise Termination Date***" means the earlier of (i) [***] (ii) [***] and (iii) [***]; provided, that in no event, shall the Option Exercise Termination Date be extended beyond July 30, 2021.

"***Option Trigger Company Disclosure Schedule***" means the Company Disclosure Schedule as part of the Option Trigger Information.

"***Option Trigger Information***" means: (a) (i) [***] or (ii) [***] and (b) the Option Trigger Company Disclosure Schedule.

"***Optionee***" has the meaning specified in the Preamble.

"***Optionee Indemnified Parties***" has the meaning specified in Section 6.2(a).

"***Organizational Documents***" means the Company Certificate of Incorporation and the Bylaws of the Company, as amended.

"***Person***" means any person or entity, whether an individual, trustee, corporation, limited liability company, general partnership, limited partnership, trust, unincorporated organization, business association, firm, joint venture, or Governmental Entity.

"***Phase III Trial***" means a Clinical Study that meets the criteria for Phase III clinical trial of the Company's topical patidegib product for the treatment of Gorlin Syndrome as set forth in 21 C.F.R. 312.21.

"***Preferred Stock***" means the Series A Preferred Stock, the Series B Preferred Stock, the Series B-2 Preferred Stock, the Series C Preferred Stock.

"***Press Release***" has the meaning specified in Section 8.12.

"***Proposed Financing***" means any debt or equity financing proposed by the Company in accordance with Section 5.12(b).

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"***Proposed Financing Notice***" means written notice from the Company setting forth the terms and conditions of a Proposed Financing.

"***Prospective Investor***" means any Person from whom the Company proposes to obtain a Proposed Financing.

"***Representatives***" of any Person means any officer, director, principal, attorney, accountant, agent, independent contractor, employee or other representative of such Person.

"***Registered IP***" means all Intellectual Property Rights that are registered, filed, or issued under the authority of any Governmental Entity, including all patents, registered copyrights, registered trademarks, registered databases, and domain names, and all applications for any of the foregoing.

"***Required Stockholder Approval***" means that approval of Stockholders which, beneficially and of record, own (a) [***] of the votes represented by all outstanding shares of Common Stock voting as a separate class, (b) [***] of the shares of the outstanding Capital Stock, voting together as a single class on an as-converted-to-common-stock basis and (c) at least [***] of the shares of the outstanding Preferred Stock, which shall include at least [***] of the outstanding shares of Series A Preferred Stock, Series B Preferred Stock, Series B-2 Preferred Stock and Series C Preferred Stock voting as a separate series on an as-converted-to-common-stock basis.

"***Required Top Line Data***" means top line data of the type described on Schedule 1.1 consistent with the Phase III Protocol [***] and Statistical Analysis Plan.

"***Research and Technical Development Plan***" has the meaning specified in Section 5.13 and as set out in Exhibit G.

"***Right of First Refusal***" means the right, but not the obligation, of the Optionee to finance all (but not less than all) of a Proposed Financing in accordance with Section 5.12(b), on the terms and conditions specified in the Proposed Financing Notice.

"***Series A Preferred Stock***" means the Series A Preferred Stock of the Company, par value $0.0001.

"***Series B Preferred Stock***" means the Series B Preferred Stock of the Company, par value $0.0001.

"***Series B-2 Preferred Stock***" means the Series B-2 Preferred Stock of the Company, par value $0.0001.

"***Series C Preferred Stock***" means the Series C Preferred Stock of the Company, par value $0.0001.

"***Shortfall Payment***" has the meaning specified in Section 2.5.

"***Stockholders'***" means, collectively, the holders of Capital Stock.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"***Subsidiary***" means, with respect to any Person, any entity of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are at any time directly or indirectly owned by such Person.

"***Support Agreement***" has the meaning specified in the Preamble.

"***Survival Period***" has the meaning specified in Section 6.1. "SIB" means Silicon Valley Bank.

"***SVB or Optionee Loan***" means a loan provided by SVB or Optionee in accordance with Section 5.15.

"***Takeover Statute***" means a "fair price," "moratorium," "control share acquisition" or other similar antitakeover statute or regulation enacted under applicable Laws.

"***Tax***" means any and all taxes, including any income, alternative or add-on minimum, gross income, gross receipts, sales, use, ad valorem, value added, transfer, franchise, profits, license, registration, recording, documentary, conveyancing, gains, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, environmental or windfall profit, custom duty, escheat or other tax or other like assessment or charge, together with any interest, penalty, addition to tax or additional amount imposed by any Governmental Entity.

1.2 Interpretation Provisions.

(a) The words "hereof," "herein" and "hereunder" and words of similar import when used in this Agreement refer to this Agreement as a whole and not to any particular provision of this Agreement, and Article, Section, Schedule and Exhibit references are to this Agreement unless otherwise specified. The meaning of defined terms shall be equally applicable to the singular and plural forms of the defined terms. Where a word or phrase is defined herein, each of its other grammatical forms shall have a corresponding meaning. The terms "include" and "including" and variations thereof, are not limiting but rather shall be deemed to be followed by the words "without limitation."

(b) Unless the context otherwise requires, references herein (i) to statutes shall include all regulations promulgated thereunder and references to statutes or regulations shall be construed as including all statutory and regulatory provisions consolidating, amending or replacing the statute or regulation and (ii) to a contract, agreement, instrument or other document means such contract, agreement, instrument, or other document as amended, supplemented and modified from time to time to the extent permitted by the provisions thereof and by this Agreement. References to "dollars" or "$" are to U.S. dollars. References to "U.S." are to the United States of America. All accounting terms defined in Section 1.1, and those accounting terms used in this Agreement not defined in Section 1.1, except as otherwise expressly provided herein, shall have the meanings customarily given thereto in accordance with GAAP. All references to the Company shall include successors of such Person.

(c) The captions and headings of this Agreement are for convenience of reference only and shall not affect the construction or interpretation of this Agreement.

(d) Whenever the context requires: the singular shall include the plural, and vice versa; the masculine gender shall include the feminine and neuter genders; the feminine gender shall include the masculine and neuter genders; and the neuter gender shall include the masculine and feminine genders.

(e) The parties participated jointly in the negotiation and drafting of this Agreement and the language used in this Agreement shall be deemed to be the language chosen by the parties to express their mutual intent. If an ambiguity or question of intent or interpretation arises, then this Agreement will accordingly be construed as drafted jointly by the parties to this Agreement, and no presumption or burden of proof will arise favoring or disfavoring any party to this Agreement by virtue of the authorship of any of the provisions of this Agreement. No prior draft of this Agreement nor any course of performance or course of dealing shall be used in the interpretation or construction of this Agreement. No parol evidence shall be introduced in the construction or interpretation of this Agreement unless the ambiguity or uncertainty in issue is plainly discernable from a reading of this Agreement without consideration of any extrinsic evidence. Although the same or similar subject matters may be addressed in different provisions of this Agreement, the Parties intend that, except as reasonably apparent on the face of the Agreement or as expressly provided in this Agreement, each such provision shall be read separately, be given independent significance and not be construed as limiting any other provision of this Agreement (whether or not more general or more specific in scope, substance or content). The doctrine of election of remedies shall not apply in constructing or interpreting the remedies provisions of this Agreement or the equitable power of a court considering this Agreement or the transactions contemplated hereby.

(f) The Schedules and Exhibits to this Agreement are a material part hereof and shall be treated as if fully incorporated into the body of this Agreement. Any capitalized terms used in any Schedule or Exhibit but not otherwise defined therein, shall have the meaning as defined in this Agreement.

(g) The use of the word “or” shall not be exclusive.

(h) The word “will” shall be construed to have the same meaning and effect as the word “shall”.

(i) The word “party” shall, unless the context otherwise requires, be construed to mean a party to this Agreement. Any reference to a party to this Agreement or any other agreement or document contemplated hereby shall include such party’s successors and permitted assigns.

ARTICLE 2
OPTION TO ACQUIRE THE COMPANY; DELIVERIES

2.1 Option to Acquire the Company. At any time after the payment of the Exclusivity Payment and through and including the Option Exercise Termination Date (the “***Option Exercise Period***”), the Optionee shall have an exclusive irrevocable option (the

"***Option***"), but not the obligation, exercisable in the Optionee's sole discretion, to elect to require the Company to effect the Merger, on the terms and subject to the conditions set forth in the Merger Agreement. The Optionee shall exercise the Option, if at all, by giving written notice to the Company of the exercise of the Option (an "***Option Exercise Notice***") on or prior to the Option Exercise Termination Date (the date such notice is delivered, the "***Option Exercise Date***").

2.2 Consideration for the Option and Equity Investment.

(a) Promptly after receipt by the Optionee of copies of Support Agreements (including irrevocable proxies) duly executed by the Company and the Stockholders of the Company representing at least the Required Stockholder Approval, the Optionee shall pay and deliver the following to the Company:

(i) as part of the consideration for the Option and the covenants of the Company under this Agreement [***] (the "***Exclusivity Payment First Installment***") by wire transfer of immediately available funds to an account previously specified in writing by the Company; and

(ii) as an Equity Investment in consideration for Common Stock pursuant to the Equity Investment Documents [***] by wire transfer of immediately available funds to an account previously specified in writing by the Company.

(b) On January 4, 2019, the Optionee shall pay to the Company [***] (the "***Exclusivity Payment Second Installment***" and, together with the Exclusivity Payment First Installment, the "***Exclusivity Payment***") by wire transfer of immediately available funds to an account previously specified in writing by the Company.

2.3 Optionee's Deliveries. Concurrently with the execution and delivery of this Agreement, the Optionee is delivering to the Company all of the following:

(a) the Merger Agreement, duly executed by the Optionee and Merger Sub, provided, however, that the Merger Agreement will not be effective until the Merger Agreement Effective Date;

(b) the Equity Investment Documents, duly executed by Optionee; and

(c) a certificate of the secretary or an assistant secretary of Optionee, dated the Agreement Date, in the form attached hereto as Exhibit C, as to: (i) the resolutions of the Optionee's of directors authorizing the execution, delivery and performance of this Agreement, the Merger Agreement (provided, however, that the Merger Agreement will not be effective until the Merger Agreement Effective Date), and the transactions contemplated hereby and thereby; and (ii) the incumbency and signatures of the officers of the Optionee executing this Agreement, the Merger Agreement, and any agreements and other documents contemplated hereby being executed and delivered on the Agreement Date (the "***Optionee Secretary's Certificate***").

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.4 The Company's Deliveries.

(a) Concurrently with the execution and delivery of this Agreement, the Company is delivering to the Optionee all of the following:

(i) the Merger Agreement, duly executed by the Company, provided, however, that the Merger Agreement shall not be effective until the Merger Agreement Effective Date;

(ii) disclosure schedules to the Company Merger Representations dated as of the Agreement Date (the "***Initial Merger Agreement Company Disclosure Schedule***");

(iii) the Equity Investment Documents, duly executed by the Company;

(iv) a certificate of the secretary or an assistant secretary of the Company, dated the Agreement Date, in the form attached hereto as Exhibit D, as to: (i) the Organizational Documents in effect as of the Agreement Date; (ii) the resolutions of the Company Board of Directors authorizing the execution, delivery and performance of this Agreement, the Merger Agreement (provided, however, that the Merger Agreement will not be effective until the Merger Agreement Effective Date), and the transactions contemplated hereby and thereby; and (iii) the incumbency and signatures of the officers of the Company executing this Agreement, the Merger Agreement, and any agreements and other documents contemplated hereby being executed and delivered on the Agreement Date (the "***Company Secretary's Certificate***"); and

(v) a certificate of good standing of the Company issued as of a recent date by the Secretary of State of the State of Delaware.

(b) No later than 23:59 PT on the day following the Agreement Date, the Company shall deliver to the Optionee Support Agreements (including irrevocable proxies) duly executed by the Company and the Stockholders of the Company representing at least the Required Stockholder Approval.

2.5 Additional Exclusivity Payment.

(a) At any time prior to Optionee delivering an Option Exercise Notice during the Option Exercise Period, upon (i) achievement of the Additional Exclusivity Payment Milestone, (ii) delivery by the Company to the Optionee of the Option Agreement Bringdown Disclosure Schedule (iii) delivery by the Company to the Optionee of the then most current budget of the Company as approved by the Company's Board of Directors (the "***Bringdown Budget***") and (iv) delivery by the Company to the Optionee of a certificate (the "***Bringdown Certificate***") executed by an officer of the Company, dated as of such date, confirming that:

(x) the representations and warranties in Section 3.1, 3.2, 3.3, 3.4, 3.5 are true and correct as of the date of achievement of the Additional Exclusivity Payment Milestone, except as could reasonably be expected to, individually or in the aggregate, prevent the Company from consummating the transactions contemplated hereby or materially interfere

with the rights of the Parties hereunder (disregarding for such purpose (i) any information previously disclosed in the Option Agreement Disclosure Schedule and (ii) facts or events that arose since the Agreement Date in the ordinary course of business of the Company not in violation of any obligation of the Company under this Agreement);

(y) the representations and warranties in Section 3.7, 3.8 are true and correct as of the date of achievement of the Additional Exclusivity Payment Milestone, except for any inaccuracies that, individually or in the aggregate, could reasonably be expected to result in liabilities of the Company in excess of [***] (disregarding for such purpose (i) any information previously disclosed in the Option Agreement Disclosure Schedule and (ii) facts or events that arose since the Agreement Date in the ordinary course of business of the Company not in violation of any obligation of the Company under this Agreement); and

(z) the representations and warranties in Section 3.6, 3.9. 3.10, 3.11 and 3.13 are true and correct as of the date of achievement of the Additional Exclusivity Payment Milestone, in all material respects (disregarding for such purpose (i) any information previously disclosed in the Option Agreement Disclosure Schedule and (ii) facts or events that arose since the Agreement Date in the ordinary course of business of the Company not in violation of any obligation of the Company under this Agreement);

the Optionee shall make the following payments to the Company by wire transfer of immediately available funds to an account specified by the Company:

(1) no later than [***] after the fulfillment by the Company of all the conditions set forth in subsection (i) through (iv) above, an amount in cash equal to (A) the actual cash expenditures of the Company from the beginning of the fiscal year in which such payment is to be made through the payment date, plus (B) the expected cash expenditures of the Company for the remainder of the year in which the payment is to be made (based on the Bringdown Budget), minus (C) if such payment is to be made in 2019, the amount of the Exclusivity Payment Second Installment (such amount payable hereunder, the "***Additional Exclusivity Payment First Installment***"); provided that in no event shall the Additional Exclusivity Payment First Installment exceed [***];

(2) at any time after the payment of the Additional Exclusivity Payment First Installment and before the end of the fiscal year during which such payment is made, if the Company has less cash and cash equivalents available on its balance sheet than the cash necessary to fund ongoing operations of the Company for another thirty (30) days in accordance with then most current Bringdown Budget and such cash and cash equivalents are not reasonably expected to be sufficient to fund the Company's operations through the payment due pursuant to paragraph (3) below (based on the good faith reasonable determination of the Company), the Optionee will be required to make an additional payment in cash equal to the amount necessary to fund the Company's operations through the payment due pursuant to paragraph (3) below (the "***Shortfall Payment***"); provided that in no event shall the aggregate amount Additional Exclusivity Payment First Installment and the Shortfall Payment exceed [***].

(3) on the third Business Day of the year immediately following the year in which the Additional Exclusivity Payment First Installment is made, an amount in cash equal to (A) [***] if any (the "***Additional Exclusivity Payment Second Installment***" and, together with the Additional Exclusivity Payment First Installment and the Shortfall Payment, the "***Additional Exclusivity Payment***").

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(b) If the Company fails to fulfill all the conditions set forth in subsections (i) through (iv) of Section 2.5(a) above, the Optionee may still continue to fund the operations of the Company from time to time in an amount up to [***] in the aggregate (the "***Missed Milestone Funding***"), subject to the right of the Company to terminate this Agreement if the conditions set forth in Section 7.1(a)(iv) are triggered.

2.6 Actions Upon Exercise of the Option. Not later than [***] Business Days following the Option Exercise Date, (i) the Company may deliver to the Optionee, an updated Company Disclosure Schedule as of the date of such delivery (the "***Revised Option Trigger Company Disclosure Schedule***"), or (ii) to the extent the Company delivered the Option Trigger Information prior to such Option Exercise Date, written confirmation that the Company has no further updates to the Option Trigger Company Disclosure Schedule. In the event that the Company elects to deliver a Revised Option Trigger Company Disclosure Schedule and the Optionee is not satisfied with such Revised Option Trigger Company Disclosure Schedule, the Optionee may, in its sole discretion, on or prior to the [***] Business Day following the date of receipt by the Optionee of the Revised Option Trigger Company Disclosure Schedule, withdraw its exercise of the Option by delivering a written notice (the "***Exercise Withdrawal Notice***") to the Company stating that the Optionee withdraws its exercise of the Option. If the Optionee delivers the Exercise Withdrawal Notice in accordance with this Section 2.6, the Option shall be deemed not to have been exercised by the Optionee. The "***Merger Agreement Effective Date***" shall be (i) if the Company delivers a Revised Option Trigger Company Disclosure Schedule and the Optionee does not deliver an Exercise Withdrawal Notice in accordance with this Section 2.6, the date which is the [***] Business Day following receipt by the Optionee of the Revised Option Trigger Company Disclosure Schedule, or (ii) if the Company delivers written confirmation that the Company has no further updates to the Option Trigger Company Disclosure Schedule, the date which is the [***] Business Day following delivery of such written confirmation. Notwithstanding the foregoing, the Optionee may, in its sole discretion, by written notice to the Company, elect an earlier Merger Agreement Effective Date.

ARTICLE 3
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

As an inducement to the Optionee and Merger Sub to enter into this Agreement, the Company hereby makes, as of the Agreement Date, the following representations and warranties to the Optionee, except as otherwise set forth in the Option Agreement Disclosure Schedule. The Option Agreement Disclosure Schedule shall include section headings corresponding to the numbered and lettered sections and subsections contained in this Article 3, and the disclosures in any section or subsection of the Option Agreement Disclosure Schedule shall qualify other sections and subsections in this Article 3 only to the extent it is reasonably apparent from a reading of the disclosure that such a disclosure is applicable to such other sections and subsections.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

3.1 Corporate Existence and Power.

(a) The Company is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation and has all requisite powers and all Permits required to carry on its Business as now conducted, to own or use the properties and assets that it purports to own or use and to perform all its obligations under all Material Contracts (as defined in the Merger Agreement). The Company is duly qualified to do business as a foreign corporation or other entity and is in good standing in each jurisdiction where such qualification is necessary.

(b) The Company does not own or control, directly or indirectly, any interest in any corporation, partnership, limited liability company, association or other business entity. The Company is not a participant in any joint venture, partnership or similar arrangement. The Company has not agreed or is obligated to, directly or indirectly, make any future investment in or capital contribution or advance to any Person. No insolvency or similar proceedings have been initiated or applied for with respect to the Company and no reasons exist why such proceedings would need to be initiated, including the Company being over-indebted or unable to pay its debts as they become due, and no such inability to pay debts is imminent.

(c) As of the date hereof, the Company has made available to the Optionee accurate and complete copies of: (i) the certificate of incorporation and bylaws, including all amendments thereto, of the Company; (ii) the stock records of the Company; and (iii) the minutes and other records of the meetings and other proceedings (including any actions taken by written consent or otherwise without a meeting) of the Stockholders, the Company Board of Directors and all committees thereof. There has not been any violation of any of the provisions of the certificate of incorporation or bylaws, including all amendments thereto, of the Company, and the Company has not taken any action that is inconsistent with any resolution adopted by the Stockholders, the Company Board of Directors or any committee thereof.

3.2 Corporate Authorization.

(a) The Company has the absolute and unrestricted right, power and authority to enter into and to perform its obligations under this Agreement, the Merger Agreement and all other agreements and instruments to be executed and delivered in connection herewith (the "***Ancillary Documents***"); and the execution, delivery and performance by the Company of this Agreement and the Ancillary Documents have been duly authorized by all necessary action on the part of the Company and the Company Board of Directors. This Agreement has been duly executed and delivered by the Company and, assuming due authorization, execution and delivery of this Agreement by the other parties, constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors, and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

(b) At a meeting duly called and held, the Company Board of Directors has unanimously (i) determined that this Agreement, the Merger Agreement and the transactions contemplated hereby and thereby are fair to, advisable and in the best interests of the Stockholders, (ii) approved and adopted this Agreement, the Merger Agreement and the transactions contemplated hereby and thereby and (iii) resolved to recommend adoption of this Agreement, the Merger Agreement and approval of the Merger and the other transactions contemplated hereby and thereby by the Stockholders.

(c) The Required Stockholder Approval is the only vote of the holders of Capital Stock necessary to adopt this Agreement and thereby approve the Merger and the other transactions contemplated hereby.

3.3 Capitalization.

(a) As of the date hereof, the authorized capital stock of the Company consists of [***] shares of Common Stock and [***] shares of Preferred Stock, of which [***] is designated as Series A Preferred Stock, [***] is designated as Series B Preferred Stock, [***] is designated as Series B-2 Preferred Stock and [***] is designated as Series C Preferred Stock. As of the date of this Agreement, there are outstanding [***] shares of Common Stock, [***] shares of Series A Preferred Stock, [***] shares of Series B Preferred Stock, [***] shares of Series B-2 Preferred Stock and [***] shares of Series C Preferred Stock. As of the date hereof, there are outstanding Equity Incentive Options to purchase an aggregate of [***] shares of Common Stock (of which Equity Incentive Options to purchase an aggregate of [***] shares of Common Stock are exercisable).

(b) As of the date hereof, the Company has reserved [***] shares of Common Stock for issuance pursuant the Company's Equity Incentive Option Plan. The Company has furnished to the Optionee complete and accurate copies of the Company's Equity Incentive Plan. All shares of Capital Stock that may be issued pursuant to the exercise of the Equity Incentive Options outstanding under the Equity Incentive Plan and all shares of Capital Stock that will be issued to the Optionee as part of the Company's Equity Investment, are, or when issued will be, duly authorized and validly issued and are, or when issued will be, fully paid, nonassessable and free of preemptive rights. As of the date hereof, there are no outstanding shares of Capital Stock that remain subject to vesting or forfeiture restrictions.

(c) Except as set forth in this Section 3.3 and for changes since the date hereof resulting from the exercise of Equity Incentive Options outstanding on such date, there are no outstanding (i) shares of Capital Stock or voting securities of the Company, (ii) securities of the Company convertible into or exchangeable for shares of capital stock or voting securities of the Company or (iii) options, warrants, calls, subscriptions, rights of conversion or other rights, agreements, arrangements or commitments of any kind or character to acquire from the Company, or other obligation of the Company to issue, deliver or sell, or cause to be issued, delivered or sold, or reserved for issuance any capital stock, voting securities or securities convertible into or exchangeable for capital stock or voting securities of the Company (the items in clauses (i), (ii) and (iii) being referred to collectively as the "***Company Securities***").

(d) As of the date hereof, there are (i) no Contracts, rights, arrangements or commitments of any kind or character, whether written or oral, relating to the Capital Stock to which the Company is a party, or by which it is bound, obligating the Company to repurchase, redeem or otherwise acquire any issued and outstanding shares of Capital Stock, (ii) no outstanding or authorized stock appreciation, phantom stock, profit participation, or other similar rights with respect to the Company and (iii) no voting trusts, stockholder agreements, proxies or other agreements or understandings in effect to which the Company is a party with respect to the governance of the Company or the voting or transfer of any shares of Capital Stock.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(e) All outstanding shares of Capital Stock have been duly authorized and are validly issued, fully paid, non-assessable and free of preemptive rights, and have been issued and granted in compliance with (i) all applicable securities laws and other applicable Laws and (ii) all requirements set forth in applicable Contracts.

3.4 Non-Contravention. The execution, delivery and performance by the Company of this Agreement and the consummation of the Merger and the other transactions contemplated hereby and thereby do not and will not (a) contravene, conflict with, or result in any violation or breach of any provision of the certificate of incorporation or bylaws of the Company, (b) assuming compliance with the matters referred to in Section 3.5, contravene, conflict with or result in a violation or breach of any provision of any applicable Laws, (c) assuming compliance with the matters referred to in Section 3.5, require any Consent or other action by any Person under, result in a breach of, constitute a default, or an event that, with or without notice or lapse of time or both, would result in a breach of, or constitute a default under, or cause or permit the termination, cancellation, acceleration or other change of any right or obligation or the loss of any benefit to which the Company is entitled under any provision of any Contract binding upon the Company, or any license, franchise, permit, certificate, approval or other similar authorization affecting, or relating in any way to, the Business or assets of the Company or (d) result in the creation or imposition of any Lien on any asset of the Company.

3.5 Governmental Authorizations. The execution, delivery and performance by the Company of this Agreement, the Merger Agreement and the consummation of the Merger and the other transactions contemplated hereby and thereby require no action by or in respect of, or filing with, any Governmental Entity other than (i) the filing of the Certificate of Merger with the Secretary of State of the State of Delaware, (ii) the notification filing to be made under the HSR Act and the expiration or termination of the waiting period thereunder and (iii) compliance with any applicable requirements of the Securities Act of 1933, the Securities Exchange Act of 1934 and any other applicable U.S. state or federal securities laws.

3.6 Financial Statements.

(a) The Company has delivered to Optionee the Company's audited balance sheets as of December 31, 2016 and 2017 and the related audited statements of income, stockholders' equity and cash flows for each of the years ended December 31, 2016 and 2017, and the Balance Sheet as of September 30, 2018 and the related unaudited interim statements of income, stockholders' equity and cash flows for the three-months ended September 30, 2018 (collectively, the "***Financial Statements***").

(b) The Financial Statements (i) have been prepared from the books and records of the Company, (ii) complied as to form in all material respects with applicable accounting requirements with respect thereto as of their respective dates, (iii) have been prepared in accordance with GAAP applied on a consistent basis throughout the periods indicated and consistent with each other (subject, in the case of unaudited interim period financial statements, to the absence of notes and normal year-end audit adjustments) and (iv) fairly present, in

accordance with GAAP, the financial condition of the Company at the dates therein indicated and the results of operations and cash flows of the Company for the periods therein specified (subject, in the case of unaudited interim period financial statements, to the absence of notes and normal year-end audit adjustments, none of which individually or in the aggregate will be material in amount).

3.7 Absence of Certain Changes. Since the Balance Sheet Date the Business has been conducted in the ordinary course consistent with past practices and there has not been:

(a) any event, occurrence, development or state of circumstances or facts that has had or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect;

(b) any damage, destruction or other casualty loss (whether or not covered by insurance) affecting the Business or assets of the Company;

(c) any amendment of Organizational Documents or equivalent constituent documents (whether by merger, consolidation or otherwise) of the Company;

(d) any splitting, combination or reclassification of any shares of Capital Stock or declaration, setting aside or payment of any dividend or other distribution or capital return (whether in cash, stock or property or any combination thereof) in respect of any Company Securities, or redemption, repurchase or other acquisition or offer to redeem, repurchase, or otherwise acquire any Company Securities;

(e) any issuance, grant, delivery or sale, or authorization of the issuance, grant, delivery or sale of, any shares of any Company Securities, other than the issuance of any shares of Common Stock upon the exercise of Equity Incentive Options in accordance with the terms of those Equity Incentive Options;

(f) any capital expenditures, or the incurrence of any obligation or liability in respect thereof, by the Company in excess of [***];

(g) any acquisition (by merger, consolidation, acquisition of stock or assets or otherwise), directly or indirectly, by the Company of any assets, securities, properties, interests or businesses;

(h) except for this Agreement and the Merger Agreement, any adoption of any plan of merger, consolidation, reorganization, liquidation or dissolution or filing of a petition in bankruptcy under any applicable Law, or consent to the filing of any such petition;

(i) any sale, lease, assignment or other transfer, or creation or incurrence of any Lien on, any assets, securities, properties, interests or businesses of the Company, other than sales of products or services in the ordinary course of business consistent with past practice;

(j) any making by the Company of any loans, advances or capital contributions to, or investments in, any other Person;

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(k) any creation, incurrence, guarantee or assumption by the Company of any Indebtedness; or

(l) any entry into any Contract that limits or otherwise restricts in any respect the Company or any of its Affiliates or any successor thereto, or that would reasonably be expected to, after the Agreement Date, limit or restrict in any respect the Company, the Merger Sub or any of their respective Affiliates, from exercising the Option.

3.8 No Undisclosed Liabilities. The Company has no liabilities, obligations or commitments whatsoever, asserted or unasserted, known or unknown, absolute or contingent, accrued or unaccrued, matured or unmatured or otherwise (collectively, "Liabilities"), other than:

(a) Liabilities that are adequately reflected or reserved against in the Balance Sheet;

(b) Liabilities that have been incurred by the Company since the Balance Sheet Date in the ordinary course of business consistent with past practice and which are not, individually or in the aggregate, material in amount;

(c) Liabilities under the Material Contracts (as defined in the Merger Agreement), to the extent the nature and magnitude of such Liabilities can be specifically ascertained by reference to the text of such Contracts; and

(d) Liabilities arising under this Agreement.

3.9 Compliance with Applicable Laws.

(a) The Company is, and has at all times during the past five (5) years been, in material compliance with, and to the knowledge of the Company, the Company is not, and at no time has been, under investigation with respect to or threatened to be charged with or given notice of any violation of, applicable Law. During the past five (5) years, the Company has not received any written notice from any Governmental Entity to the effect that the Company is not in compliance with any applicable Law.

(b) The Company has and, to the knowledge of the Company, no agent, employee or other Person associated with or acting on behalf of the Company has, directly or indirectly:

(i) made any unlawful contributions, gifts, or incurred any entertainment or other unlawful expenses relating to political activity and related in any way to the Company's business;

(ii) made any unlawful payment to any foreign or domestic government official or employee, foreign or domestic political parties or campaigns, official of any public international organization, or official of any state-owned enterprise;

(iii) violated any provision of the Foreign Corrupt Practices Act of 1977, United Kingdom Bribery Act of 2010 or any other applicable anti-corruption statute; or

(iv) made any bribe, payoff, influence payment, kickback or other similar unlawful payment.

(c) The Company is, and has at all times during the past five (5) years been, in compliance in all material respects with applicable provisions of the FDA Act and the regulations promulgated thereunder. During the past five (5) years, the Company has not received any FDA Form 483 or other notice of inspectional observations, warning letters, untitled letters, or other written notice from the FDA or other Governmental Entity alleging or asserting material noncompliance with the FDA Laws.

(d) (i) The clinical, preclinical, and other studies and tests conducted by or on behalf of or sponsored by the Company were, and if still pending are, being conducted in accordance in all material respects with standard medical and scientific research procedures and all applicable FDA Laws; and (ii) no investigational new drug application filed by or on behalf of the Company with the FDA has been terminated or suspended by the FDA, and neither the FDA nor any other Governmental Entity has commenced any action to place a clinical hold order on, or otherwise terminate or suspend, any proposed or ongoing clinical investigation conducted or proposed to be conducted by or on behalf of the Company.

(e) The Company has made available to the Optionee all material documentation and records related to all clinical, preclinical, and other studies and tests conducted by or on behalf of or sponsored by the Company that the Company is required to maintain pursuant to FDA Laws (collectively, the "***Clinical Trial Records***"). To the Company's knowledge, the Clinical Trial Records are accurate in all material respects and do not contain any untrue statement of a material fact. The Clinical Trial Records contain all information that is required pursuant to applicable Law.

3.10 Intellectual Property.

(a) Section 3.10(a) of the Option Agreement Disclosure Schedule sets forth a complete and accurate list as of the Agreement Date of (i) each item of Registered IP in which the Company has an ownership interest of any nature (whether exclusively, jointly with another Person, or otherwise), (ii) the jurisdiction in which such item of Registered IP has been registered or filed and the applicable application, registration, or serial or other similar identification number, (iii) any other Person that has an ownership interest in such item of Registered IP and the nature of such ownership interest, and (iv) all unregistered trademarks used in connection with any Company Product and any product or service currently under development by the Company. The Company has made available to Optionee complete and accurate copies of all applications, correspondence, and other material documents related to each such item of Registered IP.

(b) To the knowledge of the Company, all Company IP is valid, subsisting, and enforceable. All filings, payments and other actions required to be made or taken to obtain, perfect or maintain in full force and effect each item of Company IP that is Registered IP have been made or taken by the applicable deadline and otherwise in accordance with all applicable Laws. Except as set forth in Section 3.14(b) of the Option Agreement Disclosure Schedules, during the past [***] no application for, or registration with respect to, any Registered IP that is Company IP has been abandoned, allowed to lapse, or, except in the course of normal patent prosecution, rejected.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(c) No interference, opposition, reissue, reexamination, or other proceeding of any nature is, or during the past [***] has been, pending or threatened in which the scope, validity, or enforceability of any Company IP is being, has been, or could reasonably be expected to be contested or challenged and, to the knowledge of the Company, there is no basis for a claim that any Company IP is invalid or unenforceable.

(d) The Company is not bound by, and no Company IP is subject to, any Contract containing any covenant or other provision that in any way limits or restricts the ability of the Company to use, assert, enforce, or otherwise exploit any Company IP anywhere in the world. The Company has not transferred ownership of (whether a whole or partial interest), or granted any exclusive right to use, any Company IP to any Person.

(e) The Company exclusively owns all right, title, and interest to and in (or has an exclusive license to) the Company IP free and clear of any Liens (other than licenses granted pursuant to the Contracts listed in Section 3.10(e) of the Option Agreement Disclosure Schedule). The Company IP constitute all the Intellectual Property and Intellectual Property Rights used in the conduct of the Business. No Person who has licensed Intellectual Property or Intellectual Property Rights to the Company has ownership rights or license rights to derivative works or improvements made by or on behalf of the Company related to such Intellectual Property or Intellectual Property Rights.

(f) Each Person who is or was an employee, officer, director or contractor of the Company and who is or was engaged by the Company or its agent to design, create or otherwise develop any Intellectual Property or Intellectual Property Rights has signed an enforceable agreement containing an assignment to the Company of all such Intellectual Property and Intellectual Property Rights. At no time during the conception, reduction to practice, creation or development of any Company IP was any developer, inventor or other contributor to such Company IP (i) operating under any grants from any Governmental Entity or agency or private source, performing research sponsored by any Governmental Entity or agency or private source, except as set forth in Section 3.14(f) of the Option Agreement Disclosure Schedule, or (ii) subject to any employment agreement or invention assignment or nondisclosure agreement or other obligation with any third party that could adversely affect the Company's rights in such Company IP. No current or former stockholder, officer, director, or employee of the Company has any claim, right (whether or not currently exercisable), or interest to or in any Intellectual Property or Intellectual Property Rights used by the Company. No employee of the Company is (i) bound by or otherwise subject to any Contract restricting him or her from performing his or her duties for the Company or (ii) in breach of any Contract with any former employer or other Person, in each case, concerning Intellectual Property, Intellectual Property Rights or confidentiality.

(g) No Person has infringed, misappropriated, or otherwise violated, or is currently infringing, misappropriating, or otherwise violating, any Company IP. Section 3.10(g) of the Option Agreement Disclosure Schedule sets forth an accurate and complete list, as of the Agreement Date, and the Company has made available to the Optionee a complete and accurate

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copy of, each letter or other written or electronic communication, correspondence or other communication (in writing or otherwise) that has been sent or otherwise delivered or communicated to the Company or any representative of the Company regarding any actual, alleged, or suspected infringement or misappropriation of any Company IP, and provides a brief description of the current status of the matter referred to in such letter, communication, or correspondence.

(h) To the knowledge of the Company, the Company has not infringed, misappropriated, or otherwise violated, and is not currently infringing, misappropriating, or otherwise violating, any Intellectual Property Right of any other Person. No infringement, misappropriation, or similar claim or Proceeding is pending or threatened against the Company or, to the knowledge of the Company, against any Person who may be entitled to be indemnified or reimbursed by the Company with respect to such claim or Proceeding. The Company has not received any notice or other communication (in writing or otherwise) relating to any actual, alleged, or suspected infringement, misappropriation, or violation of any Intellectual Property Right of another Person, including any notice or communication inviting the Company to take a license under any Intellectual Property Right.

(i) Neither the execution, delivery, or performance of this Agreement, nor the consummation of any of the transactions or agreements contemplated by this Agreement, will, with or without notice or the lapse of time, result in, or give any other Person the right or option to cause or declare, (i) a loss of, or Lien on, any Company IP, (ii) a breach of, termination of, or acceleration or modification of any right or obligation under any Contract listed or required to be listed in Section 3.09(a)(i) or Section 3.09(a)(ii) of the Company Disclosure Schedule, (iii) the release, disclosure, or delivery of any Company IP by or to any escrow agent or other Person, (iv) the grant, assignment, or transfer to any other Person of any license or other right or interest under, to, or in any Intellectual Property or Intellectual Property Right, including any such grant, assignment or transfer by Optionee or its Affiliates, or (v) any Company IP becoming subject to any restriction with respect to its use or operation in any line of business or market or with any Person or in any area.

3.11 Licenses and Permits. The Company has, and at all times has had, all licenses, permits, qualifications, accreditations, approvals and authorizations of any Governmental Entity (collectively, the "***Permits***"), and has made all necessary filings required under applicable Law, necessary to service the Company's accounts in accordance with applicable Laws and otherwise to conduct the Business. The Company is in compliance with each such Permit. During the past five (5) years, the Company has not received any written notice or other written communication regarding any actual or possible violation of or failure to comply with any term or requirement of any Permit or any actual or possible revocation, withdrawal, suspension, cancellation, termination or modification of any Permit. Section 3.11 of the Option Agreement Disclosure Schedule sets forth (a) an accurate and complete list of all Permits issued to the Company and (b) an accurate and complete list of all permits for which the Company has applied or has taken the steps necessary to secure or maintain or that the Company otherwise intends to obtain. Each such Permit has been validly issued or obtained and is, and after the consummation of the transactions contemplated by this Agreement will be, in full force and effect.

3.12 Finders' Fees. Except for [***], no investment banker, broker, finder or other intermediary that has been retained by or is authorized to act on behalf of the Company who may be entitled to any fee or commission from the Company or any of its Affiliates in connection with the transactions contemplated by this Agreement.

3.13 Non-Reliance. Except for the representations and warranties set forth in Article 4 or in any certificate, instrument or other document, in each case delivered pursuant to this Agreement, the Company acknowledges and agrees that (a) none of the Optionee, Merger Sub or any Person acting on behalf of the Optionee or Merger Sub has made or is making any express or implied representation or warranty with respect to the Optionee or Merger Sub, including any Affiliate, business, operation, condition (financial or otherwise) or any other aspect thereof, or with respect to any other information provided to the Company, including the Affiliates or Representatives of the Company, (b) any other representations or warranties are expressly disclaimed by the Optionee and Merger Sub, (c) the Company, including any Person acting on behalf of the Company, is not entitled to rely on any such representation or warranty, if made, and (d) the Company, including any Person acting on behalf of the Company, has not, is not and will not rely on any such representation or warranty, if made.

3.14 [***] Agreement. Between the date hereof and the Closing Date, no payment shall be due to [***].

ARTICLE 4
REPRESENTATIONS AND WARRANTIES OF THE OPTIONEE

As an inducement to the Company to enter into this Agreement, the Optionee hereby makes, as of the Agreement Date, the following representations and warranties to the Company.

4.1 Corporate Existence and Power. Each of the Optionee and Merger Sub is a corporation duly incorporated, validly existing and in good standing under the Laws of its jurisdiction of incorporation. Since the date of its incorporation, Merger Sub has not engaged in any activities other than in connection with or as contemplated by this Agreement.

4.2 Corporate Authorization. Each of the Optionee and Merger Sub has the absolute and unrestricted right, power and authority to enter into and to perform its obligations under this Agreement and the Merger Agreement; and the execution, delivery and performance by each of the Optionee and Merger Sub of this Agreement and the Merger Agreement have been duly authorized by all necessary action on the part of the Optionee and Merger Sub, as applicable. This Agreement constitutes the legal, valid and binding obligation of the Optionee and Merger Sub, enforceable against the Optionee and Merger Sub in accordance with its terms, subject to (a) laws of general application relating to bankruptcy, insolvency and the relief of debtors and (b) rules of law governing specific performance, injunctive relief and other equitable remedies.

4.3 Governmental Authorization. The execution, delivery and performance by the Optionee and Merger Sub of this Agreement, the Merger Agreement and the consummation by the Optionee and Merger Sub of the transactions contemplated hereby and thereby require no action by or in respect of, or filing with, any Governmental Entity, other than (a) the filing of the

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Certificate of Merger with the Secretary of State of the State of Delaware, (b) the notification filing to be made under the HSR Act and the expiration or termination of the waiting period thereunder, (c) compliance with any applicable requirements of the Securities Act of 1933, the Securities Exchange Act of 1934 and any other applicable U.S. state or federal securities laws and (d) any actions or filings the absence of which would not be reasonably expected to materially impair the ability of the Optionee and Merger Sub to consummate the transactions contemplated by this Agreement.

4.4 Non-contravention. The execution, delivery and performance by the Optionee and Merger Sub of this Agreement and the Merger Agreement and the consummation by the Optionee and Merger Sub of the transactions contemplated hereby and thereby do not and will not (a) contravene, conflict with, or result in any violation or breach of any provision of the certificate of incorporation or bylaws of the Optionee or Merger Sub or (b) assuming compliance with the matters referred to in Section 4.3, contravene, conflict with or result in a violation or breach of any provision of any material applicable Law.

4.5 Finders' Fees. There is no investment banker, broker, finder or other intermediary that has been retained by or is authorized to act on behalf of the Optionee or Merger Sub who might be entitled to any fee or commission from the Optionee or the Company or any of their respective Affiliates in connection with the transactions contemplated by this Agreement.

4.6 Sufficiency of Funds. The Optionee has, and in the future will continue to have, sufficient cash on hand or other sources of immediately available funds to enable it to make payment on a timely basis of the Exclusivity Payment, Additional Exclusivity Payment, Closing Merger Consideration (as defined in the Merger Agreement), the Milestone Payments (as defined in the Merger Agreement), and all amounts required to be paid pursuant to the terms of this Agreement and the Merger Agreement.

4.7 Exclusivity of Representations; Non-Reliance. Except for the representations and warranties set forth in Article 3, and in case of the exercise of the Option the representations and warranties made by the Company in the event of a Merger as set forth in the Merger Agreement, or in any certificate, instrument or other document delivered pursuant to this Agreement, the Optionee and Merger Sub acknowledge and agree that (a) neither the Company nor any other Person acting on behalf of the Company has made or is making any express or implied representation or warranty with respect to the Company, including any Affiliate, business, operation, condition (financial or otherwise) or any other aspect thereof, or with respect to any other information provided to the Optionee or Merger Sub or any of their Affiliates or Representatives, (b) any other representations or warranties are expressly disclaimed by the Company, (c) the Optionee, Merger Sub, and any Person acting on behalf of the Optionee or Merger Sub, are not entitled to rely on any such representation or warranty, if made, and (d) the Optionee, Merger Sub, and any Person acting on behalf of the Optionee or Merger Sub, have not, are not and will not rely on any such representation or warranty, if made.

ARTICLE 5
COVENANTS

5.1 Merger Agreement, Disclosure Schedules.

(i) The Company acknowledges and agrees that the Company has prepared and delivered to the Optionee the Initial Merger Agreement Company Disclosure Schedule in order to provide the Optionee information that would be required to be disclosed in order to make the Company Merger Representations true and correct as if the Company Merger Representations were made as of the Agreement Date. The parties agree that the Initial Merger Agreement Company Disclosure Schedule are for informational purposes only, and shall not qualify the Company Merger Representations, which shall only be qualified by the Revised Option Trigger Company Disclosure Schedule or, if no such Revised Option Trigger Company Disclosure Schedule is delivered, the Option Trigger Company Disclosure Schedule.

(ii) The Company represents and warrants to the Optionee that (a) the Company has prepared the Initial Merger Agreement Company Disclosure Schedule in good faith, and (b) the Company shall prepare the Option Trigger Company Disclosure Schedule in good faith.

(iii) None of the representations or warranties in the Merger Agreement, and the Initial Merger Agreement Company Disclosure Schedule shall constitute a representation or warranty of the Company or the basis for any Liability of the Company to the Optionee or Merger Sub except as otherwise specifically provided in the Merger Agreement.

5.2 Access by the Optionee; Deliveries by the Company.

(a) Access. During the Option Agreement Term, the Company shall, and shall cause the Company's Representatives to, afford the Optionee and its Representatives reasonable access upon reasonable notice and at reasonable times to its Business for the purpose of inspecting the same, and to its officers, Employees and Representatives, properties, books and records, Contracts and other Assets, including any and all records pertaining to the Clinical Studies, and shall furnish to the Optionee and its Representatives, upon reasonable notice and in a timely manner, all material financial, operating and other data and information as the Optionee or its Representatives may reasonably request.

(b) Deliveries. Without limiting the requirements of Section 5.2(a) hereof, during the Option Agreement Term, the Company shall deliver to the Optionee:

(i) on or prior to [***] following the end of each calendar quarter during the Option Exercise Period, all reports regarding the Clinical Study received by the Company during such calendar quarter;

(ii) on or prior to [***] following the end of each calendar quarter during the Option Exercise Period, a certification from the Company's Chief Executive Officer that all clinical study reports provided to the Optionee during such quarter in accordance with Section 5.2(b)(i) have been generated, to the Company's knowledge, in compliance in all material respects with the protocols established for the applicable Clinical Study, and that, for each patient who signs an informed consent in connection with any Clinical Study, all such clinical study reports have been given to the Optionee in the form provided to the Company;

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(iii) within [***] of submission, copies of any material information or materials related to the Company Product that have been submitted to any Governmental Entity;

(iv) within [***] of such communications, copies of all material written communications and written summaries of all material oral communications related to the Company Product, from or with any Governmental Entity;

(v) within [***] of such inspection, notice of any inspections by any Governmental Entity related to the Company Product or otherwise to the Business;

(vi) within [***] of receipt, copies of any inspectional notices or other written observations received with respect to inspections by any Governmental Entity related to the Company Product or otherwise to the Business during such quarter;

(vii) as soon as reasonably practicable after request, such additional information as the Optionee may reasonably request from time to time with respect to the Clinical Study and the status of the Company Product's development, clinical studies or trials, marketing authorizations or clearances, manufacturing and/or Commercialization, and other material regulatory submissions; provided that the Company shall not be obligated to deliver copies of any records or other documents that would be unreasonably burdensome to deliver so long as the Company makes them reasonably available for inspection pursuant to Section 5.2(a);

(viii) within [***] after the end of the fiscal year of the Company, a consolidated income statement for such fiscal year, a consolidated balance sheet of the Company and statement of stockholder's equity as of the end of such year, a consolidated statement of cash flows for such year, such year-end financial reports to be in reasonable detail, and audited and certified by an independent public accounting firm of nationally or regionally recognized standing selected by the Company and reasonably acceptable to the Optionee and [***] after the end of each of the first three (3) quarters of each fiscal year of the Company, an unaudited consolidated profit or loss statement, a consolidated statement of cash flows for such fiscal quarter and an unaudited consolidated balance sheet as of the end of such fiscal quarter; and

(ix) in the time frame set forth therein, any other document, statement or information required to be provided to holders of any series of Preferred Stock pursuant to the Organizational Documents or other agreements between the Company and such holders in effect as of the Agreement Date and/or at any time during the Option Agreement Term, whether or not the right to receive such document, statement or information has been waived or amended by such holders.

Without limiting the foregoing, the Optionee shall have the right to review and provide comments (but shall not have any decision making authority) with respect to the Company's clinical, regulatory, manufacturing and reimbursement strategies and submissions to Governmental Entities, including submissions for any Intellectual Property Rights or other clinical study pursuant to a new drug application under the FDA Act or any similar foreign Law.

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Without limiting the foregoing, the financial statements to be delivered by the Company pursuant to Section 5.2(b)(ix) shall be prepared from the books and records of the Company and its Subsidiaries and shall each be prepared in accordance with GAAP applied on a consistent basis throughout the periods indicated except the unaudited consolidated financial statements need not include footnotes as required by GAAP. Unaudited consolidated financial statements shall be certified as compliant with Section 5.2(b)(ix) by the Company's Chief Financial Officer at the time of delivery to the Optionee or, if the Company does not have a Chief Financial Officer as of such time, by any duly authorized officer of the Company.

5.3 Employees. On and after the Optionee's payment of the Additional Exclusivity Payment and at any time thereafter during the Option Agreement Term, the Company shall afford the Optionee reasonable and customary access to the Employees and independent consultants of the Company and its Subsidiaries for purposes of discussing the terms of potential employment or potential engagement with the Company and/or the Optionee following the Closing; provided, that the Optionee shall not seek access to the Employees and independent consultants of the Company and its Subsidiaries without the prior written consent of the Company (which consent shall not be unreasonably withheld, conditioned or delayed). Without limiting the foregoing, at any time after the Option Exercise Date, the Optionee shall have the right, at its discretion, to make offers of employment or engagement to such Employees and independent consultants of the Company and its Subsidiaries, any such offer to be effective as of the Closing, and such Employees and independent consultants of the Company and its Subsidiaries will be permitted by the Company and its Subsidiaries to accept such offers subject to the Closing.

5.4 Consents of Third Parties; Governmental Approvals. After the Option Exercise Date and during the Option Agreement Term, upon request of the Optionee, the Company will use Commercially Reasonable Efforts to obtain such Consents from Governmental Entities and third parties which the Optionee and the Company agree to obtain prior to Closing in connection with the consummation of the transactions provided for herein and in the Merger Agreement; provided that the agreement of the Company with respect to any such Consent shall not be unreasonably withheld, conditioned or delayed. The Optionee agrees that it shall reimburse the Company for any out-of-pocket expenses reasonably incurred by the Company in obtaining such Consents during the Option Agreement Term if the Merger Agreement Effective Date does not occur subject to the Optionee's receipt of reasonable supporting documentation of such expenses.

5.5 Conduct of Business by the Company.

(a) During the Option Agreement Term, Company shall (i) conduct its Business in the ordinary course and in accordance with applicable Laws, (ii) comply with the terms of the Organizational Documents (including with respect to any amendment, restatement or waiver thereof) and (iii) use Commercially Reasonable Efforts to complete the HF-BCC Phase II Trial and the Phase III Trial.

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(b) Without limiting the generality of Section 5.5(a) and except as expressly contemplated by this Agreement or pursuant to the prior written consent of the Optionee, during the Option Agreement Term, the Company shall not:

(i) initiate or make any changes to the activities of the Company and its Business in the form of (A) entering new business and/or product areas, and (B) exiting one or more business and/or product areas in which the Company has business as of the Agreement Date;

(ii) make any amendment to the Organizational Documents so as to alter or change the powers, preferences or rights of shares of Capital Stock held by the Optionee so as to affect such shares adversely relative to the powers, preferences or rights of shares of Capital Stock of the same class or series held by holders of Capital Stock other than the Optionee;

(iii) fail to maintain, or allow to lapse, or abandon, including by failure to pay the required fees in any jurisdiction, any Intellectual Property Rights used in or otherwise material to the Business, other than in the ordinary course consistent with past practices regarding Intellectual Property Rights that are not material to the conduct of the Business;

(iv) sell, lease, license or otherwise transfer, or create, incur, assume or suffer to exist any Lien (other than Permitted Liens (as defined in the Merger Agreement)) on, any of the material assets, Intellectual Property, securities, properties, interests or businesses of the Company, other than sales and licenses of the Company Product in the ordinary course of business consistent with past practice;

(v) (A) issue, transfer, deliver, sell, pledge or otherwise encumber any of the Company's assets, shares of any Capital Stock, Equity Incentive Options, or other Company Securities, other than an issuance of (x) Equity Incentive Options granted to employees or other service providers of the Company in the ordinary course of business consistent with past practice, (y) any shares of Common Stock upon the exercise of Equity Incentive Options, (z) any shares of Capital Stock issued in accordance with Section 5.12, or (B) amend any term of any Company Security (whether by merger, consolidation or otherwise) outstanding as of the date of this Agreement;

(vi) give notice of or propose any resolution to wind up or dissolve the Company, file or make any petition, application or notice for the appointment or intended appointment of an administrator or liquidator or provisional liquidator or invite any person to appoint a receiver, administrative receiver or administrator in respect of the whole or any part of the business or assets of the Company;

(vii) present a petition or convene a meeting for the Company's bankruptcy, winding-up, recovery or similar proceedings (including a general agreement with any creditors);

(viii) propose or make any arrangement or compromise with, or assign for the benefit of, its creditors generally, or enter into any agreement for or in connection with the scheduling, restructuring or re-adjustment of any material part of its Indebtedness by reason of, or with a view to avoiding, financial difficulties;

(ix) declare, set aside or pay any dividend or other distribution (whether in cash, stock, debt or property or any combination thereof) in respect of any Company Securities, or redeem, repurchase or otherwise acquire or offer to redeem, repurchase, or otherwise acquire any Company Securities;

(x) take any action intended to obstruct or restrict the Optionee's exercise of the Option or the Merger;

(xi) make any loans, advances or capital contributions to, or investments in, any other Person, other than to the extent provided for in the Budget;

(xii) enter into any transactions with any Related Person (as defined in the Merger Agreement); or

(xiii) enter into any agreement to do any of the things described in the preceding clauses (i) through (xvi).

Notwithstanding anything to the contrary in this Section 5.5, the Company shall be permitted to adopt a carveout bonus plan for the benefit of its employees, provided that any payments under such plan shall be deducted from the Merger Consideration (as defined in the Merger Agreement) as Company Transaction Expenses (as defined in the Merger Agreement).

5.6 Stockholder Consent; Support Agreements.

(a) During the Option Agreement Term, the Company shall use Commercially Reasonable Efforts to obtain, and shall deliver to the Optionee upon receipt, the consent of Stockholders as of the Agreement Date who did not execute a Support Agreement in connection with Section2.4(b), including the irrevocable proxy in favor of the Optionee; provided, however, that, to the extent the Company uses such Commercially Reasonable Efforts, the failure to obtain such consent shall not constitute a breach of this Agreement or the Merger Agreement, as applicable, and further provided that the Company shall have no obligation to offer or pay any consideration to any such Stockholder.

(b) Following the Agreement Date, the Company shall only be entitled to exercise and accept a transfer of Capital Stock from an existing Stockholder to a third party, if such third party executes the Support Agreement and provides consent to the Merger authorizing the execution, delivery and performance of the Merger Agreement (provided, however, that the Merger Agreement will not be effective until the Merger Agreement Effective Date), and the transactions contemplated hereby and thereby.

5.7 Use of Exclusivity Payment, Additional Exclusivity Payment and other proceeds. During the Option Agreement Term, the Company shall use the proceeds of the Exclusivity Payment, the Additional Exclusivity Payment, and the SVB or Optionee Loan to fund the Company's activities as set out in the Budget and [***].

5.8 Acquisition Proposals. During [***] the Company shall not, nor shall it permit or cause any of its Affiliates, or any officer, director, Employee, investment banker or other Representative of the Company or any of its Subsidiaries to, [***].

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5.9 Non-Solicitation. Subject to Section 5.2, during the Option Agreement Term and for a period of [***] each party hereto agrees that it shall not, and shall cause its controlled Affiliates not to, directly or indirectly, solicit to employ any employee of any other party or its controlled Affiliates employed by such party or its controlled Affiliates as of the Agreement Date or any time during the Option Agreement Term and for a [***] provided, however, that the parties hereto and their respective controlled Affiliates may engage in general solicitations for employees in the ordinary course of business and consistent with past practice so long as such solicitations are not directed towards employees of any other party or such party's controlled Affiliates.

5.10 Takeover Statutes. During the Option Agreement Term, if any Takeover Statute is or may become applicable to the transactions contemplated by this Agreement or the Merger Agreement, the Company Board of Directors will grant such approvals and take such actions as are necessary so that the transactions contemplated hereby or thereby may be consummated as promptly as practicable on the terms contemplated by this Agreement and the Merger Agreement and otherwise act to eliminate the effects of any Takeover Statute on any of the transactions contemplated hereby and thereby.

5.11 Support Agreements; Common Stock Voting. The Company shall use best efforts to enforce each of the Support Agreements delivered by certain holders of Capital Stock, including through the exercise of the proxy to vote such holders shares of Capital Stock. The Optionee shall vote its shares of Common Stock in favor of the Merger Agreement, the Merger and the other transactions contemplated hereby and thereby.

5.12 Budget; Additional Funding.

(a) During the Option Agreement Term, the Company shall use Commercially Reasonable Efforts to operate the Business in accordance with the budget attached hereto as Exhibit F (the "***Budget***"). The parties acknowledge that the SVB or Optionee Loan together with the Exclusivity Payment, the Additional Exclusivity Payment and the Missed Milestone Funding (as applicable) (the "***Existing Funding***") may be insufficient to fund the Company through the Closing. If the Company reasonably determines that it needs additional funding through Closing, the Company may deliver notice to the Optionee setting forth the Company's good faith estimate of its cash needs from the date thereof through the anticipated date of Closing (the "***Additional Funding Notice***") and, within [***] of the Additional Funding Notice, the Optionee shall (i) provide a loan to the Company in the amount requested by the Company (not to exceed [***] on the same terms as those set forth in the SVB Term Sheet, as modified by Schedule 5.12 and, to the extent not in conflict with the SVB Term Sheet, otherwise on terms consistent with the then market terms for such loans (the "***Optionee Loan***"), (ii) enter into a form of "deep" subordination agreement (including, for the avoidance of doubt, if required by SVB, complete payment and lien subordination in favor of SVB) satisfactory to SVB in its sole discretion and (iii) otherwise cooperate with any reasonable requests of SVB in connection with such loan.

(b) If the Company reasonably determines that it needs additional funding pursuant to Section 5.12(a) in excess of [***] the Company may seek to obtain additional debt or equity financing from any Person; provided, that the Company hereby grants to the Optionee a Right of First Refusal to finance all (but not less than all) of the Proposed Financing on the same

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terms and conditions as those offered to the Prospective Investor(s). In such event, the Company shall deliver a Proposed Financing Notice to the Optionee not later than [***] days prior to the consummation of such Proposed Financing. Such Proposed Financing Notice shall contain the material terms and conditions of the Proposed Financing, the identity of the Prospective Investor(s) and the anticipated date of the Proposed Financing. To exercise the Optionee's Right of First Refusal the Optionee must deliver a notice of such exercise to the Company within [***] after delivery of the Proposed Financing Notice. The closing of the financing by the Optionee shall take place, and all payments from the Optionee shall have been made to the Company, by the anticipated date of the Proposed Financing pursuant to the Proposed Financing Notice.

(c) If [***] then the Optionee may elect to provide further funding to the Company on the first day of each month following [***] in an amount equal to the projected expenditures of the Company for each such month as set forth in the Company's budget in effect at such time. Any funding pursuant to this Section 5.12(c) shall not be treated as a deduction to the consideration due to the equityholders of the Company under the Merger Agreement.

5.13 Joint Development Committee.

(a) Formation. Promptly after the Agreement Date, the Company and Optionee will form a Joint Development Committee, comprised of three (3) representatives of the Company and three (3) representatives of the Optionee. The purpose of the JDC will be to oversee the conduct of a research and technical development plan (the "***Research and Technical Development Plan***"***),*** approve updates to such plan, and coordinate the parties' activities in connection with their performance under such plan. The initial Research and Technical Development Plan is attached hereto as Exhibit G. The Optionee agrees that it shall not have the right to nominate representatives of the Company to the JDC notwithstanding its ownership interest in the Company. One representative of the Company will be selected to act as the chairperson of the JDC.

(b) Meetings. The JDC will meet at least once per each calendar quarter during the term of the Research and Technical Development Plan. Such meetings may be conducted by videoconference, teleconference or in person, as agreed by the Company and Optionee. The JDC will agree upon the time and location of the meetings. The chairperson, or his or her designee, will circulate an agenda for each meeting approximately one week before the date scheduled for the meeting, and will include all matters requested to be included on such agenda by Company or Optionee. The chairperson, or his or her designee, will take complete and accurate minutes of all discussions occurring at the JDC meetings and all matters decided upon at the meetings except that matters reflecting legal advice of counsel will not be included in such minutes. A copy of the draft minutes of each meeting will be provided to each of the Company and Optionee by the chairperson, or his or her designee, after each meeting. The JDC members shall review and comment on such minutes. Final drafts of the minutes of each JDC meeting shall be provided to each party within forty-five (45) days after each meeting, and subject to formal approval at the next JDC meeting. Any member of the JDC may issue a proxy to designate a substitute to attend any JDC meeting and vote on his behalf with prior written notice to the other members of the JDC. Each of the Company and Optionee is responsible for its travel costs and expenses incurred by its respective Representatives associated with attending JDC meetings.

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(c) Functions and Powers. The responsibilities of the JDC will be as follows:

(i) facilitating communication between the parties with respect to the development of the Company Product, any Clinical Study and the activities performed under the Research and Technical Development Plan;

(ii) establishing and revising the Research and Technical Development Plan's objectives, goals and schedules, and reviewing and approving amendments to the Research and Technical Development Plan;

(iii) monitoring, discussing and overseeing the progress of the development of the Company Product, any Clinical Study, each party's progress with respect to the activities allocated to such party under the Research and Technical Development Plan;

(iv) monitoring, discussing and overseeing the Commercialization of the Company Product; and

(v) carrying out the other duties and responsibilities allocated to it in this Agreement.

(d) Decisions. Decisions of the JDC shall be made by a simple majority, with each member of the JDC having one (1) vote in all decisions. In the event that the JDC is unable to reach a decision on a matter that is within its decision-making authority [***]; provided, that [***]. Notwithstanding the foregoing, [***].

(e) Authority of JDC. The Company agrees to be bound by any valid resolution of the JDC pursuant to Section 5.13 and the Company undertakes to use reasonable best efforts to comply with, and to observe and perform any and all valid resolutions of the JDC.

(f) Limitations on JDC. The JDC shall not have any authority other than that expressly set forth above and, specifically, shall have no authority: (x) to amend or interpret this Agreement or the Merger Agreement, (y) determine whether or not a party has met its diligence or other obligations under this Agreement, or (z) to determine whether or not a breach of this Agreement has occurred.

(g) Termination. The JDC shall disband upon completion by both parties of all their obligations under the Rese arch and Technical Development Plan, and upon termination of this Agreement.

5.14 Key Representatives. Promptly after the Agreement Date, each party shall appoint an individual who shall be a Representative of such party having appropriate qualification and experience to act as the key Representative for such party (the "***Key Representative***"). Each Key Representative shall be responsible for coordinating and managing processes and interfacing between the parties on a day-to-day basis throughout the Option Agreement Term. The Key Representative will ensure communication to the JDC of all relevant

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

matters related to the Research and Technical Development Plan. Each Key Representative shall be permitted to attend meetings of the JDC as appropriate and as a non-voting participant. The Key Representative shall be the primary contact for the parties regarding the activities contemplated by this Agreement and shall facilitate all such activities hereunder. Each party may replace its Key Representative with an alternative representative at any time with prior written notice to the other party. Any Key Representative may designate a substitute to temporarily perform the functions of that Key Representative. Each party shall bear the costs of its Key Representative.

5.15 SVB Term Sheet. The Company and Optionee shall each use Commercially Reasonable Efforts to cooperate with SVB to consummate the financing contemplated by, and in accordance with, the term sheet attached hereto as Exhibit H (the "***SVB Term Sheet***"). The Optionee shall use Commercially Reasonable Efforts to provide credit support (i.e., a guaranty or a letter of credit) to SVB on the terms set forth in the SVB Term Sheet. To the extent SVB does not provide a loan to the Company within thirty (30) days after the funding date contemplated by the SVB Term Sheet for any reason, the Optionee shall, within thirty (30) days after such contemplated SVB funding date, provide a loan to the Company on the same terms and conditions as those set forth on the SVB Term Sheet and, to the extent not in conflict with the SVB Term Sheet, otherwise on terms consistent with current market terms for such loans; provided, however that such loan from the Optionee shall be unsecured.

ARTICLE 6
INDEMNIFICATION

6.1 Survival of Representations. The representations and warranties made by the Company and the Optionee in this Agreement shall survive until the earlier of (a) the termination of this Agreement in accordance with its terms and (b) the Merger Agreement Effective Date (the "***Survival Period***"). The termination of the representations and warranties provided herein shall not affect the rights of a party in respect of any claim made in accordance with Sections 6.3(a) or 6.3(b) by such party in a writing received by the other party prior to the expiration of the Survival Period. All of the covenants, agreements, undertakings and obligations of the parties contained in this Agreement shall survive until fully performed or fulfilled, unless waived in writing. The Optionee Indemnified Parties will not have the right to make any claim pursuant to this Article 6 on or after the Merger Agreement Effective Date.

6.2 Indemnification.

(a) Indemnification of the Optionee Indemnified Persons. Subject in all cases to the limitations on indemnification in this Article 6, after the Agreement Date, Company agrees to indemnify and hold harmless the Optionee, its Affiliates, and each of their respective officers, directors, employees, equityholders and agents (the "***Optionee Indemnified Parties***") from and against any and all damages, claims, losses, injuries, charges, costs, Liabilities or expenses, interests, penalties and expenses of any Action (including reasonable attorneys' fees and expenses) or remedial action, and including amounts actually paid or incurred in the absence of third party claims (collectively "***Damages***") which any of the Optionee Indemnified Parties may sustain, or to which any of the Optionee Indemnified Parties may be subjected, that arise out of or result from:

(i) a breach or inaccuracy of any representation or warranty of the Company set forth in Article 3 of this Agreement, the Company Secretary's Certificate or the Bringdown Certificate; or

(ii) a breach of any covenant on the part of the Company set forth in this Agreement.

(b) Set-Off. In the event Optionee or the Merger Sub is entitled, pursuant to a final and nonappealable Court Order, to be indemnified by the Company pursuant to Section 6.2(b), the Optionee and/or the Merger Sub, as the case may be, are entitled to, at their sole discretion, to set-off any such indemnification amount against (and thereby reducing) the Additional Exclusivity Payment, the Closing Merger Consideration (as defined in the Merger Agreement) and/or the Milestone Payments (as defined in the Merger Agreement).

(c) Indemnification of Company Indemnified Persons. Subject in all cases to the limitations on indemnification in this Article 6, after the Agreement Date, the Optionee agrees to indemnify and hold harmless the Company, its Affiliates, and each of their respective officers, directors, employees, Stockholders and agents (the "***Company Indemnified Parties***" and together with the Optionee Indemnified Parties, each an "***Indemnified Party***" and collectively the "***Indemnified Parties***") from and against any and all Damages, which any of the Company Indemnified Parties may sustain, or to which any of the Company Indemnified Parties may be subjected, that arise out of or result from:

(i) a breach or inaccuracy of any representation or warranty of the Optionee set forth in Article 4 of this Agreement; or

(ii) a breach of any covenant on the part of the Optionee set forth in this Agreement.

6.3 Procedures of Claims.

(a) Defense of Third Party Claims. In the case of any claim for indemnification arising from a claim of a third party (including any Governmental Entity), an Indemnified Party must give prompt written notice after the Indemnified Party's receipt of notice of such claim to the other party (the "***Indemnifying Party***") of any claim of which such Indemnified Party has knowledge and as to which it reasonably believes it is entitled to indemnification hereunder. Notwithstanding anything to the contrary herein, it shall be reasonable for an Indemnified Party to provide such written notice upon receipt of a third party claim that could reasonably be expected to give rise to Damages even if no Damages with respect to such claim have been suffered as of the date of such notice and, upon giving of such notice hereunder, such notice shall be deemed properly given for all purposes of this Agreement. The written notice shall state in reasonable date the nature and basis of such claims and the dollar amount of such claim, to the extent known. The failure to give such notice will not, however, relieve any Indemnifying Party of its indemnification obligations except to the extent that an Indemnifying Party is actually harmed thereby. The Indemnifying Party will have the right to defend and to direct the defense against any such claim in its name and at its expense with counsel selected by the Indemnifying Party (that shall be reasonably acceptable to the

Indemnified Party) unless there is a conflict of interest between the Indemnified Party and the Indemnifying Party in the conduct of such defense if the Indemnifying Party (i) demonstrates to the Indemnified Party, in writing, such Indemnifying Party's financial ability to provide full indemnification to the Indemnified Party with respect to such matter, and (ii) demonstrates that, after giving effect to the application of the limitations in this Article 6, the Indemnifying Party is reasonably likely to be responsible for a greater portion of the Damages than the Indemnified Party (and with respect to such portion, agrees in writing that such claim is indemnifiable hereunder, subject to the limitations and provisions set forth in this Article 6). If the Indemnifying Party assumes the defense of a third party claim it shall be conclusively established for purposes of this Agreement that the claims made in such third party claim are within the scope of and subject to indemnification. In addition, the Indemnifying Party shall not be entitled to assume control of such defense if (i) the third party claim relates to or arises in connection with any criminal proceeding against the Indemnified Party; (ii) the third party claim seeks an injunction or other similar form of equitable relief against the Indemnified Party as its principal claim for relief; or (iii) the Indemnifying Party failed or is failing to vigorously prosecute or defend such third party claim. If the Indemnifying Party is entitled to compromise or defend such claim, it will notify the Indemnified Party of its intent to use Commercially Reasonable Efforts to do so, and the Indemnified Party must, at the request and expense of the Indemnifying Party, cooperate in the defense of such claim. If the Indemnifying Party elects, in a writing delivered to the Indemnified Party, not to compromise or defend such claim, the Indemnified Party may pay, compromise or defend such claim. Notwithstanding anything to the contrary contained herein, the Indemnifying Party will have no indemnification obligations with respect to any claim which has been or will be settled by the Indemnified Party without the prior written consent of the Indemnifying Party (such consent not to be unreasonably withheld, conditioned or delayed). The Indemnifying Party's right to direct the defense will include the right to compromise or enter into an agreement settling any claim by a third party only with the consent of the Indemnified Party (such consent not to be unreasonably withheld, conditioned or delayed), unless the Indemnified Party receives a full release with respect to such claim and the sole relief in such settlement is that monetary damages are paid in full by the Indemnifying Party. The Indemnified Party will have the right to participate in the Indemnifying Party's defense of any claim with counsel selected by it subject to the Indemnifying Party's right to direct the defense. The fees and disbursements of such counsel will be at the expense of the Indemnified Party (unless the Indemnified Party's counsel shall have advised the Indemnified Party in writing, with a copy delivered to the Indemnifying Party, that there is a conflict of interest that could make it inappropriate under applicable standards of professional conduct for the Indemnifying Party and the Indemnified Party to have common counsel). An Indemnifying Party who is not permitted to direct the defense hereof will have the right to participate in the Indemnified Party's defense of any claim with one (1) counsel selected by it subject to the Indemnified Party's right to direct the defense. The fees and disbursements of such counsel will be at the expense of the Indemnifying Party.

(b) Non-Third Party Claims. Any claim which does not result from a third party claim will be asserted by a written notice from the Indemnified Party to the Indemnifying Party. The Indemnifying Party will have a period of [***] after receipt of such notice within which to respond thereto. If the Indemnifying Party does not respond within [***] the recipient will be deemed to have accepted responsibility for the Damages set forth in such notice and will have no further right to contest the validity of any claim (or the amount of such claim) set forth

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

in such notice. If the Indemnifying Party responds within [***] after the receipt of the notice and rejects such claim in whole or in part, the Indemnified Party will be free to pursue such remedies as may be available to it under contract or applicable Law, subject to the terms of this Agreement.

6.4 No Incidental, Consequential or Punitive Damages/Determination of Damages. Damages to be paid pursuant to this Article 6 shall not include incidental, consequential or punitive damages except to the extent such damages are actually paid to a third party. All Damages sought by any party pursuant to this Article 6 shall be (i) net of any insurance proceeds actually received by such Person with respect to such claim (net of any deductible amounts, costs of collection and increased premiums) and (ii) paid regardless of any investigation at any time made by or on behalf of any party hereto or of any information any party may have in respect thereof.

6.5 Exclusive Remedy. Except as provided in Section 8.10 in this Agreement, the rights and remedies of the parties under this Article 6 are exclusive and in lieu of any and all other rights and remedies which the parties may have under or related to this Agreement, other than those which are as a result of Fraud, and each party expressly waives any and all other rights or causes of action it or its Affiliates, employees, officers, directors, equityholders, Stockholders, representatives, agents, or Equity Incentive Optionholders, may have against the other party now or in the future under any Law with respect to the subject matter hereof.

ARTICLE 7
TERMINATION

7.1 Termination Rights.

(a) Notwithstanding anything in this Agreement to the contrary, this Agreement may be terminated at any time prior to the Option Exercise Termination Date:

(i) by the written agreement of the Optionee and the Company;

(ii) by the Optionee by delivery of written notice to the Company at least sixty (60) days prior to the termination date;

(iii) by the Company if the Exclusivity Payment First Installment is not paid by the Optionee within 24 hours of receipt by the Optionee of the Support Agreements as set forth in Section 2.4(b) hereof;

(iv) by the Company if (x) the Company fails to fulfill the conditions set forth in Section 2.5(a)(i) through (iv), (y) the Company has less cash and cash equivalents available on its balance sheet than the cash necessary to fund ongoing operations of the Company for another sixty (60) days in accordance with the Budget and (z) the Optionee fails to make a necessary Missed Milestone Funding payment to continue and fund the operations of the Company; provided, however, that the Company cannot terminate this Agreement under this Section 7.1(a)(iv) if (1) the Company is then in material breach of its obligations hereunder or (2) the Optionee has paid the full Missed Milestone Funding amount despite the fact that the Company failed to fulfill the conditions set forth in Section 2.5(a)(i) through (iv);

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(v) by the Company if the Additional Exclusivity Payment First Installment is not paid by the Optionee within ten (10) Business Days after fulfillment by the Company of the conditions set forth in Section 2.5(a)(i) through (iv), or either the Shortfall Payment or Additional Exclusivity Payment Second Installment are not paid by the Optionee within ten (10) Business Days of the date such payment is due;

(vi) by the Company if the Optionee fails to fund the Optionee Loan in accordance with Section 5.12(a); provided, that the Optionee shall have a ten (10) Business Day period to cure such failure to fund following delivery of notice by the Company of such failure to fund; and (vii) by either the Company or Optionee, if the Company fails to obtain, and deliver to Optionee Support Agreements (including irrevocable proxies) duly executed by the Company and the Stockholders of the Company representing at least the Required Stockholder Approval, by 23:59 PT on the day following the Agreement Date.

(b) Unless earlier terminated in accordance with Section 7.1(a), this Agreement shall terminate automatically and without further notice on (i) the Merger Agreement Effective Date or (ii) the Option Exercise Termination Date if the Optionee does not exercise the Option on or prior to the Option Exercise Termination Date.

7.2 Effect of Termination. In the event that this Agreement shall be terminated pursuant to this Article 7, all further obligations of the parties under this Agreement (other than under Article 6 through Article 8) shall be terminated without further Liability of any party to the other; provided, however, that none of the Company, the Optionee or Merger Sub shall be relieved of any obligation to indemnify the other party under Article 6 or of any Liability arising as a result of Fraud by such party of any provision of this Agreement prior to the date of such termination, provided further, that all obligations under Article 6 shall be terminated as of the Merger Agreement Effective Date. In the event this Agreement is terminated for any reason other than the occurrence of the Merger Agreement Effective Date, then notwithstanding anything herein or in the Merger Agreement to the contrary, the Merger Agreement shall, without further notice, be null and void, ab initio.

ARTICLE 8
GENERAL PROVISIONS

8.1 Assignment, Successors and No Third-Party Rights. No party hereto may assign any of its rights or delegate any of its obligations under this Agreement without the prior written consent of the other parties; provided that, the Optionee and Merger Sub shall each be permitted to assign its respective rights, interests and obligations (in whole or in part) to any of the Optionee's controlled Affiliates without obtaining any consent from the Company. Any purported assignment or delegation, except as expressly permitted pursuant to this Section 8.1, shall be void and without effect. Subject to the foregoing, this Agreement will apply to, be binding in all respects upon and inure to the benefit of the successors and permitted assigns of the parties. Nothing expressed or referred to in this Agreement will be construed to give any Person other than the parties to this Agreement any legal or equitable right, remedy or claim under or with respect to this Agreement or any provision of this Agreement, except such rights as shall inure to a successor or permitted assignee pursuant to this Section 8.1.

8.2 Notices. Unless otherwise expressly provided herein, any notice, request, instruction or other document to be given hereunder by any party hereto to another party hereto shall be in writing and shall be deemed to have been duly given (a) when delivered, if delivered by hand, (b) one (1) Business Day after being sent, if sent by overnight delivery via a national courier service, (c) when transmitted and receipt is confirmed, if sent via facsimile with confirmation of receipt, or (d) three (3) Business Days after mailing, if mailed by registered or certified mail (return receipt requested), to the parties at the following addresses (or at such other address for a party as shall be specified in a notice given in accordance with this Section 8.2):

If to the Optionee or Merger Sub, to:

LEO Pharma A/S
Industriparken 55, 2750 Ballerup
Denmark
Attention: General Counsel
Email: [***]

with a copy to (which shall not constitute notice):

Winston & Strawn LLP
200 Park Avenue
New York, NY 10166
Attention: Uri Doron
Email: [***]

if to the Company, to:

PellePharm, Inc.
101 Mission Street
Suite 2050
San Francisco, CA 94105
Attention: Sanuj Ravindran
Email: [***]

with a copy to (which shall not constitute notice):

Latham & Watkins LLP
505 Montgomery Street
Suite 2000
San Francisco, CA 94111
Attention: Alan C. Mendelson; Luke J. Bergstrom
Email: [***]

8.3 Choice of Law. This Agreement shall be construed, interpreted and the rights of the parties determined in accordance with the Laws of the State of Delaware, without giving effect to any choice of Law provision or rule that would cause the application of the Laws of any jurisdiction other than the State of Delaware.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

8.4 Entire Agreement; Amendments and Waivers. This Agreement, together with all Exhibits and Schedules hereto, and the Confidentiality Agreement, constitute the entire agreement among the parties pertaining to the subject matter hereof and supersede all prior agreements, understandings, negotiations and discussions, whether oral or written, of the parties. No supplement, modification or waiver of this Agreement shall be binding unless executed in writing by the party to be bound thereby. No waiver of any of the provisions of this Agreement shall be deemed or shall constitute a waiver of any other provision hereof (whether or not similar), nor shall such waiver constitute a continuing waiver unless otherwise expressly provided.

8.5 Counterparts. This Agreement may be executed in one or more counterparts, each of which shall be deemed an original, but all of which together shall constitute one and the same instrument, and shall become binding when one or more counterparts have been signed by each of the parties hereto and delivered to the other party. Delivery of an electronically executed counterpart of a signature page to this Agreement shall be as effective as delivery of a manually executed counterpart of this Agreement.

8.6 Invalidity. In the event that any one or more of the provisions contained in this Agreement or in any other instrument referred to herein, shall, for any reason, be held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability shall not affect any other provision of this Agreement or any other such instrument.

8.7 Expenses. Except as expressly stated herein, each party to this Agreement shall bear and pay all fees, costs and expenses (including legal fees and accounting fees) that have been incurred or that are incurred by such party in connection with the transactions contemplated by this Agreement.

8.8 Attorney Fees. If any party to this Agreement brings an Action to enforce its rights under this Agreement in accordance with the provisions hereof, the prevailing party shall be entitled to recover its actual out-of-pocket costs and expenses, including reasonable attorneys' fees reasonably incurred in connection with such Action, including any appeal of such Action.

8.9 Service of Process; Consent to Jurisdiction; Waiver of Jury Trial.

(a) SERVICE OF PROCESS. EACH OF THE PARTIES HERETO IRREVOCABLY CONSENTS TO THE SERVICE OF ANY PROCESS, PLEADING, NOTICES OR OTHER PAPERS BY THE MAILING OF COPIES THEREOF BY REGISTERED, CERTIFIED OR FIRST CLASS MAIL, POSTAGE PREPAID, TO SUCH PARTY AT SUCH PARTY'S ADDRESS SET FORTH HEREIN, OR BY ANY OTHER METHOD PROVIDED OR PERMITTED UNDER DELAWARE LAW.

(b) CONSENT AND JURISDICTION. EACH PARTY HERETO IRREVOCABLY AND UNCONDITIONALLY (I) AGREES THAT ANY SUIT, ACTION OR OTHER LEGAL PROCEEDING ARISING OUT OF THIS AGREEMENT MAY BE BROUGHT IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF DELAWARE OR, IF SUCH COURT DOES NOT HAVE JURISDICTION OR WILL NOT ACCEPT JURISDICTION, IN ANY COURT OF GENERAL JURISDICTION IN

DELAWARE; (II) CONSENTS TO THE JURISDICTION OF ANY SUCH COURT IN ANY SUCH SUIT, ACTION OR PROCEEDING; AND (III) WAIVES ANY OBJECTION WHICH SUCH PARTY MAY HAVE TO THE LAYING OF VENUE OF ANY SUCH SUIT, ACTION OR PROCEEDING IN ANY SUCH COURT.

(c) WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY IRREVOCABLY WAIVES ALL RIGHT TO TRIAL BY JURY IN ANY PROCEEDING (WHETHER BASED IN CONTRACT, TORT OR OTHERWISE) ARISING OUT OF OR RELATING TO THIS AGREEMENT OR ANY TRANSACTION OR AGREEMENT CONTEMPLATED HEREBY OR THE ACTIONS OF ANY PARTY HERETO IN THE NEGOTIATION, ADMINISTRATION, PERFORMANCE OR ENFORCEMENT HEREOF.

8.10 Specific Performance. The parties hereto agree that irreparable damage would occur to the other party in the event of a party's breach or threatened breach of any covenant, obligation or other provision of this Agreement or the Merger Agreement, including the performance of the obligations set forth in Article 2 of this Agreement. Each party hereto hereby agrees that, in the event of any breach of threatened breach by the other party of any covenant, obligation or other provisions of this Agreement or the Merger Agreement, the other party shall be entitled (in addition to any other remedy that may be available to them, including monetary damages) to obtain (a) a decree or order of specific performance or mandamus to enforce the observance and performance of such covenant, obligation or other provision, and (b) an injunction restraining such breach or threatened breach. The parties agree that no party shall be required to obtain, furnish or post any bond or similar instrument in connection with or as a condition to obtaining any remedy referred to in this Section 8.10, and the parties irrevocably waive any right they may have to require the obtaining, furnishing or posting of any such bond or similar instrument.

8.11 Confidentiality. Subject to Section 8.12, the Optionee, Merger Sub and the Company each agrees that all documents, materials and other information which it shall have obtained regarding the other party during the course of the negotiations leading to the execution of this Agreement (whether obtained before or after the Agreement Date), the investigation provided for herein and the preparation of this Agreement and other related documents, and all documents, materials and other information which it shall obtain regarding the other party during the Option Exercise Period shall be held in confidence pursuant to the Confidentiality Agreement.

8.12 Public Announcement. Each party shall be permitted to issue a public announcement, news release, statement, publication or presentation (a "***Press Release***") relating to the existence of this Agreement, the subject matter hereof, or any party's performance hereunder, provided, that (i) the Company shall not be permitted to issue a Press Release prior to the issuance of a Press Release by the Optionee, (ii) the disclosing party gives the other party notice and a reasonable opportunity to comment on the Press Release and (iii) the parties agree to cooperate in determining the scope of the Press Release. Each party shall be permitted to make public statements and disclosures consistent with the content and scope of prior public statements and disclosures made in compliance with this Section 8.12.

8.13 Certain Tax Matters. It is acknowledged and agreed that, for income tax purposes, the Exclusivity Payment and, if paid, the Additional Exclusivity Payment, represent payments made by the Optionee directly to the Company. The parties hereto shall prepare and file (and cause their Affiliates to prepare and file) all tax returns and reports consistently with the preceding sentence. Notwithstanding anything to the contrary in Section 6.3(a), the Optionee shall not be permitted to control any third party claim relating to taxes of the Company pursuant to this Agreement.

* * * * *

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

LEO PHARMA A/S

By: /s/ Gitte Abbo
Name: Gitte Abbo
Title: CEO

By: /s/ Anders Kronborg
Name: Anders Kronborg
Title: CFO

IN WITNESS WHEREOF, the parties hereto have executed this Agreement as of the day and year first written above.

LEO SPINY MERGER SUB, INC.

By: /s/ Chris Posner
Name: Chris Posner
Title: Chief Executive Officer and Treasurer

IN WITNESS WHEREOF, each party hereto has executed this Agreement as of the day and year first written above.

PELLEPHARM, INC.

By: /s/ Sanuj Ravindran
Name: Sanuj Ravindran, M.D.
Title: President and Chief Executive Officer

Address: 101 Mission Street, Suite 2050
San Francisco, CA 94105

Exhibit A

Form of Merger Agreement

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

AMENDMENT TO
OPTION AGREEMENT

THIS AMENDMENT TO OPTION AGREEMENT (this "Amendment") is made and entered into as of this 13th day of March, 2019, by and among LEO Pharma A/S, a company organized under the laws of the Kingdom of Denmark ("Optionee"), LEO Spiny Merger Sub, a Delaware corporation ("Merger Sub"), and PellePharm, Inc., a Delaware corporation ("Company"). Optionee, Merger Sub and Company are each referred to herein as a "Party" and collectively as the "Parties." Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed thereto in the Option Agreement (as defined below).

WHEREAS, the Parties are each party to that certain Option Agreement, dated as of November 19, 2018 (the "Option Agreement");

WHEREAS, Section 1.2(f) of the Option Agreement provides that the Exhibits to the Option Agreement are a material part thereof and shall be treated as if fully incorporated into the body of the Option Agreement;

WHEREAS, pursuant to Section 8.4 of the Option Agreement, no supplement, modification or waiver of the Option Agreement shall be binding unless executed in writing by the party to be bound thereby; and

WHEREAS, the Parties wish to amend and modify the Option Agreement and the Merger Agreement as outlined herein.

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements herein contained, and intending to be legally bound hereby, the parties hereto hereby agree and amend the Option Agreement as follows:

1. **Conduct of the Company**. The last sentence of Section 5.5 of the Option Agreement is hereby amended and restated in its entirety to read as follows:

Notwithstanding anything to the contrary in this Section 5.5, the Company shall be permitted to adopt a carveout bonus plan that provides for aggregate payments of up to [***] for the benefit of its employees in connection with the consummation of the transactions contemplated by the Merger Agreement, provided that [***]% of the payments under such plan and [***] (as defined in the Merger Agreement) related to such [***]% payments shall be [***] (as defined in the Merger Agreement) as [***] (as defined in the Merger Agreement) and the remainder of such payments and [***] shall not constitute [***] and shall not be [***].

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2. **Agreement of Merger**. Exhibit A of the Option Agreement is hereby amended as set forth on Attachment A hereto and, as so modified, shall constitute the Merger Agreement for all purposes under the Option Agreement.

3. **Conflicting Terms; Limitation of Amendment**. In the event of any conflict or inconsistency between the terms of this Amendment and the Option Agreement, the terms of this Amendment shall control. Except as otherwise set forth herein, all terms and provisions of the Option Agreement shall remain in full force and effect. The Option Agreement, as referenced in any other document that the Parties have executed, means the Option Agreement, as amended by this Amendment.

4. **Governing Law**. This Amendment shall be governed by and construed in accordance with the laws of the State of Delaware, without giving effect to principles of conflicts of laws that would require the application of the laws of any other jurisdiction.

5. **Counterparts**. This Amendment may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Amendment shall become effective when each Party shall have received a counterpart hereof signed by the other Party. Until and unless each Party has received a counterpart hereof signed by the other Party hereto, this Amendment shall have no effect, and no Party shall have any right or obligation hereunder (whether by virtue of any other oral or written agreement or other communication). The exchange of a fully executed Amendment (in counterparts or otherwise) by electronic transmission in .PDF format or by facsimile shall be sufficient to bind the Parties to the terms and conditions of this Amendment.

***

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

LEO PHARMA A/S

By: /s/ Anders Kronborg
Name: Anders Kronborg
Title: CFO

By: /s/ Gitte Abbo
Name: Gitte Abbo
Title: CEO

LEO SPINY MERGER SUB, INC.

By: /s/ Chris Posner
Name: Chris Posner
Title: CEO and Treasurer

PELLEPHARM, INC.

By: /s/ Sanuj Ravindran
Name: Sanuj Ravindran
Title: President and CEO

[Signature Page to Amendment to the Option Agreement]

Attachment A

First Amendment to Agreement of Merger

Execution Version

FIRST AMENDMENT TO
AGREEMENT OF MERGER

THIS FIRST AMENDMENT TO AGREEMENT OF MERGER (this "Amendment") is made and entered into as of this 13th day of March, 2019, by and among LEO Pharma A/S, a company organized under the laws of the Kingdom of Denmark ("Optionee"), LEO Spiny Merger Sub, a Delaware corporation ("Merger Sub"), PellePharm, Inc., a Delaware corporation ("Company"), and Fortis Advisors LLC, a Delaware limited liability company ("Fortis"). Optionee, Merger Sub, the Company and Fortis are each referred to herein as a "Party" and collectively as the "Parties." Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed thereto in the Merger Agreement (as defined below).

WHEREAS, the Parties are each party to that certain Agreement of Merger, dated as of November 19, 2018 (the "Merger Agreement");

WHEREAS, pursuant to Section 11.04 of the Merger Agreement, a provision of the Merger Agreement may be amended prior to the Effective Time only if such amendment is in writing and is signed by each party to the Merger Agreement; and

WHEREAS, the Parties wish to amend and modify the Merger Agreement in certain respects;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements herein contained, and intending to be legally bound hereby, the parties hereto hereby agree and amend the Merger Agreement as follows:

1. **Conduct of the Company.**

(a) The paragraph immediately following Section 5.01(b)(xviii) of the Merger Agreement is hereby amended and restated to read as follows (deleted wording is shown in **bold ~~and strikethrough~~ and inserted wording is shown in bold and underlined**):

"Notwithstanding anything to the contrary in this Section 5.01, the Company shall be permitted to **grant units to Company employees under the Carveout Plan in accordance with its terms, provided that the aggregate amount payable to Company employees under the Carveout Plan shall not exceed [***] ~~adopt a carveout bonus plan for the benefit of its employees prior to the Closing, provided that payments under such plan shall be deducted from the Merger Consideration as Company Transaction Expenses~~**."

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2. **Company Transaction Expenses**. The definition of "Company Transaction Expenses" in Section 1.1 of the Merger Agreement is hereby amended and restated to read as follows (inserted wording is shown in **bold and underlined**):

"Company Transaction Expenses" means (a) any fees and disbursements incurred by or on behalf of the Company and payable to any financial advisor (including the Company Financial Advisor), investment banker, broker or finder in connection with the transactions contemplated by this Agreement, (b) the fees and disbursements payable to legal counsel, consultants or accountants of the Company that are payable by the Company in connection with the transactions contemplated by this Agreement, (c) any bonuses, incentive compensation, or other change-in-control payments to be paid or payable to any director, officer or employee of the Company at the Closing (without any further condition) in connection with the Merger or any of the other transactions contemplated by this Agreement, and all employer Taxes related thereto, (d) the employer portion of any payroll Taxes imposed with respect to the payment of the Option Consideration, and (e) all other miscellaneous out-of-pocket expenses or costs, in each case, incurred by the Company in connection with the transactions contemplated by this Agreement. **[***]**."

3. **Contemplated Carveout Plan**. A new definition of "Carveout Plan" shall be added to Section 1.1 of the Merger Agreement and shall read as follows:

"Carveout Plan" shall mean the Company's Management Carveout Plan."

4. **Employee Matters**. Section 6.04 of the Merger Agreement is hereby amended and restated to add the following Section 6.04(e), which in its entirety will read as follows:

"(e) Promptly after the Effective Time, Parent shall cause the Surviving Corporation to make all payments due under the Carveout Plan, which obligation shall include providing any necessary funds to complete such payment obligations."

5. **Conflicting Terms; Limitation of Amendment**. In the event of any conflict or inconsistency between the terms of this Amendment and the Merger Agreement, the terms of this Amendment shall control. Except as otherwise set forth herein, all terms and provisions of the Merger Agreement shall remain in full force and effect. The Merger Agreement, as referenced in any other document that the Parties have executed, means the Merger Agreement, as amended by this Amendment.

6. **Governing Law**. This Amendment shall be governed by and construed in accordance with the laws of the State of Delaware (including in respect of the statute of limitations or other limitations period applicable to any claim, controversy or dispute hereunder), without giving effect to principles of conflicts of laws that would require the application of the laws of any other jurisdiction.

7. **Counterparts**. This Amendment may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Amendment shall become effective when each Party shall have received a counterpart hereof signed by the other Party. Until and unless each Party has received a counterpart hereof signed by the other Party hereto, this Amendment shall have no

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effect, and no Party shall have any right or obligation hereunder (whether by virtue of any other oral or written agreement or other communication). The exchange of a fully executed Amendment (in counterparts or otherwise) by electronic transmission in .PDF format or by facsimile shall be sufficient to bind the Parties to the terms and conditions of this Amendment.

***

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

LEO PHARMA A/S

By: _____
Name:
Title:

By: _____
Name:
Title:

LEO SPINY MERGER SUB, INC.

By: _____
Name:
Title:

By: _____
Name:
Title:

PELLEPHARM, INC.

By: _____
Name:
Title:

FORTIS ADVISORS LLC

By: _____
Name:
Title:

[Signature Page to First Amendment to the Agreement of Merger]

[***] **Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.**

AGREEMENT OF MERGER

BY AND AMONG

LEO PHARMA A/S,

LEO SPINY MERGER SUB, INC.,

PELLEPHARM, INC.,

AND

FORTIS ADVISORS LLC,
AS THE EQUITYHOLDER REPRESENTATIVE

NOVEMBER 19, 2018

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AGREEMENT OF MERGER

THIS AGREEMENT OF MERGER (this "Agreement"), dated as of November 19, 2018, is entered into by and among LEO Pharma A/S, a company organized under the laws of the Kingdom of Denmark ("Parent"), LEO Spiny Merger Sub, Inc., a Delaware corporation and a wholly owned subsidiary of Parent ("Merger Sub"), PellePharm, Inc., a Delaware corporation (the "Company"), and Fortis Advisors LLC, a Delaware limited liability company, as the Equityholder Representative (together with Parent, Merger Sub and the Company, the "Parties").

RECITALS

WHEREAS, Parent, Merger Sub and the Company have agreed to enter into this Agreement, provided that no provision of this Agreement (other than Article 11 (excluding Section 11.01) and Section 9.01(g)) shall be effective until the Merger Agreement Effective Date.

WHEREAS, Parent, Merger Sub and the Company intend to effect a merger of Merger Sub with and into the Company (the "Merger") upon the terms and subject to the conditions of this Agreement and in accordance with the General Corporation Law of the State of Delaware (the "DGCL") and the California Corporations Code (the "CCC"). Effective as of immediately following consummation of the Merger, Merger Sub will cease to exist, and the Company will continue as a wholly owned subsidiary of Parent.

WHEREAS, this Agreement has been approved by all necessary corporate action of Parent and by the board of directors of the Company (the "Company Board of Directors") and the board of directors of Merger Sub (the "Merger Sub Board of Directors").

WHEREAS, on the Merger Agreement Effective Date, and as a condition and inducement to the Equityholders', the Company's and Parent's willingness to enter into this Agreement, certain individuals identified on Exhibit A shall enter into non-competition agreements on the material terms set forth in Exhibit B (the "Non-Competition Agreements"); provided, however, that if any individual listed on Exhibit A is no longer an employee, officer or director of the Company on the Merger Agreement Effective Date, such individual shall be deemed to be removed from Exhibit A.

WHEREAS, in accordance with the terms of the Purchase Option Agreement, certain holders of Company Capital Stock shall enter into a stockholders' agreement with the Company, which includes an irrevocable proxy in favor of the Company (each, a "Support Agreement"), pursuant to which, among other things, each such holder will (a) agree to vote its shares of Company Capital Stock in favor of the adoption of this Agreement, thereby approving the Merger and the other transactions contemplated hereby and (b) appoint the Company as its proxy to vote its shares of Company Capital Stock in favor of the adoption of this Agreement, thereby approving the Merger and the other transactions contemplated hereby.

NOW, THEREFORE, intending to be legally bound, the Parties hereby agree as follows:

ARTICLE I
DEFINITIONS

Section 1.01 **Definitions**.

(a) As used in this Agreement, the following terms have the following meanings:

"280G Approval" means the stockholder vote required pursuant to Section 5.05, solicited in conformity with Section 280G(b)(5)(B) of the Code, with respect to any payments and/or benefits that were subject to such stockholder vote.

"Acquisition of a Competing Product" means an acquisition or in-licensing by Parent or any of its Subsidiaries of a Competing Product or the rights to exploit a Competing Product; *provided*, that the acquisition of a Competing Product or the rights to exploit a Competing Product as part of the acquisition by Parent or any of its Affiliates of another business of which the Competing Product accounts for less than [***] of the revenue or the value of the assets shall not be deemed an Acquisition of a Competing Product if such acquired Competing Products or the rights to exploit a Competing Product are sold, transferred or otherwise divested to a non-Affiliate of the Parent within [***] of the completion of the acquisition of such business.

"Acquisition Proposal" means, other than the Merger, any offer, proposal or inquiry relating to, or any Person's indication of interest in, (a) the sale, license or other disposition of all or a material portion of the business or assets of the Company, (b) the issuance, disposition or acquisition of (i) any capital stock or other equity security of the Company (other than in connection with the exercise of any Company Option outstanding on the date hereof), (ii) any subscription, option, call, warrant, preemptive right, right of first refusal or any other right (whether or not exercisable) to acquire any capital stock or other equity security of the Company (other than the grant of Company Options to newly hired employees of the Company in the ordinary course of business consistent with past practices, or (iii) any security, instrument or obligation that is or may become convertible into or exchangeable for any capital stock or other equity security of the Company or (c) any merger, consolidation, business combination, reorganization, liquidation, recapitalization, share exchange or similar transaction involving the Company.

"Affiliate" means, with respect to any Person, any other Person directly or indirectly controlling, controlled by, or under common control with such Person. For purposes of this definition, "control," when used with respect to any specified person, means the power to direct or cause the direction of the management and policies of such Person, directly or indirectly, whether through ownership of voting securities or by contract or otherwise, and the terms "controlling" and "controlled by" have correlative meanings to the foregoing.

"Aggregate Exercise Price" means the aggregate dollar amount of the exercise prices of all In-Money Options (whether vested or unvested) and Company Warrants as of immediately prior to the Effective Time.

"Aggregate Closing Merger Consideration" means a dollar amount equal to the sum of (a) the Aggregate Exercise Price plus (b) the Closing Merger Consideration.

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"Aggregate Series A Preferred Share Preference" means a dollar amount, rounded to the nearest cent, equal to the product of (a) the Series A Preferred Per Share Preference, multiplied by (b) the total number of shares of Series A Preferred Stock that are issued and outstanding immediately prior to the Effective Time.

"Aggregate Series B/B-2 Preferred Share Preference" means a dollar amount, rounded to the nearest cent, equal to the product of (a) the Series B/B-2 Preferred Per Share Preference, multiplied by (b) the sum of (i) the total number of shares of Series B Preferred Stock that are issued and outstanding immediately prior to the Effective Time plus (ii) the total number of shares of Series B-2 Preferred Stock that are issued and outstanding immediately prior to the Effective Time.

"Aggregate Series C Preferred Share Preference" means a dollar amount, rounded to the nearest cent, equal to the product of (a) the Series C Preferred Per Share Preference, multiplied by (b) the total number of shares of Series C Preferred Stock that are issued and outstanding immediately prior to the Effective Time.

"Aggregate New Series Preferred Share Preference" means a dollar amount, rounded to the nearest cent, equal to the product of (a) the New Series Preferred Per Share Preference, multiplied by (b) the total number of shares of New Series Preferred Stock that are issued and outstanding immediately prior to the Effective Time.

"Antitrust Laws" means the Hart-Scott-Rodino Act, the Sherman Act, the Clayton Act, the Federal Trade Commission Act and any other applicable federal, state or foreign law, regulation or decree designed to prohibit, restrict or regulate actions for the purpose or effect of monopolization or restraint of trade.

"Applicable Law" means, with respect to any Person, any federal, state, local, municipal, foreign or other law, constitution, treaty, convention, ordinance, code, rule, regulation, order, injunction, judgment, decree, ruling or other similar requirement enacted, adopted, promulgated or applied by a Governmental Authority that is binding upon or applicable to such Person, unless expressly specified otherwise.

"Business" means the business and operations of the Company, as conducted on the Merger Agreement Effective Date.

"Business Day" means a day, other than a Saturday, Sunday or other day on which commercial banks in New York, New York or Copenhagen, Denmark are authorized or required by Applicable Law to close.

"Change of Control" means: (a) the direct or indirect acquisition of the Surviving Corporation by means of any transaction or series of related transactions following which Parent and its wholly-owned Subsidiaries are the beneficial owners of less than 50% of the outstanding equity interests of the Surviving Corporation entitled to (x) vote with respect to the election of directors (or similar managers) or (y) the right to receive the proceeds upon any sale, liquidation or dissolution of the Surviving Corporation and (b) a sale, transfer, or other disposition (including an Exclusive License), in a single transaction or series of related transactions (including the sale of any Subsidiary of Parent that directly or indirectly owns right, title or

interest in Company Products or Company IP material to the conduct of the Business), of the Surviving Corporation's right, title and interest in the Company Products or any of the Company IP that is material to the conduct of the Business with respect to the Company Products (other than any transaction or series of related transactions in which Parent and its wholly-owned Subsidiaries continue to beneficially own, directly or indirectly, at least 50% of the outstanding equity interests of the transferee or licensee entitled to (i) vote with respect to the election of directors (or similar managers) and (ii) receive the proceeds upon any sale, liquidation or dissolution of the transferee or licensee).

"[***] Matter" means any allegation that [***] (a) [***] (b) [***] (c) [***] or (d)[***].

"Closing Indebtedness" means (i) all Indebtedness of the Company, plus (ii) any accounts payable and other short term liabilities that are not included in the definition of Indebtedness in excess of [***] that are outstanding for more than 90 days past the date of invoice, in each case as of 12:01 a.m. Pacific Time on the Closing Date.

"Closing Merger Consideration" means a dollar amount, rounded to the nearest whole cent, equal to (a) [***], minus (b) the sum of (i) the amount of Company Transaction Expenses that have not been paid as of 12:01 a.m. Pacific Time on the Closing Date, plus (ii) Closing Indebtedness, plus (iii) the amounts, if any, paid or payable by the Company to [***] pursuant to Sections 2.3.2 and 6 of the License Agreement, dated June 28, 2013, by and between the Company and [***]that are not accounted for in the Budget (as defined in the Purchase Option Agreement) and are due and payable by the Company prior to the Closing Date.

"Code" means the Internal Revenue Code of 1986.

"Common Merger Consideration" means a dollar amount equal to the difference of (a) the Aggregate Closing Merger Consideration minus (b) the sum of (i) the Aggregate Series A Preferred Share Preference, (ii) the Aggregate Series B/B-2 Preferred Share Preference, (iii) the Aggregate Series C Preferred Share Preference and (iv) the Aggregate New Series Preferred Share Preference (if any).

"Common Per Share Amount" means a dollar amount equal to the quotient of (a) the sum of (i) the Common Merger Consideration and (ii) the Contingent Merger Consideration divided by (b) the Fully Diluted Common Number, rounded to five decimal places.

"Company Capital Stock" means collectively, the Company Common Stock and the Company Preferred Stock.

"Company Common Stock" means the common stock, par value $0.0001, of the Company.

"Company Disclosure Schedule" means the disclosure schedule dated the Final Schedule Date regarding this Agreement provided by the Company to Parent.

"Company Equity Incentive Plans" means the Company's 2014 Equity Incentive Plan and 2016 Equity Incentive Plan, and any other plan for the issuance of equity compensation awards to purchase or receive Company Common Stock adopted after the date of this Agreement, each as amended from time to time.

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"Company Financial Advisor" means Rothschild Global Advisory.

"Company IP" means all Intellectual Property Rights and Intellectual Property owned by or exclusively licensed to the Company.

"Company Option" means any option or other right to purchase shares of Company Common Stock that was granted by the Company, other than the Company Warrant.

"Company Optionholder" means a holder of a Company Option.

"Company Preferred Stock" means the preferred stock, par value $0.0001, of the Company.

"Company Product" means: (a) any product or product candidate that is being researched, tested, developed, commercialized, manufactured, sold or distributed by the Company, and any product or product candidate with respect to which the Company has royalty rights, in each case as of the Closing Date; and (b) any product or product candidate that, in each case, is (i) not within the scope of the foregoing clause (a) and (ii) incorporates, or is covered or claimed by, any of the Company IP, or any improvements thereto.

"Company Stockholder" means any holder of Company Capital Stock (other than Dissenting Stockholders).

"Company Transaction Expenses" means (a) any fees and disbursements incurred by or on behalf of the Company and payable to any financial advisor (including the Company Financial Advisor), investment banker, broker or finder in connection with the transactions contemplated by this Agreement, (b) the fees and disbursements payable to legal counsel, consultants or accountants of the Company that are payable by the Company in connection with the transactions contemplated by this Agreement, (c) any bonuses, incentive compensation, or other change-in-control payments to be paid or payable to any director, officer or employee of the Company at the Closing (without any further condition) in connection with the Merger or any of the other transactions contemplated by this Agreement, and all employer Taxes related thereto, (d) the employer portion of any payroll Taxes imposed with respect to the payment of the Option Consideration, and (e) all other miscellaneous out-of-pocket expenses or costs, in each case, incurred by the Company in connection with the transactions contemplated by this Agreement.

"Company Warrant" means (a) that certain Warrant to Purchase Company Common Stock by and between the Company and Silicon Valley Bank, dated as of March 29, 2018 and (b) any additional Warrant to Purchase Company Common Stock issued by Company to Silicon Valley Bank in connection with the SVB Loan (as defined in the Purchase Option Agreement).

"Company Warrantholder" means Silicon Valley Bank.

"Competing Product" means any pharmaceutical or biological product which [***]

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"Consent" means any approval, consent or ratification.

"Contingent Merger Consideration" means, collectively, the Milestone Payments, payable to the Equityholders, if at all, following the Effective Time pursuant to and in accordance with Section 2.08.

"Contract" means any legally binding contract, agreement, indenture, note, bond, loan, license, instrument, lease, commitment, plan or other arrangement, whether oral or written.

"Current Balance Sheet Date" means the date of the balance sheet included in the Current Monthly Financial Statements.

"Current Financial Statements" means, collectively, the Current Monthly Financial Statements and the audited or reviewed, as available, financial statements of the Company as of the two most recent fiscal years and the related audited consolidated statements of income, changes in stockholders' equity and cash flows for such fiscal years.

"Current Monthly Financial Statements" means the most recent month-end unaudited balance sheet of the Company and the related unaudited statements of income, changes in stockholders' equity and cash flows for the fiscal year in which such month occurs.

"Damages" means all losses, damages, penalties, fines, costs or expenses (including reasonable attorney's fees and expenses and reasonable expenses of other professionals); provided, that "Damages" shall not include punitive damages, unless such damages are actually awarded to a Governmental Authority or other third party.

"Dissenting Stockholder" means any Person who objects to the Merger and complies with the provisions of the DGCL or the CCC concerning the rights of holders of Company Capital Stock to dissent from the Merger and demand appraisal of and payment for, or repurchase of, as applicable, their shares of Company Capital Stock.

"Environmental Laws" means any Applicable Law, and any governmental order or binding agreement with any Governmental Authority: (a) relating to pollution (or the cleanup thereof) or the protection of natural resources, endangered or threatened species, human health or safety, or the environment (including ambient air, soil, surface water or groundwater, or subsurface strata); or (b) concerning the presence of, exposure to, or the management, manufacture, use, containment, storage, recycling, reclamation, reuse, treatment, generation, discharge, transportation, processing, production, disposal or remediation of any Hazardous Substances. The term "Environmental Law" includes, without limitation, the following (including their implementing regulations and any state analogs): the Comprehensive Environmental Response, Compensation, and Liability Act of 1980, as amended by the Superfund Amendments and Reauthorization Act of 1986, 42 U.S.C. §§ 9601 et seq.; the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976, as amended by the Hazardous and Solid Waste Amendments of 1984, 42 U.S.C. §§ 6901 et seq.; the Federal Water Pollution Control Act of 1972, as amended by the Clean Water Act of 1977, 33 U.S.C. §§ 1251 et seq.; the Toxic Substances Control Act of 1976, as amended, 15 U.S.C. §§ 2601 et seq.; the Emergency Planning and Community Right-to-Know Act of 1986, 42 U.S.C. §§ 11001 et seq.; the Clean Air Act of 1966, as amended by the Clean Air Act Amendments of 1990, 42 U.S.C. §§ 7401 et seq.; and the Occupational Safety and Health Act of 1970, as amended, 29 U.S.C. §§ 651 et seq.

"Environmental Permits" means all permits, licenses, franchises, certificates, approvals and other similar authorizations of Governmental Authorities relating to or required by Environmental Laws and affecting, or relating in any way to, the business of the Company as currently conducted.

"Equityholder" means a Company Stockholder, Company Warrantholder or Company Optionholder, as the case may be.

"Equityholder Expense Fund" means an amount in cash to be determined by the Company, in its sole discretion, prior to the Closing Date.

"ERISA" means the Employee Retirement Income Security Act of 1974.

"ERISA Affiliate" of any entity means any other entity which, together with such entity, would be treated as a single employer under Section 414 of the Code.

"Estimated Closing Merger Consideration" means a dollar amount, rounded to the nearest whole cent, equal to (a) [***], minus (b) the sum of (i) the amount of Estimated Company Transaction Expenses that have not been paid as of 12:01 a.m. Pacific Time on the Closing Date, plus (ii) the Estimated Closing Indebtedness, plus (iii) the amounts, if any, paid or payable by the Company to [***] pursuant to Sections 2.3.2 and 6 of the License Agreement, dated June 28, 2013, by and between the Company and [***]that are not accounted for in the Budget (as defined in the Purchase Option Agreement) and are due and payable by the Company prior to the Closing Date.

"Exchange Act" means the Securities Exchange Act of 1934.

"Exclusive License" means any single transaction or series of related transactions that grants an exclusive license, or option for an exclusive license, to the Company IP (or has the effect of granting an exclusive license or option to the Company IP).

"FDA" means the United States Food and Drug Administration.

"Final Schedule Date" means the date on which the Final Merger Agreement Company Disclosure Schedule are delivered, as required by Section 2.6(b) of the Purchase Option Agreement, or, if the Final Merger Agreement Company Disclosure Schedule are not delivered pursuant to Section 2.6(b) of the Purchase Option Agreement, the Merger Agreement Effective Date.

"FIRPTA Certificate" means a statement and accompanying IRS notice, issued pursuant to Treasury Regulation Sections 1.897-2(h) and 1.1445-2(c)(3)(i), in form and substance reasonably satisfactory to Parent, certifying that the stock of the Company is not a United States real property interest within the meaning of Section 897 of the Code.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"First Commercial Sale" means, with respect to any Company Product, the first sale for end use or consumption of such Company Product in a country after Marketing Authorization of such Company Product in such country within the approved indication, excluding, however, any sale or other distribution for use in a clinical trial or provided as samples, but including any Company Product that is sold as part of a named patient use program (or similar program where a Company Product can be sold in a country prior to Marketing Authorization being obtained for such Company Product in such country.

"Fraud" means an actual fraud with respect to the representations and warranties made pursuant to Article III (as modified by the Company Disclosure Schedule), as applicable, which involves a knowing and intentional misrepresentation of a fact material to the transactions contemplated by this Agreement, with the express intent of inducing Parent or Merger Sub to enter into this Agreement and upon which Parent or Merger Sub has relied to its detriment (as opposed to any fraud claim based on constructive knowledge, negligent misrepresentation or a similar theory) under applicable tort laws.

"Fully Diluted Common Number" means the sum of (a) the total number of shares of Company Common Stock that are issued and outstanding immediately prior to the Effective Time, (b) the total number of shares of Company Common Stock that are issuable upon the conversion in full of all shares of Company Preferred Stock issued and outstanding immediately prior to the Effective Time, and (c) the total number of shares of Company Common Stock that are issuable upon the conversion or exercise in full of all convertible securities, options, warrants or other rights to acquire Company Capital Stock that are outstanding immediately prior to the Effective Time (whether vested or unvested).

"Fundamental Representations" shall mean the representations and warranties contained in Sections 3.01, 3.02, 3.03, 3.04, 3.05, and 3.23.

"GAAP" means generally accepted accounting principles in the United States.

"Generally Available Software" means non-customized software that (a) is licensed to the Company solely in executable or object code form pursuant to a nonexclusive, internal use software license, (b) is not incorporated into, or used directly in the development, manufacturing, or distribution of any of the Company's products or services and (c) is generally available on standard terms for either (i) annual payments by the Company of [***] or less or (ii) aggregate payments by the Company of [***] or less.

"Gorlin Syndrome" means Gorlin syndrome, also known as nevoid basal cell carcinoma syndrome, a rare autosomal dominant heritable disease characterized by numerous phenotypic abnormalities, most prominent among which is the development of numerous basal cell carcinomas over a lifetime.

"Governmental Authority" means any: (a) nation, state, commonwealth, province, territory, county, municipality, district or other jurisdiction of any nature; (b) federal, state, local, municipal, foreign or other government; or (c) governmental or quasi-governmental authority of any nature (including any governmental division, department, agency, commission, instrumentality, official, organization, unit, body or Person and any court or other tribunal and including any arbitrator and arbitration panel).

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"Governmental Order" means any order, writ, judgment, injunction, decree, stipulation, determination or award entered by or with any Governmental Authority.

[***]

"HSR Act" means the Hart-Scott-Rodino Antitrust Improvements Act of 1976.

"Hazardous Substances" means any pollutant, contaminant, waste or chemical or any toxic, radioactive, ignitable, corrosive, reactive or otherwise hazardous substance, waste or material, or any substance, waste or material having any constituent elements displaying any of the foregoing characteristics, including petroleum, its derivatives, byproducts and other hydrocarbons, and any substance, waste or material regulated under any Environmental Law.

"In-Money Option" means any Company Option other than an Out-of-Money Option.

"Indebtedness" means any liability of a Person for any amount owed (including (a) unpaid interest, (b) premiums thereon, (c) any prepayment penalties, breakage costs, fees, expenses or similar charges arising as a result of the discharge of any such liability and (d) any payments or premiums, penalties, related expenses, commitment and other fees, sale or liquidity participation amounts, reimbursements, indemnities and other amounts attributable to, or which arise as a result of, a change of control of such Person or any Affiliate of such Person) in respect of (i) borrowed money, (ii) capitalized lease obligations, (iii) obligations for the reimbursement of any obligor for amounts drawn on any letter of credit, banker's acceptance or similar transaction, (iv) obligations for the deferred purchase price of property or services (other than current liabilities for such property or services incurred in the ordinary course of business, (v) any accrued and unused vacation, accrued and unpaid bonuses and commissions, and any other bonus or commission payments related to the pre-Closing period (irrespective of whether accrued), and all employer Taxes related thereto, and (vi) any liability of the type described in clauses "(i)" through "(v)" guaranteed by such Person, that is recourse to such Person or any of its assets or that is otherwise its legal liability or that is secured in whole or in part by the assets of such Person.

"Indemnified Taxes" (and the correlative meaning "Indemnified Tax") means, without duplication, in each case, whether imposed, assessed, due or otherwise payable directly or as a successor or transferee under applicable Law, (a) all Taxes of the Company for any Pre-Closing Tax Period (or portion of any Straddle Period ending on the Closing Date); and (b) all Taxes that the Company is liable for (including pursuant to Treasury Regulation Section 1.1502-6 or any similar provision of state, local, or non-U.S. Laws) as a result of being a member of an affiliated group prior to the Closing. Notwithstanding the foregoing, Indemnified Taxes shall not include, and the Equityholders shall not be responsible for and shall have no obligation to indemnify the Parent Indemnified Parties against, income Taxes attributable to the receipt of payments under the Purchase Option Agreement (except to the extent such income Taxes are for a Pre-Closing Tax Period and are attributable to an ownership change under Section 382 of the Code which change was not disclosed to Parent on or before the date hereof and which change occurred prior

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to the date of the Purchase Option Agreement, with the amount of income Taxes so attributable being determined on a with and without basis), any Taxes attributable to any transaction after the Closing, any Taxes arising as a result of Parent's breach of its covenants in Article VII or any Taxes taken into account in Closing Indebtedness or Company Transaction Expenses as finally determined pursuant to Section 2.07.

"Indemnity Escrow Fund" means an amount in cash calculated by multiplying (a) the Closing Merger Consideration by (b) [***].

"[***] License Agreement" means that certain License Agreement by and between the Company and [***] dated as of June 28, 2013.

"Intellectual Property" means and includes algorithms, APIs, apparatus, diagrams, inventions (whether or not patentable), invention disclosures, trade secrets, know-how, logos, trademarks, service marks and other brand elements (including brand names, product names, logos, and slogans), methods, network configurations and architectures, processes, proprietary information, protocols, schematics, specifications, technical data, software code (in any form, including source code and executable or object code), mask works, subroutines, techniques, user interfaces, URLs, domain names, web sites, works of authorship, documentation (including instruction manuals, samples, studies, and summaries), databases and data collections, any other forms of technology, and any goodwill associated with or symbolized by any of the foregoing, in each case whether or not embodied in any tangible form and including all tangible embodiments of any of the foregoing.

"Intellectual Property Rights" means and includes all past, present, and future rights of the following types, which may exist or be created under the laws of any jurisdiction worldwide: (a) rights associated with works of authorship, including exclusive exploitation rights, copyrights, design rights, and moral rights; (b) trademark, trade name, service name, trade dress and service mark rights and similar rights and any goodwill associated with or symbolized by any of the foregoing; (c) trade secret rights; (d) patents and industrial property rights; (e) other proprietary rights in Intellectual Property of every kind and nature; and (f) rights in or relating to registrations, renewals, extensions, combinations, reexaminations, provisionals, continuations, continuations-in-part, divisions, and reissues of, and applications for, any of the rights referred to in clauses "(a)" through "(e)" above.

"IRS" means the United States Internal Revenue Service.

"IT Assets" means software, systems, servers, computers, hardware, firmware, middleware, networks, data communications lines, routers, hubs, switches and all other information technology equipment, and all associated documentation, in each case, used or held for use in the operation of the Business.

"Knowledge" means, when used with respect to the Company, the actual knowledge of any officer of the Company, Ervin Epstein, or Jean Tang, in each case after due inquiry of their respective direct reports.

"Lien" means, with respect to any property or asset, any mortgage, lien, pledge, charge, security interest, encumbrance or other adverse claim of any kind in respect of such property or

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asset. For purposes of this Agreement, a Person shall be deemed to own subject to a Lien any property or asset that it has acquired or holds subject to the interest of a vendor or lessor under any conditional sale agreement, capital lease or other title retention agreement relating to such property or asset.

"Marketing Authorization" means obtaining any and all approvals (including without limitation NDA, supplements, amendments, and pre- and post-approvals, where applicable), permits, licenses, registrations or authorizations of the applicable Governmental Authorities (including, without limitation, the FDA in the US) that are necessary for the manufacture, distribution, use or sale of a Company Product in the jurisdiction where such activities are to be carried out.

"Material Adverse Effect" means any change event, circumstance, development occurrence or effect that individually or taken together with any other change event, circumstance, development occurrence or effect is, or would reasonably be expected to be, materially adverse to the business, operations, condition (financial or otherwise), assets, or results of operations of the Company, taken as a whole; provided, however, that none of the following shall be deemed, either alone or in combination, to constitute, and no change, event, circumstance, development, occurrence or effect arising from or attributable or relating to any of the following shall be taken into account in determining whether there has been a Material Adverse Effect: (a) the public announcement or pendency of this Agreement or any of the transactions contemplated herein, including the impact thereof on the relationships of the Company with suppliers, consultants, employees or independent contractors or other third parties with whom the Company has any relationship, (b) [***] (c) the taking of any action required by this Agreement, or otherwise taken with the written consent of Parent, (d) any breach by Parent or Merger Sub of this Agreement or the Confidentiality Agreement, (e) [***] or (f) [***] or (g) [***].

"Merger Agreement Effective Date" has the meaning set forth in the Purchase Option Agreement.

"Merger Consideration" means (a) the Closing Merger Consideration, plus (b) the Contingent Merger Consideration.

"NDA" means a new drug application as described in Code of Federal Regulations Title 21 (21 C.F.R.) § 314.50, submitted to the FDA under Section 505(b) of the Federal Food, Drug, and Cosmetic Act (21 U.S.C. § 355(b)) for approval to commercialize a drug product in the United States.

"Net Sales" [***].

"New Series Preferred Per Share Amount" means an amount of cash, without interest, equal to the sum of (a) the New Series Preferred Per Share Preference plus (b) the Common Per Share Amount, rounded to five decimal places.

"New Series Preferred Per Share Preference" means a dollar amount equal to the per share original issue price (as adjusted for stock splits, stock dividends, reclassifications and the like) of such shares of New Series Preferred Stock pursuant to the certificate of incorporation of the Company as in effect on the Merger Agreement Effective Date.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"New Series Preferred Stock" means any new series of Company Preferred Stock created after the date hereof, and which series has any shares issued and outstanding as of the Merger Agreement Effective Date.

"Out-of-Money Options" means Company Options having an exercise price in excess of the Common Per Share Amount, calculated for this purpose as if all Company Options were included in the definition of Fully Diluted Common Number.

"Permitted Recipients" means the Persons identified on Schedule 1.1 hereto.

"Person" means an individual, corporation, partnership, limited liability company, association, trust or other entity or organization, including a Governmental Authority.

"Personal Information" means, in addition to any definition provided by the Company for any similar term (e.g., "personally identifiable information" or "PII") in any privacy notice or other public-facing statement by the Company, all information regarding or capable of being associated with an individual consumer or device, including: (a) information that identifies, could be used to identify or is otherwise identifiable with an individual, including name, physical address, telephone number, email address, financial account number, government-issued identifier (including Social Security number and driver's license number), medical, health or insurance information (including any information collected during clinical trials), gender, date of birth, educational or employment information, religious or political views or affiliations, marital or other status, photograph, face geometry, or biometric information, and any other data used or intended to be used to identify, contact or precisely locate an individual; (b) any data regarding an individual's activities online or on a mobile or other application (e.g., searches conducted, web pages or content visited or viewed); (c) Internet Protocol addresses or other persistent identifiers; and (d) any information that can be used to contact an individual and (e) protected health information. Personal Information may relate to any individual, including a current, prospective or former customer, employee or vendor of any Person. Personal Information includes such information in any form, including paper, electronic and other forms.

"Post-Closing Tax Period" means any taxable period that begins on or after the day immediately following the Closing Date.

"Pre-Closing Tax Period" means any taxable period that ends on or before the Closing Date.

"Privacy and Security Requirements" means (a) all Applicable Laws or Governmental Orders relating to the Processing of Personal Information; (b) all Applicable Laws related to breach notification; (c) all Applicable Laws governing the treatment of Personal Information gathered in connection with clinical trials; (d) all applicable Privacy Contracts; and (e) all applicable Privacy Policies.

"Privacy Contracts" means all Contracts between the Company and any Person that are applicable to the Processing of Personal Information.

"Privacy Policies" means all written policies applicable to the Company relating to the Processing of Personal Information, including without limitation all website and mobile application privacy policies and all written policies and procedures required by Applicable Laws governing the Processing of Personal Information gathered in connection with clinical trials, to the extent applicable to the Company.

"Pro Rata Share" means, with respect to an Equityholder as of any date of determination, a fraction, (a) the numerator of which is the sum of the value of (i) the Closing Merger Consideration and (ii) the Contingent Merger Consideration payable to such holder pursuant to this Agreement as of the date of determination and (b) the denominator of which is the sum of the value of (i) the Closing Merger Consideration and (ii) the Contingent Merger Consideration payable to all Equityholders pursuant to this Agreement as of the date of determination (in each case without taking into account the deduction of any portion of the Equityholder Expense Fund to be delivered to the Equityholder Representative or any portion of the Indemnity Escrow Fund to be deposited with the Escrow Agent, in each case, on behalf of such Persons pursuant to this Agreement).

"Proceeding" means any charge, dispute, action, suit, litigation, arbitration, civil, criminal, administrative, or appellate proceeding or hearing commenced, brought, conducted or heard by or before, or otherwise involving, any court or other Governmental Authority.

"Process" or "Processing" means the creation, collection, use (including, without limitation, for the purposes of sending telephone calls, text messages and emails), storage, maintenance, processing, distribution, transfer, transmission, receipt, access, disposal or disclosure or other activity regarding data (whether electronically or in any other form or medium).

"Purchase Option" means the exclusive option granted by the Company to Parent pursuant to the Purchase Option Agreement.

"Purchase Option Agreement" means the Option Agreement, dated as of the date hereof, by and among Company, Parent and Merger Sub.

"Registered IP" means all Intellectual Property Rights that are registered, filed, or issued under the authority of any Governmental Authority, including all patents, registered copyrights, registered trademarks, registered databases, and domain names, and all applications for any of the foregoing.

"Regulatory Milestones" means Milestone Events (ii) and (iii) of Section 2.08(a).

"Representatives" means a Person's officers, directors, employees, agents, attorneys, accountants, advisors, lenders and other authorized representatives.

"Requisite Stockholder Approval" means with respect to this Agreement (a) [***] of the votes represented by all outstanding shares of Company Common Stock voting as a separate class, (b) [***] of the shares of the outstanding Company Capital Stock, voting together as a single class on an as-converted-to-common-stock basis and (c) at least [***]% of the shares of the outstanding Company Preferred Stock, which shall include at least[***] of the outstanding shares of Series A Preferred Stock, Series B Preferred Stock, Series B-2 Preferred Stock and Series C Preferred Stock voting as separate series on an as-converted-to-common-stock basis.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"SEC" means the United States Securities and Exchange Commission.

"Securities Act" means the Securities Act of 1933.

"Security Breach" means security breach of Personal Information under Applicable Law.

"Security Incident" means any attempted or successful unauthorized access, use, disclosure, modification, or destruction of information or interference with system operations of IT assets that results in unauthorized access to Personal Information.

"Series A Preferred Per Share Amount" means an amount of cash, without interest, equal to the sum of (a) the Series A Preferred Per Share Preference plus (b) the Common Per Share Amount, rounded to five decimal places.

"Series A Preferred Per Share Preference" means a dollar amount equal to $0.84 per share of Series A Preferred Stock.

"Series A Preferred Stock" means the Series A Preferred Stock of the Company, par value $0.0001.

"Series B Preferred Per Share Amount" means an amount of cash, without interest, equal to the sum of (a) the Series B/B-2 Preferred Per Share Preference plus (b) the Common Per Share Amount, rounded to five decimal places.

"Series B/B-2 Preferred Per Share Preference" means a dollar amount equal to $1.17 per share of Series B Preferred Stock or Series B-2 Preferred Stock.

"Series B Preferred Stock" means the Series B Preferred Stock of the Company, par value $0.0001.

"Series B-2 Preferred Stock" means the Series B-2 Preferred Stock of the Company, par value $0.0001.

"Series C Preferred Per Share Amount" means an amount of cash, without interest, equal to the sum of (a) the Series C Preferred Per Share Preference plus (b) the Common Per Share Amount, rounded to five decimal places.

"Series C Preferred Per Share Preference" means a dollar amount equal to $2.34 per share of Series C Preferred Stock.

"Series C Preferred Stock" means the Series C Preferred Stock of the Company, par value $0.0001.

"Set-Off Pro Rata Share" means, with respect to an Equityholder immediately prior to the Merger, a fraction, (a) the numerator of which is the sum of (i) the total number of shares of

Company Common Stock that are issued and outstanding immediately prior to the Effective Time, (ii) the total number of shares of Company Common Stock that are issuable upon the conversion in full of all shares of Company Preferred Stock issued and outstanding immediately prior to the Effective Time and (iii) the total number of shares of Company Common Stock that are issuable upon the conversion or exercise in full of all convertible securities, options, warrants or other rights to acquire Company Capital Stock (whether vested or unvested) held by such Equityholder and (b) the denominator of which is the Fully Diluted Common Number.

"Straddle Period" means any taxable period that includes, but does not end on, the Closing Date.

"Subsidiary" means, with respect to any Person, any entity of which securities or other ownership interests having ordinary voting power to elect a majority of the board of directors or other persons performing similar functions are at any time directly or indirectly owned by such Person.

"Tax" means any and all taxes, including any income, alternative or add-on minimum, gross income, gross receipts, sales, use, ad valorem, value added, transfer, franchise, profits, license, registration, recording, documentary, conveyancing, gains, withholding, payroll, employment, excise, severance, stamp, occupation, premium, property, environmental or windfall profit, custom duty, escheat or other tax or other like assessment or charge, together with any interest, penalty, addition to tax or additional amount imposed by any Governmental Authority.

"Tax Return" means any return, report, declaration, claim for refund, information return or other document (including schedules thereto, other attachments thereto, amendments thereof, or any related or supporting information) filed or required to be filed with any Governmental Authority in connection with the determination, assessment or collection of any Tax, or the administration of any laws, regulations or administrative requirements relating to any Tax.

(b) Each of the following terms is defined in the Section set forth opposite such term:

Term	Section
Acceleration Event	Section 2.08(d)
Advisory Group	Section 11.01(c)
Aggregate Damages	Section 10.03(b)
Agreement	Preamble
Amended and Restated Certificate of Incorporation	Section 2.03(a)
Ancillary Documents	Section 3.02(a)
Buy-Back	Section 2.10(a)
Canceled Shares	Section 2.04(a)
CCC	Recitals
Certificate of Merger	Section 2.02(c)
Claim Certificate	Section 10.04(a)
Claim Dispute Notice	Section 10.04(c)
Closing	Section 2.01
Closing Date	Section 2.01

Term	Section
Closing Statement	Section 2.07(f)
Commercially Reasonable Efforts	Section 2.08(b)
Company	Preamble
Company Board of Directors	Recitals
Company Board Recommendation	Section 3.02(b)
Company Closing Certificate	Section 8.02(d)(v)
Company Cure Period	Section 9.01(d)
Company Indemnified Parties	Section 6.03(a)
Company Securities	Section 3.05(c)
Company Stock Certificate	Section 2.07(a)
Confidentiality Agreement	Section 6.02(a)
Consideration Spreadsheet	Section 5.06(a)
Contingent Merger Consideration Set-Off	Section 2.09
Continuing Employee	Section 6.01(a)
D&O Tail Policy	Section 6.03(b)
Deductible	Section 10.03(b)
DGCL	Recitals
Disputed Amounts	Section 2.07(i)
Disqualified Individual	Section 5.05
DOJ	Section 6.01(c)
Effective Time	Section 2.02(c)
Employee Plans	Section 3.19(b)
End Date	Section 9.01(b)
Equityholder Indemnified Parties	Section 10.02(b)
Equityholder Representative	Section 11.01(a)
Equityholder Representative Engagement Agreement	Section 11.01(c)
Equityholder Representative Expenses	Section 11.01(c)
Equityholder Representative Group	Section 11.01(b)
Escrow Agent	Section 2.07(e)
Escrow Agreement	Section 2.07(e)
Estimated Closing Indebtedness	Section 2.07(d)
Estimated Closing Statement	Section 2.07(d)
Estimated Company Transaction Expenses	Section 2.07(d)
Existing Representation	Section 6.06(a)
FDA Laws	Section 3.10(c)
FR Expiration Date	Section 10.01(a)
FTC	Section 6.01(c)
General Expiration Date	Section 10.01(a)
Holder Group	Section 6.06(a)
Indemnitee	Section 10.05(a)
Indemnitor	Section 10.05(a)
Independent Accountant	Section 2.07(i)
Information Statement	Section 5.02
Interim Period	Section 5.01(a)

Term	Section
Invoice	Section 5.06(b)
Leased Real Property	Section 3.12(a)
Letter of Transmittal	Section 2.07(b)
Liabilities	Section 3.08
Material Contract	Section 3.09(a)
Merger	Recitals
Merger Sub	Preamble
Merger Sub Board of Directors	Recitals
Merger Sub Common Stock	Section 2.04(a)
Milestone	Section 2.08(a)
Milestone Payment	Section 2.08(a)
Net Sales Statement	Section 2.08(e)
Non-Competition Agreement	Recitals
Option Consideration	Section 2.05
Option Period	Section 2.10(c)
Option Term Sheet	Section 2.10(c)
Parent	Preamble
Parent Benefit Plans	Section 6.04(b)
Parent Closing Certificate	Section 8.03(c)
Parent Cure Period	Section 9.01(e)
Parent Indemnified Parties	Section 10.02(a)
Parent Prepared Returns	Section 7.04(b)
Parties	Preamble
Payment Agent	Section 2.07(b)
Payoff Letter	Section 5.06(b)
Permits	Section 3.17
Permitted Liens	Section 3.13(a)(iii)
Post-Closing Adjustment	Section 2.07(k)
Real Property Lease	Section 3.12(a)
Related Person	Section 3.21
Resolution Period	Section 2.07(h)
Review Period	Section 2.07(g)
Right of First Negotiation	Section 2.10(a)
Right of First Negotiation Period	Section 2.10(c)
ROFN Notice	Section 2.10(c)
Seller Prepared Returns	Section 7.04(a)
Specified Accounting Principles	Section 2.07(d)
Statement of Objections	Section 2.07(h)
Support Agreement	Recitals
Surrender	Section 2.07(c)
Surviving Corporation	Section 2.02(a)
Tax Benefit	Section 10.03(a)
Tax Contest	Section 7.06
Third-Party Claim	Section 10.05(a)

Term	Section
Transfer Taxes	Section 7.03
Undisputed Amounts	Section 2.07(i)
Waived Parachute Payments	Section 5.05
WARN Act	Section 3.19(n)
Warrant Consideration	Section 2.06
Written Consent	Section 5.02

Section 1.02 **Interpretative Provisions**.

(a) The words “hereof,” “herein” and “hereunder” and words of like import used in this Agreement shall refer to this Agreement as a whole and not to any particular provision of this Agreement.

(b) The captions herein are included for convenience of reference only and shall be ignored in the construction or interpretation hereof. References to Articles, Sections, Exhibits and Schedules are to the Articles, Sections, Exhibits and Schedules of this Agreement unless otherwise specified.

(c) Any singular term in this Agreement shall be deemed to include the plural, and any plural term the singular, and words denoting either gender shall include both genders as the context requires. Where a word or phrase is defined herein, each of its other grammatical forms shall have a corresponding meaning.

(d) All Exhibits and Schedules annexed hereto or referred to herein are hereby incorporated in and made a part of this Agreement as if set forth in full herein. Any capitalized terms used in any Exhibit or Schedule but not otherwise defined therein, shall have the meaning as defined in this Agreement.

(e) Whenever the words “include,” “includes” or “including” are used in this Agreement, they shall be deemed to be followed by the words “without limitation,” whether or not they are in fact followed by those words or words of like import.

(f) The use of the word “or” shall not be exclusive.

(g) The word “will” shall be construed to have the same meaning and effect as the word “shall.”

(h) The word “party” shall, unless the context otherwise requires, be construed to mean a party to this Agreement. Any reference to a party to this Agreement or any other agreement or document contemplated hereby shall include such party’s successors and permitted assigns.

(i) A reference to any legislation or to any provision of any legislation shall include any modification, amendment, re-enactment thereof, any legislative provision substituted therefore and all rules, regulations and statutory instruments issued or related to such legislation.

(j) Any rule of construction to the effect that ambiguities are to be resolved against the drafting party shall not be applied in the construction or interpretation of this Agreement. No prior draft of this Agreement nor any course of performance or course of dealing shall be used in the interpretation or construction of this Agreement. No parol evidence shall be introduced in the construction or interpretation of this Agreement unless the ambiguity or uncertainty in issue is plainly discernable from a reading of this Agreement without consideration of any extrinsic evidence. Although the same or similar subject matters may be addressed in different provisions of this Agreement, the Parties intend that, except as reasonably apparent on the face of the Agreement or as expressly provided in this Agreement, each such provision shall be read separately, be given independent significance and not be construed as limiting any other provision of this Agreement (whether or not more general or more specific in scope, substance or content). The doctrine of election of remedies shall not apply in constructing or interpreting the remedies provisions of this Agreement or the equitable power of a court considering this Agreement or the transactions contemplated hereby.

(k) The Parties agree that any reference in a particular Section of the Company Disclosure Schedule shall be deemed to be an exception to (or, as applicable, a disclosure for purposes of) (i) the representations and warranties (or covenants, as applicable) of the relevant party that are contained in the corresponding Section of this Agreement and (ii) any other representations and warranties of such party that are contained in this Agreement, but only if the relevance of that reference as an exception to (or a disclosure for purposes of) such representations and warranties would be readily apparent to an individual who has read that reference and such representations and warranties.

(l) Any statement in this Agreement to the effect that any information, document or other material has been "made available" to Parent or any of its Representatives means that such information, document or other material was posted to the electronic data room hosted by or on behalf of the Company at https://desouzatech.firmex.com in connection with the transactions contemplated hereby no later than 11:59 p.m. Pacific Time on the date that is two days prior to the Final Schedule Date and has been made available on a continuous basis by or on behalf of the Company for review therein by Parent and its Representatives since such time.

Section 1.03 **Effectiveness of Agreement**. This Agreement shall become effective at such time as there has been deemed to be a Merger Agreement Effective Date in accordance with Section 2.6 of the Option Agreement. No provision of this Agreement (other than Article 11 (excluding Section 11.01) and Section 9.01(g)) shall be effective until the Merger Agreement Effective Date.

ARTICLE II
DESCRIPTION OF THE TRANSACTION

Section 2.01 **Closing**. The consummation of the transactions contemplated by this Agreement (the "Closing") shall take place electronically by exchange of PDF copies of documents on a date and at a time to be specified by the Parties, but no later than [***] after the satisfaction or waiver of the last of the conditions set forth in Article VIII to be satisfied or waived (other than those conditions that by their nature are to be satisfied at the Closing, but subject to the satisfaction or waiver of such conditions), or at such other time, date and location, or in such other manner, as the Parties agree in writing. The date on which the Closing actually takes place is referred to in this Agreement as the "Closing Date."

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Section 2.02 **The Merger; Effect of the Merger; Effective Time**.

(a) Upon the terms and subject to the conditions set forth in this Agreement, at the Effective Time, Merger Sub shall be merged with and into the Company, the separate existence of Merger Sub shall cease, and the Company (in its capacity as the corporation surviving the Merger, the "Surviving Corporation") will continue as the corporation surviving the Merger.

(b) The Merger shall have the effects provided in this Agreement and Applicable Law.

(c) Concurrently with, or as promptly as practicable after the Closing, the Parties shall cause the Merger to be consummated by filing with the Secretary of State of the State of Delaware a certificate of merger in the form attached hereto as Exhibit C (the "Certificate of Merger") and executed in accordance with the relevant provisions of the DGCL, and shall make all other filings or recordings required under the DGCL in order to consummate the Merger. The Merger shall become effective at the time the Certificate of Merger is filed with the Secretary of State of the State of Delaware or at such other date and time as is agreed by Parent and the Company and specified in the Certificate of Merger (such date and time, the "Effective Time").

Section 2.03 **Certificate of Incorporation and Bylaws; Directors and Officers**. Unless otherwise agreed in writing by Parent and the Company prior to the Effective Time:

(a) the Company's certificate of incorporation shall be amended and restated as of the Effective Time in accordance with the relevant provisions of the DGCL to read in its entirety as set forth in Exhibit D hereto (the "Amended and Restated Certificate of Incorporation"), and, as so amended, such Amended and Restated Certificate of Incorporation shall be the certificate of incorporation of the Surviving Corporation until amended in accordance with its terms and conditions and Applicable Law;

(b) the bylaws of the Surviving Corporation shall be amended and restated as of the Effective Time to conform to the bylaws of Merger Sub as in effect immediately prior to the Effective Time and, as so amended, shall be the bylaws of the Surviving Corporation until thereafter changed or amended in accordance with the terms and conditions stated therein or under Applicable Law; and (c i the directors and officers of the Surviving Corporation immediately after the Effective Time shall be the individuals identified by Parent in its sole discretion prior to the Effective Time.

Section 2.04 **Conversion of Shares**. At the Effective Time, by virtue of the Merger and without any further action on the part of Parent, Merger Sub, the Company or any Equityholder:

(a) Subject to Section 2.07, Section 2.12 and Article X:

(i) Each share of Series A Preferred Stock outstanding immediately prior to the Effective Time (other than the Canceled Shares) shall cease to exist, be automatically canceled and be converted into the right to receive the Series A Preferred Per Share Amount;

(ii) Each share of Series B Preferred Stock or Series B-2 Preferred Stock outstanding immediately prior to the Effective Time (other than the Canceled Shares) shall cease to exist, be automatically canceled and be converted into the right to receive the Series B/B-2 Preferred Per Share Amount;

(iii) Each share of Series C Preferred Stock outstanding immediately prior to the Effective Time (other than the Canceled Shares) shall cease to exist, be automatically canceled and be converted into the right to receive the Series C Preferred Per Share Amount;

(iv) Each share of New Series Preferred Stock outstanding immediately prior to the Effective Time (other than the Canceled Shares) shall cease to exist, be automatically canceled and be converted into the right to receive the New Series Preferred Per Share Amount;

(v) Each share of Company Common Stock outstanding immediately prior to the Effective Time (other than the Canceled Shares) shall be converted into the right to receive the Common Per Share Amount;

(vi) each share of Company Capital Stock held by the Company, Merger Sub or Parent or any direct or indirect subsidiary of the Company or Parent as of immediately prior to the Effective Time (the "Canceled Shares") shall be canceled and extinguished without any conversion thereof; and

(vii) each share of the common stock, $0.01 par value, of Merger Sub (the "Merger Sub Common Stock") outstanding as of immediately prior to the Effective Time shall be converted into, and exchanged for, one newly and validly issued, fully paid and nonassessable share of common stock of the Surviving Corporation.

Section 2.05 **Treatment of Company Options**. At the Effective Time, each Company Option that is outstanding as of immediately prior to the Effective Time, whether vested or unvested, and that has not been exercised prior to the Effective Time, shall be canceled and extinguished and converted into the right to receive with respect to In-Money Options an amount in cash, if any, equal to the product obtained by multiplying (a) the aggregate number of shares of Company Common Stock subject to such Company Option as of immediately prior to the Effective Time and (b) the amount, if any, by which the Common Per Share Amount exceeds the exercise price per share of such Company Option (the "Option Consideration"). Payments of the Option Consideration to employees and former employees of the Company shall be remitted through the payroll system of the Surviving Corporation. The Option Consideration, less the portions of such Option Consideration in respect of the Milestone Payments or to be deposited in the Equityholder Expense Fund and the Indemnity Escrow Fund pursuant to Section 2.07(e), shall be paid as soon as administratively practicable following the Effective Time. Portions of Option Consideration in respect of the Milestone Payments or deposited in the Equityholder Expense Fund and the Indemnity Escrow Fund pursuant to Section 2.07(e) shall be paid when

distributions of such amounts, if any, are made to Company Stockholders. For the avoidance of doubt, all Out-of-Money Options shall be cancelled and shall not have any right to receive any consideration in respect thereof.

Section 2.06 **Treatment of Company Warrants**. At the Effective Time, each Company Warrant that is outstanding immediately prior to the Effective Time shall be canceled and extinguished as of immediately prior to the Effective Time and converted into the right to receive an amount in cash equal to the product obtained by multiplying (a) the aggregate number of shares of Company Common Stock for which such Company Warrant was exercisable (after converting all shares of Company Capital Stock subject to such Company Warrant to Company Common Stock) immediately prior to the Effective Time and (b) the amount, if any, by which the Common Per Share Amount exceeds the exercise price per share of such Company Warrant (the "Warrant Consideration"). Upon delivery of a Letter of Transmittal required pursuant to Section 2.07(b), duly completed and validly executed in accordance with the instructions thereto, each holder of a Company Warrant shall be entitled to receive in exchange therefor the Warrant Consideration, less the portions of such Warrant Consideration in respect of the Milestone Payments or to be deposited in the Equityholder Expense Fund and the Indemnity Escrow Fund pursuant to Section 2.07(e) with respect to each share of Company Capital Stock subject to such Company Warrant, and Parent shall cause such payment to be made to the holder of such Company Warrant.

Section 2.07 **Closing of the Company's Transfer Books; Exchange of Certificates; Payment of Merger Consideration and Escrow Fund.**

(a) At the Effective Time, holders of certificates representing shares of Company Capital Stock that were outstanding immediately prior to the Effective Time (each certificate, a "Company Stock Certificate") shall cease to have any rights as Equityholders, and the stock transfer books of the Company shall be closed with respect to all shares of Company Capital Stock outstanding immediately prior to the Effective Time. No further transfer of any such shares of Company Capital Stock shall be made on the Company's stock transfer books after the Effective Time. If, after the Effective Time, a Company Stock Certificate is presented to the Surviving Corporation or Parent in accordance with this Section 2.07, such Company Stock Certificate shall be canceled and exchanged as provided in this Section 2.07.

(b) Prior to the Effective Time, Parent shall appoint PNC Bank as agent (the "Payment Agent") for the purpose of exchanging surrendered Company Stock Certificates with applicable Pro Rata Shares of the Merger Consideration to be paid pursuant to Section 2.04, Section 2.05, Section 2.06 and Section 2.08 (other than that portion of the Merger Consideration to be paid through the Company's payroll system pursuant to Section 2.05). At least ten (10) Business Days prior to the Closing Date, Parent shall send, or shall cause the Payment Agent to send, to each holder of shares of Company Capital Stock as of immediately prior to the Effective Time a letter of transmittal (in a form reasonably acceptable to Parent and the Surviving Corporation, which shall include an acknowledgement and agreement to be bound by this Agreement, including the provisions of Article X and Article XI) (each a "Letter of Transmittal") and instructions for use in such exchange.

(c) Upon surrender of a Company Stock Certificate for cancellation to the Payment Agent, together with a Letter of Transmittal, duly completed and validly executed in accordance with the instructions thereto, (i) the surrendering holder shall be entitled to receive such amount in cash in exchange for such surrender as provided by Section 2.04(a), less the portions of such consideration in respect of the Milestone Payments or to be deposited in the Equityholder Expense Fund and the Indemnity Escrow Fund pursuant to Section 2.07(e), and (ii) the Company Stock Certificate so surrendered shall forthwith be canceled. The Payment Agent shall, promptly after receipt of a properly surrendered Company Stock Certificate and duly completed and validly executed Letter of Transmittal, cause the payment described in the preceding sentence to be sent by check to the holder of such Company Stock Certificate at the mailing address designated by such holder in the Letter of Transmittal delivered with such Company Stock Certificate; provided, that the Payment Agent shall deliver or cause to be delivered such amounts on the Closing Date to any holder of Company Capital Stock that has delivered a properly surrendered Company Stock Certificate and duly executed and completed a Letter of Transmittal at least three (3) Business Days prior to the Closing Date. Until surrendered in compliance with this Section 2.07 (each such compliant surrender, a "Surrender"), each outstanding Company Stock Certificate that as of immediately prior to the Effective Time represented shares of Company Capital Stock will be deemed from and after the Effective Time, for all purposes, to evidence only the right to receive, contingent upon Surrender, the Series A Preferred Per Share Amount, Series B/B-2 Preferred Per Share Amount, the Series C Preferred Per Share Amount, the New Series Preferred Per Share Amount or Common Per Share Amount, as applicable, for each of such shares pursuant to Section 2.04(a) (subject to the provisions hereof relating to Milestone Payments, the Equityholder Expense Fund and the Indemnity Escrow Fund). If any Company Stock Certificate shall have been lost, stolen or destroyed, Parent may, in its discretion and as a condition precedent to the issuance of any payment therefor, require the owner of such lost, stolen or destroyed Company Stock Certificate to provide an appropriate affidavit and to deliver a bond (in such sum as Parent may reasonably direct) as indemnity against any claim that may be made against Parent or the Surviving Corporation with respect to such Company Stock Certificate.

(d) At least three (3) Business Days before the Closing, the Company shall prepare and deliver to Parent a statement (the "Estimated Closing Statement") setting forth its good faith estimate of Company Transaction Expenses (the "Estimated Company Transaction Expenses") and the estimated Closing Indebtedness (the "Estimated Closing Indebtedness"), which statement shall contain an estimated balance sheet of the Company as of the Closing Date (without giving effect to the transactions contemplated herein), and a certificate of the Chief Executive Officer of the Company that the Estimated Closing Statement was prepared in accordance with GAAP, applied using the same accounting methods, practices, principles, policies and procedures, with consistent classifications, judgments and valuation and estimation methodologies that are used in the preparation of the Company's unaudited month-end financial statements (the "Specified Accounting Principles"). On the Closing Date, the Parent shall pay the Payment Agent an amount equal to the Estimated Closing Merger Consideration, less the amount payable in respect of Option Consideration payable pursuant to Section 2.05, less the amount to be deposited in the Equityholder Expense Fund and the Indemnity Escrow Fund pursuant to Section 2.07(e), by wire transfer of immediately available funds to the bank account listed on Schedule 2.07 hereof (it being understood that any payment to a Company Optionholder who is a current or former employee of the Company shall be made through the Surviving Corporation's payroll).

(e) On the Closing Date, Parent shall deliver to (i) the Equityholder Representative the Equityholder Expense Fund, which amount shall be held in accordance with the agreement providing therefor between the Equityholder Representative and the Company and (ii) PNC Bank, National Association, a national banking association (the "Escrow Agent"), as the escrow agent under the Escrow Agreement in the form attached hereto as Exhibit E (the "Escrow Agreement"), the Indemnity Escrow Fund, which amounts shall be held by the Escrow Agent in accordance with the terms of the Escrow Agreement. The Equityholder Expense Fund and the Indemnity Escrow Fund shall be funded by deducting from the amount otherwise payable to an Equityholder such Equityholder's Pro Rata Share of the Equityholder Expense Fund and the Indemnity Escrow Fund (and such Pro Rata Share of the Equityholder Expense Fund and the Indemnity Escrow Fund shall be allocated equally on a pro rata basis for purposes of Section 2.07(c) among all shares of Company Capital Stock formerly held by such Equityholder and shares of Company Capital Stock subject to either a Company Warrant pursuant to which Warrant Consideration was payable to such holder at the Effective Time or a Company Option pursuant to which Option Consideration was payable to such holder at the Effective Time).

(f) Within sixty (60) days after the Closing Date, Parent shall prepare and deliver to the Equityholder Representative a statement setting forth its calculation of Company Transaction Expenses and Closing Indebtedness (the "Closing Statement"), which statement shall contain an unaudited balance sheet of the Company as of the Closing Date (without giving effect to the transactions contemplated herein), and a certificate of the Chief Financial Officer of Parent that the Closing Statement was prepared in accordance with the Specified Accounting Principles.

(g) After receipt of the Closing Statement, the Equityholder Representative shall have thirty (30) days (the "Review Period") to review the Closing Statement. During the Review Period, the Equityholder Representative and its accountants shall have full access to the books and records of the Company, the personnel of, and work papers prepared by, Parent and/or its accountants to the extent that they relate to the Closing Statement and to such historical financial information (to the extent in Parent's possession) relating to the Closing Statement as the Equityholder Representative may reasonably request for the purpose of reviewing the Closing Statement and to prepare a Statement of Objections (defined below); provided, that such access shall be in a manner that does not interfere with the normal business operations of Parent or the Company.

(h) On or prior to the last day of the Review Period, the Equityholder Representative may object to the Closing Statement by delivering to Parent a written statement setting forth its objections in reasonable detail, indicating each disputed item or amount and the basis for its disagreement therewith (the "Statement of Objections"). If the Equityholder Representative fails to deliver the Statement of Objections before the expiration of the Review Period, the Closing Statement shall be deemed to have been accepted by the Equityholder Representative and be final and binding. If the Equityholder Representative delivers the Statement of Objections before the expiration of the Review Period, Parent and the Equityholder Representative shall negotiate in good faith to resolve such objections within thirty (30) days after the delivery of the Statement of Objections (the "Resolution Period"), and, if the same are so resolved within the Resolution Period, the Closing Statement with such changes as may have been previously agreed in writing by Parent and the Equityholder Representative, shall be final and binding.

(i) If the Equityholder Representative and Parent fail to reach an agreement with respect to all of the matters set forth in the Statement of Objections before the expiration of the Resolution Period, then any amounts remaining in dispute ("Disputed Amounts" and any amounts not so disputed, the "Undisputed Amounts") may be submitted by either Parent or the Equityholder Representative for resolution to the San Francisco office of BDO or, if BDO is unable to serve, Parent and the Equityholder Representative shall appoint by mutual agreement the San Francisco office of an impartial nationally recognized firm of independent certified public accountants (the "Independent Accountant") who, acting as experts and not arbitrators, shall resolve the Disputed Amounts only and the Closing Statement. The Parties hereto agree that all adjustments shall be made without regard to materiality. The Independent Accountant shall only decide the specific items under dispute by the Parties and their decision for each Disputed Amount must be within the range of values assigned to each such item in the Closing Statement and the Statement of Objections, respectively.

(j) The fees and expenses of the Independent Accountant shall be paid by the Equityholder Representative (on behalf of the Stockholders and Optionholders), on the one hand, and by Parent, on the other hand, based upon the percentage that the amount actually contested but not awarded to the Equityholder Representative or Parent, respectively, bears to the aggregate amount actually contested by the Equityholder Representative and Parent. Any such fees and expenses payable by the Equityholder Representative shall be paid from the Equityholder Expense Fund to the extent available.

(k) The Independent Accountant shall make a determination as soon as practicable within 30 days (or such other time as the Parties hereto shall agree in writing) after their engagement, and their resolution of the Disputed Amounts and their adjustments to the Closing Statement shall be conclusive and binding upon the Parties hereto (any amount payable pursuant to Section 2.07(f) through (k), the "Post-Closing Adjustment").

(l) If the Closing Merger Consideration, as determined pursuant to this Section 2.07, is less than the Estimated Closing Merger Consideration, then the Equityholder Representative and Parent shall, within five (5) Business Days after the final determination of the Post-Closing Adjustment, jointly instruct the Escrow Agent to disburse from the Indemnity Escrow Fund by wire transfer of immediately available funds to Parent, the Post-Closing Adjustment.

(m) If the Closing Merger Consideration, as determined pursuant to this Section 2.07, is greater than the Estimated Closing Merger Consideration, then Parent shall, within five (5) Business Days after the final determination of the Post-Closing Adjustment, (i) deposit with the Payment Agent, for distribution to the Equityholders in accordance with their Pro Rata Shares, such Equityholders' and Optionholders' aggregate Pro Rata Share of the Post-Closing Adjustment, (ii) deposit with the Company, for distribution to the employee Optionholders in accordance with their Pro Rata Shares, such Optionholders' aggregate Pro Rata Share of the amount of the Post-Closing Adjustment.

(n) If the Closing Merger Consideration, as determined pursuant to this Section 2.07, is equal to the Estimated Closing Date Merger Consideration, neither the Equityholders nor the Parent shall make any payment to the other party pursuant to this Section 2.07(n).

(o) Any payments made pursuant to Section 2.07 shall be treated as an adjustment to the Closing Merger Consideration by the Parties for Tax purposes, unless otherwise required by Law.

(p) Any portion of the Merger Consideration that remains undistributed to Equityholders as of the third anniversary of this Agreement shall be delivered to Parent upon demand, and Equityholders who have not theretofore surrendered their Company Stock Certificates in accordance with this Section 2.07 shall thereafter (if Parent has made such demand) look only to Parent for satisfaction of their claims, which such satisfaction in any event shall be without any interest thereon, for any Merger Consideration payable with respect to the shares of Company Capital Stock previously represented by such Company Stock Certificates. Neither Parent nor the Surviving Corporation shall be liable, including for losses incurred complying with any public official pursuant to any applicable abandoned property, escheat or similar law, to any holder or former holder of shares of Company Capital Stock following the third anniversary of this Agreement.

Section 2.08 **Milestone Payments.**

(a) Upon the occurrence of any of the events set forth in the table below under "Milestone Event" (each a "Milestone") (for the avoidance of doubt, with respect of Milestone Events (iv)-(viii), the calculation of Net Sales for a calendar year shall occur within sixty (60) days after the end of any calendar year following the year in which the First Commercial Sale of any Company Product takes place) Parent shall, within fifteen (15) Business Days of each such event, deposit or cause to be deposited the amount of cash in U.S. dollars set forth in the table below under "Milestone Payment" opposite such Milestone (each, a "Milestone Payment") to the Payment Agent for further distribution to the Equityholders, in each case (i) subject to any Contingent Merger Consideration Set-Off pursuant to Section 2.09 and withholding rights set forth in Section 2.11, (ii) less the amount of any Company Transaction Expenses that were unpaid as of 12:01 a.m. Pacific Time on the Closing Date, to the extent not accounted for in the determination of the Closing Merger Consideration, and (iii) less the portion of such amount, if any, allocable to Dissenting Shares; provided, that if any Milestone Payment becomes due and payable prior to the General Expiration Date, an amount equal to [***] of such Milestone Payment shall not be deposited with the Payment Agent and shall instead be deposited in the Indemnity Escrow Fund with the Escrow Agent, to be held by the Escrow Agent pursuant to the Escrow Agreement. Upon receipt of any Milestone Payment, the Payment Agent shall pay or cause to be paid to each Equityholder who is not a holder of Dissenting Shares, promptly, and in any event within five (5) Business Days of receipt of such payment, such Equityholder's Set-Off Pro Rata Share of such Milestone Payment, provided that any payment to a Company Optionholder shall be made by March 15 of the calendar year following the year in which the applicable Milestone Event occurs (it being understood that any payment to a Company Optionholder who is a current or former employee of the Company shall be made through the Surviving Corporation's payroll). Notwithstanding anything to the contrary set forth in this Agreement, in the event that Parent fails to timely deposit any Milestone Payment in accordance

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

with this Section 2.08(a), then the applicable Milestone Payment shall bear interest from the date upon which such Milestone occurred until the date of deposit of the Milestone Payment with the Payment Agent, at a rate per annum equal to [***].

Milestone Event	Milestone Payment
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]
[***]	[***]

(b) During the period beginning on the Closing Date and ending on the date each of the Regulatory Milestones set forth in Section 2.08(a)(ii) and (iii) has been achieved ("Milestone Efforts Period"), Parent shall use Commercially Reasonable Efforts to achieve the applicable Regulatory Milestones to the extent that they have not been achieved by the Company prior to the Effective Time. For purposes of the foregoing, "Commercially Reasonable Efforts" [***].

(c) To the extent not completed by the Company prior to the Effective Time, Parent shall continue and conduct the HF-BCC Phase II Trial through the HF-BCC Phase II Trial Period.

(d) In the event that (i) (A) Parent, subject to the obligations of the Right of First Negotiation, consummates a Change of Control without a corresponding transfer of the obligations under this Section 2.08 to a party with the financial wherewithal to satisfy such obligations, (B) Parent or any of its Subsidiaries completes an Acquisition of a Competing Product, or (C) Parent materially breaches the obligations in Section 2.08(b) and Section 2.08(c) (such event an "Acceleration Event") and (ii) the Regulatory Milestones have not been achieved, but are still reasonably attainable at such time, then [***] of the Milestone Payments associated with such Regulatory Milestones that have not been achieved and paid in full but that are still reasonably attainable at such time and that relate to the indication with respect to which such Acceleration Event occurred shall become immediately due and payable in accordance with Section 2.08(a). Parent shall provide prompt (and in any event within fifteen (15) Business Days) written notice to the Equityholder Representative following the occurrence of any of the circumstances specified in clauses (i)(A), (i)(B), or (i)(C)of this Section 2.08(d) during the Milestone Efforts Period.

(e) During the period beginning on the Closing Date and ending on the earlier of (i) the date each of the Milestones set forth in Section 2.08(a) has been achieved and (ii) that date that Parent and the Equityholder Representative determine jointly that the remaining Milestones are no longer reasonably attainable, Parent shall deliver to the Equityholder Representative a report (the "Progress Report") sixty (60) days following the end of each calendar year summarizing in reasonable detail and on a reasonably current basis all material developments and circumstances relating to the achievement of the Milestones and the business of Parent and the Surviving Corporation related thereto. Upon the reasonable request of the Equityholders'

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Representative, Parent shall, and shall cause the Surviving Corporation to, upon reasonable notice and at a reasonable time following delivery of each such Progress Report, make available the relevant employees of Parent with responsibility for development of the Company Product to meet with the Equityholder Representative in person to discuss and to provide information to, and respond to questions from, the Equityholder Representative with respect to matters reasonably relating to each such Progress Report. From the date of the First Commercial Sale of the Company Product until the Milestone Events (iv)-(viii) of Section 2.08(a) have been achieved, in any year in which Parent has determined that Net Sales of the Company Product are within [***] of the achievement of any unachieved Net Sales Milestone, Parent shall (i) deliver to the Equityholder Representative, as promptly as practicable, but in any event within sixty (60) days after the end of such calendar year, a statement setting forth Parent's calculation of Net Sales of the Company Product for such calendar year (each, a "Net Sales Statement"), including a breakdown of gross sales, net deductions and Net Sales by product, and (ii) make available, upon reasonable notice and at a reasonable time, during normal business hours, the relevant accounting team of Parent to, at Parent's option, meet with the Equityholder Representative via teleconference or correspond via email to respond to questions from the Equityholder Representative with respect to matters reasonably relating to each such Net Sales Statement.

(f) The Equityholder Representative shall hold in confidence and shall not disclose to any other Person the information provided to it pursuant to Section 2.08(e) except to the extent that such information can be shown to have been in the public domain through no fault of the Equityholders' Representative; provided, that the Equityholder Representative may disclose such information to the Permitted Recipients (including the Advisory Group) so long as each such Permitted Recipient (i) is informed of the confidential nature of such information and (ii) executes a confidentiality agreement with the Equityholder Representative regarding such information (A) that is comparable to and no less restrictive than the terms of Section 2.08(e) with respect to the Equityholder Representative (provided, however, that if such Permitted Recipient is a venture capital fund, it shall be permitted to (y) disclose such information to its auditors for purposes of enabling such auditors to confirm the reasonableness of the methodology utilized by such venture capital fund in valuing its expected return from the Merger and (z) disclose to prospective and current limited partners the valuation such venture capital fund has placed on its expected return from the Merger and the likelihood that the Milestone Payments will be received), (B) contains the acknowledgement and agreement referred to in the last sentence of Section 2.08(e) and (C) to which Parent is made an express third party beneficiary. At the request of Parent, the Equityholder Representative shall deliver, or cause to be delivered to Parent, true and correct copies of each such confidentiality agreement.

(g) For the avoidance of doubt, the Parties acknowledge and agree that all payments made pursuant to this Section 2.08 (including the Contingent Merger Consideration) constitute consideration paid for shares of the Company Capital Stock for income tax purposes (except to the extent paid to a Company Optionholder pursuant to Section 2.08(a) in respect of compensatory options), and shall be treated as such by the Parties for all tax reporting purposes.

Section 2.09 **Set-Off Right**. Notwithstanding anything to the contrary in this Agreement, but subject to the limitations on indemnification in Article X and solely following the General Expiration Date, the obligation of Parent to make any Milestone Payment shall be qualified in its entirety by the right of Parent to reduce, by up to [***], the amount of any such

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Milestone Payment (a "Contingent Merger Consideration Set-Off), to the extent Parent has an indemnification claim under Article X pending at the time such Milestone Payment becomes due and payable under Section 2.08, by the amount of any Damages incurred or suffered, or (until the amount is resolved pursuant to Article X) reasonably likely to be incurred or suffered, by any Parent Indemnified Party and subject only to the express limitations on indemnification set forth in Article X, and any other amounts shall be paid to the Equityholders in accordance with Section 2.08(a). In the event that the aggregate amount set off from a Milestone Payment made to the Equityholders pursuant to this Section 2.09 with respect to any indemnification claim pursuant to Article X is greater than the aggregate amount of Damages finally determined to be payable in respect of such indemnification claim in accordance with Article X, Parent shall, or shall cause the Surviving Corporation to, within ten (10) days after such final determination, pay the amount of such excess, without interest, to the Payment Agent for payment to the Equityholders in cash in accordance with Section 2.08 in the respective amounts they would have been entitled to receive had such amount not been retained or set-off by Parent (it being understood that any payment to a Company Optionholder who is a current or former employee of the Company shall be made through the Surviving Corporation's payroll).

Section 2.10 **Right of First Negotiation**.

(a) In accordance with the obligations of Section 2.10(b) and Section 2.10(c) (the "Buy-Back"), Parent hereby grants to Equityholder Representative, on behalf of the Equityholders, the right (the "Right of First Negotiation") to exclusively negotiate regarding a possible buy-back of the rights to Company Products (including, without limitation, all Intellectual Property Rights attributable to the development of such property prior to the consummation of such Buy-Back).

(b) The Equityholder Representative may exercise the Right of First Negotiation, in the case of the following:

(i) During the Milestone Efforts Period, Parent takes the action set forth in Section 2.08(d)(i)(B) or Section 2.08(d)(i)(C); or

(ii) Parent provides notice to the Equityholder Representative that Parent is contemplating entering into a transaction that will result in a Change of Control.

(c) No later than ten (10) Business Days following either of the events set forth in Section 2.10(b)(i) and Section 2.10(b)(ii), Parent shall (i) provide written notice (the "ROFN Notice") to the Equityholder Representative that the Equityholder Representative may exercise the Right of First Negotiation on behalf of the Equityholders and (ii) negotiate in good faith with the Equityholder Representative for up to 30 days after the Equityholder Representative's receipt of such notice (the "Option Period") with respect to such rights applicable under such Right of First Negotiation. If, during an Option Period, the Equityholder Representative notifies Parent that the Equityholder Representative chooses not to exercise the Right of First Negotiation or, at the expiration of the Option Period the Parties have not agreed on the principal terms of the Buy-Back, Parent may take either of the actions contemplated in Section 2.10(b) and set forth in the ROFN Notice with any third party; provided, that the terms of such transaction are no less favorable in the aggregate to Parent (including economics, indemnification and closing

conditions) than those proposed by the Equityholder Representative during the Option Period. If, during an Option Period, the Parties determine to pursue the Buy-Back on principal terms acceptable to each of the Parties and reflected in an executed non-binding term sheet (the "Option Term Sheet"), the Parties shall negotiate exclusively in good faith for up to 90 days (the "Right of First Negotiation Period") for the purpose of entering into a separate agreement with respect to the Buy-Back on terms acceptable to the Parties, acting reasonably and in good faith; provided, that if the Parties do not enter into such definitive agreement within the Right of First Negotiation Period, Parent may take either of the actions contemplated in Section 2.10(b) and set forth in the ROFN Notice with any third party; provided, that the terms of such transaction are no less favorable to Parent in the aggregate than those in the Option Term Sheet (including economics, indemnification and closing conditions), except that, if Parent does not enter into such transaction with any third party within six (6) months after the end of the Option Period, Parent shall not enter into and continue negotiations with any third party with respect to such transaction without again complying with this Section 2.10(c).

Section 2.11 **Withholding Rights**. Each of Parent, Merger Sub and the Surviving Corporation shall be entitled to deduct and withhold from any consideration or other amount payable or otherwise deliverable to any Equityholder or former Equityholder or other Person pursuant to this Agreement such amounts as Parent, Merger Sub or the Surviving Corporation, as the case may be, is required to deduct or withhold therefrom under the Code, or any Tax law, with respect to the making of such payment; provided, however, that Parent shall provide at least three (3) days' notice of its intention to make, and shall provide the Company or the relevant recipient a reasonable opportunity to mitigate or eliminate, any withholding other than U.S. federal backup withholding and employee withholding with respect to payments pursuant to Section 2.05. To the extent that such amounts are so withheld and remitted to the appropriate Governmental Authority, such withheld amounts shall be treated for all purposes of this Agreement as having been paid to the Person to whom or to which such amounts would otherwise have been paid.

Section 2.12 **Dissenting Shares**.

(a) Notwithstanding anything to the contrary contained in this Agreement, to the extent that (i) the provisions of Section 262 of the DGCL are or prior to the Effective Time may become applicable to the Merger or (ii) the provisions of Chapter 13 of the CCC are or prior to the Effective Time may become applicable to the Merger by reason of Section 2115 of the CCC, then, in each such case, any share of Company Capital Stock that, as of the Effective Time, may carry appraisal rights under Section 262 of the DGCL or is or may become a "dissenting share" within the meaning of Section 1300(b) of the CCC shall not be converted into or represent the right to receive the Series A Preferred Per Share Amount, Series B/B-2 Preferred Per Share Amount, Series C Preferred Per Share Amount, New Series Preferred Per Share Amount or Common Per Share Amount, as applicable, and the holder or holders of such share shall be entitled only to such rights as may be granted to such holder or holders in Section 262 of the DGCL or Chapter 13 of the CCC; provided, however, that if the status of any such share as a share carrying appraisal rights or a "dissenting share" shall not be perfected or shall be withdrawn, or if any such share shall lose its status as a share carrying appraisal rights or as a "dissenting share," then, as of the later of the Effective Time or the time of the failure to perfect such status or the loss of such status, such share shall automatically be converted into and shall

represent only the right to receive (upon the Surrender of the certificate representing such share) the Series A Preferred Per Share Amount, Series B/B-2 Preferred Per Share Amount, Series C Preferred Per Share Amount, New Series Preferred Per Share Amount or Common Per Share Amount, as applicable, in accordance with Section 2.04, without any interest thereon.

(b) The Company shall give Parent (i) prompt notice and a copy of any written demand received by the Company prior to the Effective Time to require payment for shares of Company Capital Stock pursuant to Section 262 of the DGCL or Chapter 13 of the CCC and of any other demand, notice or instrument delivered to the Company prior to the Effective Time pursuant to the DGCL or the CCC, and (ii) the opportunity to participate in all negotiations and proceedings with respect to any such demand, notice or instrument. The Company shall not make any payment or settlement offer prior to the Effective Time with respect to any such demand unless Parent shall have consented in writing to such payment or settlement offer.

Section 2.13 **Further Action**. If, at any time after the Effective Time, any further action is determined by Parent to be necessary or desirable to carry out the purposes of this Agreement or to vest the Surviving Corporation and its Subsidiaries or Parent with full right, title and possession of and to all rights and property of Merger Sub and the Company, the officers and directors of the Surviving Corporation and its Subsidiaries and Parent shall be fully authorized (in the name of Merger Sub, in the name of the Company and otherwise) to take such action.

ARTICLE III
REPRESENTATIONS AND WARRANTIES OF THE COMPANY

Subject to Section 1.02(k), except as set forth in the Company Disclosure Schedule, as of the Merger Agreement Effective Date and as of the Closing Date, the Company represents and warrants to Parent and Merger Sub as set forth in this Article III. The Company acknowledges and agrees that the Final Merger Agreement Company Disclosure Schedule (as defined in the Purchase Option Agreement) delivered in accordance with Section 2.6 of the Purchase Option Agreement (or if not so delivered as required by Section 2.6, the Initial Merger Agreement Company Disclosure Schedule (as defined in the Purchase Option Agreement), as attached hereto) shall constitute the Company Disclosure Schedule as of the Final Schedule Date.

Section 3.01 **Corporate Existence and Power**.

(a) The Company is duly organized, validly existing and in good standing under the laws of the jurisdiction of its formation and has all requisite powers and all governmental licenses, authorizations, permits, consents and approvals required to carry on its business as now conducted, to own or use the properties and assets that it purports to own or use and to perform all its obligations under all Material Contracts. The Company is duly qualified to do business as a foreign corporation or other entity and is in good standing in each jurisdiction where such qualification is necessary.

(b) The Company does not own or control, directly or indirectly, any interest in any corporation, partnership, limited liability company, association or other business entity. The Company is not a participant in any joint venture, partnership or similar arrangement. The Company has not agreed or is obligated to, directly or indirectly, make any future investment in

or capital contribution or advance to any Person. No insolvency or similar proceedings have been initiated or applied for with respect to the Company and no reasons exist why such proceedings would need to be initiated, including the Company being over-indebted or unable to pay its debts as they become due, and no such inability to pay debts is imminent.

(c) The Company has made available to Parent accurate and complete copies of: (i) the certificate of incorporation and bylaws, including all amendments thereto, of the Company; (ii) the stock records of the Company; and (iii) the minutes and other records of the meetings and other proceedings (including any actions taken by written consent or otherwise without a meeting) of the stockholders of the Company, the Company Board of Directors and all committees thereof. There has not been any violation of any of the provisions of the certificate of incorporation or bylaws, including all amendments thereto, of the Company, and the Company has not taken any action that is inconsistent with any resolution adopted by the stockholders of the Company, the Company Board of Directors or any committee thereof.

Section 3.02 **Corporate Authorization**.

(a) The Company has the absolute and unrestricted right, power and authority to enter into and to perform its obligations under this Agreement and all other agreements and instruments to be executed and delivered in connection herewith (the "Ancillary Documents"); and the execution, delivery and performance by the Company of this Agreement and the Ancillary Documents have been duly authorized by all necessary action on the part of the Company and the Company Board of Directors. This Agreement has been duly executed and delivered by the Company and, assuming due authorization, execution and delivery of this Agreement by the other Parties, constitutes the legal, valid and binding obligation of the Company, enforceable against the Company in accordance with its terms, subject to (i) laws of general application relating to bankruptcy, insolvency and the relief of debtors, and (ii) rules of law governing specific performance, injunctive relief and other equitable remedies.

(b) At a meeting duly called and held, the Company Board of Directors has unanimously (i) determined that this Agreement and the transactions contemplated hereby are fair to, advisable and in the best interests of the Company's stockholders, (ii) approved and adopted this Agreement and the transactions contemplated hereby and (iii) resolved to recommend adoption of this Agreement and approval of the Merger and the other transactions contemplated hereby by the stockholders of the Company (the "Company Board Recommendation").

(c) The Requisite Stockholder Approval is the only vote of the holders of any class or series of capital stock of the Company necessary to adopt this Agreement and thereby approve the Merger and the other transactions contemplated hereby.

Section 3.03 **Governmental Authorization**. The execution, delivery and performance by the Company of this Agreement and the consummation by the Company of the transactions contemplated hereby require no action by or in respect of, or filing with, any Governmental Authority other than (a) the filing of the Certificate of Merger with the Secretary of State of the State of Delaware, (b) the notification filing to be made under the HSR Act and the expiration or termination of the waiting period thereunder and (c) compliance with any applicable requirements of the Securities Act, the Exchange Act and any other applicable U.S. state or federal securities laws.

Section 3.04 **Non-contravention**. The execution, delivery and performance by the Company of this Agreement and the consummation of the Merger and the other transactions contemplated hereby do not and will not (a) contravene, conflict with, or result in any violation or breach of any provision of the certificate of incorporation or bylaws of the Company, (b) assuming compliance with the matters referred to in Section 3.03, contravene, conflict with or result in a violation or breach of any provision of any Applicable Law, (c) assuming compliance with the matters referred to in Section 3.03, require any consent or other action by any Person under, result in a breach of, constitute a default, or an event that, with or without notice or lapse of time or both, would result in a breach of, or constitute a default under, or cause or permit the termination, cancellation, acceleration or other change of any right or obligation or the loss of any benefit to which the Company is entitled under any provision of any Contract binding upon the Company, or any license, franchise, permit, certificate, approval or other similar authorization affecting, or relating in any way to, the assets or business of the Company or (d) result in the creation or imposition of any Lien on any asset of the Company.

Section 3.05 **Capitalization.**

(a) Section 3.05(a)(i) of the Company Disclosure Schedule contains a complete and correct list of the designation, par value, number of authorized shares of each class and series of Company Common Stock and Company Preferred Stock, and number of issued and outstanding shares of each class and series of Common Stock and Preferred Stock, together with a list of, the number of shares owned by, accrued unpaid dividends with respect to, and number of shares of Company Common Stock into which each share is convertible with respect to. Section 3.05(a)(ii) of the Company Disclosure Schedule contains a complete and correct list of all outstanding Company Options to purchase shares of Company Common Stock.

(b) Section 3.05(b)(i) of the Company Disclosure Schedule sets forth the number of shares of Company Common Stock the Company has reserved for issuance pursuant to the Company Equity Incentive Plans. All shares of Company Capital Stock that may be issued pursuant to the exercise of Company Options will be, when issued in accordance with the respective terms thereof, duly authorized and validly issued and are, or when issued will be, fully paid, nonassessable and free of preemptive rights. Section 3.05(b)(ii) of the Company Disclosure Schedule contains a complete and correct list of all outstanding shares of Company Capital Stock that remain subject to vesting or forfeiture restrictions. Section 3.05(b)(iii) of the Company Disclosure Schedule contains a complete and correct list of each outstanding Company Option, including (i) the holder, (ii) the date of grant, (iii) the number of shares of Company Common Stock subject to such Company Option as of the Merger Agreement Effective Date, (iv) the exercise price per share of Company Common Stock subject to such Company Option, (v) whether such Company Option is intended to constitute an “incentive stock option” within the meaning of Section 422 of the Code and (vi) the date on which such Company Option expires. All Company Options were granted under the Company Equity Incentive Plans.

(c) Except as set forth in this Section 3.05 and for changes since the Merger Agreement Effective Date resulting from the exercise of Company Options outstanding on such date, there are no outstanding (i) shares of capital stock or voting securities of the Company, (ii) securities of the Company convertible into or exchangeable for shares of capital stock or voting securities of the Company or (iii) options, warrants, calls, subscriptions, rights of conversion or other rights, agreements, arrangements or commitments of any kind or character to acquire from the Company, or other obligation of the Company to issue, deliver or sell, or cause to be issued, delivered or sold, or reserved for issuance any capital stock, voting securities or securities convertible into or exchangeable for capital stock or voting securities of the Company (the items in clauses (i), (ii) and (iii) being referred to collectively as the "Company Securities"). Each share of each series of Preferred Stock shall be treated for purposes of the Merger and this Agreement as if all holders of such series had converted such holder's shares of such series into shares of Company Common Stock on a one-for-one basis immediately prior to the Effective Time.

(d) There are (i) no rights, agreements, arrangements or commitments of any kind or character, whether written or oral, relating to the capital stock of the Company to which the Company is a party, or by which it is bound, obligating the Company to repurchase, redeem or otherwise acquire any issued and outstanding shares of capital stock of the Company, (ii) no outstanding or authorized stock appreciation, phantom stock, profit participation, or other similar rights with respect to the Company and (iii) no voting trusts, stockholder agreements, proxies or other agreements or understandings in effect to which the Company is a party with respect to the governance of the Company or the voting or transfer of any shares of capital stock of the Company.

(e) All outstanding shares of Company Capital Stock have been duly authorized and are validly issued, fully paid, nonassessable and free of preemptive rights, and have been issued and granted in compliance with (i) all applicable securities laws and other Applicable Laws and (ii) all requirements set forth in applicable Contracts.

Section 3.06 **Financial Statements**. The Company has delivered to Parent the Current Financial Statements. The Current Financial Statements (a) have been prepared from the books and records of the Company, (b) complied as to form in all material respects with applicable accounting requirements with respect thereto as of their respective dates, (c) have been prepared in accordance with GAAP applied on a consistent basis throughout the periods indicated and consistent with each other (subject, in the case of unaudited interim period financial statements, to the absence of notes and normal year-end audit adjustments) and (d) fairly present, in accordance with GAAP, the financial condition of the Company at the dates therein indicated and the results of operations and cash flows of the Company for the periods therein specified (subject, in the case of unaudited interim period financial statements, to the absence of notes and normal year-end audit adjustments, none of which individually or in the aggregate will be material in amount).

Section 3.07 **Absence of Certain Changes**. Between the Current Balance Sheet Date and the Merger Agreement Effective Date, the business of the Company has been conducted in the ordinary course consistent with past practices and there has not been:

(a) any event, occurrence, development or state of circumstances or facts that has had or could reasonably be expected to have, individually or in the aggregate, a Material Adverse Effect;

(b) any damage, destruction or other casualty loss (whether or not covered by insurance) affecting the business or assets of the Company;

(c) any amendment of the certificate of incorporation or bylaws or equivalent constituent documents (whether by merger, consolidation or otherwise) of the Company;

(d) any splitting, combination or reclassification of any shares of Company Capital Stock or declaration, setting aside or payment of any dividend or other distribution or capital return (whether in cash, stock or property or any combination thereof) in respect of any Company Securities, or redemption, repurchase or other acquisition or offer to redeem, repurchase, or otherwise acquire any Company Securities;

(e) (i) any issuance, grant, delivery or sale, or authorization of the issuance, grant, delivery or sale of, any shares of any Company Securities, other than the issuance of any shares of Company Common Stock upon the exercise of Company Options that were outstanding on the Current Balance Sheet Date in accordance with the terms of those Company Options on the Current Balance Sheet Date or (ii) amendment of any term of any Company Security (in each case, whether by merger, consolidation or otherwise);

(f) any capital expenditures, or the incurrence of any obligation or liability in respect thereof, by the Company in excess of [***] individually or [***] in the aggregate;

(g) any acquisition (by merger, consolidation, acquisition of stock or assets or otherwise), directly or indirectly, by the Company of any assets, securities, properties, interests or businesses;

(h) except for this Agreement, any adoption of any plan of merger, consolidation, reorganization, liquidation or dissolution or filing of a petition in bankruptcy under any Applicable Law, or consent to the filing of any such petition;

(i) any sale, lease, assignment or other transfer, or creation or incurrence of any Lien on, any assets, securities, properties, interests or businesses of the Company, other than sales of products or services in the ordinary course of business consistent with past practice;

(j) any making by the Company of any loans, advances or capital contributions to, or investments in, any other Person;

(k) any creation, incurrence, guarantee or assumption by the Company of any Indebtedness;

(l) (i) any entry into any Contract that limits or otherwise restricts in any material respect the Company or any of its Affiliates or any successor thereto, or that would reasonably be expected to, after the Effective Time, limit or restrict in any material respect the Company, the Surviving Corporation, Parent or any of their respective Affiliates, from engaging or

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

competing in any line of business (including any grant of exclusivity with respect to Intellectual Property Rights or otherwise), in any location or with any Person or (ii) any entry into, amendment or modification in any material respect of, termination of or acceleration of the Company's obligations under, any Material Contract or any waiver, release or assignment of any material rights, claims or benefits of the Company under any Material Contract;

(m) other than as required by Applicable Law, any Contract, or the terms of any Employee Plan, (i) any entry into, termination, or amendment of any Employee Plan, employment agreement, independent contractor agreement, consulting agreement or collective bargaining agreement, (ii) any grant or increase in the annual base salary, annual bonus opportunity, annual fees, severance, benefit, or other payment, as applicable, to any current or former employee, independent contractor, consultant, or temporary employee of the Company, (iii) any acceleration of any compensation, fees, severance, or benefit payable, as applicable, to any current or former employee, independent contractor, consultant, or temporary employee, or (iv) hiring or terminating any current or former employee, independent contractor, consultant, or temporary employee;

(n) any change in accounting controls, policies, principles, methods or practices, including any change in practices, policies and procedures with respect to cash management, collection of accounts receivable, reserves (whether for bad debts, contingent liabilities or otherwise), accrual of accounts receivable, inventory control, prepayment of expenses, payment of trade accounts receivable, accrual of other expenses, deferral of revenue and acceptance of customer deposits, of the Company, except as required by concurrent changes in GAAP and as agreed to by its independent public accountants;

(o) any settlement, or offer or proposal to settle, (i) any Proceeding or claim involving or against the Company, (ii) any stockholder litigation or dispute against the Company or any of its officers or directors or (iii) any Proceeding that relates to the transactions contemplated hereby; or

(p) (i) any material Tax election made or changed, (ii) any claim, notice, audit report or assessment in respect of material Taxes settled or compromised, or (iii) any extension or waiver of the statute of limitations period applicable to any Tax claim or assessment consented to.

Section 3.08 **No Undisclosed Liabilities**. The Company has no liabilities, obligations or commitments whatsoever, asserted or unasserted, known or unknown, absolute or contingent, accrued or unaccrued, matured or unmatured or otherwise (collectively, "Liabilities"), other than:

(a) Liabilities that are adequately reflected or reserved against in the Current Balance Sheet;

(b) Liabilities that have been incurred by the Company since the Current Balance Sheet Date in the ordinary course of business consistent with past practice and which are not, individually or in the aggregate, material in amount;

(c) Liabilities under the Contracts identified in Section 3.09 of the Company Disclosure Schedule, to the extent the nature and magnitude of such Liabilities can be specifically ascertained by reference to the text of such Contracts; and

(d) liabilities or obligations arising under this Agreement.

Section 3.09 **Material Contracts**.

(a) The Company is not a party to or bound by any of the following (a Contract responsive to any of the following categories being herein referred to as a "Material Contract"):

(i) any lease, rental or occupancy agreements, installment and conditional sale agreements, and other Contracts affecting the ownership of, leasing of, title to, use of, or any leasehold interest in property (whether real or personal);

(ii) any Contract pursuant to which any Intellectual Property Right or Intellectual Property is or has been licensed, sold, assigned or otherwise conveyed or provided to the Company or pursuant to which any Person has agreed not to enforce any Intellectual Property Right against the Company, other than Contracts for Generally Available Software;

(iii) any Contract pursuant to which any Intellectual Property Right or Intellectual Property is or has been licensed (whether or not such license is currently exercisable), sold, assigned or otherwise conveyed or provided to a third party by the Company, or pursuant to which the Company has agreed not to enforce any Intellectual Property Right against any third party;

(iv) any Contract imposing any restriction on the Company's right or ability, or, after the Effective Time, the right or ability of Parent or the Surviving Corporation or any of their respective Affiliates (A) to compete in any line of business or market or with any Person or in any area or which would so limit the freedom of Parent or the Surviving Corporation or any of their respective Affiliates after the Closing Date (including granting exclusive rights or rights of first refusal to license, market, sell or deliver any of the products or services offered by the Company or any related Intellectual Property or Intellectual Property Right), (B) to develop or distribute any Intellectual Property or technology, or (C) to use, assert, enforce, or otherwise exploit any Intellectual Property anywhere in the world;

(v) any Contract for the purchase, sale or distribution of materials, supplies, goods, services, equipment or other assets providing for (A) annual payments by or to the Company of [***] or more, (B) aggregate payments by or to the Company of [***] or more;

(vi) any Contract granting a right of first refusal, right of first negotiation or similar right to any Person;

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(vii) any partnership, joint venture or similar Contract, including any Contract providing for the sharing of revenues, profits, losses, costs or liabilities or for joint research, development, marketing or distribution;

(viii) any Contract relating to the acquisition or disposition of any business (whether by merger, sale of stock, sale of assets or otherwise) entered into in the last three (3) years or pursuant to which the Company has any current or future rights or obligations;

(ix) any Contract relating to the sale of any assets of the Company within the last three (3) years;

(x) any Contract relating to Indebtedness (whether incurred, assumed, guaranteed or secured by any asset and including any agreements or commitments for future loans, credit or financing);

(xi) any Contract relating to the acquisition, issuance or transfer of any Company Securities (other than Company Options outstanding as of the Merger Agreement Effective Date);

(xii) any Contract under which (A) any Person has directly or indirectly guaranteed any liabilities or obligations of the Company or (B) the Company has directly or indirectly guaranteed any liabilities or obligations of any other Person (in each case other than endorsements for the purposes of collection in the ordinary course of business);

(xiii) any Contract relating to the creation of any Lien with respect to any asset (including Intellectual Property Rights or other intangible assets) of the Company;

(xiv) any Contract which contains any provisions requiring the Company to indemnify any other party (excluding indemnities contained in agreements for the purchase, sale or license of products or services in the ordinary course of business consistent with past practice pursuant to the Company's standard form agreement, as made available to Parent);

(xv) any Contract with any Related Person;

(xvi) any employment, independent contractor or consultant Contract, in each case, that does not constitute an Employee Plan;

(xvii) any Contract with a staffing agency, temporary labor agency, or other similar entity for the provision of temporary employee services;

(xviii) any collective bargaining agreement or other labor representation agreement; and

(xix) any other Contract not made in the ordinary course of business that is material to the Company.

(b) The Company has delivered to Parent accurate and complete copies of all written Material Contracts, including all amendments thereto. Section 3.09(b) of the Company Disclosure Schedule provides an accurate description of the terms of each Material Contract that is not in written form.

(c) (i) Each Material Contract is a valid and binding agreement of the Company party thereto and is in full force and effect, (ii) the Company has performed, in all material respects, all obligations required to be performed by it under each of the Material Contracts to which it is a party, (iii) the Company is not, and, to the Knowledge of the Company, no other party thereto is, in default or breach in any material respect under the terms of any Material Contract, and, to the Knowledge of the Company, no event has occurred, and no circumstance or condition exists, that (with or without notice or lapse of time) will, or could reasonably be expected to, (A) result in a violation or breach of any of the provisions of any Material Contract, (B) give any Person the right to declare a default or exercise any remedy under any Material Contract, (C) give any Person the right to accelerate the maturity or performance of any grant or rights or other obligation under a Material Contract or (D) give any Person the right to cancel, terminate or modify any Material Contract and (iv) as of the Merger Agreement Effective Date, the Company has not received any written notice or other communication regarding violation or breach of, or default under, or the cancellation or termination of any Material Contract

Section 3.10 **Compliance with Applicable Laws**.

(a) The Company is, and has at all times during the past five (5) years been, in material compliance with, and to the Knowledge of the Company, the Company is not, and at no time has been, under investigation with respect to or threatened to be charged with or given notice of any violation of, Applicable Law. During the past five (5) years, the Company has not received any written notice from any Governmental Authority to the effect that the Company is not in compliance with any Applicable Law.

(b) The Company has and, to the Knowledge of the Company, no agent, employee or other Person associated with or acting on behalf of the Company has, directly or indirectly:

(i) made any unlawful contributions, gifts, or incurred any entertainment or other unlawful expenses relating to political activity and related in any way to the Company's business;

(ii) made any unlawful payment to any foreign or domestic government official or employee, foreign or domestic political parties or campaigns, official of any public international organization, or official of any state-owned enterprise;

(iii) violated any provision of the Foreign Corrupt Practices Act of 1977, United Kingdom Bribery Act of 2010 or any other applicable anti-corruption statute; or

(iv) made any bribe, payoff, influence payment, kickback or other similar unlawful payment.

(c) The Company is, and has at all times during the past five (5) years been, in compliance in all material respects with applicable provisions of the Federal Food, Drug, and

Cosmetic Act (21 U.S.C. § 301 et seq.) and the regulations promulgated thereunder ("FDA Laws"). During the past five (5) years, the Company has not received any FDA Form 483 or other notice of inspectional observations, warning letters, untitled letters, or other written notice from the FDA or other Governmental Authority alleging or asserting material noncompliance with the FDA Laws.

(d) (i) The clinical, preclinical, and other studies and tests conducted by or on behalf of or sponsored by the Company were, and if still pending are, being conducted in accordance in all material respects with standard medical and scientific research procedures and all applicable FDA Laws; and (ii) no investigational new drug application filed by or on behalf of the Company with the FDA has been terminated or suspended by the FDA, and neither the FDA nor any other Governmental Authority has commenced any action to place a clinical hold order on, or otherwise terminate or suspend, any proposed or ongoing clinical investigation conducted or proposed to be conducted by or on behalf of the Company.

(e) The Company has made available to Parent all material documentation and records related to all clinical, preclinical, and other studies and tests conducted by or on behalf of or sponsored by the Company that the Company is required to maintain pursuant to FDA Laws (collectively, the "Clinical Trial Records"). To the Company's knowledge, the Clinical Trial Records are accurate in all material respects and do not contain any untrue statement of a material fact. The Clinical Trial Records contain all information that is required pursuant to Applicable Law.

Section 3.11 **Litigation**.

(a) There is no pending Proceeding and, to the Knowledge of the Company, during the past five (5) years, no Person has threatened to commence any Proceeding: (i) that involves the Company, any of the assets owned or used by the Company or any Person for which the Company has assumed or retained such Person's liability, either contractually or by operation of law; or (ii) that challenges, or that may have the effect of preventing, delaying, making illegal or otherwise interfering with, the Merger or any of the other transactions contemplated by this Agreement.

(b) There is no order, writ, injunction, directive, restriction, judgment or decree to which the Company, or any of the assets owned or used by the Company, is subject or which restricts in any respect the ability of the Company to conduct its business.

Section 3.12 **Real Property**.

(a) The Company does not own and has never owned any real property. The Company is not obligated under or a party to any option, right of first refusal or other contractual right to purchase, acquire, sell, assign or dispose of any real property or any portion thereof or interest therein. The Company has a good and valid leasehold, license or other similarly applicable interest in each parcel of real property leased, subleased, licensed or otherwise used or occupied by the Company (the "Leased Real Property"). Section 3.12 of the Company Disclosure Schedule contains a true, correct and complete list of each item of Leased Real Property (each, a "Real Property Lease"), including the street address of the Leased Real Property and the name of the lessor thereof.

(b) The Leased Real Property is not subject to any Liens, except for Permitted Liens. The Company has not received any written notice of a violation of any Real Property Lease and the Company has not received any written notice of a material violation of any ordinance, regulation or building, zoning or other similar law with respect to any Leased Real Property. The Company has not received any written notice of any expiration of, pending expiration of, changes to, or pending changes to any material entitlement relating to the Leased Real Property and there is no condemnation, special assessment or the like pending or, to the Knowledge of the Company, threatened with respect to any of the Leased Real Property. The Company has the right to use and occupy the Leased Real Property for the full term of the Real Property Lease relating thereto.

Section 3.13 **Properties**.

(i) The Company has good and marketable, indefeasible, fee simple title to, or in the case of leased property and assets, has valid leasehold interests in, all property and assets (whether real, personal, tangible or intangible (other than Intellectual Property Rights)) used or leased for use by the Company in connection with the conduct of its business. None of such property or assets is subject to any Lien, except:

(ii) Liens disclosed on the Current Financial Statements;

(iii) landlords', workmen's, repairmen's, warehousemen's and carriers' Liens and other similar Liens imposed by Law, incurred in the ordinary course of business; or (iii) pledges or deposits in connection with workers compensation, unemployment insurance and other social security legislation (clauses (i) through (iii) of this Section 3.13(a) are, collectively, the "Permitted Liens").

(b) All leases of such real property and personal property are in good standing and are valid, binding and enforceable in accordance with their respective terms and there does not exist under any such lease any default or any event which with notice or lapse of time or both could reasonably be expected to constitute a default.

Section 3.14 **Intellectual Property**.

(a) Section 3.14(a) of the Company Disclosure Schedule sets forth a complete and accurate list as of the Merger Agreement Effective Date of (i) each item of Registered IP in which the Company has an ownership interest of any nature (whether exclusively, jointly with another Person, or otherwise), (ii) the jurisdiction in which such item of Registered IP has been registered or filed and the applicable application, registration, or serial or other similar identification number, (iii) any other Person that has an ownership interest in such item of Registered IP and the nature of such ownership interest, and (iv) all unregistered trademarks used in connection with any Company Product and any product or service currently under development by the Company. The Company has made available to Parent complete and accurate copies of all applications, correspondence, and other material documents related to each such item of Registered IP.

(b) To the Knowledge of the Company, all Company IP is valid, subsisting, and enforceable. All filings, payments and other actions required to be made or taken to obtain, perfect or maintain in full force and effect each item of Company IP that is Registered IP have been made or taken by the applicable deadline and otherwise in accordance with all Applicable Laws. Except as set forth in Section 3.14(b) of the Company Disclosure Schedule, during the past five (5) years, no application for, or registration with respect to, any Registered IP that is Company IP has been abandoned, allowed to lapse, or, except in the course of normal patent prosecution, rejected. Section 3.14(a) of the Company Disclosure Schedule sets forth a complete and accurate list of each filing, payment, and action that must be made or taken on or before the date that is 90 days after the Closing Date in order to obtain, perfect or maintain in full force and effect each item of Company IP that is Registered IP.

(c) No interference, opposition, reissue, reexamination, or other Proceeding of any nature is, or during the past five (5) years has been, pending or threatened in which the scope, validity, or enforceability of any Company IP is being, has been, or could reasonably be expected to be contested or challenged and, to the Knowledge of the Company, there is no basis for a claim that any Company IP is invalid or unenforceable.

(d) The Company is not bound by, and no Company IP is subject to, any Contract containing any covenant or other provision that in any way limits or restricts the ability of the Company to use, assert, enforce, or otherwise exploit any Company IP anywhere in the world. The Company has not transferred ownership of (whether a whole or partial interest), or granted any exclusive right to use, any Company IP to any Person.

(e) The Company exclusively owns all right, title, and interest to and in (or has an exclusive license to) the Company IP free and clear of any Liens (other than licenses granted pursuant to the Contracts listed in Section 3.14(e) of the Company Disclosure Schedule). The Company IP constitute all the Intellectual Property and Intellectual Property Rights used in the conduct of the business of the Company. No Person who has licensed Intellectual Property or Intellectual Property Rights to the Company has ownership rights or license rights to derivative works or improvements made by or on behalf of the Company related to such Intellectual Property or Intellectual Property Rights.

(f) Each Person who is or was an employee, officer, director or contractor of the Company and who is or was engaged by the Company or its agent to design, create or otherwise develop any Intellectual Property or Intellectual Property Rights has signed an enforceable agreement containing an assignment to the Company of all such Intellectual Property and Intellectual Property Rights. At no time during the conception, reduction to practice, creation or development of any Company IP was any developer, inventor or other contributor to such Company IP (i) operating under any grants from any Governmental Entity or agency or private source, performing research sponsored by any Governmental Entity or agency or private source, except as set forth in Section 3.14(f) of the Company Disclosure Schedule, or (ii) subject to any employment agreement or invention assignment or nondisclosure agreement or other obligation with any third party that could adversely affect the Company's rights in such Company IP. No current or former stockholder, officer, director, or employee of the Company has any claim, right (whether or not currently exercisable), or interest to or in any Intellectual Property or Intellectual Property Rights used by the Company. No employee of the Company is (i) bound by or

otherwise subject to any Contract restricting him or her from performing his or her duties for the Company or (ii) in breach of any Contract with any former employer or other Person, in each case, concerning Intellectual Property, Intellectual Property Rights or confidentiality.

(g) To the Knowledge of the Company, no Person has infringed, misappropriated, or otherwise violated, or is currently infringing, misappropriating, or otherwise violating, any Company IP. Section 3.14(g) of the Company Disclosure Schedule sets forth an accurate and complete list, as of the Merger Agreement Effective Date, and the Company has made available to Parent a complete and accurate copy of, each letter or other written or electronic communication, correspondence or other communication (in writing or otherwise) that has been sent or otherwise delivered or communicated to the Company or any representative of the Company regarding any actual, alleged, or suspected infringement or misappropriation of any Company IP, and provides a brief description of the current status of the matter referred to in such letter, communication, or correspondence.

(h) The Company has not infringed, misappropriated, or otherwise violated, and is not currently infringing, misappropriating, or otherwise violating, any Intellectual Property Right of any other Person. No infringement, misappropriation, or similar claim or Proceeding is pending or threatened against the Company or, to the Knowledge of the Company, against any Person who may be entitled to be indemnified or reimbursed by the Company with respect to such claim or Proceeding. The Company has not received any notice or other communication (in writing or otherwise) relating to any actual, alleged, or suspected infringement, misappropriation, or violation of any Intellectual Property Right of another Person, including any notice or communication inviting the Company to take a license under any Intellectual Property Right.

(i) Neither the execution, delivery, or performance of this Agreement, nor the consummation of any of the transactions or agreements contemplated by this Agreement, will, with or without notice or the lapse of time, result in, or give any other Person the right or option to cause or declare, (i) a loss of, or Lien on, any Company IP, (ii) a breach of, termination of, or acceleration or modification of any right or obligation under any Contract listed or required to be listed in Section 3.09(a)(i) or Section 3.09(a)(ii) of the Company Disclosure Schedule, (iii) the release, disclosure, or delivery of any Company IP by or to any escrow agent or other Person, (iv) the grant, assignment, or transfer to any other Person of any license or other right or interest under, to, or in any Intellectual Property or Intellectual Property Right, including any such grant, assignment or transfer by Parent or its Affiliates, or (v) any Company IP becoming subject to any restriction with respect to its use or operation in any line of business or market or with any Person or in any area.

Section 3.15 **Privacy**.

(a) The Company's Privacy Policies are prominently posted and accessible to individuals on the Company website and on any other mechanism through which the Company collects Personal Information. The Company complies in all material respects, and at all times has materially complied, with applicable Privacy and Security Requirements.

(b) The Company has taken industry-standard measures that protect and maintain the confidential nature of any Personal Information to which the Company has access and that

protect such Personal Information against loss, theft and unauthorized access or disclosure (including unauthorized access or use by the Company's employees and contractors). Such measures are consistent with and have conformed to any public statements by the Company regarding its information security practices and any contractual commitments of the Company relating to security, including contractual commitments to payment card networks. The Company has not received any written claims, notices or complaints regarding the Company's information handling or security practices, Processing of any Personal Information, or alleging a violation of any person's privacy, personal or confidentiality rights under the Privacy Policies or otherwise by any person, including the FTC, any similar foreign bodies, or any other Governmental Authority.

(c) Neither the execution, delivery, or performance of this Agreement, nor the consummation of any of the transactions contemplated by this Agreement, will violate any Privacy Contracts, including the current Privacy Policies and any Privacy Policies that were in effect at any time during which any Personal Information was collected or obtained by the Company, or any other applicable Privacy and Security Requirements. The Company has not experienced any material Security Breaches or material Security Incidents, and the Company has not received any written complaints from any Person regarding such material Security Breach or material Security Incident.

(d) The Privacy Contracts do not require the delivery of any notice to or consent from any Person, or prohibit the transfer of Personal Information in the possession or control of the Company to Parent, in connection with the execution, delivery, or performance of this Agreement or the consummation of any of the transactions contemplated by this Agreement. The Company has a valid and legal right (whether contractually, by law or otherwise) to access or use all Personal Information that is Processed by or on behalf of the Company in connection with the use and/or operation of its products, services and business.

(e) The Company contractually requires all third parties who have access to or receive Personal Information from the Company to materially comply with all applicable Privacy and Security Requirements, and to use commercially reasonable efforts consistent with industry standards designed to protect Personal Information from unauthorized Processing of the Personal Information. The Company contractually requires all Persons who provide Personal Information to the Company to obtain consent or authorization for the Processing of such Personal Information as required by applicable Privacy and Security Requirements, except as would not reasonably be expected to have a Material Adverse Effect.

Section 3.16 **Insurance Coverage**. The Company has made available to Parent a list of, and accurate and complete copies of, all insurance policies and fidelity bonds relating to the assets, business, operations, employees, officers or directors of the Company, each of which is in full force and effect, together with a claims history for the past 3 years. Other than claims made in the ordinary course, there are no pending claims under any such policies or bonds, including any claims for loss or damage to the properties, assets or business of the Company. There is no claim by the Company pending under any of such policies or bonds as to which coverage has been questioned, denied or disputed by the underwriters of such policies or bonds or in respect of which such underwriters have reserved their rights. All premiums payable under all such policies and bonds have been timely paid and the Company has otherwise complied fully with

the terms and conditions of all such policies and bonds, and no such policies or bonds provide for any retrospective premium adjustment or other experience-based liability on the part of the Company. Such policies and bonds are of the type and in amounts customarily carried by Persons conducting businesses similar to those of the Company. The Company has no Knowledge of any actual or threatened termination of, premium increase with respect to, or material alteration of coverage under, any of such policies or bonds. After the Closing, the Company shall continue to have coverage under such policies and bonds with respect to events occurring prior to the Closing. The Company does not have any self-insurance or co-insurance programs.

Section 3.17 **Licenses and Permits**. The Company has, and at all times has had, all licenses, permits, qualifications, accreditations, approvals and authorizations of any Governmental Authority (collectively, the "Permits"), and has made all necessary filings required under Applicable Law, necessary to service the Company's accounts in accordance with Applicable Laws and otherwise to conduct the business of the Company. The Company is in compliance with each such Permit. During the past five (5) years, the Company has not received any written notice or other written communication regarding any actual or possible violation of or failure to comply with any term or requirement of any Permit or any actual or possible revocation, withdrawal, suspension, cancellation, termination or modification of any Permit. Section 3.17 of the Company Disclosure Schedule sets forth (a) an accurate and complete list of all Permits issued to the Company and (b) an accurate and complete list of all permits for which the Company has applied or has taken the steps necessary to secure or maintain or that the Company otherwise intends to obtain. Each such Permit has been validly issued or obtained and is, and after the consummation of the transactions contemplated by this Agreement will be, in full force and effect.

Section 3.18 **Tax Matters**.

(a) The Company has duly and timely filed with the appropriate Tax authorities all material Tax Returns required to be filed. All such Tax Returns are complete and accurate in all material respects. All material Taxes due and owing by the Company (whether or not shown on any Tax Returns) have been paid. The Company is not currently the beneficiary of any extension of time within which to file any Tax Return other than extensions obtained in the ordinary course. No written claim has ever been received by the Company from a Tax authority or other Governmental Authority in a jurisdiction where the Company does not file Tax Returns that the Company is or may be subject to taxation by that jurisdiction. The Company does not have any request for a private letter ruling, a request for administrative relief, a request for technical advice, a request for a change of any method of accounting, or any other similar request pending with any Governmental Authority relating to Taxes or Tax Returns of the Company. No power of attorney granted by the Company with respect to any Taxes other than in connection with ordinary-course preparation of Tax Returns is currently in force.

(b) Since the Current Balance Sheet Date, the Company has not incurred any material liability for Taxes outside the ordinary course of business.

(c) No deficiencies for material Taxes with respect to the Company have been claimed, proposed or assessed in writing by any Tax authority or other Governmental Authority.

There are no pending audits, assessments or other governmental actions for or relating to any liability in respect of Taxes of the Company, nor are any to the Knowledge of the Company threatened. The Company (or any predecessor thereof) has not waived any statute of limitations in respect of Taxes or agreed to any extension of time with respect to a Tax assessment or deficiency, nor has any request been made in writing for any such extension or waiver. The Company is not participating in, and has never commenced a voluntary disclosure proceeding in any state or local or non-U.S. jurisdiction that has not been fully resolved or settled.

(d) There are no Liens for Taxes upon any property or asset of the Company (other than statutory Liens for current Taxes not yet due and payable).

(e) The Company has not elected at any time to be treated as an S corporation within the meaning of Sections 1361 or 1362 of the Code (or any corresponding provision of state, local or foreign Tax law).

(f) The Company will not be required to include any item of income in, or exclude any item of deduction from, taxable income for any period (or any portion thereof) ending after the Closing Date as a result of any installment sale or other open transaction prior to the Closing Date, any accounting method change filed with any Tax authority prior to the Closing, the use of an improper method of accounting for any period or portion thereof ending prior to the Closing Date, any intercompany transaction or excess loss account described in Section 1502 of the Code (or any corresponding provision of state, local or foreign Tax law), any prepaid amounts received prior to the Closing Date or deferred revenue realized prior to the Closing Date except deferred revenue reflected in the Current Financial Statements, or an agreement entered into with any Government Authority (including a “closing agreement” under Code Section 7121 or any “gain recognition agreements” entered into under Code Section 367) on or prior to the Closing Date. The Company has not made an election (including a protective election) pursuant to Code Section 108(i).

(g) The Company is not a party to or bound by any Tax indemnity agreement, Tax sharing agreement, Tax allocation agreement or similar Contract (excluding, for the avoidance of doubt, Contracts entered into in the ordinary course of business the primary purpose of which does not relate to Taxes). The Company is not liable for Taxes of any other Person as a result of successor liability or transferee liability under law.

(h) The Company has not been a party to a transaction that is or is substantially similar to a “reportable transaction,” as such term is defined in Treasury Regulations Section 1.6011-4(b)(1), or any other transaction requiring disclosure under analogous provisions of state, local or foreign Tax law.

(i) The Company has never been a member of an affiliated group filing a consolidated federal income Tax Return or a combined, consolidated, unitary or other affiliated group Tax Return for state, local or foreign Tax purposes (other than a group the common parent of which is the Company).

(j) The Company has timely withheld and paid all Taxes required to have been withheld and paid in connection with (i) amounts paid or owing to any employee, independent

contractor, creditor, equityholders of the Company or other Person, and (ii) all sales, use, ad valorem, and value added Taxes. The Company has not been a party to any distribution that the parties to which treated as satisfying the requirements of Section 355 of the Code.

(k) For the avoidance of doubt, the Company makes no representations or warranties in respect of the amount or availability after the Closing of any of the Company's net operating loss carryforwards, tax credit carryforwards and similar tax attributes arising prior to the Closing. Notwithstanding anything in this Section 3.18 to the contrary, the Company makes no representations or warranties with respect to the tax consequences of the Purchase Option Agreement or any payment received therefor.

Section 3.19 **Employees and Employee Benefit Plans**.

(a) Section 3.19(a)(i) of the Company Disclosure Schedule sets forth an accurate and complete list of the names, titles, hire dates, annual base salary or hourly wage rate, as applicable, accrued vacation and paid time off balance, bonus or other cash incentive opportunity, and status (exempt or non-exempt, full-time or part-time, and active or description of leave) for all employees of the Company as of the Merger Agreement Effective Date. Section 3.19(a)(ii) of the Company Disclosure Schedule sets forth an accurate and complete list of all independent contractors, consultants, and temporary employees of the Company as of the Merger Agreement Effective Date, including the fees paid to each independent contractor, consultant, and temporary employee in 2017 and to-date in 2018. All employees of the Company classified as exempt under the Fair Labor Standards Act and state and local wage and hour laws are properly classified.

(b) Section 3.19(b) of the Company Disclosure Schedule sets forth an accurate and complete list identifying each material "employee benefit plan," as defined in Section 3(3) of ERISA, each material employment, termination, severance, incentive compensation or similar Contract and each other plan, policy, agreement, program or arrangement (written or oral) providing for compensation, bonuses, commission, profit-sharing, stock option or other stock- or equity- related rights, incentive or deferred compensation, vacation or paid-time-off benefits, insurance (including any self-insured arrangements), death, life, dental, vision, health or medical benefits, employee assistance, disability or sick leave benefits, workers' compensation, supplemental unemployment benefits, retention, transaction, change in control payments, savings, pension, post-employment or retirement benefits and each other material employee compensation or benefit plan, program, policy, agreement, program, arrangement or commitment, in each case, which is maintained, administered or contributed to by the Company and covers any employee or former employee, independent contractor, consultant, or temporary employee of the Company, or with respect to which the Company has any material actual or contingent liability. Such plans are referred to collectively herein as the "Employee Plans."

(c) The Company has made available to Parent accurate and complete copies of (i) all documents constituting each Employee Plan (and written descriptions of all material terms of any Employee Plan that is not in writing), including all amendments thereto and all related trust documents and other funding arrangements, (ii) the three (3) most recent annual reports (Form 5500 and all schedules and financial statements attached thereto), if any, required under ERISA or the Code in connection with each Employee Plan, (iii) the most recent summary plan

description together with the summary(ies) of material modifications thereto, if any, required under ERISA with respect to each Employee Plan, (v) all material written Contracts relating to each Employee Plan to the extent currently effective, including administrative service agreements and group insurance contracts, (vi) the most recent determination or opinion letter from the Internal Revenue Service relating to each Employee Plan, if any, (vii) material correspondence within the past three (3) years to or from any Governmental Authority relating to any Employee Plan, and (viii) all trust documents, administrative service agreements, group annuity contracts, group insurance contracts, and policies pertaining to fiduciary liability insurance covering the fiduciaries for each Employee Plan.

(d) No Employee Plan is, and neither the Company nor any of its ERISA Affiliates (nor any predecessor thereof) sponsors, maintains or contributes to, or has in the past sponsored, maintained or contributed to, any pension plan that is an "employee pension benefit plan" (within the meaning of Section 3(2) of ERISA) that is subject to Title IV of ERISA or Section 412 or 430 of the Code.

(e) No Employee Plan is, and neither the Company nor any of its ERISA Affiliates (nor any predecessor thereof) contributes to, or has in the past contributed to, any multiemployer plan, as defined in Section 3(37) of ERISA, a plan maintained by more than one employer, as defined in Section 413(c) of the Code, or multiple employer welfare arrangement, within the meaning of Section 3(40) of ERISA.

(f) Each Employee Plan has been established and maintained in compliance in all material respects with its terms and Applicable Law, including ERISA and the Code. Each Employee Plan which is intended to be qualified under Section 401(a) of the Code has received a favorable determination letter (or opinion letter, if applicable), or has pending or has time remaining in which to file, an application for such determination from the IRS and, to the Knowledge of the Company, no fact or event has occurred that would reasonably be expected to cause the loss of such qualification or exemption. Each trust established in connection with any Employee Plan which is intended to be exempt from federal income taxation under Section 501(a) of the Code is so exempt, and no fact or event has occurred that would reasonably be expected to adversely affect the exempt status of any such trust.

(g) Except as contemplated by this Agreement or set forth in Section 3.20(g) of the Company Disclosure Schedule, the consummation of the Merger and the other transactions contemplated by this Agreement will not (either alone or together with any other event, including a subsequent termination of employment or service) entitle any current or former employee or independent contractor or director of the Company to (i) any acceleration of the time of payment or vesting of any compensation, severance, or benefit, (ii) any payment or funding (through a grantor trust or otherwise) of compensation, severance, or benefits, (iii) any increase of the amount payable under any Employee Plan, or (iv) result in any payment that could individually or in combination with any other payment, constitute an "excess parachute payment," as defined in Section 280G(b)(1) of the Code (determined without regard to the exceptions provided for in Section 280G(b)(5) of the Code).

(h) Neither the Company nor any of its ERISA Affiliates has any current or projected liability in respect of post-employment or post-retirement health, medical or life insurance

benefits for retired, former or current employees of the Company or any of their respective ERISA Affiliates, except as required to avoid excise tax under Section 4980B of the Code or except for the continuation of coverage through the end of the calendar month in which termination from employment occurs.

(i) All contributions and payments accrued under each Employee Plan, determined in accordance with prior funding and accrual practices, as adjusted to include proportional accruals for the period ending as of the Merger Agreement Effective Date, have been discharged and paid on or prior to the Merger Agreement Effective Date or are reflected as an accrued liability on the Current Financial Statements.

(j) There is no Proceeding pending against or involving or, to the Knowledge of the Company, threatened against or involving, any Employee Plan (other than routine claims for benefits). The Company (with respect to any Employee Plan), and no Employee Plan or any fiduciary thereof is not the subject of an audit or investigation by the IRS, the U.S. Department of Labor, the Pension Benefit Guaranty Corporation or any other Governmental Authority, nor is any such audit or investigation pending or, to the Knowledge of the Company, threatened.

(k) Each Employee Plan that constitutes a "nonqualified deferred compensation plan" (as defined in Section 409A(d)(1) of the Code) has been operated and maintained in compliance with Section 409A of the Code and its purpose, as determined under applicable guidance of the Department of Treasury and Internal Revenue Service, with respect to deferred amounts (within the meaning of Section 409A of the Code).

(l) The Company does not have any obligation or commitment to "gross up" any Person with respect to Taxes under Section 409A of the Code or Section 4999 of the Code.

(m) The Company is not a party to or subject to, or is currently negotiating in connection with entering into, any collective bargaining agreement or similar contract or understanding with a labor union, works council or similar organization. Neither the Company nor its Affiliates has experienced any strike, slowdown, work stoppage, picketing, lockouts, unfair labor practice charge, or other organized work interruption with respect to any employees during the past three (3) years. No union or labor representative organizing activities are taking place or have taken place in the past five (5) years at any of the locations operated by the Company.

(n) The Company is in compliance with all Applicable Laws regarding employment, including, but not limited to, employment practices, terms and conditions of employment, plant closings and layoffs under the Worker Adjustment and Retraining Notification Act of 1988, as amended and similar state and local Applicable Laws (collectively, the "WARN Act"), unemployment insurance, workers' compensation, discrimination, wrongful discharge, fair labor standards, affirmative action, civil rights, background checks, hiring practices, the collection and payment of social security and other Taxes, employee safety and health, immigration status and wages and hours. There is no Proceeding pending against, involving, or, to the Knowledge of the Company, threatened concerning or affecting any current or former employee, independent contractor, consultant, temporary employee, or applicant, or related to any labor or employment matter. The Company has properly classified all independent contractors, consultants, and temporary employees pursuant to Applicable Law.

(o) The Company has paid in full (i) to all employees and former employees, any wages, salaries, bonuses, commissions, overtime, cash-outs of accrued and unused vacation or paid time off, leave or severance amounts, or any other amounts that are due and payable; and (ii) to all independent contractors, consultants, and temporary employees, any fees for services that are due and payable.

(p) Section 3.19(p) of the Company Disclosure Schedule lists all employees, independent contractors, consultants and temporary employees covered by any written noncompetition or non-solicitation Contract with the Company, and the Company has provided or made available to Parent the current and complete copies of each such Contract. The Company has not sought to enforce any non-competition or non-solicitation Contract covering a former employee of the Company in the past three (3) years.

(q) During the three (3) years prior to the Merger Agreement Effective Date, (i) the Company has not effectuated a "plant closing" or employee "mass layoff" (as defined under the WARN Act) affecting any site of employment or one or more facilities or operating units within any site of employment or facility of its business, (ii) there has not occurred a "mass layoff (each, as defined in under the WARN Act) affecting any site of employment or one or more facilities or operating units within any site of employment or facility of its business.

Section 3.20 **Environmental Matters**.

(a) No notice, notification, demand, request for information, citation, summons or order has been received, no complaint has been filed, no penalty has been assessed, and no Proceeding (or any basis therefor) is pending or, to the Knowledge of the Company, is threatened by any Governmental Authority or other Person relating to the Company and relating to or arising out of any Environmental Law.

(b) The Company is, and has at all times been, in material compliance with all Environmental Laws and all Environmental Permits.

(c) There has been no environmental investigation, study, audit, test, review or other analysis conducted of which the Company has Knowledge in relation to the current or prior business of the Company or any property or facility now or previously owned or leased by the Company that has not been delivered to Parent.

(d) The Company has delivered or otherwise made available for inspection to Parent true, complete and correct copies and results of any environmental reports, studies, analyses in the possession of the Company, pertaining to Hazardous Substances in, on, beneath or adjacent to any property currently owned, operated or leased by the Company.

Section 3.21 **Affiliate Transactions**. No director, officer, employee, Affiliate (which for purposes of this Section 3.21 shall include any stockholder of the Company that owns more than 5% of the Company Capital Stock), "associate" or "immediate family" member (as such terms are respectively defined in Rule 12b-2 and Rule 16a-1 of the Exchange Act) of the

Company (each of the foregoing, a "Related Person"), other than in such Related Person's capacity as a director, officer or employee of the Company (a) has entered into any Contract involving the Company that remains in effect, (b) directly or indirectly owns, or otherwise has any right, title, interest in, to or under, any property or right, tangible or intangible, that is used by the Company or otherwise related to the business of the Company, (c) is engaged, directly or indirectly, in any business that competes with the business of the Company, (d) has any claim or right against the Company (other than rights to receive compensation for services performed as a director, officer or employee of the Company and other than rights to reimbursement for travel and other business expenses incurred in the ordinary course), (e) owes any money to the Company or is owed money from the Company (other than amounts owed for compensation or reimbursement pursuant to clause (d) above) or (f) provides services to the Company (other than services performed as a director, officer or employee of the Company) or is dependent on services or resources provided by the Company. In addition, to the Knowledge of the Company, no Related Person has an interest in any Person that competes with the business of the Company in any market presently served by the Company (except for ownership of less than one percent (1%) of the outstanding capital stock of any corporation that is publicly traded on any recognized stock exchange or over-the-counter market).

Section 3.22 **Books and Records**. The minute books and stock record books of the Company, all of which have been made available to Parent, are complete and correct and have been maintained in accordance with sound business practices. The minute books of the Company contain accurate and complete records of all meetings, and actions taken by written consent of, the Stockholders, the Company Board of Directors and any committees of the Company Board of Directors, and no meeting, or action taken by written consent, of any such Stockholders, Company Board of Directors or committee has been held for which minutes have not been prepared and are not contained in such minute books. At the Closing, all of those books and records will be in the possession of the Company.

Section 3.23 **Finders' Fees**. Except for the Company Financial Advisor (solely with respect to certain advisory fees earned in connection with this Agreement and the transactions contemplated by this Agreement), no investment banker, broker, finder or other intermediary that has been retained by or is authorized to act on behalf of the Company who may be entitled to any fee or commission from the Company or any of its Affiliates in connection with the transactions contemplated by this Agreement.

Section 3.24 **Exclusivity of Representations; Non-Reliance**. Except for the representations and warranties set forth in Article IV or in any certificate, instrument or other document, in each case delivered pursuant to this Agreement, the Company acknowledges and agrees that (a) none of Parent, Merger Sub or any Person acting on behalf of Parent or Merger Sub has made or is making any express or implied representation or warranty with respect to Parent or Merger Sub, including any Affiliate, business, operation, condition (financial or otherwise) or any other aspect thereof, or with respect to any other information provided to the Company, including the Affiliates or Representatives of the Company, (b) any other representations or warranties are expressly disclaimed by Parent and Merger Sub, (c) the Company, including any Person acting on behalf of the Company, is not entitled to rely on any such representation or warranty, if made, and (d) the Company, including any Person acting on behalf of the Company, has not, is not and will not rely on any such representation or warranty, if made.

ARTICLE IV
REPRESENTATIONS AND WARRANTIES OF PARENT

Parent represents and warrants to the Company that:

Section 4.01 **Corporate Existence and Power**. Each of Parent and Merger Sub is a corporation duly incorporated, validly existing and in good standing under the laws of its jurisdiction of incorporation. Since the date of its incorporation, Merger Sub has not engaged in any activities other than in connection with or as contemplated by this Agreement.

Section 4.02 **Corporate Authorization**. Each of Parent and Merger Sub has the absolute and unrestricted right, power and authority to enter into and to perform its obligations under this Agreement; and the execution, delivery and performance by each of Parent and Merger Sub of this Agreement have been duly authorized by all necessary action on the part of Parent and Merger Sub, as applicable. This Agreement constitutes the legal, valid and binding obligation of Parent and Merger Sub, enforceable against Parent and Merger Sub in accordance with its terms, subject to (a) laws of general application relating to bankruptcy, insolvency and the relief of debtors and (b) rules of law governing specific performance, injunctive relief and other equitable remedies.

Section 4.03 **Governmental Authorization**. The execution, delivery and performance by Parent and Merger Sub of this Agreement and the consummation by Parent and Merger Sub of the transactions contemplated hereby require no action by or in respect of, or filing with, any Governmental Authority, other than (a) the filing of the Certificate of Merger with the Secretary of State of the State of Delaware, (b) the filing of the notification form under the HSR Act and the expiration or termination of the waiting period thereunder, (c) compliance with any applicable requirements of the Securities Act, the Exchange Act and any other U.S. state or federal securities laws or the laws of any national securities exchange and (d) any actions or filings the absence of which would not be reasonably expected to materially impair the ability of Parent and Merger Sub to consummate the transactions contemplated by this Agreement.

Section 4.04 **Non-contravention**. The execution, delivery and performance by Parent and Merger Sub of this Agreement and the consummation by Parent and Merger Sub of the transactions contemplated hereby do not and will not (a) contravene, conflict with, or result in any violation or breach of any provision of the certificate of incorporation or bylaws of Parent or Merger Sub or (b) assuming compliance with the matters referred to in Section 4.03, contravene, conflict with or result in a violation or breach of any provision of any material Applicable Law.

Section 4.05 **Finders' Fees**. There is no investment banker, broker, finder or other intermediary that has been retained by or is authorized to act on behalf of Parent or Merger Sub who might be entitled to any fee or commission from Parent or the Company or any of their respective Affiliates in connection with the transactions contemplated by this Agreement.

Section 4.06 **Sufficiency of Funds**. Parent has, and in the future will continue to have, sufficient cash on hand or other sources of immediately available funds to enable it to make payment on a timely basis of the Closing Merger Consideration, the Milestone Payments, and all amounts required to be paid pursuant to the terms of this Agreement.

Section 4.07 **Exclusivity of Representations; Non-Reliance**. Except for the representations and warranties set forth in Article III or in any certificate, instrument or other document delivered pursuant to this Agreement, Parent and Merger Sub acknowledge and agree that (a) neither the Company nor any other Person acting on behalf of the Company has made or is making any express or implied representation or warranty with respect to the Company, including any Affiliate, business, operation, condition (financial or otherwise) or any other aspect thereof, or with respect to any other information provided to Parent or Merger Sub or any of their Affiliates or Representatives and (b) any other representations or warranties are expressly disclaimed by the Company, (c) Parent, Merger Sub, and any Person acting on behalf of Parent or Merger Sub, are not entitled to rely on any such representation or warranty, if made, and (d) Parent, Merger Sub, and any Person acting on behalf of Parent or Merger Sub, have not, are not and will not rely on any such representation or warranty, if made.

ARTICLE V
COVENANTS OF THE COMPANY

Section 5.01 **Conduct of the Company**.

(a) From the Merger Agreement Effective Date until the earlier of the Effective Time and the termination of this Agreement in accordance with its terms (such period, the "Interim Period"), the Company shall conduct its business in the ordinary course consistent with past practice and use reasonable best efforts to (i) preserve intact its present business organization, (ii) maintain in effect all of its Permits, (iii) keep available the services of officers and key employees of the Company and (iv) maintain satisfactory relationships with the regulators, customers, lenders and suppliers of the Company and others having material business relationships with the Company.

(b) Without limiting the generality of Section 5.01 and except as expressly contemplated by this Agreement or pursuant to the written consent of Parent, during the Interim Period, the Company shall not:

(i) amend its certificate of incorporation, bylaws or other equivalent constituent documents (whether by merger, consolidation or otherwise);

(ii) declare, set aside or pay any dividend or other distribution (whether in cash, stock, debt or property or any combination thereof) in respect of any Company Securities, or redeem, repurchase or otherwise acquire or offer to redeem, repurchase, or otherwise acquire any Company Securities;

(iii) (A) issue, transfer, deliver, sell, pledge or otherwise encumber any shares of any Company Capital Stock, Company Options, or other Company Securities, other than the issuance of any shares of Company Common Stock upon the exercise of Company Options that are outstanding on the Merger Agreement Effective Date in accordance with the terms of those Company Options as of the Merger Agreement Effective Date, or (B) amend any term of any Company Security (whether by merger, consolidation or otherwise);

(iv) make any capital expenditures or incur any obligations or liabilities in respect thereof, except for any budgeted capital expenditures and other unbudgeted capital expenditures not to exceed [***] individually or [***] in the aggregate;

(v) acquire (by merger, consolidation, acquisition of stock or assets or otherwise), directly or indirectly, any assets, securities, properties, interests or businesses;

(vi) sell, lease, license or otherwise transfer, or create, incur, assume or suffer to exist any Lien (other than Permitted Liens) on, any of the assets, securities, properties, interests or businesses of the Company, other than sales and licenses of Company Products in the ordinary course of business consistent with past practice;

(vii) make any loans, advances or capital contributions to, or investments in, any other Person, other than in the ordinary course of business consistent with past practice;

(viii) make any payments to any Related Person outside the ordinary course of business consistent with past practice;

(ix) create, incur, assume, suffer to exist or otherwise be liable with respect to any Indebtedness;

(x) modify, amend, cancel, terminate or waive any rights under any Material Contract, enter into any Contract that would have been a Material Contract had it been entered into prior to the Merger Agreement Effective Date, or otherwise waive, release or assign any material rights, claims or benefits of the Company;

(xi) other than as required by Applicable Law, any Contract, or the terms of any Employee Plan, (A) any entry into, termination, or amendment of any Employee Plan, employment agreement, independent contractor agreement, consulting agreement or collective bargaining agreement, (B) any grant or increase in the annual base salary, annual bonus opportunity, annual fees, severance, benefit, or other payment, as applicable, to any current or former employee, independent contractor, consultant, or temporary employee of the Company, (C) any acceleration of any compensation, fees, severance, or benefit payable, as applicable, to any current or former employee, independent contractor, consultant, or temporary employee, or (D) hiring or terminating any current or former employee, independent contractor, consultant, or temporary employee;

(xii) fail to maintain, or allow to lapse, or abandon, including by failure to pay the required fees in any jurisdiction, any Intellectual Property Rights used in or otherwise material to the business of the Company, other than in the ordinary course consistent with past practice regarding Intellectual Property Rights that are not material to the conduct of the business of the Company;

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(xiii) sell any Company Products outside the ordinary course of business consistent with past practice, including with respect to pricing, discounting practices, bundling, sales volume and services levels;

(xiv) change the Company's methods of accounting or accounting practices, except as required by concurrent changes in GAAP as agreed to by the Company's independent public accountants;

(xv) commence, settle, or offer or propose to settle, (A) any Proceeding involving or against the Company, (B) any stockholder litigation or dispute against the Company or any of its officers or directors or (C) any Proceeding that relates to the transactions contemplated hereby;

(xvi) (A) make or change any material Tax election inconsistent with past practices or change a method of accounting or accounting period for Tax purposes, (B) settle or compromise any claim, notice, audit report or assessment in respect of Taxes, (C) enter into any Tax allocation agreement, Tax sharing agreement, or any agreement with any Governmental Authority (including a closing agreement) relating to any Tax, (D) amend any material Tax Return, (E) surrender or forfeit any right to claim a Tax refund, (F) consent to any extension or waiver of the statute of limitations period applicable to any Tax claim or assessment, or (G) incur any material Taxes outside of the ordinary course of business;

(xvii) any agreement or negotiation with any vendor to delay the delivery of invoices; or

(xviii) authorize or agree, resolve or commit to do any of the foregoing.

Notwithstanding anything to the contrary in this Section 5.01, the Company shall be permitted to adopt a carveout bonus plan for the benefit of its employees prior to the Closing, provided that any payments under such plan shall be deducted from the Merger Consideration as Company Transaction Expenses.

Section 5.02 **Stockholder Approval**.

(a) Immediately following the Merger Agreement Effective Date, the Company shall duly take all lawful action to obtain the Requisite Stockholder Approval pursuant to an executed written consent (the "Written Consent"). Promptly following receipt of the Written Consent, the Company will deliver a copy of the Written Consent to Parent. The Company shall use best efforts to enforce each of the Support Agreements delivered by certain holders of Capital Stock, including through the exercise of the proxy to vote such holders' shares of Capital Stock. Parent shall vote its shares of Company Capital Stock in favor of this Agreement, the Merger and the other transactions contemplated hereby.

(b) No later than ten (10) days after receipt by the Company of the Requisite Stockholder Approval pursuant to the Written Consent, the Company shall deliver an information statement (the "Information Statement") in form and substance reasonably acceptable to Parent and its Representatives to the stockholders of the Company (a) in

compliance with Sections 228(e) and 262 of the DGCL and Chapter 13 of the CCC, to the extent applicable and (b) which shall also provide the requisite notice of appraisal and dissenters' rights under the DGCL and CCC, respectively. The Company will give Parent and its Representatives reasonable opportunity to review and comment on the Information Statement (in no event less than two (2) Business Days prior to its transmission to the stockholders of the Company) and the Company will incorporate any reasonable comments that Parent or its Representatives have made with respect to the Information Statement.

Section 5.03 **No Solicitation**. During the [***], the [***]

Section 5.04 **Access to Information**. During the Interim Period, the Company shall (a) give Parent and its Representatives reasonable access to the offices, properties, books and records of the Company, (b) furnish to Parent and its Representatives such financial and operating data and other information relating to the Company as such Persons may reasonably request and (c) instruct the employees, counsel and financial advisors of the Company to cooperate with Parent in its investigation of the Company. Any investigation pursuant to this Section 5.04 shall be conducted in such manner as not to interfere unreasonably with the conduct of the business of the Company; provided, however, that the Company may restrict or otherwise prohibit access to such documents or information to the extent that (i) any Applicable Law requires the Company to restrict or otherwise prohibit access to such documents or information, (ii) access to such documents or information would give rise to a material risk of waiving any attorney-client privilege, work product doctrine or other privilege applicable to such documents or information or (iii) access to a Contract to which the Company is a party or otherwise bound would give a third party the right to terminate or accelerate the rights under, such Contract; and provided further, however, that no information or knowledge obtained by Parent or its Representatives in any investigation conducted pursuant to the access contemplated by this Section 5.04 shall affect or be deemed to modify any representation or warranty of the Company set forth in this Agreement or otherwise impair the rights and remedies available to Parent and Merger Sub hereunder.

Section 5.05 **280G Matters**. Not less than three (3) Business Day prior to the Effective Time, the Company shall (a) use commercially reasonable efforts to obtain and deliver to Parent, prior to the initiation of the stockholder approval procedure under clause (b), a waiver, in a form reviewed and approved by Parent, from each Person who is, with respect to the Company, a "disqualified individual" (within the meaning of Section 280G of the Code) as of immediately prior to the initiation of such Requisite Stockholder Approval procedure (each, a "Disqualified Individual"), and who might otherwise have, receive or have the right or entitlement to receive a "parachute payment" (within the meaning of Section 280G of the Code), of such Disqualified Individual's rights to all such payments or benefits applicable to such Disqualified Individuals (the "Waived Parachute Payments") so that all remaining payments and/or benefits applicable to such Disqualified Individual shall not be deemed to be "excess parachute payments" (within the meaning of Section 280G of the Code) and (b) submit to the stockholders of the Company for approval (in a manner satisfactory to Parent) by such number of stockholders, in a manner that meets the requirements of Section 280G(b)(5)(B) of the Code, any payments and/or benefits that Parent and the Company reasonably determine may separately or in the aggregate, constitute "parachute payments," such that such payments and benefits shall not be deemed to be "parachute payments" under Section 280G of the Code.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Section 5.06 **Consideration Spreadsheet; Payoff Letters and Invoices**.

(a) At least five (5) Business Days prior to the Closing, the Company shall deliver to Parent a draft spreadsheet calculating the Closing Merger Consideration (including the Company Transaction Expenses, Closing Indebtedness and any payments due to [***]), the Aggregate Closing Merger Consideration, the Indemnity Escrow Fund, the Equityholder Expense Fund, and the amounts to be paid to each Company Stockholder and Company Warrantholder (the "Consideration Spreadsheet"), setting forth in reasonable detail the Company's good-faith estimates of the information therein requested as of the Effective Time. At least two (2) Business Days prior to Closing the Company shall deliver to Parent the final form of the Consideration Spreadsheet, certified by the Chief Executive Officer and Chief Financial Officer of the Company, accurately and completely setting forth the information requested as of the Effective Time.

(b) The Company shall exercise commercially reasonable efforts to obtain and deliver to Parent no later than two (2) Business Days prior to the Closing Date, accurate and complete copies of: (i) with respect to any item of Indebtedness the Company, if any, a payoff letter, dated no more than three (3) Business Days prior to the Closing Date, from the lender of such item of Indebtedness and setting forth the amounts payable to such lender to (A) satisfy such Indebtedness as of the Closing and (B) terminate and release any Liens related thereto effective as of the Closing (each, a "Payoff Letter"); and (ii) an invoice from each advisor or other service provider to the Company, dated no more than three (3) Business Days prior to the Closing Date, with respect to all Company Transaction Expenses estimated to be due and payable to such advisor or other service provider, as the case may be, as of the Closing Date (each, an "Invoice").

ARTICLE VI
ADDITIONAL COVENANTS OF THE PARTIES

Section 6.01 **Efforts**.

(a) The Company shall use reasonable best efforts to cause the conditions set forth in Section 8.01 and Section 8.02 to be satisfied on a timely basis, and Parent and Merger Sub shall use their respective reasonable best efforts to cause the conditions set forth in Section 8.01 and Section 8.03 to be satisfied on a timely basis.

(b) In furtherance of, and not in limitation of Section 6.01(a), as promptly as practicable after the Merger Agreement Effective Date, each party to this Agreement (i) shall make all filings and give all notices that are or may be required to be made and given by such party in connection with the Merger and the other transactions contemplated by this Agreement and (ii) shall use reasonable best efforts to obtain all Consents which are or may be required to be obtained (pursuant to any Applicable Law, Contract, or otherwise) by such party in connection with the Merger and the other transactions contemplated by this Agreement. Each party shall, upon request of another party and to the extent permitted by Applicable Law or applicable Contract, promptly deliver to such other party a copy of each such filing made, each such notice given and each such Consent obtained by it.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(c) In furtherance and not in limitation of the terms of Section 6.01(a) and Section 6.01(b), (i) to the extent required by Applicable Law, each of Parent and the Company shall file, or cause to be filed, a Notification and Report Form pursuant to the HSR Act, with respect to the transactions contemplated by this Agreement within three (3) Business Days after the Merger Agreement Effective Date (which shall include in the case of Parent a request for early termination of the applicable waiting period under the HSR Act) and (ii) each of Parent and the Company will furnish to each other's counsel such necessary information and reasonable assistance as the other may request in connection with its preparation of any filing or submission that is necessary under the HSR Act and will provide any supplemental information requested by the United States Federal Trade Commission ("FTC"), the United States Department of Justice ("DOJ") and any other applicable Governmental Authority as promptly as reasonably practicable.

(d) Parent and the Company will use their respective reasonable best efforts to cause the expiration or termination of the applicable waiting periods under the HSR Act as soon as reasonably practicable and to instruct their respective counsel to cooperate with each other and use reasonable best efforts to facilitate and expedite the identification and resolution of any issues arising under the HSR Act at the earliest practicable dates. Such reasonable best efforts and cooperation include counsel's undertaking to (i) permit the other to review, and consider in good faith the other's comments on, any material communication or submission to be given to any Governmental Authority with respect to any filings or required to be made with, or action or nonactions, waivers, expirations or terminations of waiting periods, clearances, consents or orders required to be obtained from, such Governmental Authority in connection with execution and delivery of this Agreement and the consummation of the transactions contemplated by this Agreement, (ii) promptly notify each other of any material communications with any Governmental Authority with respect to the transactions contemplated by this Agreement and (iii) ensure, to the extent permitted by Applicable Law or Governmental Authority, that each of the Parties is given the opportunity to attend and participate in any meetings or substantive discussions with or appearances before any Governmental Authority with respect to the transactions contemplated by this Agreement. In furtherance of the foregoing and subject to the terms and conditions of this Agreement, the Parties shall not take any action that is reasonably likely to have the effect of unreasonably delaying, impairing or impeding the receipt of any required authorizations, consents, orders or approvals.

(e) Notwithstanding anything to the contrary contained in this Agreement, in no event shall Parent (or any of its Affiliates) have any obligation to, for the purpose of obtaining any consent or approval under any Antitrust Law: (i) propose, negotiate, offer to commit or effect, by consent decree, hold separate order or otherwise, the sale, divestiture, licensing or other disposition of, or restriction on, any assets, businesses, services or products of Parent (or any of its Affiliates) or the Company or any aspect of its business; (ii) terminate any existing relationships or contractual rights of Parent or any of its Affiliates or of the Company or amend or terminate any licenses or other intellectual property agreements of Parent or any of its Affiliates or of the Company or any aspect of its business; (iii) accept any operational restrictions or limitations on the business of Parent or any of its Affiliates or on the Company or any of its assets or any aspect of its business or undertake any other form of behavioral remedy; or (iv) contest and resist any action relating to any Antitrust Law, including any legislative, administrative or judicial action, or to have vacated, lifted, reversed or overturned any Governmental Order that restricts, prevents or prohibits (or seeks to restrict, prevent or prohibit) the consummation of the transactions contemplated by this Agreement under any Antitrust Law.

Section 6.02 **Confidentiality; Public Announcements**.

(a) Parent and the Company hereby acknowledge and agree to continue to be bound by the Confidentiality Agreement dated as of February 23, 2015, by and between Parent and the Company (the "Confidentiality Agreement").

(b) Neither Party shall, and each Party shall cause each of its respective Representatives not to, directly or indirectly, issue any press release or other public statement relating to the terms of this Agreement or the transactions contemplated hereby, unless required by Applicable Law. Notwithstanding anything herein or in the Confidentiality Agreement, (i) subject to Parent's prior written consent (which shall not be unreasonably withheld or delayed), venture capital funds that have invested in the capital stock of the Company may make contractually-required communications to their investors (which shall contain no more information regarding the subject matter of this Agreement or the transactions contemplated hereby than is so contractually required to be disclosed and shall, in any event, not be inconsistent with any public statements made by Parent regarding the subject matter of this Agreement or the transactions contemplated hereby), (ii) the Parties agree that a press release will be issued on the Merger Agreement Effective Date in a form mutually agreed upon by Parent and the Company and (iii) BridgeBio Pharma LLC will be allowed to issue a press release on the Merger Agreement Effective Date in a form consented to by the Parties (which consent shall not be unreasonably withheld or delayed).

Section 6.03 **Indemnification of Officers and Directors**.

(a) From and after the Effective Time, Parent shall cause the Surviving Corporation to maintain all rights to indemnification, advancement of expenses and exculpation by the Company now existing in favor of each person who is now, or has been at any time prior to the Merger Agreement Effective Date or who becomes prior to the Effective Time an officer or director of the Company (collectively, the "Company Indemnified Parties") as provided in the Company's Certificate of Incorporation or bylaws or indemnification agreements as in effect on the Merger Agreement Effective Date. Parent and Merger Sub further agree that all such rights to indemnification, advancement of expenses and exculpation shall be assumed by the Surviving Corporation in the Merger, without further action, at the Effective Time and shall survive the Merger and shall remain in full force and effect in accordance with their terms, and, in the event that any proceeding is pending or asserted or any claim made during such period, until the final disposition of such proceeding or claim.

(b) Prior to the Closing, the Company shall obtain and fully pay for a six-year "tail" insurance policy with respect to directors' and officers' liability insurance (the "D&O Tail Policy"). The D&O Tail Policy will be obtained from an insurance carrier with the same or better credit rating as the Company's current insurance carrier with respect to directors' and officers' liability insurance and the amount and scope of coverage under the D&O Tail Policy will be at least as favorable as the Company's existing directors' and officers' liability policies with respect to matters existing or occurring at or prior to the Closing Date. The Company shall bear the cost of the D&O Tail Policy, and such costs, to the extent not paid prior to the Closing, shall be included in the determination of Transaction Expenses.

(c) The provisions of this Section 6.03 shall survive the Closing and are intended to be for the benefit of, and enforceable by, each current director and officer of the Company and his or her heirs and personal representatives, and nothing in this Agreement shall affect any indemnification rights that any such current director or officer and his or her heirs and personal representatives may have under the certificate of incorporation or bylaws of the Company or any contract or Applicable Law.

Section 6.04 **Employee Matters**.

(a) For a period from the Closing Date through the date that is six (6) months following the Closing Date, Parent will provide (or cause an Affiliate of Parent to provide) to each employee who continues in employment with the Surviving Corporation or another Affiliate of Parent following the Effective Time (each, a "Continuing Employee") with: (i) a base salary or an hourly wage rate, as applicable, and bonus opportunity that is no lower than the base salary or hourly wage rate, as applicable, and any annual cash bonus opportunity provided to such Continuing Employee immediately prior to the Effective Time, and (ii) at Parent's election (a) employee benefits (excluding equity, phantom equity, or other equity-like compensation and retention or change in control bonuses), including, without limitation, health, welfare, retirement and severance benefits, that are no less favorable, in the aggregate, than those provided to such Continuing Employees immediately prior to the Effective Time or (b) those employee benefits that Parent or an Affiliate of Parent provides to similarly situated employees of Parent or an Affiliate of Parent.

(b) For purposes of determining eligibility to participate, vesting and benefit accrual (for vacation and severance only) under any benefit plan or arrangement of Parent, the Surviving Corporation or any of their respective Subsidiaries providing employee benefits to Continuing Employees after the Closing (the "Parent Benefit Plans"), Parent shall use commercially reasonable efforts so that each Continuing Employee will receive service credit for service with the Company (and its predecessors) prior to the Closing Date to the same extent such service credit was granted to such Continuing Employee under the Employee Plans, except to the extent that providing such credit would result in a duplication of benefits. In addition, Parent and the Surviving Corporation shall use commercially reasonable efforts to (i) waive all limitations as to preexisting conditions exclusions, actively at work requirements and waiting periods with respect to participation and coverage requirements applicable to Continuing Employees under any welfare benefit plans that such employees may be eligible to participate in after the Effective Time, other than limitations or waiting periods that are already in effect with respect to such employees and that have not been satisfied as of the Effective Time under any welfare benefit plan maintained for the Continuing Employees immediately prior to the Effective Time and (ii) cause any co-payments, deductibles and other eligible expenses incurred by an Continuing Employees during the plan year that includes the Closing Date to be credited for purposes of satisfying all deductible, coinsurance and maximum out-of-pocket requirements applicable to such Continuing Employee and his or her covered dependents for the applicable plan year of each comparable Parent Benefit Plan (to the extent such credit would have been given under comparable Employee Plans prior to the Closing.

(c) The Company and Parent acknowledge and agree that all provisions contained in this Section 6.04 with respect to employees are included for the sole benefit of the respective Parties and shall not create any right in any other Person, including any employees, former employees, any participant in any Employee Plan or any beneficiary thereof or any right to continued employment with the Company, Parent or any Subsidiary of Parent, nor shall require the Company to continue or amend any particular benefit plan after the consummation of the transactions contemplated by this Agreement for any employee or former employee of such the Company, and any such plan may be amended or terminated in accordance with its terms and Applicable Law.

(d) At Parent's direction, the Company shall terminate the Employee Plans set forth in Section 6.04(d) of the Company Disclosure Schedules immediately prior to the Closing.

Section 6.05 **Notices of Certain Events**. During the Interim Period, the Company shall promptly notify Parent, and Parent shall promptly notify the Company of:

(a) any notice or other communication from any Person received after the Merger Agreement Effective Date alleging that the consent of such Person is or may be required in connection with the transactions contemplated by this Agreement;

(b) any Proceeding commenced or, to such Party's Knowledge, threatened against, relating to or involving or otherwise affecting the Company or Parent, as the case may be, that, if pending on the Merger Agreement Effective Date, would have been required to have been disclosed pursuant to Article II, Article III or Article IV, as the case may be, or that relates to the consummation of the transactions contemplated by this Agreement;

(c) any inaccuracy in or breach of any representation, warranty or covenant of such Party contained in this Agreement (i) occurring after the Merger Agreement Effective Date, or (ii) which such Party becomes aware of after the Merger Agreement Effective Date, which would render inaccurate any of the representations and warranties made by such Party herein or, in the case of the Company, if existing and known on the Merger Agreement Effective Date, would have been required to be disclosed on the Company Disclosure Schedule; and

(d) any event, condition, fact or circumstance of Parent or Company, as the case may be, that would make the timely satisfaction of any of the conditions set forth in Article VIII impossible or unlikely by such party.

No such notice or supplement provided pursuant to Section 6.05(c)(ii) shall be deemed to cure any prior existing breach of any representation, warranty or covenant in this Agreement nor shall such supplement be deemed to amend the Company Disclosure Schedule with respect to any prior breach without the written consent of Parent. A notice or supplement provided pursuant to Section 6.05(c)(i) shall be deemed to amend the Company Disclosure Schedule as long as such notice or supplement relates to matters arising in the ordinary course of business and which would not constitute a Material Adverse Effect.

Section 6.06 **Provision Respecting Legal Representation; Attorney-Client Privilege**. Each of the parties to this Agreement hereby agrees, on its own behalf and on behalf of its directors, members, partners, officers, employees and Affiliates, that Latham & Watkins LLP

may serve as counsel to each and any Equityholder and such Equityholder's respective Affiliates (individually and collectively, the "Holder Group"), on the one hand, and the Company, on the other hand, in connection with the negotiation, preparation, execution and delivery of this Agreement and the consummation of the transactions contemplated hereby (the "Existing Representation"), and that, following consummation of the transactions contemplated hereby, Latham & Watkins LLP (or any successor) may serve as counsel to the Holder Group or any director, member, partner, officer, employee or Affiliate of the Holder Group, in connection with any litigation, claim or obligation arising out of or relating to this Agreement or the transactions contemplated by this Agreement notwithstanding the Existing Representation and each of the parties hereto hereby consents thereto and waives any conflict of interest arising therefrom, and each of such parties shall cause any Affiliate thereof to consent to waive any conflict of interest arising from the Existing Representation.

(a) From and after the Closing, Parent on behalf of itself and its Affiliates) agrees that if, absent this sentence, any attorney-client privilege, attorney work-product protection or other similar privilege or protection would have applied to, or if there was any expectation of client confidence with respect to: (i) any communication between Latham & Watkins LLP, on the one hand, and the Holder Group, on the other hand, regarding the negotiation, execution, and delivery of this Agreement or the transactions contemplated hereby; or (ii) any advice given to the Holder Group by Latham & Watkins LLP during and with respect to the Existing Representation, neither Parent nor any of its Affiliates shall use any such communication or advice against the Holder Group in connection with any dispute between the Holder Group and one or more of Parent and its Affiliates with respect to this Agreement or any of the transactions contemplated hereby. Notwithstanding the foregoing, in the event that a dispute arises between Parent, the Company, its Subsidiaries or any Affiliates, on the one hand, and a third party other than the Holder Group, on the other hand, the attorney-client privilege, attorney work-product protection or other similar privilege or protection shall be asserted by the Surviving Corporation and its Affiliates on behalf of the Holder Group to prevent the disclosure of any such communications or advice to such third party; provided, however, that such privilege may be waived only with the prior written consent of the Equityholder Representative.

(b) Parent hereby acknowledges that it has had the opportunity (including on behalf of its Affiliates) to discuss and obtain adequate information concerning the significance and material risks of, and reasonable available alternatives to, the waivers, permissions and other provisions of this Section 6.06, including the opportunity to consult with counsel other than Latham & Watkins LLP. This Section 6.06 shall be irrevocable, and no term of this Section 6.06 may be amended, waived or modified, without the prior written consent of the Equityholder Representative and Latham & Watkins LLP.

ARTICLE VII
TAX MATTERS

Section 7.01 **FIRPTA**. Prior to the Closing, the Company shall have delivered to Parent the FIRPTA Certificate. The Parties intend that the FIRPTA Certificate be considered to be voluntarily provided by the Company in response to a request from Parent pursuant to Treasury Regulation Section 1.1445-2(c)(3)(i). Parent shall mail the FIRPTA Certificate to the IRS within 30 days after the Closing.

Section 7.02 **Characterization of Payments**. Any indemnity payments made pursuant to Article X shall constitute an adjustment of the Merger Consideration paid by Parent pursuant to Article II for Tax purposes and shall be treated as such by all Parties on their Tax Returns to the extent permitted by law.

Section 7.03 **Transfer Taxes**. Any federal, state, local, non-U.S. transfer, excise, sales, use, ad valorem value added, registration, stamp, recording, property and similar Taxes or fees applicable to, imposed upon, and resulting from the Merger or any other transaction contemplated by this Agreement and all related interest and penalties (collectively, "Transfer Taxes") shall be borne [***] by Parent and [***] by the Equityholders.

Section 7.04 **Tax Returns**.

(a) The Company shall (i) prepare and timely file all Tax Returns of the Company due (after taking into account all appropriate extensions) prior to the Closing Date ("Seller Prepared Returns") and (ii) timely pay all Taxes that are shown as payable with respect to Seller Prepared Returns. All Seller Prepared Returns shall be prepared in accordance with the past practice of the Company, unless required otherwise by Law.

(b) Parent shall cause the Company to prepare and timely file all Tax Returns of the Company due after the Closing Date (the "Parent Prepared Returns"). To the extent that a Parent Prepared Return relates to a Pre-Closing Tax Period or the pre-Closing portion of a Straddle Period, such Tax Return shall be prepared on a basis consistent with the past practice of the Company, unless required otherwise by Law. Each such Parent Prepared Return that shows an Indemnified Tax shall be submitted to the Equityholder Representative at least ten (10) days prior to the due date (taking into account any extension) of such Tax Return for Equityholder Representative's review. Parent shall incorporate any reasonable comments submitted by the Equityholder Representative at least three (3) days prior to the due date of such Tax Return. No failure or delay of Parent in providing Parent Prepared Returns for the Equityholder Representative to review shall reduce or otherwise affect the obligations or liabilities of Equityholders pursuant to this Agreement, unless the Equityholders are prejudiced thereby.

Section 7.05 **Apportionment of Taxes**. For purposes of determining the amount of Taxes that are attributable to a Pre-Closing Tax Period (or portion of any Straddle Period ending on or prior to the Closing Date) the Parties agree as follows:

(a) In the case of property Taxes and other similar ad valorem Taxes imposed on a periodic basis for a Straddle Period, the amounts that are attributable to the portion of the Straddle Period ending on the Closing Date shall be determined by multiplying the Taxes for the entire Straddle Period by a fraction, the numerator of which is the number of calendar days in the portion of the period ending on the Closing Date and the denominator of which is the number of calendar days in the entire Straddle Period.

(b) In the case of all other Taxes for a Straddle Period (including income Taxes, employment Taxes, and sales and use Taxes) the amount attributable to the portion of the Straddle Period ending on the Closing Date shall be determined as if the Company filed a separate Tax Return with respect to such Taxes for the portion of the Straddle Period ending on as of the end of the day on the Closing Date using a "closing of the books methodology."

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Section 7.06 **Tax Contests**. Parent and the Company shall notify the Equityholder Representative within five (5) days after receipt of notice of any inquiries, claims, assessments, audits or redetermination relating to Taxes for which the Equityholders may be responsible under this Agreement (any such inquiry, claim, assessment, audit or similar event, a "Tax Contest"). No failure or delay of the Parent or the Company in providing notice of a Tax Contest to the Equityholder Representative shall reduce or otherwise affect the obligations or liabilities of Equityholders pursuant to this Agreement unless the Equityholders are prejudiced thereby. Parent shall control, or cause the Company to control, the conduct of any Tax Contest; provided, however, that the Equityholder Representative, at the sole cost and expense of the Equityholders, shall have the right to control any such Tax Contest relating solely to Taxes of the Company for which Equityholders are obligated to indemnify under Section 10.02_and Parent shall not settle any such Tax Contest it controls without the prior written consent of the Equityholder Representative (not to be unreasonably withheld). If there is any conflict between this Section 7.06 and Section 10.05, this Section 7.06 shall control.

Section 7.07 **Cooperation**. The Parent, the Company, and each Equityholder shall provide any information, records, other documents or assistance as may reasonably be requested in connection with the preparation, signing and filing of any Tax Returns of the Company or any audit or other examination by any Tax authority relating to Taxes, provide any information necessary or reasonably requested to allow the Parent or the Company to comply with any information reporting or withholding requirements contained in the Code or other applicable Laws or to compute the amount of payroll or other employment Taxes due with respect to any payment made in connection with this Agreement, and provide certificates or forms, and timely execute any Tax Return, that are necessary or appropriate to establish an exemption for (or reduction in) any Transfer Tax.

Section 7.08 **Tax Refunds**. Any Tax refunds or credits that are received by Parent and its Affiliates (including the Company after the Closing) that relate to Indemnified Taxes shall be for the account of the Equityholders, and Parent shall pay over the amount of any such refund or credit, net of any unreimbursed Taxes incurred by Parent in respect of the receipt or recognition of such refund or credit, to the Payment Agent (for further distribution to the Equityholders) within five (5) days after Parent's receipt thereof.

Section 7.09 **Certain Conduct**. Without the prior written consent of the Equityholder Representative, not to be unreasonably withheld, Parent shall not (and shall not cause or permit any of its Affiliates or the Company to) (a) amend, refile or otherwise modify any Tax Return of or relating (in whole or in part) to the Company with respect to any Pre-Closing Tax Period or the pre-Closing portion of any Straddle Period, unless otherwise required by law, or (b) make any Tax election that (i) relates to the Company with respect to any Pre-Closing Tax Period or pre-Closing portion of any Straddle Period or (ii) would result in any increase in the liability of Equityholders under this Agreement.

ARTICLE VIII
CONDITIONS TO THE MERGER

Section 8.01 **Conditions to the Obligations of Each Party**. The obligations of the Company, Parent and Merger Sub to consummate the Merger are subject to the satisfaction of the following conditions:

(a) **Requisite Stockholder Approval**. The Requisite Stockholder Approval shall be in full force and effect and the Written Consent shall have been delivered to Parent.

(b) **HSR Clearance**. The applicable waiting period under the HSR Act shall have expired or been terminated.

(c) **No Injunction; No Legal Impediment**. No temporary restraining order, preliminary or permanent injunction or other order or decree issued by any Governmental Authority of competent jurisdiction shall be in effect which prevents the consummation of the Merger on the terms contemplated herein, and no Applicable Law shall have been enacted or be deemed applicable to the Merger or any of the other transactions contemplated hereby that makes illegal consummation of the Merger or any of the other transactions contemplated hereby.

Section 8.02 **Conditions to the Obligations of Parent and Merger Sub**. The obligations of Parent and Merger Sub to consummate the Merger are subject to the satisfaction, at or prior to the Closing, of the following further conditions:

(a) **Representations and Warranties**. Other than the Fundamental Representations, the representations and warranties of the Company contained in this Agreement, and any agreement, certificate or other writing delivered pursuant hereto shall be true and correct in all respects (in the case of any representation or warranty qualified by materiality or Material Adverse Effect) or in all material respects (in the case of any representation or warranty not qualified by materiality or Material Adverse Effect) on and as of the Merger Agreement Effective Date and on and as of the Closing Date with the same effect as though made at and as of such date (except those representations and warranties that address matters only as of a specified date, the accuracy of which shall be determined as of that specified date in all respects). The Fundamental Representations shall be true and correct in all respects on and as of the Merger Agreement Effective Date and on and as of the Closing Date with the same effect as though made at and as of such date (except (i) the representations and warranties contained in Section 3.05, which shall be true and correct in all but de minimis respects as of the Merger Agreement Effective Date and as of the Closing Date with similar effect and (ii) those representations and warranties that address matters only as of a specified date, the accuracy of which shall be determined as of that specified date in all respects).

(b) **Covenants**. Each of the covenants and obligations that the Company is required to comply with or to perform at or prior to the Closing shall have been complied with and performed in all material respects.

(c) **No Material Adverse Effect**. Since the Merger Agreement Effective Date, there shall not have occurred any Material Adverse Effect, nor shall any event or events have occurred that, individually or in the aggregate, with or without the lapse of time, could reasonably be expected to result in a Material Adverse Effect.

(d) **Executed Agreements and Certificates**. Parent shall have received the following agreements and documents, each of which shall be in full force and effect:

(i) the Escrow Agreement, executed by the Equityholder Representative and the Escrow Agent;

(ii) the Non-Competition Agreements, executed by each of the Persons listed on Exhibit A; provided, however, that if any individual listed on Exhibit A is no longer an officer, director or employee of the Company on the Merger Agreement Effective Date, such individual shall be deemed to be removed from Exhibit A and will not be required to execute a Non-Competition Agreement;

(iii) releases in form reasonably acceptable to Parent, executed by each director, officer and holder of more than [***] of the Company Capital Stock on a fully diluted basis on the Merger Agreement Effective Date;

(iv) a certificate executed on behalf of the Company by its Chief Executive Officer and its Chief Financial Officer (the "Company Closing Certificate") and containing representations and warranties of the Company (A) to the effect that the conditions set forth in Sections 8.02(a), 8.02(b) and 8.02(c) have been duly satisfied, (B) specifying the total amount of the Closing Indebtedness (and attaching thereto an accurate and complete copy of each executed Payoff Letter not previously delivered to Parent) and (C) specifying the total amount of the Company Transaction Expenses (and attaching thereto an accurate and complete copy of each Invoice not previously delivered to Parent);

(v) duly executed and delivered payoff letters with respect to any debt for borrowed money;

(vi) evidence of termination of the Company's various shareholders agreements, including the then current Amended and Restated Investors' Rights Agreement, the Company's Amended and Restated Voting Agreement and the Company's Amended and Restated Right of First Refusal and Co-Sale Agreement, in each case as amended from time to time; and

(vii) written resignations of the directors and officers of the Company, effective as of the Effective Time, as directed by Parent no later than five (5) Business Days prior to the Closing Date.

(e) **Related Party Transactions**. All Contracts between the Company, on the one hand, and any Related Person, on the other hand, (other than ordinary course agreements relating to employee compensation and benefits that have been made available to Parent) shall have been terminated.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(f) **280G Approval**. Prior to the Closing, the Company shall have delivered to Parent evidence reasonably satisfactory to Parent that either (i) the 280G Approval was obtained or (ii) the 280G Approval was not obtained but commercially reasonable efforts were used to provide that the Waived Parachute Payments shall not be made or provided, pursuant to the waivers of those payments and/or benefits which were executed by the Disqualified Individuals in accordance with Section 5.05.

(g) **Litigation**. There shall not be pending by any Governmental Authority any Proceeding that seeks to prevent the consummation of the Merger or any of the other transactions contemplated hereby on the terms, and conferring upon Parent and the Surviving Corporation all of their respective rights and benefits, contemplated herein.

(h) **Dissenters' Rights**. Holders of equity securities representing no more than 5% of the Fully Diluted Common Number, in the aggregate, are Dissenting Stockholders as of the Closing Date.

Section 8.03 **Conditions to the Obligations of the Company**. The obligations of the Company to consummate the Merger are subject to the satisfaction of the following further conditions:

(a) **Representations and Warranties**. The representations and warranties made by Parent and Merger Sub in this Agreement (i) shall have been accurate in all material respects as of the Merger Agreement Effective Date, without giving effect to any materiality qualifications contained or incorporated directly or indirectly in such representations and warranties and (ii) shall be accurate in all material respects as of the Closing Date as if made as of the Closing Date (except for representations and warranties that speak as of a particular date, which shall be accurate in all material respects as of such date), without giving effect to any materiality qualifications contained or incorporated directly or indirectly in such representations and warranties.

(b) **Covenants**. The covenants and obligations that Parent and Merger Sub are required to comply with or to perform at or prior to the Closing shall have been complied with and performed in all material respects.

(c) **Executed Agreements and Certificates**. The Company shall have received the following agreements and documents, each of which shall be in full force and effect:

(i) the Escrow Agreement, executed by Parent and the Escrow Agent; and

(ii) a certificate executed on behalf of Parent by its authorized representative and containing the representation and warranty of Parent that the conditions set forth in Sections 8.03(a) and 8.03(b) have been duly satisfied (the "Parent Closing Certificate").

ARTICLE IX
TERMINATION

Section 9.01 **Termination**. This Agreement may be terminated and the Merger may be abandoned at any time prior to the Effective Time (notwithstanding the Requisite Stockholder Approval):

(a) by mutual written agreement of the Company and Parent;

(b) by either the Company or Parent, if the Merger has not been consummated on or before the three (3) month anniversary of the Merger Agreement Effective Date (the "End Date"); provided, however, that such date shall be automatically extended for an additional three (3) months if the applicable waiting period under the HSR Act shall not have expired or been terminated as of the then-scheduled termination date; provided further, that the right to terminate this Agreement pursuant to this Section 9.01(b) shall not be available to any party whose breach of any provision of this Agreement results in the failure of the Merger to be consummated by such time;

(c) by either Parent or the Company, if a Governmental Authority shall have issued any order, injunction or other decree or taken any other action, in each case, which has become final and non-appealable and which restrains, enjoins or otherwise prohibits the Merger;

(d) by Parent, if (i) any representation or warranty of the Company contained in this Agreement shall be inaccurate such that the condition set forth in Section 8.02(a) would not be satisfied, or (ii) any of the covenants or obligations of the Company contained in this Agreement shall have been breached in any material respect such that the condition set forth in Section 8.02(b) would not be satisfied; provided, however, that if an inaccuracy or breach is curable by the Company during the [***] after Parent notifies the Company in writing of the existence of such inaccuracy or breach (the "Company Cure Period"), then Parent may not terminate this Agreement under this Section 9.01(d) as a result of such inaccuracy or breach prior to the expiration of the Company Cure Period unless the Company is no longer continuing to exercise commercially reasonable efforts to cure such inaccuracy or breach;

(e) by the Company, if (i) any representation or warranty of Parent contained in this Agreement shall be inaccurate such that the condition set forth in Section 8.03(a) would not be satisfied, or (ii) any of the covenants or obligations of Parent contained in this Agreement shall have been breached in any material respect such that the condition set forth in Section 8.03(b) would not be satisfied; provided, however, that if an inaccuracy or breach is curable by Parent during the [***] after the Company notifies Parent in writing of the existence of such inaccuracy or breach (the "Parent Cure Period"), then the Company may not terminate this Agreement under this Section 9.01(e) as a result of such inaccuracy or breach prior to the expiration of the Parent Cure Period unless Parent is no longer continuing to exercise commercially reasonable efforts to cure such inaccuracy or breach;

(f) by Parent at any time after the Merger Agreement Effective Date and before the Requisite Stockholder Approval has been obtained; provided, that Parent shall not be permitted to terminate pursuant to this clause (f) within the first 48 hours after the Merger Agreement Effective Date; or

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(g) by either the Company or Parent, if the Company fails to obtain, and deliver to Parent Support Agreements (including irrevocable proxies) duly executed by the Company and the Stockholders of the Company representing at least the Required Stockholder Approval, by 23:59 PT on the day following the date hereof.

The party desiring to terminate this Agreement pursuant to this Section 9.01 (other than pursuant to Section 9.01(a)) shall give a notice of such termination to the other party setting forth a brief description of the basis on which such party is terminating this Agreement.

Section 9.02 **Effect of Termination**. If this Agreement is terminated pursuant to Section 9.01, this Agreement shall become void and of no effect without liability of any Party (or any Representative of such Party) to any other Party; provided, that: (a) nothing contained in this Agreement shall relieve any Party from any liability resulting from a willful and intentional breach of any agreement or covenant in this Agreement; and (b) the Parties shall, in all events, remain bound by and continue to be subject to the provisions set forth in Section 6.02 and Article XI, which shall survive any termination of this Agreement.

ARTICLE X
INDEMNIFICATION

Section 10.01 **Survival of Representations, Etc.**

(a) Except as otherwise provided herein, (i) the Fundamental Representations shall survive the Closing and expire on the [***] (the "FR Expiration Date") and (ii) the representations and warranties made by the Company in all other sections of Article III and in the Company Closing Certificate shall survive the Closing and expire [***] (the "General Expiration Date"). Notwithstanding the foregoing, if at any time prior to the FR Expiration Date or General Expiration Date, as applicable, any Indemnitee delivers to the Equityholder Representative a written notice alleging the existence of an inaccuracy in or a breach of any of such representation or warranty and asserting a claim for recovery under Section 10.02 based on such alleged inaccuracy or breach, then the claim asserted in such notice shall survive until such time as [***]

(b) The representations, warranties, covenants and obligations of the Company, and the rights and remedies that may be exercised by the Indemnitees, shall not be limited or otherwise affected by or as a result of any information furnished to, any investigation made by or knowledge of, or any waiver by any of the Indemnitees or any of their Representatives.

(c) For purposes of this Agreement, each statement or other item of information set forth in the Company Disclosure Schedule shall be deemed to be a representation and warranty made by the Company in this Agreement.

(d) The Parties acknowledge and agree that if the Surviving Corporation suffers, incurs or otherwise becomes subject to any Damages as a result of or in connection with any inaccuracy in or breach of any representation, warranty, covenant or obligation, then (without

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limiting any of the rights of the Surviving Corporation as an Indemnitee) Parent shall also be deemed, by virtue of its ownership of the stock of the Surviving Corporation, to have incurred Damages as a result of and in connection with such inaccuracy or breach.

Section 10.02 **Indemnification.**

(a) Subject to the limitations set forth in this Article X, from and after the Effective Time, the Equityholders, severally and in proportion to their respective Pro Rata Shares, shall hold harmless and indemnify each of Merger Sub, the Surviving Corporation, Parent and their respective Representatives (the "Parent Indemnified Parties") from and against, and shall compensate and reimburse each of the Parent Indemnified Parties for, any Damages which are suffered or incurred by any of the Parent Indemnified Parties (regardless of whether or not such Damages relate to any Third-Party Claim) based upon, arising out of, relating to, with respect to or by reason of:

(i) any breach of any representation or warranty set forth in Article III (without giving effect to any Material Adverse Effect or other materiality qualification or any similar qualification contained or incorporated directly or indirectly in such representation or warranty);

(ii) any breach of any representation or warranty set forth in Article III as of the Closing Date as if such representation or warranty had been made as of the Closing Date (except for such representations and warranties that address matters only as of a particular time, which need only be accurate as of such time) (without giving effect to any Material Adverse Effect or other materiality qualification or any similar qualification contained or incorporated directly or indirectly in such representation or warranty);

(iii) all Indemnified Taxes, including, for the avoidance of doubt, all reasonable out-of-pocket costs and expenses of preparing Tax Returns for a Pre-Closing Tax Period and all reasonable out-of-pocket costs and expenses of contesting any Tax Contest to the extent relating to an Indemnified Tax;

(iv) [***]

(v) any breach of any covenant or obligation of the Company set forth in this Agreement; or

(vi) any Closing Indebtedness or Company Transaction Expenses, to the extent not accounted for in the determination of the Merger Consideration.

(b) Subject to the limitations set forth in this Article X, from and after the Effective Time, Parent and Merger Sub, shall jointly and severally hold harmless and indemnify the Equityholders and their respective officers, directors and employees (the "Equityholder Indemnified Parties") from and against, and shall compensate and reimburse each of the Equityholder Indemnified Parties for, any Damages which are suffered or incurred by any of the Equityholder Indemnified Parties (regardless of whether or not such Damages relate to any Third-Party Claim) and which are the proximate result of:

(i) any breach or inaccuracy of any representation or warranty set forth in Article IV;

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(ii) any breach or inaccuracy of any representation or warranty set forth in Article IV as of the Closing Date as if such representation or warranty had been made as of the Closing Date (except for such representations and warranties that address matters only as of a particular time, which need only be accurate as of such time); or

(iii) any breach or violation of any covenant or agreement of Parent or Merger Sub (or the Surviving Corporation after the Closing) set forth in this Agreement.

Section 10.03 **Limitations**.

(a) Payments by any Indemnitor to an Indemnitee in respect of an indemnifiable loss shall be reduced by (i) an amount equal to the amount of any Tax Benefit actually realized in the tax year in which such Damages were incurred or in either of the subsequent [***] by Parent or any of its Affiliates in connection with such Damages or any of the circumstances giving rise thereto and (ii) any insurance proceeds actually received by any Indemnitor under any insurance policy (net of actual out-of-pocket costs of enforcement, deductibles and premium adjustments). For purposes hereof, "Tax Benefit" shall mean any refund or credit of Taxes to be paid or reduction in the amount of Taxes which otherwise would be owed by the Parent or its Affiliates, as applicable, calculated on a with and without basis.

(b) The Indemnitors shall not be required to make any indemnification payment pursuant to Section 10.02(a)(i) and (ii) of this Agreement until the aggregate amount of all Damages (including the Damages arising from such inaccuracy or breach and all other Damages arising from any other inaccuracies in or breaches of any representations or warranties) that have been directly or indirectly suffered or incurred by any one or more of the Indemnitees, or to which any one or more of the Indemnitees has or have otherwise become subject ("Aggregate Damages"), exceeds an amount equal [***] of the Closing Merger Consideration (rounded to the nearest dollar, the "Deductible") in the aggregate (it being understood that [***]). Notwithstanding the foregoing, no claim for indemnification may be made pursuant to Section 10.02(a)(i) unless the amount of such claim, together with the amount of any related claims, exceeds [***], and if such claim, together with any related claims, does not exceed such amount, the amount of such claim shall not be taken into account in determining the Aggregate Damages.

(c) The maximum cumulative liability (without giving effect to the timing or order of submission of any claims for indemnification) of the Equityholders under Section 10.02(a)(i) and (ii) shall be equal to the sum of (i) [***] and (ii) [***] of the Milestone Payments actually earned pursuant to Section 2.08(a).

(d) The limitations set forth in Section 10.03(b) and Section 10.03(c) shall not apply to any claim for indemnification to the extent such claim arises from or is a result of or directly or indirectly connected with, any breach of a Fundamental Representation or any Fraud or willful and intentional breach of this Agreement by the Company or any of its Representatives (regardless of whether such actions have been authorized). Notwithstanding anything to the

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contrary in this Agreement, in no event shall any Equityholder be liable to the Parent Indemnified Parties for Damages under this Section 10.03(d) (i) in excess of [***] or (ii) in excess of the [***]

(e) Absent Fraud or willful and intentional breach of this Agreement by the Company or any of its Representatives, the indemnification provisions contained in this Section 10.03(e) are intended to provide the sole and exclusive remedy following the Closing as to all Damages any Indemnitee may incur arising from or relating to this Agreement, the Merger or the transactions contemplated hereby (it being understood that nothing in this Section 10.03(e) or elsewhere in this Agreement shall affect the Parties' rights to specific performance or other equitable remedies with respect to the covenants referred to in this Agreement or to be performed after the Closing or any rights arising out of claims Parent or the Surviving Corporation may have under the letters of transmittal delivered pursuant to Section 2.07).

(f) The Equityholders shall have no liability under Section 10.02(a)(i) for any Damages relating to Taxes for a Tax period or portion thereof beginning after the Closing Date attributable to a breach of Section 3.18 (other than Section 3.18(f), (g) and (i)).

(g) The maximum cumulative liability of the Equityholders under Section 10.02(a)(iv) with respect to the CHORI Matter shall be equal to (A) the sum of (i) [***], plus (ii) [***] minus (B) [***] Notwithstanding anything to the contrary in this Agreement, any and all claims by an Indemnified Party under Section 10.02(a)(iv) with respect to the [***] first shall be satisfied from the Indemnity Escrow Fund and second, by the Equityholders directly, subject to the other limitations contained herein.

Section 10.04 **Claims and Procedures**.

(a) If an Indemnified Party determines in good faith that it has a bona fide claim for indemnification pursuant to this Section 10.04(a), then Parent (if such Indemnified Party is a Parent Indemnified Party) or the Equityholder Representative (if such Indemnified Party is an Equityholder Indemnified Party), as the case may be, may deliver to the Equityholder Representative or Parent, as the case may be, a certificate (any certificate delivered in accordance with the provisions of this Section 10.04(a) a "Claim Certificate"):

(i) stating that an Indemnified Party has a claim for indemnification pursuant to this Section 10.04(a)(i);

(ii) to the extent possible, containing a good faith non-binding, preliminary estimate of the amount to which such Indemnified Party claims to be entitled to receive, which shall be the amount of Damages such Indemnified Party claims to have so incurred or suffered or could reasonably be expected to incur or suffer; and

(iii) specifying in reasonable detail (based upon the information then possessed by Parent or the Equityholder Representative, as the case may be) the material facts known to the Indemnified Party giving rise to such claim.

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No delay in providing such Claim Certificate prior to the Expiration Date shall affect a Parent Indemnified Party's rights hereunder, unless (and then only to the extent that) the Equityholders are actually and materially prejudiced thereby.

(b) At the time of delivery of any Claim Certificate to the Equityholder Representative, a duplicate copy of such Claim Certificate shall be delivered to the Escrow Agent by or on behalf of Parent (on behalf of itself or any other Parent Indemnified Party).

(c) If the Equityholder Representative or Parent, as the case may be, in good faith objects to any claim made in any Claim Certificate, then the Equityholders' Representative or Parent, as the case may be, shall deliver a written notice (a "Claim Dispute Notice") to Parent or the Equityholders' Representative, as the case may be, during the 30-day period commencing upon receipt by the Equityholders' Representative or Parent, as the case may be, of the Claim Certificate. The Claim Dispute Notice shall set forth in reasonable detail the principal basis for the dispute of any claim made in the applicable Claim Certificate. If the Equityholder Representative or Parent, as the case may be, does not deliver a Claim Dispute Notice hereunder prior to the expiration of such 30-day period, then (i) each claim for indemnification set forth in such Claim Certificate shall be deemed to have been conclusively determined in favor of the applicable Indemnified Party for purposes of this Section 10.04(c) on the terms set forth in the Claim Certificate and (ii) if the Claim Certificate was delivered by Parent and cash remains in the Indemnity Escrow Fund, then Parent may direct the Escrow Agent to deliver cash from the Indemnity Escrow Fund to Parent in accordance with this Section 10.04(c).

(d) If a Claim Dispute Notice is properly delivered hereunder, then Parent and the Equityholder Representative shall attempt in good faith to resolve any such objections raised by the Equityholder Representative in such Claim Dispute Notice. If Parent and the Equityholder Representative agree to a resolution of such objection, then a memorandum setting forth the matters conclusively determined by Parent and the Equityholder Representative shall be prepared and signed by both parties and, if the Claim Certificate was delivered by Parent and cash remains in the Indemnity Escrow Fund, promptly delivered to the Escrow Agent directing the Escrow Agent to distribute cash from the Indemnity Escrow Fund in accordance with the terms of such memorandum.

(e) If no such resolution can be reached during the 45-day period following receipt of a given Claim Dispute Notice, then upon the expiration of such 45-day period, either Parent or the Equityholder Representative may bring suit to resolve the objection in accordance with Sections 11.07, 11.08 and 11.09.

Section 10.05 **Defense of Third-Party Claims**.

(a) Upon receipt by any Person seeking to be indemnified, held harmless, compensated or reimbursed pursuant to Section 6.03 (the "Indemnitee") of notice of any actual or possible claim, demand, suit, action, arbitration, investigation, inquiry or Proceeding that has been or may be brought or asserted by a third party against such Indemnitee and that may be subject to indemnification, the right to be held harmless, compensated or reimbursement hereunder (a "Third-Party Claim"), the Indemnitee shall promptly give notice of such Third-Party Claim to the Person from whom indemnification, the right to be held harmless,

compensated or reimbursement is sought under Section 6.03 (the "Indemnitor") indicating the nature of such Third-Party Claim and the stated basis therefor and the amount of Damages claimed pursuant to such Third-Party Claim, to the extent known.

(b) The Indemnitor shall have fifteen (15) calendar days after receipt of the Indemnitee's notice of a given Third-Party Claim to elect, at its option, to assume the defense of any such Third-Party Claim that the Indemnitor acknowledges involves Damages for which the Indemnitor must, subject to the limitations set forth in this Article X, indemnify, hold harmless, compensate or reimburse the Indemnitee pursuant to Section 10.02. No delay in providing such notice shall affect an Indemnitee's rights hereunder, unless (and then only to the extent that) an Indemnitor is materially prejudiced thereby. If the Indemnitor so proceeds with the defense of any such Third-Party Claim: (i) subject to the other provisions of Article X, all reasonable expenses relating to the defense of such Third-Party Claim shall be borne and paid exclusively by the Indemnitor; (ii) each Indemnitee shall make available to the Indemnitor any documents and materials in such Indemnitee's direct or indirect possession or control that Indemnitor reasonably considers necessary or desirable for the defense of such Third-Party Claim; (iii) the Indemnitee shall execute such documents and take such other actions as the Indemnitor may reasonably request for the purpose of facilitating the defense of, or any settlement, compromise or adjustment relating to, such Third-Party Claim; (iv) the Indemnitee shall otherwise fully cooperate as reasonably requested by the Indemnitor in the defense of such Third-Party Claim; (v) the Indemnitee shall not admit any liability with respect to such Third-Party Claim; (vi) the Indemnitor shall not enter into any agreement providing for the settlement or compromise of such Third-Party Claim or the consent to the entry of a judgment with respect to such Third-Party Claim without the prior written consent of the Indemnitee (which consent shall not be unreasonably withheld, conditioned or delayed); and (vii) the Indemnitee shall not enter into any agreement providing for the settlement or compromise of such Third-Party Claim or the consent to the entry of a judgment with respect to such Third-Party Claim without the prior written consent of the Indemnitor (which consent shall not be unreasonably withheld, conditioned or delayed). The Indemnitee shall have the right to employ separate counsel in such Third-Party Claim and participate in such defense thereof, but the fees and expenses of such counsel shall be at the expense of the Indemnitee; provided, however, that the Indemnitee shall be entitled, at the Indemnitor's cost, risk and expense, to retain one firm of separate counsel of its own choosing (along with any required local counsel) if the Indemnitee reasonably determines based on written advice of counsel that a conflict of interest exists that would make it inappropriate for the same counsel to represent both the Indemnitee and the Indemnitor. If the Indemnitor elects not to defend such Third-Party Claim, then (1) the Indemnitee shall diligently defend such Third-Party Claim and (2) the Indemnitee shall not enter into any agreement providing for the settlement or compromise of such Third-Party Claim or the consent to the entry of a judgment with respect to such Third-Party Claim without the prior written consent of the Indemnitor (which consent shall not be unreasonably withheld, conditioned or delayed).

Section 10.06 **No Contribution**. No Indemnitor shall have, or be entitled to exercise or assert (or attempt to exercise or assert), any right of contribution, right of indemnity or other right or remedy against the Surviving Corporation in connection with any indemnification obligation or any other liability to which such Indemnitor may become subject under or in connection with this Agreement, it being understood that this in no way shall limit any rights provided under Section 6.03.

Section 10.07 **Exercise of Remedies by Indemnitees Other Than Parent**. No Indemnitee (other than Parent or any successor thereto or assign thereof) shall be permitted to assert any indemnification claim or exercise any other remedy under this Agreement unless Parent (or any successor thereto or assign thereof) shall have consented to the assertion of such indemnification claim or the exercise of such other remedy.

ARTICLE XI
MISCELLANEOUS

Section 11.01 **Equityholder Representative**.

(a) By virtue of the adoption of this Agreement and the approval of the Merger and the other transactions contemplated hereby by the Requisite Stockholder Approval, each of the Equityholders shall have irrevocably constituted and appointed, upon the Effective Time (and by its execution of this Agreement as Equityholder Representative, Fortis Advisors LLC hereby accepts its appointment) as the true, exclusive and lawful agent and attorney-in-fact (the "Equityholder Representative"), of the Equityholders receiving consideration hereunder to act in the name, place and stead of the Equityholders in connection with the transactions contemplated by this Agreement, including, without limitation, Section 2.07, Section 2.08, Section 2.09, Section 2.10, Article X, the Escrow Agreement and the Equityholder Representative Engagement Agreement, in accordance with the terms and provisions of this Agreement, and to act on behalf of the Equityholders in any Proceeding involving this Agreement, to do or refrain from doing all such further acts and things, and to execute all such documents as the Equityholder Representative shall deem necessary or appropriate in connection with the transactions contemplated by this Agreement, including the power:

(i) to act for the Equityholders with regard to matters pertaining to indemnification referred to in this Agreement, including the power to compromise any indemnity claim on behalf of the Company Stockholders and to transact matters of litigation or other Proceedings;

(ii) to execute and deliver all amendments, waivers, ancillary agreements, stock powers, certificates and documents that the Equityholder Representative deems necessary or appropriate in connection with the consummation of the transactions contemplated by this Agreement;

(iii) to execute and deliver all amendments and waivers to this Agreement that the Equityholder Representative deems necessary or appropriate, whether prior to, at or after the Closing;

(iv) to receive funds for the payment of expenses of the Equityholders and apply such funds in payment for such expenses;

(v) to do or refrain from doing any further act or deed on behalf of the Equityholders that the Equityholder Representative deems necessary or appropriate in its sole discretion relating to the subject matter of this Agreement as fully and completely as the Equityholders could do if personally present; and

(vi) to receive service of process in connection with any claims under this Agreement.

Notwithstanding the foregoing, the Equityholder Representative shall have no obligation to act on behalf of the Equityholders, except as expressly provided herein, in the Escrow Agreement and in the Equityholder Representative Engagement Agreement, and for purposes of clarity, there are no obligations of the Equityholder Representative in any ancillary agreement, schedule, exhibit or the Company Disclosure Schedule. The Equityholder Representative shall be entitled to: (A) rely upon the Consideration Spreadsheet, (B) rely upon any signature believed by it to be genuine, and (C) reasonably assume that a signatory has proper authorization to sign on behalf of the applicable Equityholder or other party. The powers, immunities and rights to indemnification granted to the Equityholder Representative hereunder: (y) are coupled with an interest and shall be irrevocable and survive the death, incompetence, bankruptcy or liquidation of any Equityholder and shall be binding on any successor thereto, and (z) shall survive the delivery of an assignment by any Equityholder of the whole or any fraction of his, her or its interest in the Indemnity Escrow Fund.

(b) The Equityholder Representative may resign at any time or may be removed or replaced only upon delivery of written notice to the Surviving Corporation by the Equityholders holding at least a majority of outstanding shares of Company Common Stock (on an as-converted to Company Common Stock basis) as of immediately prior to the Effective Time. Parent, the Surviving Corporation and any other Person may conclusively and absolutely rely, without inquiry, upon any action of the Equityholder Representative in all matters referred to herein. The Equityholder Representative shall act for the Equityholders on all of the matters set forth in this Agreement in the manner the Equityholder Representative believes to be in the best interest of the Equityholders and consistent with the obligations under this Agreement, the Escrow Agreement and the Equityholder Representative Engagement Agreement, but neither the Equityholder Representative nor its members, managers, directors, officers, contractors, agents and employees nor any member of this Advisory Group (collectively, the "Equityholder Representative Group") shall be responsible to the Equityholders for any Damages the Equityholders may suffer by the performance of its duties under this Agreement, other than Damages arising from willful violation of the law or gross negligence or willful misconduct in the performance of its duties under this Agreement. All actions taken by the Equityholder Representative under this Agreement, the Escrow Agreement or the Equityholder Representative Engagement Agreement shall be binding upon each Equityholder and such Equityholder's successors as if expressly confirmed and ratified in writing by such Equityholder, and all defenses which may be available to any Equityholder to contest, negate or disaffirm the action of the Equityholder Representative taken in good faith under this Agreement, the Escrow Agreement or the Equityholder Representative Engagement Agreement are waived.

(c) Certain Equityholders have entered into an engagement agreement (the "Equityholder Representative Engagement Agreement") with the Equityholder Representative to provide direction to the Equityholder Representative in connection with its services under this Agreement, the Escrow Agreement and the Equityholder Representative Engagement Agreement (such Equityholders, including their individual representatives, collectively hereinafter referred to as the "Advisory Group"). The Equityholders shall indemnify, defend and hold harmless the Advisory Group from and against any and all losses, claims, damages, liabilities, fees, costs,

expenses (including fees, disbursements and costs of counsel and other skilled professionals and in connection with seeking recovery from insurers), judgments, fines or amounts paid in settlement (collectively, the "Equityholder Representative Expenses") incurred by the Equityholders' Representative while acting in good faith and in the exercise of its reasonable judgment and arising out of or in connection with the acceptance or administration of its duties under this Agreement, under the Escrow Agreement or under the Equityholder Representative Engagement Agreement. Such Equityholder Representative Expenses may be recovered first, from the Equityholder Expense Fund, second, from any distribution of the Indemnity Escrow Fund or Milestone Payment otherwise distributable to the Equityholders at the time of distribution, and third, directly from the Equityholders based on their respective Pro Rata Shares. The immunities and rights to indemnification shall survive the resignation or removal of the Equityholder Representative or any member of the Advisory Group and the Closing and/or any termination of this Agreement and the Escrow Agreement. The Equityholders acknowledge that the Equityholder Representative shall not be required to expend or risk its own funds or otherwise incur any financial liability in the exercise or performance of any of its powers, rights, duties or privileges or pursuant to this Agreement, the Escrow Agreement, the Equityholder Representative Engagement Agreement or the transactions contemplated hereby or thereby. Furthermore, the Equityholder Representative shall not be required to take any action unless the Equityholder Representative has been provided with funds, security or indemnities which, in its determination, are sufficient to protect the Equityholder Representative against the costs, expenses and liabilities which may be reasonably incurred by the Equityholder Representative in performing such actions.

(d) The Equityholder Expense Fund shall be held by the Equityholder Representative in a segregated client account and shall be used (i) for the purposes of paying directly or reimbursing the Equityholder Representative for any Equityholder Representative Expenses incurred pursuant to this Agreement, the Escrow Agreement or the Equityholder Representative Engagement Agreement, or (ii) as otherwise determined by the Advisory Group. The Equityholder Representative is not providing any investment supervision, recommendations or advice and shall have no responsibility or liability for any loss of principal of the Equityholder Expense Fund other than as a result of its gross negligence or willful misconduct. The Equityholder Representative is not acting as a withholding agent or in any similar capacity in connection with the Equityholder Expense Fund, and has no tax reporting or income distribution obligations. Subject to Advisory Group approval, the Equityholder Representative may contribute funds to the Equityholder Expense Fund from any consideration otherwise distributable to the Equityholders. As soon as reasonably determined by the Equityholder Representative that the Equityholder Expense Fund is no longer required to be withheld, the Equityholder Representative shall distribute the remaining Equityholder Expense Fund (if any) to the Payment Agent for further distribution to the Equityholders.

Section 11.02 **Notices**. All notices, requests and other communications required or permitted under, or otherwise made in connection with, this Agreement, shall be in writing and shall be deemed to have been duly given (a) when delivered in person, (b) upon receipt after dispatch by registered or certified mail, postage prepaid, (c) on the next Business Day if transmitted by national overnight courier (with confirmation of delivery) or (d) in the case of notices delivered by Parent or the Company in connection with Section 5.01, on the date delivered if sent by email (with confirmation of delivery), in each case, addressed as follows;

provided, that with respect to notices delivered to the Equityholder Representative, such notices must be delivered solely via email:

if to Parent or Merger Sub, to:

LEO Pharma A/S
Industriparken 55, 2750 Ballerup
Denmark
Attention: General Counsel
Email: [***]

with a copy to (which shall not constitute notice):

Winston & Strawn LLP
200 Park Avenue
New York, NY 10166
Attention: Uri Doron
Email: [***]

if to the Company, to:

PellePharm, Inc.
101 Mission Street
Suite 2050
San Francisco, CA 94105
Attention: Sanuj Ravindran
Email: [***]

with a copy to (which shall not constitute notice):

Latham & Watkins LLP
505 Montgomery Street
Suite 2000
San Francisco, CA 94111
Attention: Alan C. Mendelson; Luke J. Bergstrom
Email: [***]

if to the Equityholder Representative, to:

Fortis Advisors LLC
Attention: Notice Department
Email: [***]

with a copy to (which shall not constitute notice):

Latham & Watkins LLP
505 Montgomery Street
Suite 2000
San Francisco, CA 94111
Attention: Alan C. Mendelson; Luke J. Bergstrom
Email: [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

or to such other address or as such party may specify by due notice under this Section 11.02 to each the other Parties.

Section 11.03 **Remedies Cumulative; Specific Performance**. The rights and remedies of the Parties shall be cumulative (and not alternative). The Parties agree that irreparable damage would occur if any provision of this Agreement were not performed in accordance with the terms hereof and that the Parties shall be entitled to an injunction or injunctions to prevent breaches of this Agreement or to enforce specifically the performance of the terms and provisions of this Agreement in addition to any other remedy to which they are entitled to at law or in equity, in each case without the requirement of posting any bond or other type of security.

Section 11.04 **Entire Agreement; Severability; Amendments and Waivers**.

(a) This Agreement and the Confidentiality Agreement constitute the entire agreement between the Parties with respect to the subject matter of this Agreement and supersede all prior agreements and understandings, both oral and written, between the Parties with respect to the subject matter of this Agreement.

(b) If any term, provision, covenant or restriction of this Agreement is held by a court of competent jurisdiction or other Governmental Authority to be invalid, void or unenforceable, the remainder of the terms, provisions, covenants and restrictions of this Agreement shall remain in full force and effect and shall in no way be affected, impaired or invalidated so long as the economic or legal substance of the transactions contemplated hereby is not affected in any manner materially adverse to any party. Upon such a determination, the Parties shall negotiate in good faith to modify this Agreement so as to effect the original intent of the Parties as closely as possible in an acceptable manner in order that the transactions contemplated hereby be consummated as originally contemplated to the fullest extent possible.

(c) Any provision of this Agreement may be amended or waived prior to the Effective Time if, but only if, such amendment or waiver is in writing and is signed, in the case of an amendment, by each party to this Agreement or, in the case of a waiver, by each party against whom the waiver is to be effective.

(d) No failure or delay by any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof nor shall any single or partial exercise thereof preclude any other or further exercise thereof or the exercise of any other right, power or privilege. The rights and remedies herein provided shall be cumulative and not exclusive of any rights or remedies provided by Applicable Law.

Section 11.05 **Expenses**. Except as otherwise provided herein, all costs and expenses incurred in connection with this Agreement, including all third-party legal, accounting, financial advisory, consulting or other fees and expenses incurred in connection with the Merger and the transactions contemplated thereby, shall be paid by the party incurring such cost or expense; provided, that the Company shall pay all amounts payable to the Company Financial Advisor.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Section 11.06 **Binding Effect; Benefit; Assignment**.

(a) The provisions of this Agreement shall be binding upon and shall inure to the benefit of the Parties and their respective successors and assigns. Except with respect to Section 6.02(b), Section 6.03, Section 6.06 and Article X, no provision of this Agreement is intended to confer any rights, benefits, remedies, obligations or liabilities hereunder upon any Person other than the Parties and their respective successors and assigns.

(b) No party may assign, delegate or otherwise transfer any of its rights or obligations under this Agreement without the consent of each other party hereto, except that Parent or Merger Sub may transfer or assign its rights and obligations under this Agreement, in whole or from time to time in part, to (i) one or more of their Affiliates at any time and (ii) after the Effective Time, to any Person; provided, that such transfer or assignment shall not relieve Parent or Merger Sub of its obligations hereunder or enlarge, alter or change any obligation of any other party hereto or due to Parent or Merger Sub or result in any incremental withholding Taxes on payments under this Agreement.

Section 11.07 **Governing Law**. This Agreement shall be governed by and construed in accordance with the laws of the State of Delaware (including in respect of the statute of limitations or other limitations period applicable to any claim, controversy or dispute hereunder), without giving effect to principles of conflicts of laws that would require the application of the laws of any other jurisdiction.

Section 11.08 **Jurisdiction**. The Parties agree that any Proceeding seeking to enforce any provision of, or based on any matter arising out of or in connection with, this Agreement or the transactions contemplated hereby shall be brought in any federal court located in the State of Delaware or any Delaware state court, and each of the Parties hereby irrevocably consents to the jurisdiction of such courts (and of the appropriate appellate courts therefrom) in any such Proceeding and irrevocably waives, to the fullest extent permitted by law, any objection that it may now or hereafter have to the laying of the venue of any such Proceeding in any such court or that any such Proceeding brought in any such court has been brought in an inconvenient forum. Process in any such Proceeding may be served on any party anywhere in the world, whether within or without the jurisdiction of any such court. Without limiting the foregoing, each party agrees that service of process on such party as provided in Section 11.02 shall be deemed effective service of process on such party.

Section 11.09 **Waiver of Jury Trial**. EACH OF THE PARTIES HERETO HEREBY IRREVOCABLY WAIVES ANY AND ALL RIGHT TO TRIAL BY JURY IN ANY LEGAL PROCEEDING ARISING OUT OF OR RELATED TO THIS AGREEMENT OR THE TRANSACTIONS CONTEMPLATED HEREBY.

Section 11.10 **Counterparts; Effectiveness**. This Agreement may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Agreement shall become effective when each party hereto shall have received a counterpart hereof signed by all of the other Parties. Until and unless each party has received a counterpart hereof signed by the other party hereto, this Agreement shall have no effect and no party shall have any right or obligation

hereunder (whether by virtue of any other oral or written agreement or other communication). The exchange of a fully executed Agreement (in counterparts or otherwise) by electronic transmission in .PDF format shall be sufficient to bind the Parties to the terms and conditions of this Agreement.

[*Signature Page Follows*]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be duly executed by their respective authorized officers as of the date first written above.

LEO PHARMA A/S

By: _____
Name:
Title:

By: _____
Name:
Title:

LEO SPINY MERGER SUB, INC.

By: _____
Name:
Title:

By: _____
Name:
Title:

PELLEPHARM, INC.

By: _____
Name:
Title:

FORTIS ADVISORS LLC

By: _____
Name:
Title:

Exhibit A
Persons to Execute Non-Competition Agreements

- [***]
- [***]
- [***]
- [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Exhibit B
Material Terms of Non-Competition Agreement

- Term – [***]
- Geography – [***]
- Scope of restriction – [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Exhibit C
Form of Certificate of Merger

[Attached]

Exhibit D
Amended and Restated Certificate of Incorporation

[Attached]

Exhibit E
Form of Escrow Agreement

[Attached]

Schedule 1.1
Permitted Recipients

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Exhibit B

Form of Support Agreement

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

FIRST AMENDMENT TO AGREEMENT OF MERGER

THIS FIRST AMENDMENT TO AGREEMENT OF MERGER (this "Amendment") is made and entered into as of this 13th day of March, 2019, by and among LEO Pharma A/S, a company organized under the laws of the Kingdom of Denmark ("Optionee"), LEO Spiny Merger Sub, a Delaware corporation ("Merger Sub"), PellePharm, Inc., a Delaware corporation ("Company"), and Fortis Advisors LLC, a Delaware limited liability company ("Fortis"). Optionee, Merger Sub, the Company and Fortis are each referred to herein as a "Party" and collectively as the "Parties." Capitalized terms used but not otherwise defined herein shall have the respective meanings ascribed thereto in the Merger Agreement (as defined below).

WHEREAS, the Parties are each party to that certain Agreement of Merger, dated as of November 19, 2018 (the "Merger Agreement");

WHEREAS, pursuant to Section 11.04 of the Merger Agreement, a provision of the Merger Agreement may be amended prior to the Effective Time only if such amendment is in writing and is signed by each party to the Merger Agreement; and

WHEREAS, the Parties wish to amend and modify the Merger Agreement in certain respects;

NOW, THEREFORE, in consideration of the foregoing and the mutual covenants and agreements herein contained, and intending to be legally bound hereby, the parties hereto hereby agree and amend the Merger Agreement as follows:

1. **Conduct of the Company**.

(a) The paragraph immediately following Section 5.01(b)(xviii) of the Merger Agreement is hereby amended and restated to read as follows (deleted wording is shown in **bold ~~and strikethrough~~ and inserted wording is shown in bold and underlined):**

"Notwithstanding anything to the contrary in this Section 5.01, the Company shall be permitted to **grant units to Company employees under the Carveout Plan in accordance with its terms, provided that the aggregate amount payable to Company employees under the Carveout Plan shall not exceed [***] ~~adopt a carveout bonus plan for the benefit of its employees prior to the Closing, provided that payments under such plan shall be deducted from the Merger Consideration as Company Transaction Expenses~~."**

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2. **Company Transaction Expenses**. The definition of "Company Transaction Expenses" in Section 1.1 of the Merger Agreement is hereby amended and restated to read as follows (inserted wording is shown in **bold and underlined):**

"Company Transaction Expenses" means (a) any fees and disbursements incurred by or on behalf of the Company and payable to any financial advisor (including the Company Financial Advisor), investment banker, broker or finder in connection with the transactions contemplated by this Agreement, (b) the fees and disbursements payable to legal counsel, consultants or accountants of the Company that are payable by the Company in connection with the transactions contemplated by this Agreement, (c) any bonuses, incentive compensation, or other change-in-control payments to be paid or payable to any director, officer or employee of the Company at the Closing (without any further condition) in connection with the Merger or any of the other transactions contemplated by this Agreement, and all employer Taxes related thereto, (d) the employer portion of any payroll Taxes imposed with respect to the payment of the Option Consideration, and (e) all other miscellaneous out-of-pocket expenses or costs, in each case, incurred by the Company in connection with the transactions contemplated by this Agreement. [***]**"**

3. **Contemplated Carveout Plan**. A new definition of "Carveout Plan" shall be added to Section 1.1 of the Merger Agreement and shall read as follows:

"Carveout Plan" shall mean the Company's Management Carveout Plan."

4. **Employee Matters**. Section 6.04 of the Merger Agreement is hereby amended and restated to add the following Section 6.04(e), which in its entirety will read as follows:

"(e) Promptly after the Effective Time, Parent shall cause the Surviving Corporation to make all payments due under the Carveout Plan, which obligation shall include providing any necessary funds to complete such payment obligations."

5. **Conflicting Terms; Limitation of Amendment**. In the event of any conflict or inconsistency between the terms of this Amendment and the Merger Agreement, the terms of this Amendment shall control. Except as otherwise set forth herein, all terms and provisions of the Merger Agreement shall remain in full force and effect. The Merger Agreement, as referenced in any other document that the Parties have executed, means the Merger Agreement, as amended by this Amendment.

6. **Governing Law**. This Amendment shall be governed by and construed in accordance with the laws of the State of Delaware (including in respect of the statute of limitations or other limitations period applicable to any claim, controversy or dispute hereunder), without giving effect to principles of conflicts of laws that would require the application of the laws of any other jurisdiction.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

7. **Counterparts**. This Amendment may be signed in any number of counterparts, each of which shall be an original, with the same effect as if the signatures thereto and hereto were upon the same instrument. This Amendment shall become effective when each Party shall have received a counterpart hereof signed by the other Party. Until and unless each Party has received a counterpart hereof signed by the other Party hereto, this Amendment shall have no effect, and no Party shall have any right or obligation hereunder (whether by virtue of any other oral or written agreement or other communication). The exchange of a fully executed Amendment (in counterparts or otherwise) by electronic transmission in .PDF format or by facsimile shall be sufficient to bind the Parties to the terms and conditions of this Amendment.

***

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

LEO PHARMA A/S

By: _____
Name:
Title:

By: _____
Name:
Title:

LEO SPINY MERGER SUB, INC.

By: _____
Name:
Title:

By: _____
Name:
Title:

PELLEPHARM, INC.

By: _____
Name:
Title:

FORTIS ADVISORS LLC

By: _____
Name:
Title:

[Signature Page to First Amendment to the Agreement of Merger]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

LEO PHARMA A/S

By: _____
Name:
Title:

By: _____
Name:
Title:

LEO SPINY MERGER SUB, INC.

By: _____
Name:
Title:

By: _____
Name:
Title:

PELLEPHARM, INC.

By: _____
Name:
Title:

FORTIS ADVISORS LLC

By: _____
Name:
Title:

[Signature Page to First Amendment to the Agreement of Merger]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

LEO PHARMA A/S

By: _____
Name:
Title:

By: _____
Name:
Title:

LEO SPINY MERGER SUB, INC.

By: _____
Name:
Title:

By: _____
Name:
Title:

PELLEPHARM, INC.

By: _____
Name:
Title:

FORTIS ADVISORS LLC

By: _____
Name:
Title:

[Signature Page to First Amendment to the Agreement of Merger]

IN WITNESS WHEREOF, the parties hereto have executed this Amendment as of the date first above written.

LEO PHARMA A/S

By: _____
Name:
Title:

By: _____
Name:
Title:

LEO SPINY MERGER SUB, INC.

By: _____
Name:
Title:

By: _____
Name:
Title:

PELLEPHARM, INC.

By: _____
Name:
Title:

FORTIS ADVISORS LLC

By: _____
Name:
Title:

[Signature Page to First Amendment to the Agreement of Merger]

Exhibit 10.13

EXECUTION VERSION

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

ASSET PURCHASE AGREEMENT

among

PHOENIX TISSUE REPAIR, INC.,

SHIRE HUMAN GENETIC THERAPIES, INC.

and

LOTUS TISSUE REPAIR, INC.

Dated as of July 21, 2017

This ASSET PURCHASE AGREEMENT, dated as of July 21, 2017, is made and entered into by and among PHOENIX TISSUE REPAIR, INC., a Delaware corporation ("Purchaser"), SHIRE HUMAN GENETIC THERAPIES, INC., a Delaware corporation ("Shire"), and LOTUS TISSUE REPAIR, INC., a Delaware corporation ("Lotus," and together with Shire, "Sellers" or each a "Seller"). Capitalized terms used herein and not otherwise defined have the meanings ascribed to them in Section 7.06(b).

WHEREAS, Shire purchased all of the outstanding shares of Lotus pursuant to the Stock Purchase Agreement;

WHEREAS, Shire has provided notice to the Equityholders' Representative of an event giving rise to a Purchase Option (as such term is defined in the Stock Purchase Agreement) pursuant to Section 2.07 of the Stock Purchase Agreement;

WHEREAS, pursuant to the terms of the Contribution Agreement, the Equityholders (as such term is defined in the Stock Purchase Agreement) have contributed the Purchase Option to Purchaser;

WHEREAS, pursuant to Section 2.07 of the Stock Purchase Agreement, Purchaser, in its capacity as the Designated Affiliate (as such term is defined in the Stock Purchase Agreement), has elected to exercise the Purchase Option and complete the Asset Purchase (as such term is defined in the Stock Purchase Agreement); and

WHEREAS, Sellers desire to sell, and Purchaser desires to purchase, the Acquired Assets (as defined below) and consummate the Asset Purchase (including the assumption of the Assumed Liabilities by Purchaser) as contemplated in this Agreement.

NOW, THEREFORE, in consideration of the premises and mutual covenants herein contained, and for other good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties agree as follows:

ARTICLE I

Purchase and Sale of Acquired Assets

SECTION 1.01 Purchase and Sale. On the terms and subject to the conditions contained herein, the Sellers hereby agree to sell, convey, assign, transfer and deliver to Purchaser, and shall cause each of their Affiliates to sell, convey, assign, transfer and deliver to Purchaser, and Purchaser hereby agrees to purchase from Sellers or their Affiliates, all of Sellers' and their Affiliates' right, title and interest in, to and under the Acquired Assets, for a purchase price (the "Purchase Price") consisting of (i) an aggregate amount of [***] (the "Base Purchase Price"), payable as set forth in Article II, (ii) [***] shares (the "Purchaser Shares") of Purchaser's common stock, $0.0001 par value per share ("Common Stock"), issued by Purchaser to Lotus pursuant to that certain Subscription Agreement dated as of the date hereof, free and clear of any Liens other than restrictions on transfer under the Other Transaction Documents, applicable state and federal securities laws and liens or encumbrances created by or imposed by Sellers (the "Subscription Agreement"), (iii) the Milestone Consideration, payable in accordance

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with Section 1.02, (iv) the Contingent Payments, payable in accordance with Section 1.03, and (v) the assumption by Purchaser of the Assumed Liabilities. The purchase and sale of the Acquired Assets and the assumption by Purchaser of the Assumed Liabilities are referred to in this Agreement collectively as the "Acquisition".

SECTION 1.02 Milestone Consideration.

(a) Milestone Events. Upon the occurrence of each of the events (each, a "Milestone Event") set forth in the table below (the "Milestone Table") regarding the first Product with which any member of the Purchaser Rights Group achieves such Milestone Event, Purchaser shall pay to Sellers the applicable amount set forth opposite each such Milestone Event in the Milestone Table (each such payment, a "Milestone Payment", and collectively, the "Milestone Consideration") in accordance with Section 1.02(b). Milestone Events (i)(A) through (and including) (i)(C) set forth in the Milestone Table are referred to in this Agreement as "Regulatory Milestone Events" and the Milestone Events (ii)(A) through (and including) (ii)(F) set forth in the table below are referred to in this Agreement as "Net Sales Milestone Events". Payments in respect of Regulatory Milestone Events are referred to in this Agreement as "Regulatory Milestone Payments" and payments in respect of the Net Sales Milestone Events are referred to in this Agreement as "Net Sales Milestone Payments".

	Milestone Event	Milestone Payment
(i)	Regulatory Milestone Events	
	[***]	[***]
	[***]	[***]
	[***]	[***]
(ii)	Net Sales Milestone Events	
	[***]	[***]
	[***]	[***]
	[***]	[***]
	[***]	[***]
	[***]	[***]
	[***]	[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Each of the Milestone Payments shall be payable a maximum of one (1) time only. For the avoidance of doubt:

(1) each of the Milestone Payments shall become payable upon the occurrence of the associated Milestone Event, irrespective of the order in which the Milestone Events occur relative to each other,

(2) no amounts shall be due for subsequent or repeated achievements of any Milestone Event,

(3)(x) if Regulatory Milestone Event (i)(B) is achieved before Regulatory Milestone Event (i)(A), then the Milestone Payments for Regulatory Milestone Events (i)(A) and (i)(B) shall become payable upon such achievement, and (y) if Regulatory Milestone Event (i)(C) is achieved before Regulatory Milestone Event (i)(A) or (i)(B), the Milestone Payments for all Regulatory Milestone Events shall become payable upon such achievement, and

(4) if any combination of Net Sales Milestone Events not previously achieved are achieved in any one Calendar Year, the Milestone Payments for each such achieved Net Sales Milestones Events shall become payable upon their respective achievement (*e.g.*, if, in one Calendar Year the aggregate worldwide Net Sales for Products exceeds [***] and no Net Sales Milestone Events have been previously achieved, then the Net Sales Milestone Payments for Net Sales Milestone Events (ii)(A), (ii)(B) and (ii)(C) shall become payable upon their respective achievement).

In accordance with the foregoing, the maximum total Milestone Payments payable by Purchaser to Sellers under this Section 1.02 would be [***].

(b) Notice and Payment. Upon the occurrence of a Regulatory Milestone Event, Purchaser shall promptly (and in any event no later than [***] business days thereafter) provide written notice (a "Regulatory Milestone Statement") to Sellers of the occurrence of such Regulatory Milestone Event and, within [***] business days of such notice pay Sellers the corresponding Milestone Payment. No later than [***] business days after the end of the Calendar Quarter in which each Net Sales Milestone Event occurs, Purchaser shall (A) provide written notice to Sellers of the occurrence of such Net Sales Milestone Event and (B) pay

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Sellers the corresponding Milestone Payment. Notwithstanding anything to the contrary set forth in this Agreement, in the event that Purchaser fails to deliver timely notice of a Milestone Event to Sellers or fails to timely pay any Milestone Payment, in each case in accordance with this Section 1.02(b), then the applicable Milestone Payment shall bear interest on a daily basis, from and including the date by which such Milestone Payment should have been paid in accordance with this Section 1.02(b) until (but excluding) the date the payment is debited from Purchaser's bank account, at a rate per annum equal to the then-prevailing prime rate of Bank of America, N.A.

SECTION 1.03 Contingent Payments. Pursuant to Section 1.01(iv), during the Contingent Term, contingent payments (the "Contingent Payments") shall be payable by Purchaser to Sellers in accordance with this Section 1.03.

(a) Contingent Rates. Except as provided in Section 1.03(c), Purchaser shall pay to Sellers Contingent Payments for each Product of (i) [***] of the annual worldwide Net Sales of such Product where such annual worldwide Net Sales in any Calendar Year are less than [***], (ii) [***] of the annual worldwide Net Sales of such Product where such annual worldwide Net Sales in any Calendar Year are equal to or greater than [***] but less than [***], and (iii) [***] of the annual worldwide Net Sales of such Product where such annual worldwide Net Sales in any Calendar Year are equal to or greater than [***].

(b) Contingent Term. The Contingent Payments payable by Purchaser to Sellers under Section 1.03(a) shall be paid on a Product-by-Product and country-by-country basis beginning on the First Commercial Sale of a Product in a country until the latest of (i) the date which is [***] years after the First Commercial Sale of such Product in such country, (ii) the expiration of the last-to-expire Regulatory Exclusivity with respect to such Product in such country and (iii) the expiration in such country of the last-to-expire Valid Claim of a Transferred Patent that Covers such Product (the "Contingent Term").

(c) Adjustments. Notwithstanding anything in Section 1.03(a) to the contrary, if at any time during the Contingent Term (i) there is no Valid Claim of any Transferred Patent that Covers any element of a Product in a country and as of such time the last-to-expire Regulatory Exclusivity with respect to such Product in such country has not expired, then the applicable contingent rate contemplated by **Section 1.03**(a) shall be reduced by [***] of the otherwise applicable contingent rate with respect to all Net Sales for such Product in such country effective immediately following such time, (ii) there is no Valid Claim of any Transferred Patent that Covers any element of a Product in a country and as of such time the last-to-expire Regulatory Exclusivity with respect to such Product in such country has expired, then the applicable contingent rate contemplated by Section 1.03(a) shall be reduced by [***] of the otherwise applicable contingent rate with respect to all Net Sales for such Product in such country effective immediately following such time, or (iii) a Generic Product Event occurs with respect to a Product in a country, then the contingent rate contemplated by Section 1.03(a) shall equal [***] with respect to all Net Sales for such Product in such country effective immediately following such time. For the avoidance of doubt, and notwithstanding anything herein to the contrary, (A) the contingent rate reductions contemplated in the foregoing clauses (i) – (iii) shall not be aggregated and (B) in no event shall the contingent rate contemplated by **Section 1.03**(a) after being reduced pursuant to any of the foregoing clauses (i) – (iii) equal less than [***] with respect to any Net Sales for any Product in any country.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Without limiting the foregoing, and by way of example only:

(1) In the event that, at any time during the Contingent Term, the contingent rate contemplated by Section 1.03(a) applicable to Net Sales of a Product in a country is [***] and at such time (x) there is no Valid Claim of any Transferred Patent that Covers any element of such Product in such country and (y) the last-to-expire Regulatory Exclusivity with respect to such Product in such country has not expired, then the applicable contingent rate contemplated by Section 1.03(a) would be reduced to [***] with respect to all Net Sales for such Product in such country effective immediately following such time. If, following such time, the last-to-expire Regulatory Exclusivity with respect to such Product in such country expires, then the applicable contingent rate contemplated by **Section 1.03**(a) would be reduced to [***] with respect to all Net Sales for such Product in such country thereafter.

(2) In the event that, at any time during the Contingent Term, the contingent rate contemplated by Section 1.03(a) applicable to Net Sales of a Product in a country is [***] and at such time (x) there is no Valid Claim of any Transferred Patent that Covers any element of such Product in such country and (y) the last-to-expire Regulatory Exclusivity with respect to such Product in such country has expired, then the applicable contingent rate contemplated by **Section 1.03**(a) would be reduced to [***] with respect to all Net Sales for such Product in such country effective immediately following such time. If, following such time, a Generic Product Event occurs with respect to such Product in such country, then the contingent rate contemplated by Section 1.03(a) would remain at [***] with respect to all Net Sales for such Product in such country.

(d) Contingent Report and Payment. No later than [***] days after the end of each Calendar Quarter, Purchaser or its Affiliates shall pay to Sellers the Contingent Payments payable for such Calendar Quarter and provide a contingent report (the "Contingent Report") showing:

(i) the Net Sales of each Product sold by Purchaser, its Affiliates and any other member of the Purchaser Rights Group, in each case during such Calendar Quarter;

(ii) the "gross to net" adjustments with respect to the calculation of Net Sales for such Calendar Quarter and each prior Calendar Quarter, if any, for the applicable Calendar Year, including the individual components of the calculation, as described in the definition of "Net Sales";

(iii) the Contingent Payments in Dollars which shall have accrued hereunder with respect to any Net Sales of each Product;

(iv) withholding Taxes, subject to Section 1.04(b), if any, to be deducted with respect to such Contingent Payments; and

(v) the Spot Exchange Rate, if applicable, used by Purchaser in determining the amount of Dollars payable hereunder.

Notwithstanding anything to the contrary set forth in this Agreement, in the event that Purchaser fails to deliver timely a Contingent Report to Sellers or fails to timely pay any Contingent Payment, in each case in accordance with this Section 1.03(d), then the applicable Contingent Payment shall bear interest on a daily basis, from and including the date by which such Contingent Payment should have been paid in accordance with this Section 1.03(d) until (but excluding) the date the payment is debited from Purchaser's bank account, at a rate per annum equal to the then-prevailing prime rate of Bank of America, N.A.

SECTION 1.04 Payments; Records; Disputes; Efforts.

(a) Manner of Payment and Exchange Rate. All payments to be made by Purchaser to Sellers under Sections 1.02 and 1.03 shall be made in Dollars and shall be paid by wire transfer in immediately available funds to such bank account in the United States designated in writing by Sellers. In computing the amount of sales of a Product (including Net Sales) denominated in any currency other than Dollars, the rate of exchange to be used in computing the amount of currency equivalent in Dollars shall be the Spot Exchange Rate for the month in which such sales occurred.

(b) Tax Withholding. The Purchaser will be entitled to deduct and withhold from the amounts otherwise payable by it pursuant to this Agreement such amounts as it reasonably determines that it is required to deduct and withhold with respect to the making of such payment under the Code, or any provision of state, local or foreign Tax law; provided, however, that the Purchaser will so long as Sellers' right to receive the Milestone Consideration and the Contingent Payments has not been assigned pursuant to Section 7.01(b) (or if only a portion of the right to the Milestone Consideration and the Contingent Payments has been assigned then only with respect to the portion of the right to such payment retained by and paid to Sellers), promptly (and in any event no later than [***] business days prior to the date on which such payment is made) notify the applicable Seller of any intention to so deduct and withhold with respect to any payment to the Seller and provide the Seller a reasonable opportunity to provide any statement, form, or other documentation that would reduce or eliminate any such requirement to deduct and withhold. In addition, Purchaser will (i) remit and report any such amount required to be deducted and withheld to the applicable Governmental Authority in accordance with Applicable Law; (ii) upon request, promptly provide to the Seller a certificate, receipt or other documentation of proof of such remittance reasonably acceptable to the Seller; and (iii) cooperate with the Seller, [***], as reasonably requested with respect to the filing of any Tax Return or conduct of any claim relating to any available refund of such amount remitted. To the extent that amounts are so withheld and paid to the appropriate Governmental Authority by Purchaser, such withheld amounts shall be treated for all purposes of this Agreement as having been paid to the applicable Seller or its Affiliates.

(c) Regulatory Milestone Updates. From the Closing and until such time as each of the Regulatory Milestone Events has been achieved, the Purchaser shall provide to Sellers, (i) within [***] days following January 1 of each Calendar Year, with a written report describing in reasonable detail the current development and regulatory status of the Product(s) and the progress towards achievement of the Regulatory Milestone Events by all applicable members of the Purchaser Rights Group.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(d) Net Sales Records. Purchaser shall, and shall cause the other members of the Purchaser Rights Group to, keep books and records prepared in accordance with their respective standard accounting procedures and in accordance with GAAP, in each case consistently applied, for the purpose of calculating all Net Sales Milestone Payments and Contingent Payments payable to Sellers. Subject to and without limiting Section 5.03(d) and Section 5.06(d), such books and records shall be kept at Purchaser's or the relevant Purchaser Rights Group member's principal place of business for a period of no less than [***] years following the end of the Calendar Year to which they shall pertain, and shall be open for inspection on an annual basis by a mutually agreed upon independent certified accountant, [***], for the purpose of verifying the Net Sales Milestone Payments or the Contingent Payments payable to Sellers. The books and records for any particular Calendar Year shall be subject to no more than one inspection, and in no event shall any inspection be initiated with respect to any Calendar Year more than three years following the end of such Calendar Year. Such accountant shall have agreed in writing to maintain all information learned in confidence, except as necessary to disclose to Sellers any compliance or noncompliance by Purchaser and any other member of the Purchaser Rights Group with the terms of this Section 1.04, and shall have executed all customary release letters reasonably requested by Purchaser's or any other Purchaser Rights Group member's independent auditors. [***].

(e) Net Sales Disputes. If Sellers believe that any Net Sales Milestone Event has occurred, or that any Contingent Report is inaccurate in whole or in part, then Sellers shall promptly deliver written notice (a "Net Sales Dispute Notice") thereof, in reasonable detail, to Purchaser. During the [***] days following the delivery of a Net Sales Dispute Notice, Purchaser and Sellers shall attempt in good faith to resolve any dispute as to the occurrence of any Net Sales Milestone Event or the accuracy of any Contingent Report. If the parties do not reach agreement with respect to any dispute relating to any such matter within [***] days after a Net Sales Milestone Dispute Notice is delivered to Purchaser by Sellers, the parties shall submit for arbitration all matters that remain in dispute and that were properly included in the Net Sales Dispute Notice to a nationally recognized independent accounting firm (the "Accounting Firm"). The Accounting Firm shall be a nationally recognized independent public accounting firm as shall be agreed upon by the parties in writing or, if the parties are unable to so agree in writing within [***] days, then Purchaser and Sellers shall each select such a firm and such firms shall jointly select a third nationally recognized independent public accounting firm to serve as the Accounting Firm. The parties shall jointly instruct the Accounting Firm that it shall (i) review only the matters that were properly included in the Net Sales Dispute Notice and which remain in dispute, (ii) make its determination in accordance with the requirements of this Section 1.04(e) and (iii) render its written decision as promptly as practicable but in no event later than [***] days after submission to the Accounting Firm of all matters in dispute. The Accounting Firm's determination shall be accompanied by a certificate of the Accounting Firm that it reached its decision in accordance with the provisions of this Section 1.04(d). Purchaser and the Sellers shall each pay its own expenses of arbitration, and the fees, costs and expenses of the Accounting Firm shall be [***]. Any decision rendered by the Accounting Firm shall be final and binding upon the parties; *provided, however*, that no such decision shall be any more favorable to Purchaser than is set forth in the applicable Contingent Report or any more

favorable to Sellers than is proposed in the applicable Net Sales Dispute Notice. All proceedings conducted by the Accounting Firm shall take place in New York, New York. Any underpayments of Net Sales Milestone Payments or Contingent Payments shall be paid (together with interest in accordance with Section 1.02(b) or 1.03(d), as applicable) by Purchaser within [***] days of notification of the results of such inspection.

(f) Efforts Standard. Purchaser shall, and shall cause each other member of the Purchaser Rights Group to, use Commercially Reasonable Efforts to (i) [***] and (ii) [***]. Sellers acknowledge and agree that, subject only to the foregoing requirement to use Commercially Reasonable Efforts, (A) Purchaser has the exclusive right to own, operate, use, license, research, develop and otherwise commercialize the Acquired Assets and Products in any way that the Purchaser and its Affiliates deem appropriate, in their sole discretion, including the determination of whether or not to develop or commercialize a Product or the indications for which a Product may be developed or commercialized, (B) there is no assurance that the Milestone Payments will become payable, (C) Purchaser and its Affiliates owe no fiduciary duty to Sellers or their Affiliates, and each of them hereby expressly waives any such fiduciary duty if any such duty were to exist, and (D) without limiting any express provisions of this Agreement, the parties intend the express provisions of this Agreement (including the definition of "Commercially Reasonable Efforts" where such term is expressly applicable) to govern their contractual relationship and to supersede any standard of efforts or implied covenant of good faith and fair dealing that might otherwise be imposed by any court or other Governmental Authority.

SECTION 1.05 Product Sale. In no event shall the Purchaser or any of its Affiliates effect any Product Sale to any person, unless all of the following requirements are satisfied: (a) the transferee in such Product Sale agrees in writing to be bound by, and assumes and succeeds to, all of the obligations of the Purchaser set forth in Sections 1.02, 1.03 and 1.04, and (b) prior to or simultaneously with the consummation of such Product Sale, (i) such transferee delivers to the Sellers an instrument of assumption, reasonably acceptable to the Sellers, effecting the agreement, assumption and succession described in the foregoing clause (a), and (ii) the Purchaser pays or causes to be paid to Sellers all Milestone Payments and Contingent Payments that have become due and payable under this Agreement prior to such consummation of such Product Sale. Following the consummation of any such Product Sale, the Purchaser shall be jointly and severally liable for any obligations of the transferee under this Agreement with respect to the Products and Acquired Assets that are the subject of such Product Sale. Notwithstanding anything in this Agreement to the contrary, any purported Product Sale in contravention of this Section 1.05 shall be null and void.

SECTION 1.06 Transfer of Assets.

(a) Except as otherwise provided in this Agreement, upon the terms and subject to the conditions set forth in this Agreement, at the Closing Sellers hereby agree to sell, convey, assign, transfer and deliver to Purchaser, and shall cause their Affiliates to sell, convey, assign, transfer and deliver to Purchaser, and Purchaser hereby agrees to purchase from Sellers

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

or their Affiliates, all of Sellers' and their Affiliates' right, title and interest in, to and under the assets described or identified below (other than Excluded Assets) as they exist as of immediately prior to the Closing (collectively, the "Acquired Assets"):

(i) Closing Date IP Assets;

(ii) Research Program Assets; and

(iii) the Contracts identified in Section 1.06(a)(iii) of the Sellers Disclosure Schedule (the "Transferred Contracts").

(b) Notwithstanding anything to the contrary contained in Section 1.06(a) or elsewhere in this Agreement, nothing herein contained shall be deemed to sell, transfer, assign or convey the Excluded Assets to Purchaser, and the Sellers and their Affiliates shall retain all right, title and interest to, in and under the Excluded Assets after the Closing. The term "Excluded Assets" shall mean all assets, properties, interests and rights of the Sellers and any of their respective Affiliates other than the Acquired Assets. For the avoidance of doubt, the Excluded Assets shall include (but are not limited to):

(i) all cash and cash equivalents of Sellers and any of their Affiliates;

(ii) all rights and claims of Sellers or any of their Affiliates to the extent relating to any Excluded Asset or any Excluded Liability, including any such items arising under insurance policies and all guarantees, warranties, indemnities and similar rights in favor of Sellers and their Affiliates in respect of any Excluded Asset or any Excluded Liability;

(iii) all Contracts other than the Transferred Contracts;

(iv) except for the Closing Date IP Assets and Product IP and rights granted under the Product Licensed IP pursuant to the Purchaser License, all other Intellectual Property of Sellers and their Affiliates (including all Sellers Names and Marks);

(v) all Tax refunds and Tax deposits, Tax Assets and all Tax books and records;

(vi) all rights of Sellers and their Affiliates under this Agreement, the Other Transaction Documents and the other agreements and instruments executed and delivered in connection with this Agreement; and

(vii) all assets, properties or rights set forth on, or arising under any Contracts set forth on, Section 1.06(b)(vii) of the Sellers Disclosure Schedule.

(c) Notwithstanding the foregoing, Purchaser acknowledges and agrees that (i) Sellers and their Affiliates may retain possession of and use any Acquired Asset necessary or desirable for the Sellers and their Affiliates to perform their obligations under the Transition Services Agreement, (ii) in respect of documents, materials and information (including, for the avoidance of doubt, electronic data) included in the Acquired Assets: (x) with respect to any portions of such items that do not relate solely to the Acquired Assets or are also required for the operation of the Excluded Assets or relate to the Excluded Liabilities, the Sellers and their Affiliates may retain the originals of such items, and deliver, or cause to be delivered, copies thereof to Purchaser and redact from any such items any information that is not related to the

Acquired Assets or the Assumed Liabilities, (y) the Sellers and their Affiliates will have up to [***] following the Closing (or such longer time as provided in the Transition Services Agreement) to deliver such items to Purchaser and (z) Sellers and their Affiliates shall only have an obligation to physically deliver such items to the extent in the possession or control of Sellers or such Affiliates and (iii) in the event of a conflict between this Agreement and the Transition Services Agreement with respect to the delivery of any Acquired Assets, the Transition Services Agreement will control.

(d) Seller has listed on Section 1.06(d) of the Sellers Disclosure Schedule certain statements of work under Contracts (not included in the Transferred Contracts) that relate exclusively to the Acquired Product (such statements of work, the "Specified SOWs") and certain Contracts that relate both to the Acquired Product and other businesses of Shire and its Affiliates (the "Specified Contracts"). Notwithstanding anything to the contrary in this Agreement, but subject to Section 1.09, in addition to the Transferred Contracts, the Acquired Assets shall also include (i) such Specified SOWs (but not the related master agreement) and (ii) the rights under the Specified Contracts to the extent exclusively related to the Acquired Product and the Assumed Liabilities shall also include all Liabilities to the extent arising out of or relating to (i) the Specified SOWs or (ii) the Specified Contracts, in the case of this clause (ii), to the extent relating to the Acquired Product and in each case which have not arisen from breaches or defaults of a Seller during the Ownership Period. Buyer shall use commercially reasonable efforts to enter into its own Contracts to replace the rights provided under the Specified SOWs and Specified Contracts reasonably promptly following the Closing.

SECTION 1.07 Assumed Liabilities.

(a) Upon the terms and subject to the conditions of this Agreement, Purchaser shall assume, effective as of the Closing, all of the following Liabilities of Sellers and their Affiliates, other than any Excluded Liability (the "Assumed Liabilities"):

(i) all Liabilities primarily related to the Closing Date IP and the Research Program Assets or the operation or use thereof, including those listed in Section 1.07(a)(i) of the Sellers Disclosure Schedule;

(ii) all Liabilities to the extent arising out of or relating to the Transferred Contracts and which have not arisen from breaches or defaults of a Seller during the Ownership Period; and

(iii) all Taxes apportioned to Purchaser under Section 5.03, including Purchaser's share of any Taxes discussed in Section 5.03(a).

(b) Notwithstanding any other provision of this Agreement, Purchaser shall not assume any Excluded Liability. The term "Excluded Liability" means:

(i) all Liabilities of any Seller or its Affiliates other than Assumed Liabilities, including, but not limited to, the Liabilities listed on Section 1.07(b)(i) of the Sellers Disclosure Schedule;

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(ii) subject to Section 5.03, all Liabilities and obligations for (i) Taxes arising from or relating to the Acquired Assets for any Pre-Closing Tax Period, (ii) any Taxes of the Sellers for any taxable period, (iii) any Taxes relating to the Excluded Liabilities for any taxable period; and (iv) Sellers' share of any Taxes described in Section 5.03(a); and

(iii) all Liabilities arising out of or relating to the Transferred Contracts to the extent such Liabilities have arisen from breaches or defaults of such Transferred Contract by Seller or any of its Affiliates during the Ownership Period.

SECTION 1.08 Further Assurances; Inadvertent Transfers of Assets.

(a) In case at any time after the Closing any further action is necessary or desirable to carry out the purposes of this Agreement, at any party's reasonable request and, subject to Section 5.03(a), at such requesting party's sole cost and expense, each party shall take such further action (including the execution and delivery to the other party of such other reasonable instruments of sale, transfer, conveyance, assignment, assumption and confirmation, providing materials and information) as another party may reasonably request as shall be reasonably deemed necessary to transfer, convey and assign to Purchaser all of the Acquired Assets and to confirm Purchaser's assumption of the Assumed Liabilities.

(b) Without limiting the provisions of Section 1.08(a), to the extent that Purchaser or either Seller discovers any additional assets or properties, including any Intellectual Property, which are Acquired Assets or Product Licensed IP but were not transferred, assigned, or licensed in accordance with the terms hereof, Purchaser and Sellers shall cooperate and execute and deliver any instruments of transfer or assignment or a license agreement (as applicable), reasonably necessary to transfer and assign or license (as applicable) such asset or property to Purchaser. Without limiting the provisions of Section 1.08(a), to the extent that Purchaser or either Seller discovers any assets or properties, including any Intellectual Property, which is an Excluded Asset but which was inadvertently transferred or assigned to Purchaser, Purchaser and Sellers shall cooperate and execute and deliver any instruments of transfer or assignment reasonably necessary to transfer and assign such asset or property back to Sellers, as appropriate.

SECTION 1.09 Consents of Third Parties. Notwithstanding anything in this Agreement to the contrary, this Agreement shall not constitute an agreement to assign any Acquired Asset or any claim or right or any benefit arising thereunder or resulting therefrom if an attempted assignment thereof requires the consent of a third party (including any Governmental Authority), would in any way adversely affect the rights of Purchaser or the Sellers thereunder or would be contrary to Applicable Law. The Sellers and Purchaser shall use their commercially reasonable efforts (but without any requirement to pay money or offer other consideration or accommodation to any person) to obtain the consent of any applicable third party to the assignment of any such Acquired Asset or such claim, right or benefit (including, with respect to a Specified SOW, to separately assign such Specified SOW and its associated Assumed Liabilities). If any such required consent or approval is not obtained prior to the Closing, then in each such case (i) such interest in such Acquired Asset shall be withheld from sale pursuant to this Agreement without any reduction in the Purchase Price, (ii) Sellers, their Affiliates and Purchaser shall use commercially reasonable efforts to cooperate ([***]) to seek to

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obtain such consent as soon as practicable after the Closing and (iii) until such consent is obtained, Sellers and Purchaser shall use commercially reasonable efforts to cooperate (each at their own expense) in any lawful arrangement that does not require such consent under which Purchaser shall obtain the economic claims, rights, benefits and Liabilities under the asset (including any Contract or Permit) or related claim, right or benefit with respect to which the consent has not been obtained in accordance with this Agreement. Such arrangement may include (a) the subcontracting, sublicensing or subleasing to Purchaser, if permitted, of any and all rights of Sellers and their Affiliates against, and obligations of Sellers and their Affiliates to, the other party to such third-party agreement and (b) the enforcement ([***] and subject to the Sellers having received, to their reasonable satisfaction, assurances (including in by way of indemnities, etc.) that Purchaser will be able to comply with such obligations) by Sellers or their Affiliates of such rights. The Sellers and their Affiliates shall have no obligation to obtain such consent or approval or to provide such an alternative arrangement other than the undertaking to use commercially reasonable efforts to obtain or provide the same as set forth in this Section 1.09 (and the failure to do so shall not be deemed to be a breach of the Sellers' representations, warranties or covenants hereunder and the Sellers and their Affiliates shall have no Liability in connection with such failure).

SECTION 1.10 Grant of Licenses.

(a) Effective as of the Closing, Sellers hereby grant to Purchaser a non-exclusive, worldwide, irrevocable and non-terminable, perpetual, royalty-free, fully paid-up, non-transferable (except in accordance with Section 7.01) license, with the right to sublicense through multiple tiers of sublicenses (but subject to Section 1.10(c)), under the Product Licensed IP to Exploit the Product in all fields of use ("Purchaser License").

(b) Effective as of the Closing, Purchaser hereby grants to the Sellers a non-exclusive, worldwide, irrevocable and non-terminable, perpetual, royalty-free, fully paid-up, non-transferable (except in accordance with Section 7.01) license, with the right to sublicense through multiple tiers of sublicenses (but subject to Section 1.10(d)), under the Closing Date IP Assets and Product IP to Exploit any product (other than a recombinant human collagen type VII product) in any field of use outside of the Covered Indication ("Sellers License").

(c) The license granted to Purchaser under the Purchaser License shall include the right of Purchaser to grant sublicenses thereunder to any person. Any sublicense of the Purchaser License granted to any third party that is not an Affiliate of Purchaser shall be in writing (it being understood that, for the avoidance of doubt, nothing herein shall be construed as requiring Purchaser to provide a copy of such sublicense (or any other notice) to, or obtain consent from, Sellers in connection with granting any sublicense under the Purchaser License). Purchaser shall remain liable to Sellers for all acts or omissions of its sublicensees under the Purchaser License as if they were acts or omissions of the Purchaser under this Agreement.

(d) The license granted to Sellers under the Sellers License shall include the right of Sellers to grant sublicenses thereunder to any person. Any sublicense of the Sellers License granted to any third party that is a not an Affiliate of any Seller shall be in writing (it being understood that, for the avoidance of doubt, nothing herein shall be construed as requiring any Seller to provide a copy of such sublicense (or any other notice) to, or obtain consent from,

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Purchaser in connection with granting any sublicense under the Sellers License). Sellers shall remain liable to Purchaser for all acts or omissions of its sublicensees under the Sellers License as if they were acts or omissions of Sellers under this Agreement.

(e) Without limiting the express representations and warranties of the parties set forth in Article III and Article IV, the Purchaser License and Sellers License are granted "as is" and Sellers and Purchaser each hereby disclaim any express or implied representations or warranties of any kind with respect to the Purchaser License and Sellers License, including those regarding merchantability, fitness for a particular purpose or non-infringement. Except for the Purchaser License and Sellers License, no other licenses of Intellectual Property are granted to Purchaser or Sellers under this Agreement.

ARTICLE II

Closing

SECTION 2.01 Closing. The closing of the Acquisition (the "Closing") shall take place on the date hereof (the "Closing Date") at the offices of Goodwin Procter LLP, 100 Northern Avenue, Boston, MA, substantially contemporaneously with the transactions contemplated by the Contribution Agreement and the Purchaser SPA.

(a) In connection with the execution and delivery of this Agreement, Purchaser has delivered to Shire, Lotus, or the Sellers, as applicable:

(i) by wire transfer to a bank account designated in writing by Shire at least [***] business days prior to the Closing Date in Dollars, immediately available funds in an amount equal to the Base Purchase Price;

(ii) an executed counterpart of the Assignment and Assumption Agreement;

(iii) an executed counterpart of the Patent Assignment;

(iv) an executed counterpart of the Transition Services Agreement;

(v) an executed counterpart of the Subscription Agreement;

(vi) an executed Contribution Agreement;

(vii) an executed counterpart of the Purchaser SPA;

(viii) an executed counterpart to the Right of First Refusal and Co-Sale Agreement;

(ix) an executed counterpart to the Voting Agreement; and

(x) an executed counterpart to the Investors' Rights Agreement.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(b) In connection with the execution and delivery of this Agreement, Shire, Lotus or Sellers, as applicable, have delivered to Purchaser:

(i) an executed counterpart of the Assignment and Assumption Agreement;

(ii) an executed counterpart of the Patent Assignment;

(iii) an executed counterpart of the Transition Services Agreement;

(iv) an executed counterpart of the Subscription Agreement;

(v) an executed counterpart to the Right of First Refusal and Co-Sale Agreement;

(vi) an executed counterpart to the Voting Agreement;

(vii) an executed counterpart to the Investors' Rights Agreement; and

(viii) an executed certificate from each Seller, signed under penalties of perjury, stating that such Seller is not a foreign person, in accordance with the requirements of Treasury Regulation section 1.1445-2(b)(2).

ARTICLE III

Representations and Warranties of Sellers

Except as set forth in the Sellers Disclosure Schedule attached hereto (the "Sellers Disclosure Schedule"), the Sellers, on a joint and several basis, each hereby represents and warrants to Purchaser as of the date hereof as follows (it being understood that, notwithstanding anything to the contrary in this Agreement, all of the following representations and warranties, including all historical or other rearward-looking representations and warranties, of Sellers, except for those representations and warranties in Section 3.04(b), are given only with respect to the Ownership Period (whether or not such qualifying language appears in all applicable circumstances throughout this Article III), and not to any facts, circumstances, liabilities or obligations which may have occurred or accrued prior to the Ownership Period):

SECTION 3.01 Corporate Existence and Power. Each Seller is a corporation duly incorporated, validly existing and in good standing under the laws of its jurisdiction of incorporation and has all corporate powers and all material governmental licenses, authorizations, permits, consents and approvals required to carry on its business as now conducted, except as would not reasonably be expected to, individually or in the aggregate, materially impair the ability of a Seller to consummate the transactions contemplated by this Agreement.

SECTION 3.02 Authorization. The execution, delivery and performance by a Seller of this Agreement and the Other Transaction Documents and the consummation of the transactions contemplated hereby and thereby are within the powers of such Seller and have been duly authorized by all necessary action on the part of such Seller. This Agreement and each of

the Other Transaction Documents to which a Seller is a party, and each of the other documents and instruments to be executed and delivered by such Seller pursuant hereto and thereto constitute, or shall constitute, as the case may be a valid and binding agreement of such Seller (assuming that this Agreement and any such Other Transaction Document has been or will be duly and validly authorized, executed and delivered by the other parties thereto) enforceable against such Seller in accordance with its terms (subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity). No vote or approval of the shareholders of a Seller or any of its Affiliates is required in order to consummate the transactions contemplated by this Agreement or the Other Transaction Documents except for any approval that has already been given.

SECTION 3.03 Governmental Authorization. No consent, approval, license, permit, order or authorization of, or registration, declaration or filing with, any Governmental Authority is required to be obtained or made by or with respect to a Seller in connection with such Seller's execution, delivery and performance of this Agreement, the Other Transaction Documents or the consummation of the transactions contemplated hereby or thereby by such Seller, other than (i) those that may be required solely by reason of Purchaser's or any Affiliate of Purchaser's (as opposed to any other third party's) participation in the transactions contemplated hereby or thereby and (ii) such consents, approvals, licenses, permits, orders, authorizations, registrations, declarations and filings the absence of which, or the failure to make or obtain which, individually or in the aggregate, would not be reasonably likely to be material to the Acquired Assets, taken as a whole, or would not reasonably be expected to, individually or in the aggregate, materially impair the ability of a Seller to consummate the transactions contemplated by this Agreement and the Other Transaction Documents and the consummation of the transactions contemplated hereby and thereby.

SECTION 3.04 Noncontravention.

(a) The execution, delivery and performance by a Seller of this Agreement and the consummation of the transactions contemplated hereby do not and will not (i) violate the certificate of incorporation or bylaws of such Seller, (ii) assuming compliance with the matters referred to in Section 3.03, violate any Applicable Law, (iii) require any consent or other action by any third party under, constitute a default or an event that, with or without notice or lapse of time or both, would constitute a default under, or give rise to any right of termination, cancellation or acceleration of any right or obligation of such Seller or to a loss of any benefit to which such Seller is entitled under any Transferred Contract or (iv) result in the creation or imposition of any liens, claims, encumbrances, security interests, licenses, covenants not to use, options, charges or restrictions of any kind ("Liens") on any Acquired Asset, except for any Permitted Liens, with such exceptions, in the case of each of clauses (ii) through (iv), as would not reasonably be expected to be, individually or in the aggregate, material to the Acquired Assets, taken as a whole, or would not reasonably be expected to, individually or in the aggregate, materially impair the ability of a Seller to consummate the transactions contemplated by this Agreement and the Other Transaction Documents and the consummation of the transactions contemplated hereby and thereby.

(b) Neither the current operation by Shire of the Acquired Assets nor the Acquisition is subject to that certain [***].

SECTION 3.05 Good and Valid Title. Seller and its Affiliates have good and valid title to all Acquired Assets, in each case free and clear of all Liens, other than for Permitted Liens or as a result of facts, circumstances or events not occurring during the Ownership Period.

SECTION 3.06 Material Contracts. Except as set forth in Section 3.06 of the Sellers Disclosure Schedule, to the knowledge of Sellers, each Transferred Contract is valid, binding and in full force and effect and, to the knowledge of Sellers, is enforceable by the applicable Seller or its applicable Affiliate in accordance with its terms, subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity. During the Ownership Period, each Seller and its Affiliates has performed in all material respects all obligations required to be performed by it under the Transferred Contracts and is not (with or without the lapse of time or the giving of notice, or both) in breach or default in any material respect thereunder and, to the knowledge of Sellers, no other party to any of the Transferred Contracts is (with or without the lapse of time or the giving of notice, or both) in breach or default in any material respect thereunder.

SECTION 3.07 Litigation. There is no action relating to, arising out of or in connection with the Acquired Assets pending against or, to the knowledge of Sellers, threatened in writing against or affecting Sellers, any of their properties or any of their directors or officers (in their capacity as such) before any arbitrator or any Governmental Authority that, in each case if determined adversely in accordance with the plaintiff's demands, would reasonably be expected to be, individually or in the aggregate, material to the Acquired Assets, taken as a whole, or would reasonably be expected to, individually or in the aggregate, materially impair the ability of a Seller to consummate the transactions contemplated by this Agreement.

SECTION 3.08 Compliance with Laws and Court Orders. Sellers have not been since the Lotus Closing and are not in material violation of, have not been threatened in writing to be charged with or given notice of any material violation of and, to the knowledge of Sellers, are not under investigation with respect to, any Applicable Law relating to, arising out of or in connection with any Acquired Asset. Other than orders of general applicability, there is no order (other than orders of general applicability) of any arbitrator or Governmental Authority (including the U.S. Department of Health and Human Services, including its Office of Inspector General, the U.S. Department of Justice and any State Attorney General) outstanding against Sellers specifically relating to, or arising out of or in connection with, any Acquired Asset that is or would reasonably be expected to be, individually or in the aggregate, material to the Acquired Assets, taken as a whole, or would reasonably be expected to, individually or in the aggregate, materially impair the ability of a Seller to consummate the transactions contemplated by this Agreement.

SECTION 3.09 Regulatory Matters.

(a) To the knowledge of Sellers, each Seller has all material permits required by the FDA (or any foreign equivalent thereof) (if any) to conduct its business as it relates to

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and in connection with the Acquired Assets (the "FDA Permits"). To the knowledge of Sellers, all of the material FDA Permits are in full force and effect, each Seller is in compliance in all material respects with, and is not in material default under (and no event which with the giving of notice or lapse of time, or both, would become a material default under), each such material FDA Permit. Neither Sellers nor any of their Affiliates has granted any third party any right or license to use, access or reference any filings or applications with the FDA (and any foreign equivalent thereof) associated with the Acquired Product (collectively, the "Seller Regulatory Filings"), including any of the Research Program IP in any of Seller Regulatory Filings or rights (including any regulatory exclusivities) associated with each such Seller Regulatory Filing.

(b) Sellers have not received any written notice during the Ownership Period relating to any alleged lack of safety or efficacy of the Acquired Product or any other product candidate of Sellers that is an Acquired Asset.

(c) To the knowledge of Sellers, in all matters relating to, arising out of or in connection with the Acquired Assets, each Seller is in compliance in all material respects with all Applicable Law and any other applicable letters, notices or guidance issued by the FDA or any other Governmental Authority which regulates the development or sale of pharmaceutical products or biological, device or regenerative medicine products in any jurisdiction. To the knowledge of Sellers, there are no pending or threatened regulatory actions by the FDA or any Governmental Authority which regulates the development or sale of pharmaceutical products or biological, device or regenerative medicine products in any jurisdiction against a Seller relating to, arising out of or in connection with any Acquired Asset or, with respect to the Acquired Product or any other product candidate of Sellers that is an Acquired Asset, to the knowledge of Sellers, any person that manufactures any component, ingredient, or material used in manufacturing such Acquired Product or any other product candidate of Sellers pursuant to a development, commercialization, manufacturing, supply or other collaboration arrangement with Sellers (a "Collaborative Partner"). Since the Lotus Closing, Sellers have received no written notices, reports, warning letters or untitled letters alleging or asserting material noncompliance with any Applicable Law with respect the Acquired Product or any other product candidate of Sellers that is an Acquired Asset or any subpoenas or investigative demands or other written inquiries that would reasonably be interpreted as raising a material compliance concern sent or delivered by any Governmental Authority with regard to such Acquired Product or product candidate.

(d) Since the Lotus Closing, Sellers have received no (i) FDA Form 483 inspection observations, (ii) establishment inspection reports, (iii) written warning, untitled or action letters, (iv) order of any Governmental Authority or (v) enforcement actions that, in each case, assert material noncompliance with any Applicable Law, in all such cases, relating to, arising out of or in connection with any Acquired Asset.

(e) If applicable, to the knowledge of Sellers, the manufacture of the Acquired Product or any other product candidate of Seller that is an Acquired Asset is being conducted in compliance in all material respects with current "good manufacturing practices," as defined by the FDA, including, as applicable, the FDA's Current Good Manufacturing Practices set forth in 21 C.F.R. Parts 210 and 211.

(f) To the knowledge of Sellers, neither Seller nor any of its Affiliates or any of their respective Collaborative Partners with respect to the Acquired Product or any other product candidate of Sellers that is an Acquired Asset (i) has been convicted of any crime or engaged in any conduct that has resulted or would reasonably be expected to result in debarment or disqualification by the FDA or any other Governmental Authority, (ii) has failed to disclose a material fact required to be disclosed to any Governmental Authority with respect to Seller, and there are no proceedings pending or threatened in writing that would reasonably be expected to result in criminal or civil liability or debarment or disqualification by the FDA or any other Governmental Authority or (iii) has committed any act, made any statement or failed to make any statement that would reasonably be expected to provide a basis for the FDA to invoke its policy with respect to "Fraud, Untrue Statements of Material Facts, Bribery, and Illegal Gratuities" or for any other Governmental Authority to invoke any similar policy.

(g) To the knowledge of Sellers, all studies, tests, preclinical research and clinical studies or trials being conducted by Sellers or any of their Affiliates, or on behalf of Sellers or any of their Affiliates, in each case with respect to the Acquired Product or any other product candidate of Sellers that is an Acquired Asset are being, and during the Ownership Period have been, conducted in compliance in all material respects with standard medical and scientific research procedures and all Applicable Law, including the Federal Food, Drug, and Cosmetic Act of 1938, as amended (the "FDCA"), and, to the extent applicable, its implementing regulations including 21 C.F.R. Parts 50, 54, 56, 58, 312 and 812, and comparable Applicable Law.

(h) To the knowledge of Sellers, neither Seller nor any of its Affiliates, nor any of their respective officers, directors, managing employees (as those terms are defined in 42 C.F.R. § 1001.1001), nor any agent (as such term is defined in 42 C.F.R. § 1001.1001(a)(2)) of Seller or any of its Affiliates: (i) is a party to, or bound by, any order, individual integrity agreement, corporate integrity agreement or other formal or informal agreement with any Governmental Authority concerning compliance with Federal health care program laws; (ii) has been debarred, excluded or suspended from participation in any Federal health care program, as defined in 42 U.S.C. § 1320a-7b(f); (iii) has had a civil monetary penalty assessed against it, him or her under 42 U.S.C. § 1320a-7a; (iv) is currently listed on the General Services Administration (the "GSA") published list of parties excluded from federal procurement programs and non-procurement programs, maintained in the GSA's System for Award Management; (v) is the target or subject of any current investigation by a Governmental Authority relating to any material Federal health care program-related offense; or (vi) is currently charged with or convicted of any criminal offense relating to the delivery of an item or service under any Federal health care program, in each of cases (i)-(vi) specifically relating to, or arising out of or in connection with, any Acquired Asset.

(i) To the knowledge of Sellers, there are no pending or threatened in writing filings of an action against Sellers or any of their Affiliates relating to the Acquired Product or any other product candidate of Seller that is an Acquired Asset under any federal or state whistleblower statute, including under the False Claims Act (31 U.S.C. § 3729 et seq.).

(j) As it relates to or in connection with any Acquired Asset, to the knowledge of Sellers, neither Seller nor its Affiliates is under investigation by any

Governmental Authority for a violation of the Health Insurance Portability and Accountability Act of 1996, as amended by the Health Information Technology for Economic and Clinical Health Act, or the regulations contained in 45 C.F.R. Parts 160 and 164, including receiving any written notices from the United States Department of Health and Human Services Office of Civil Rights relating to any such violations, or any comparable state or local Applicable Law.

(k) To the knowledge of Sellers, Sellers owns and/or have the right to use all information and data generated in all development activities and all preclinical, toxicology and other studies, and clinical studies and trials (together with data sets associated with such studies) with respect to the Acquired Product, in each case, undertaken by or on behalf of Seller.

(l) As it relates to or in connection with any Acquired Asset, to the knowledge of Sellers, each Seller and its Affiliates have during the Ownership Period complied in all material respects with Applicable Law with respect to Seller relating to security and privacy standards regarding protected health information.

(m) Notwithstanding anything herein to the contrary, the representations and warranties set forth in this Section 3.09 are the only representations and warranties of Sellers with respect to regulatory matters.

SECTION 3.10 Intellectual Property.

(a) To the knowledge of Sellers, Section 3.10(a) of the Sellers Disclosure Schedule contains a true and complete list of each of the registrations and applications for registrations owned by Sellers and included in the Research Program IP, specifying as to each such item, as applicable, (i) each owner of such item, (ii) each jurisdiction in which such item is issued or registered or in which any application for issuance or registration has been filed, (iii) the respective issuance, registration, or application number of such item and (iv) the date of application and issuance or registration of such item.

(b) Sellers (i) are the sole and exclusive owners of the Research Program IP owned by Sellers and (ii) hold all of their right, title and interest in and to such Research Program IP free and clear of any Lien (other than Permitted Liens), in each case other than as a result of facts, circumstances or events not occurring during the Ownership Period.

(c) To the knowledge of Sellers, the consummation of the transactions contemplated by this Agreement will not alter, encumber, impair or extinguish any Research Program IP.

(d) To the knowledge of Sellers, during the Ownership Period, the conduct of the Research Program by Sellers as conducted as of the Closing, does not infringe, induce or contribute to the infringement of, misappropriate or otherwise violate any Intellectual Property of any person (for the avoidance of doubt, the awareness solely of the existence of particular patents and patent applications (but not the content thereof) shall not be deemed to constitute “knowledge” of the inventions claimed therein). To the knowledge of Sellers, during the Ownership Period, there is no investigation by a Governmental Authority, or claim, action, suit, or proceeding, pending against, or threatened against, such Sellers, or any present officer, director or employee of such Sellers (i) based upon, or challenging or seeking to deny or

restrict, the rights of such Sellers in any Research Program IP, (ii) alleging that any Research Program IP is invalid or unenforceable, or (iii) alleging that the conduct of the Research Program by Sellers has infringed, misappropriated or otherwise violated any Intellectual Property of any person.

(e) To the knowledge of Sellers, during the Ownership Period, none of the Research Program IP has been adjudged invalid or unenforceable in whole or part, or, in the case of pending Patent applications included in the Research Program IP, has been the subject of a final and unappealable finding of unpatentability. To the knowledge of Sellers, during the Ownership Period, all registration, maintenance and renewal fees applicable to the Transferred Patents that are currently due have been paid and all documents and certificates related to such items have been filed with the relevant Governmental Authority or other authorities in the applicable jurisdictions for the purposes of maintaining such items.

(f) To the knowledge of Sellers, during the Ownership Period, no person has infringed, misappropriated or otherwise violated any of Sellers' rights in any Research Program IP.

(g) During the Ownership Period, to the knowledge of Sellers, Sellers have taken reasonable steps in accordance with normal industry practice to maintain the confidentiality of all Research Program IP the value of which to Sellers is contingent upon maintaining the confidentiality thereof and, to the knowledge of Sellers, no such Research Program IP has been disclosed to a person not bound by a written confidentiality agreement.

(h) Notwithstanding anything herein to the contrary, the representations and warranties set forth in this Section 3.10 are the only representations and warranties of Sellers with respect to Intellectual Property matters.

SECTION 3.11 [Reserved]

SECTION 3.12 Finders' Fees. There is no investment banker, broker, finder or other intermediary which has been retained by or is authorized to act on behalf of any Seller who is entitled to any fee or commission in connection with the transactions contemplated by this Agreement and the Other Transaction Documents.

SECTION 3.13 Affiliate Transactions. Except as set forth on Section 3.13 of the Sellers Disclosure Schedule and for the Other Transaction Documents, no (a) director, officer or, to the knowledge of Sellers, employee of a Seller or (b) Affiliate of a Seller (each of the foregoing, a "Related Party") is a party to any Transferred Contract (other than (A) in the case of any current or former director, officer, or employee of Sellers, rights and claims for indemnification or to advancement or reimbursement of expenses that any such person may have in his or her capacity as a current or former director, officer, or employee of a Seller or (B) in the case of an employee or independent contractor of a Seller, any rights or claims which such person may have arising out of or related to such person's status as an employee or independent contractor of a Seller with respect to payment of accrued and unpaid wages, compensation earned, unreimbursed business expenses and/or participation in, or benefits under, any compensation or benefits plan or other arrangement). For the avoidance of doubt, the Sellers and their subsidiaries shall not be deemed to be "Related Parties" hereunder.

SECTION 3.14 Foreign Corrupt Payments. To the knowledge of Sellers, as it relates to, arises out of or in connection with the Acquired Assets, none of Seller, any director or officer of Seller, or any consultant, agent or other person acting for or on behalf of Seller has taken any action that would result in a material violation by such person of the Foreign Corrupt Practices Act (15 U.S.C. §§ 78m(b), 78dd-1, 78dd-2, 78ff) (the "FCPA"), The Bribery Act of 2010 of the United Kingdom (the "UK Bribery Act"), or any other anti-corruption Applicable Law (but, in each case, only to the extent such Applicable Law is applicable to the foregoing persons), including: (a) by making use of the mails or any means or instrumentality of interstate commerce in furtherance of an offer, payment, promise to pay or authorization of the payment of any money, or offer, gift, promise to give, or authorization of the giving of anything of value, directly or indirectly, to any "foreign official" (as such term is defined in the FCPA) or any foreign political party or official thereof or any candidate for foreign political office to secure official action, or to any person (whether or not a foreign official) to influence that person to act in breach of a duty of good faith, impartiality or trust ("acting improperly") or to reward the person for acting improperly, in contravention of the FCPA or the UK Bribery Act or any other applicable anti-corruption Applicable Law or (b) by requesting, agreeing to receive or accepting a financial or other advantage intending that, as a consequence, anyone's work duties will be performed improperly, or as a reward for anyone's past improper performance. Since the Lotus Closing, Seller has conducted its businesses relating to, arising out of or in connection with the Acquired Assets in compliance in all material respects with the FCPA, the UK Bribery Act and any other anti-corruption Applicable Law.

SECTION 3.15 Taxes. For the Pre-Closing Tax Periods beginning after the Lotus Closing (x) Sellers have timely paid all Taxes which will have been required to be paid on or prior to the date hereof, the non-payment of which would result in a Lien on any Acquired Asset or would result in the Purchaser becoming liable or responsible therefor, (y) there are no examinations or audits now pending or threatened in writing regarding any Tax Returns with respect to the Acquired Assets by any Governmental Authority and (z) there are no Liens on the Acquired Assets other than liens for Taxes not yet due and payable for which adequate reserves have been established in accordance with GAAP. Notwithstanding anything herein to the contrary, the representations and warranties set forth in this Section 3.15 are the only representations and warranties of the Sellers with respect to Tax matters.

SECTION 3.16 No Other Representations or Warranties. Except as expressly set forth in this Article III, the Sellers make no representations or warranties, express or implied, and expressly disclaim any and all representations and warranties other than those set forth in this Article III.

ARTICLE IV

Representations and Warranties of Purchaser

Purchaser hereby represents and warrants to Sellers as of the date hereof as follows:

SECTION 4.01 Organization; Existence and Power. Purchaser is duly organized, validly existing and in good standing under the laws of its jurisdiction of organization and has all corporate powers and all material governmental licenses, authorizations, permits, consents and approvals required to carry on its business as now conducted.

SECTION 4.02 Authorization. The execution, delivery and performance by Purchaser of this Agreement and the consummation of the transactions contemplated hereby are within the powers of Purchaser and have been duly authorized by all necessary action on the part of Purchaser. This Agreement and each of the Other Transaction Documents to which Purchaser is a party, and each of the other documents and instruments to be executed and delivered by Purchaser pursuant hereto and thereto constitute, or shall constitute, as the case may be a valid and binding agreement of Purchaser enforceable against Purchaser in accordance with its terms (subject to applicable bankruptcy, insolvency, fraudulent transfer, reorganization, moratorium and other laws affecting creditors' rights generally and general principles of equity).

SECTION 4.03 Governmental Authorization. The execution, delivery and performance by Purchaser of this Agreement and the Other Transaction Documents to which it is a party, and each of the other documents and instruments to be executed and delivered by Purchaser pursuant hereto and thereto, and the consummation of the transactions contemplated hereby and thereby require no action by or in respect of, or filing with, any Governmental Authority other than any actions or filings the absence of which would not reasonably be expected, individually or in the aggregate, to materially impair the ability of Purchaser to consummate the transactions contemplated by this Agreement.

SECTION 4.04 Noncontravention. The execution, delivery and performance by Purchaser of this Agreement and the Other Transaction Documents and the consummation of the transactions contemplated hereby and thereby do not and will not (i) violate the certificate of incorporation or bylaws of Purchaser, (ii) assuming compliance with the matters referred to in Section 5.03, violate any Applicable Law (iii) require any consent or other action by any person under, constitute a default under, or give rise to any right of termination, cancellation or acceleration of any right or obligation of Purchaser or to a loss of any benefit to which Purchaser is entitled under any provision of any agreement or other instrument binding upon Purchaser or (iv) result in the creation or imposition of any material Lien on any asset of Purchaser.

SECTION 4.05 Litigation and Governmental Orders. There is no action pending against Purchaser before any arbitrator or any Governmental Authority that, if determined or resolved adversely in accordance with the plaintiffs demands, would reasonably be expected to, individually or in the aggregate, impair the ability of Purchaser to consummate the transactions contemplated by this Agreement, or in any manner challenges or seeks to

prevent, enjoin, alter or materially delay the transactions contemplated by this Agreement. Neither Purchaser nor any of its Affiliates is subject to any order of any arbitrator or Governmental Authority that in any manner challenges or seeks to prevent, enjoin, alter or materially delay the transactions contemplated by this Agreement or the Other Transaction Documents.

SECTION 4.06 Finders' Fees. There is no investment banker, broker, finder or other intermediary which has been retained by or is authorized to act on behalf of Purchaser or any of its Affiliates who is entitled to any fee or commission in connection with the transactions contemplated by this Agreement and the Other Transaction Documents.

SECTION 4.07 No Side Arrangements. Except for the Other Transaction Documents, Purchaser has provided Sellers with all agreements and arrangements existing as of the date hereof or contemplated between Purchaser and its Affiliates, on the one hand, and holders of shares of any of the Purchaser's securities as of the Closing (after consummation of the transactions contemplated by the Purchaser SPA and the Contribution Agreement) and their respective Affiliates, on the other hand, that relate directly or indirectly to the transactions contemplated by this Agreement and the Other Transaction Documents or any of such holder's direct or indirect investment in Purchaser, and there are no promises or inducements for future transactions by or among Purchaser or any of its Affiliates, on the one hand, and any such holder or any such holder's Affiliates, on the other hand, related to the foregoing.

SECTION 4.08 No Other Representations. Purchaser is an informed and sophisticated purchaser, and has engaged expert advisors, experienced in the evaluation and purchase of property and assets such as the Acquired Assets and assumption of liabilities such as the Assumed Liabilities as contemplated hereunder. Purchaser has undertaken such investigation and has been provided with and has evaluated such documents and information as it has deemed necessary to enable it to make an informed and intelligent decision with respect to the execution, delivery and performance of this Agreement. Purchaser acknowledges that each Seller has given Purchaser such access to the key employees, documents and facilities relating to the Acquired Assets and the Assumed Liabilities as Purchaser has requested. Purchaser acknowledges and agrees that the Acquired Assets are sold "as is" and Purchaser agrees to accept the Acquired Assets and the Assumed Liabilities in the condition they are in on the Closing Date based on its own inspection, examination and determination with respect to all matters, and without reliance upon any express or implied representations or warranties of any nature made by or on behalf of or imputed to Sellers, except as expressly set forth in this Agreement. Except for the representations and warranties of the Sellers set forth in this Agreement, Purchaser (on behalf of itself and its Affiliates) acknowledges and agrees that no representation or warranty of any kind whatsoever, express or implied, at law or in equity, is made or shall be deemed to have been made by or on behalf of any Seller or any of its Affiliates, and each Seller hereby disclaims, and Purchaser (on behalf of itself and its Affiliates) hereby disclaims any reliance upon, any such representation or warranty, and notwithstanding the delivery or disclosure to Purchaser or any of its representatives or Affiliates of any documentation or other information by the Sellers or any of their representatives or Affiliates with respect to any one or more of the foregoing. Without limiting the generality of the foregoing, Purchaser acknowledges that the Sellers make no representation or warranty with respect to (i) any projections, estimates or budgets delivered to or made available to Purchaser of future revenues, future results of operations (or any component

thereof), future cash flows or future financial condition (or any component thereof) with respect to the Acquired Assets or the Assumed Liabilities, (ii) the research, development, product design, manufacturing, production, distribution, marketing, promotion, sale or commercialization of any Product, or the likelihood of the achievement of any of the Milestone Events or (iii) any other information or documents made available to Purchaser or its counsel, accountants or advisors with respect to the Acquired Assets or Assumed Liabilities, except as expressly set forth in this Agreement. Purchaser also acknowledges that no employee or representative of a Seller (or any of its Affiliates) has been authorized to make any statements or representations, other than those specifically contained in this Agreement. Except as expressly set forth in this Article IV or the Other Transaction Documents, Purchaser makes no representations or warranties, express or implied, and expressly disclaim any and all representations and warranties other than those set forth in this Article IV or the Other Transaction Documents.

ARTICLE V

Covenants

SECTION 5.01 Publicity. Each Seller and Purchaser agree that no public release or announcement concerning this Agreement or the transactions contemplated hereby or other communications with any news media regarding this Agreement or the transactions contemplated hereby shall be issued by any party or its Affiliates without the prior written consent of the other parties hereto (which consent shall not be unreasonably withheld), except as such release or announcement may be required by Applicable Laws, the rules or regulations of any United States or foreign securities exchange to which such party is subject, any listing agreement with any U.S. or U.K. securities exchange or share market or any listing authority including the U.K. Listing Authority; *provided* that if any such release, announcement or communication is so required, the Sellers and Purchaser shall consult with each other, to the extent reasonably practicable, in advance as to the contents and timing thereof.

SECTION 5.02 Bulk Transfer Laws. The parties hereby waive compliance with the provisions of any so-called “bulk transfer law” of any jurisdiction in connection with the sale of the Acquired Assets to Purchaser.

SECTION 5.03 Tax Matters.

(a) All Transfer Taxes and any filing or recording fees applicable to the Acquisition shall be borne one-half by the Sellers and one-half by the Purchaser. The legally required party shall timely file all necessary Tax Returns and other documentation with respect to such Transfer Taxes required by a Governmental Authority to be filed and, if required by applicable Law, the other party will, and will cause its Affiliates to, join in the execution of any such Tax Returns and other documentation. The Sellers and the Purchaser shall, as applicable, (i) cooperate in the preparation and filing of all necessary Tax Returns and other documentation with respect to such Transfer Taxes, (ii) use commercially reasonable efforts to minimize any such Taxes or fees and to avail itself of any available exemptions from any such Taxes or fees, and (iii) cooperate with the other party in providing any information and documentation that may be necessary to obtain such exemption.

(b) Any real property, personal property or similar Taxes applicable to the Acquired Assets for a taxable period that includes but does not end on the Closing Date (collectively, the "Apportioned Obligations") shall be timely paid by the Purchaser or the Seller, as applicable, and such Taxes shall be apportioned between the Purchaser and the Seller based on the number of days in such taxable period included in the Pre-Closing Tax Period and the number of days in the entire taxable period.

(c) Upon payment of any such Apportioned Obligations or Transfer Taxes, the paying party shall present a statement to the non-paying party setting forth the amount of reimbursement to which the paying party is entitled under Sections (a) or (c), as the case may be, together with such supporting evidence as is reasonably necessary to calculate the amount to be reimbursed or refunded. The applicable party shall make the payment in the foregoing sentence promptly but in no event later than [***] days after the presentation of such statement. Any payment not made within such time shall bear interest at the federal underpayment rate for each day until paid. Notwithstanding the foregoing, the party with the primary legal obligation to pay any Apportioned Obligations or Transfer Taxes may, in its sole discretion, seek reimbursement under this Section 5.03(c) from the non-paying party prior to such party's payment of any such Apportioned Obligations or Transfer Taxes, and the non-paying party shall make such reimbursement promptly but in no event later than [***] business days after the presentation of such statement; provided, that the non-paying party shall not be required to make such reimbursement earlier than [***] days prior to the date on which such Apportioned Obligations or Transfer Taxes are due.

(d) The Purchaser and the Sellers agree to furnish or cause to be furnished to each other, upon request, as promptly as practicable, such information and assistance relating to the Acquired Assets (including access to books and records) as is reasonably necessary for the filing of all Tax Returns, the making of any election relating to Taxes, the preparation for any audit by any Governmental Authority, and the prosecution or defense of any claim, suit or proceeding relating to any Tax. The Purchaser and the Sellers shall retain all books and records with respect to Taxes pertaining to the Acquired Assets for a Pre-Closing Tax Period for a period of at least [***] years following the Closing Date. On or after the end of such period, each party shall provide the other with at least [***] days prior written notice before destroying any such books and records, during which period the party receiving such notice can elect to take possession, at its own expense, of such books and records. The Sellers and the Purchaser shall cooperate with each other in the conduct of any audit or other proceeding relating to Taxes involving the Acquired Assets with respect to any Pre-Closing Tax Period.

(e) Tax Treatment. The parties hereto agree that the purchase of the Acquired Assets by Purchaser in consideration for the Purchase Price is integrated for U.S. federal income tax purposes with (i) the contribution of the Assets (as such term is defined in the Contribution Agreement) by the Contributors (as such term is defined in the Contribution Agreement) in consideration for the Shares (as such term is defined in the Contribution Agreement) pursuant to the Contribution Agreement, and (ii) the issuance of the Initial Shares (as such term is defined in the Purchaser SPA) by Purchaser to BridgeBio Pharma LLC pursuant to the Purchaser SPA. Accordingly, the purchase of the Acquired Assets and the transactions in clause (i) and (ii) shall be treated by the parties as a transaction governed by Section 351 of the Code. The parties hereto agree that, for all Tax purposes, the transaction

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

contemplated by this agreement will be reported in a manner that is consistent with this Section 5.03(e), and none of them (nor any of their respective affiliates) will take any Tax position inconsistent therewith on any Tax Return or otherwise, except as otherwise required by a "determination," within the meaning of Section 1313(a)(1) of the Code or any similar provision of any state, foreign or local law. Any gain recognized pursuant to Section 351(b) of the Code shall be allocated among the Acquired Assets in accordance with their relative fair market values as reasonably determined by the parties. If the parties cannot agree on an allocation, then the matter shall be submitted to the Accounting Firm in accordance with the procedures set forth in Section 1.04(e) of this Agreement for the Accounting Firm's determination, which shall be binding on the parties.

SECTION 5.04 Intellectual Property Matters.

(a) [***] shall be responsible, at its sole cost and expense, for all applicable recordations of the assignment of the Research Program IP.

(b) From and after the Closing, Purchaser shall, and shall cause each other member of the Purchaser Rights Group to, diligently prosecute in good faith each pending Patent application included in the Transferred Patents. For the avoidance of doubt, Purchaser shall not file any Patent in any manner designed to circumvent or otherwise avoid having such Patent constitute a Transferred Patent under this Agreement that contains at least one Valid Claim.

SECTION 5.05 Confidential Information.

(a) After the Closing until the sixth anniversary thereof, each of the Sellers shall hold, and shall cause its Affiliates to hold, and will use their respective reasonable best efforts to cause their respective officers, directors, employees, accountants, counsel, consultants, advisors and agents ("Representatives") to hold, in confidence, except (i) to the extent necessary to perform their obligations under this Agreement and the Other Transaction Documents, (ii) to their Affiliates and their respective Representatives on a need-to-know basis (provided that Sellers shall be responsible for any breach of this Section 5.05(a) by any of their Affiliates or Representatives to which such information is disclosed in accordance with this clause (ii)), (iii) as necessary to defend or prosecute any claim, action, suit, investigation or proceeding relating to this Agreement or the Other Transaction Documents or the transactions contemplated hereby or thereby or (iv) if requested or compelled to disclose by judicial or administrative process or by other requirements of law or pursuant to any listing agreement with any U.S. or U.K securities exchanges or share market or by any listing authority, all confidential documents and information relating to, arising out of or in connection with the Acquired Assets, except to the extent that such information (X) shall have entered public domain through no improper disclosure by Sellers or any of their respective Affiliates or (Y) shall have become known to the Sellers or any of their Affiliates after the Closing from a source (other than the Purchaser and its Affiliates) not known by it to be bound by a confidentiality obligation to any person with respect to such information. The obligation of Sellers and their Affiliates to hold any such information in confidence shall be satisfied if they exercise the same care with respect to such information as they would take to preserve the confidentiality of their own similar information.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(b) After the Closing until the [***] anniversary thereof, Purchaser shall hold, and shall cause its Affiliates to hold, and will use its reasonable best efforts to cause their respective Representatives to hold, in confidence, except (i) to the extent necessary to perform its obligations under this Agreement and the Other Transaction Documents, (ii) to its Affiliates and their respective Representatives on a need-to-know basis (provided that Purchaser shall be responsible for any breach of this Section 5.05(b) by any of its Affiliates or Representatives to which such information is disclosed in accordance with this clause (ii)), (iii) as necessary to defend or prosecute any claim, action, suit, investigation or proceeding relating to this Agreement or the Other Transaction Documents or the transactions contemplated hereby or thereby or (iv) if requested or compelled to disclose by judicial or administrative process or by other requirements of law or pursuant to any listing agreement with any U.S. or U.K securities exchanges or share market or by any listing authority, (A) all nonpublic or confidential documents and information relating to, arising out of or in connection with Product Licensed IP provided to Purchaser or (B) all nonpublic or confidential information provided to Purchaser, any of its Affiliates or any of their Representatives by a Seller, any of its Affiliates or their Representatives concerning a Seller or any of its Affiliates or any of their respective businesses in connection with the potential transactions resulting in the asset sale described herein, and not otherwise constituting an Acquired Asset or Assumed Liability (it being understood that Purchaser may disclose such documents and information described in the foregoing clause (A) to a third party that has been granted a sublicense to the Product Licensed IP by Purchaser pursuant to Section 1.10(c), but only to the extent necessary for such third party to exercise its rights granted under Section 1.10(c), provided that Purchaser shall remain liable to Sellers for any breach of this Section 5.05(b) by any such third party), except to the extent that such information (X) shall have entered public domain through no improper disclosure by Purchaser or any of its Affiliates or (Y) shall have become known to Purchaser or any of its Affiliates after the Closing from a source (other than the Sellers and their Affiliates) not known by it to be bound by a confidentiality obligation to any person with respect to such information. The obligation of Purchaser and its Affiliates to hold any such information in confidence shall be satisfied if they exercise the same care with respect to such information as they would take to preserve the confidentiality of their own similar information.

SECTION 5.06 Access to Information.

(a) On and after the Closing Date, Sellers shall, and shall cause their Affiliates to, provide any information in such Sellers' possession reasonably requested by Purchaser or any of its controlled Affiliates (i) with respect to any period ending on or before the Closing Date to the extent relating to the Acquired Assets or the Assumed Liabilities or (ii) to the extent necessary or useful for the Purchaser in connection with any audit, investigation, dispute (including in connection with a dispute between the parties) or any other reasonable business purpose relating to the Acquired Assets; provided that any such access shall not unreasonably interfere with the conduct of the business of such Seller or any of its Affiliates and shall not require such Seller or any of its Affiliates to violate any Applicable Law or a contract or obligation of confidentiality owed to a third party or to permit access to any privileged information. [***] shall bear all of the out-of-pocket costs and expenses (excluding reimbursement for general overhead, salaries and employee benefits) reasonably incurred by [***] or its Affiliates in connection with [***] exercise of its rights under this Section 5.06(a).

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(b) On and after the Closing Date, Purchaser shall, and shall cause its Affiliates to, provide any information in its possession reasonably requested by Sellers or any of their Affiliates (i) with respect to any period ending on or before the Closing Date to the extent relating to the Acquired Assets or the Assumed Liabilities or (ii) to the extent necessary or useful for Sellers in connection with any audit, investigation, dispute (including in connection with a dispute between the parties) or any other reasonable business purpose relating to the Acquired Assets; provided that any such access shall not unreasonably interfere with the conduct of the business of Purchaser or any of its Affiliates and shall not require Purchaser or any of its Affiliates to violate any Applicable Law or a contract or obligation of confidentiality owed to a third party or to permit access to any privileged information. [***] shall bear all of the out-of-pocket costs and expenses (excluding reimbursement for general overhead, salaries and employee benefits) reasonably incurred by [***] or its Affiliates in connection with [***] exercise of its rights under this Section 5.06(b).

(c) Promptly (and in any event no later than [***] days) after the Closing, Sellers will deliver to Purchaser a copy of all documents in the electronic data room maintained by Sellers in connection with the transactions contemplated hereby at www.intralinks.com on compact disc or DVD or in such other form as reasonably acceptable to Purchaser.

(d) From and after the Closing, subject to Section 5.05, Sellers and their Affiliates and their respective Representatives may retain a copy of any or all of the data room materials and other books, data, files, information and records relating to the Acquired Assets on or before the Closing Date. Each party agrees that, with respect to all original data room materials and other books, data, files, information and records relating to the Acquired Assets and existing as of the Closing, it will (and will cause each of its Affiliates and Representatives to) (i) comply in all material respects with all Applicable Law relating to the preservation and retention of records and (ii) apply preservation and retention policies that are no less stringent than those generally applied by such party or its Affiliates or Representatives. In addition, for at least [***] years after the Closing Date, Purchaser shall, and shall cause each of its Affiliates to, preserve all original data room materials and other books, data, files, information and records relating to the Acquired Assets and existing as of the Closing Date and, thereafter, until the [***] anniversary of the Closing Date, dispose of such original data room materials and other books, data, files, information and records only after it shall have given the Sellers [***] days' prior written notice of such disposition and the opportunity ([***]) to remove and retain such information.

SECTION 5.07 Non-Competition.

(a) For a period of [***] years following the Closing Date (the "Restricted Period"), neither Seller shall, whether directly or indirectly or alone or in collaboration with any other person, through any Affiliate, engage or participate (or invest in any business that engages or participates) anywhere in the world in any research, development, product design, manufacturing, production, distribution, marketing, promotion, sale or commercialization relating to the discovery, development or commercialization of any [***] (a "Restricted Business"), in each case including by owning, managing, operating, controlling or otherwise participating in the ownership, management, operation or control of any entity engaged in any such activities, whether as an employer, proprietor, partner, equityholder, consultant, agent or

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otherwise; *provided* that, notwithstanding anything to the contrary in the foregoing, nothing in this Section 5.07 shall restrict, prohibit or limit in any respect a Seller or any of its Affiliates from (i) acquiring (and thereafter operating) the whole or any part of, or investing in, a person which engages in any Restricted Business or the whole or any part of a business which includes any Restricted Business so long as either (A) the revenues of the Restricted Business being acquired constitute no more than [***] of the revenues of the person or business being acquired (as set out in the latest available annual financial statements of that person or business) or (B) if such [***] threshold is exceeded, such Seller or Affiliate completes the sale of the Restricted Business within [***] of the acquisition; provided that if such sale is subject to regulatory approval then such [***] period shall be extended until [***] business days after all regulatory approvals have been received, but only to the extent that the parties to such sale are using commercially reasonable efforts to obtain any such approvals; (ii) being a passive owner of the outstanding capital stock or other equity interests of any person; or (iii) owning any interest in an entity whose securities are publicly traded or listed with a securities exchange. For the avoidance of doubt, (A) the restrictions set forth in this Section 5.07 shall not apply with respect to [***]; and (B) during the Restricted Period, Sellers shall not grant any sublicense under the Sellers License in any manner designed to circumvent or otherwise avoid the restrictions set forth in this Section 5.07.

(b) The Restricted Period shall be extended by the length of any period during which either Seller is finally determined to be in breach of the terms of this Section 5.07.

SECTION 5.08 Sellers Names and Marks. Following the Closing, Purchaser shall, and shall cause its Affiliates to, cease and discontinue any and all uses of the Sellers Names and Marks and remove all Sellers Names and Marks from all Acquired Assets and any other materials of Purchaser or any of its Affiliates.

ARTICLE VI

Indemnification

SECTION 6.01 Indemnification by Sellers. Subject to the terms and conditions of this Article VI, from and after the Closing, Sellers shall, on a joint and several basis, indemnify Purchaser and its Affiliates and each of their respective officers, directors, employees, agents, representatives, partners, shareholders and members against and hold them harmless from any loss, Tax, liability, damage, obligation or expenses (including reasonable legal fees and expenses and the reasonable cost of enforcing any right to indemnification hereunder) (collectively, "Losses") suffered or incurred by any such indemnified party to the extent arising from (a) any breach of any representation or warranty of either Seller contained in Article III of this Agreement, (b) any breach of any covenant of either Seller contained in this Agreement, or (c) any Excluded Liability. Notwithstanding the foregoing, (i) Sellers shall not have any liability under clause (a) of this Section 6.01 unless the aggregate of all Losses for which Sellers would be liable, but for this clause (i), exceeds [***]; and (ii) Sellers' liability under clause (a) of this Section 6.01 shall in no event exceed [***]. Notwithstanding the foregoing, Losses arising from any [***]. Notwithstanding anything in this Agreement to the contrary, Sellers' aggregate liability under this Section 6.01 shall in no event exceed the sum of (i) [***] and (ii) [***]. For the avoidance of doubt, [***] is not intended to be indicative of [***] for any purposes other than this Agreement.

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SECTION 6.02 Indemnification by Purchaser. Subject to the terms and conditions of this Article VI, from and after the Closing, Purchaser shall indemnify Sellers and their Affiliates and each of their respective officers, directors, employees, agents, representatives, partners, shareholders and members against and hold them harmless from any Losses suffered or incurred by any such indemnified party to the extent arising from (a) any breach of any representation or warranty of Purchaser contained in Article IV this Agreement, (b) any breach of any covenant of Purchaser contained in this Agreement, (c) any Assumed Liability or (d) [***], in connection with the transactions contemplated hereby (it being agreed that, for the avoidance of doubt, in the event any such claim results in a [***]. Notwithstanding the foregoing, (i) Purchaser shall not have any liability under clause (a) of this Section 6.02 unless the aggregate of all Losses for which Purchaser would be liable, but for this clause (i), exceeds on a cumulative basis the [***]; and (ii) Purchaser's liability under clause (a) of this Section 6.02 shall in no event exceed on a cumulative basis [***]. Notwithstanding the foregoing, Losses arising from any breach of any representation or warranty of Purchaser contained in [***].

SECTION 6.03 Indemnification Payments; Limitations on Liability.

(a) Each indemnified party shall use commercially reasonable efforts to collect any amounts available under insurance coverage, or from any other person alleged to be responsible, for any Losses payable under Section 6.01 or Section 6.02. The amount of any Losses for which indemnification is provided under this Article VI shall be net of any amounts actually received by the indemnified party under insurance policies or in respect of any other third-party recovery with respect to such Losses. If such indemnified party actually receives any amounts under insurance policies or in respect of any other third-party recovery with respect to such Losses after the indemnifying party has paid the indemnified party under any indemnification provision of this Agreement in respect of that loss, the indemnified party shall notify the indemnifying party and pay to the indemnifying party the extent of such amounts actually received by the indemnified party (less the indemnified party's reasonable costs of collection from such insurance provider or other third party, not exceeding the value of the benefit to the indemnified party) within [***] business days after the benefit is received.

(b) Subject to the applicable limitations set forth in this Article VI, Purchaser shall have the right, but not the obligation, to set off any indemnification payments that have been determined pursuant to a final, non-appealable judgment to be owed by the Sellers to an indemnified party pursuant to Section 6.01 against any Milestone Payment or any Contingent Payment that is owed and has not yet been paid.

(c) [***].

(d) Notwithstanding any provision herein, [***].

(e) Notwithstanding anything to the contrary set forth in this Agreement, except for (i) claims for specific performance as provided in Section 7.13 and (ii) claims under the Transition Services Agreement, the Subscription Agreement and the Equity Documents, the

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parties acknowledge and agree that each party's sole and exclusive remedy with respect to claims arising from the breach of any representation or warranty contained in this Agreement, breach of covenant or other agreement contained in this Agreement or other claim arising out of this Agreement or in any of the Other Transaction Documents, or in any certificate or instrument delivered pursuant hereto or thereto (other than claims of, or causes of action arising from, actual fraud with the intent to deceive), shall be pursuant to the indemnification provisions set forth in this Article VI. Other than the claims referred to in the first sentence of this Section 6.03(e), effective as of the Closing, Purchaser waives any rights and claims Purchaser may have against each Seller or any of their Affiliates, whether in law or in equity, relating to the Acquired Assets (or operation thereof), the Assumed Liabilities or the transactions contemplated hereby. The rights and claims waived by Purchaser include claims for breach of contract, breach of representation or warranty, negligent misrepresentation and all other claims for breach of duty.

(f) Each indemnified party shall mitigate in accordance with Applicable Law any Losses for which such indemnified party seeks indemnification under this Agreement; *provided*, that no party is required to bring any suit, action or proceeding in connection with such mitigation. If such indemnified party mitigates its loss after the indemnifying party has paid the indemnified party under any indemnification provision of this Agreement in respect of that loss, the indemnified party shall notify the indemnifying party and pay to the indemnifying party the extent of the value of the benefit to the indemnified party of that mitigation (less the indemnified party's reasonable costs of mitigation, not exceeding the value of the benefit to the indemnified party) within [***] business days after the benefit is received.

(g) Notwithstanding anything to the contrary in this Agreement, the Sellers shall not have any liability under Section 6.01 with respect to any facts, circumstances, liabilities or obligations which may have occurred or accrued prior to the Ownership Period.

SECTION 6.04 Termination of Indemnification.

(a) The obligations to indemnify and hold harmless a party hereto pursuant to (i) Sections 6.01(a) and 6.02(a) shall terminate when the applicable representation or warranty terminates pursuant to paragraph (b) below and (ii) the other clauses of Sections 6.01 and 6.02 shall not terminate; *provided, however*, that as to clause (i) of this sentence such obligations to indemnify and hold harmless shall not terminate with respect to any item as to which the person to be indemnified or the related party thereto shall have, before the expiration of the applicable period, previously made a claim by delivering a notice of such claim in accordance with, and satisfying the requirements of, Section 6.05 or Section 6.06, as applicable, to the indemnifying party, in which case any such claim and such obligations to indemnify and hold harmless shall survive the expiration of the applicable period until final resolution of such claim.

(b) The representations and warranties contained in this Agreement shall survive the Closing for a period of [***] months after the Closing Date; *provided, however*, that the Sellers Fundamental Representations and Purchaser Fundamental Representations shall survive until [***]. The covenants and agreements contained in this Agreement shall survive the Closing until they have been performed or satisfied.

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SECTION 6.05 Procedures Relating to Indemnification for Third Party Claims.

(a) In order for a party (the "indemnified party") to be entitled to any indemnification provided for under this Agreement in respect of, arising out of or involving a claim or demand made by any person who is not a party to this Agreement or an Affiliate, agent or representative of the foregoing against the indemnified party (a "Third Party Claim"), such indemnified party shall notify the indemnifying party in writing of the Third Party Claim, setting forth in reasonable detail such claim and the basis for indemnification and the amount of such Losses incurred or that such indemnified party reasonably estimates in good faith is likely to be incurred in connection with such claim (taking into account the information then available to the indemnified party), promptly after receipt by such indemnified party of written notice of the Third Party Claim; *provided*, *however*, that failure to give such notification shall not affect the indemnification provided hereunder except and only to the extent the indemnifying party shall have been materially prejudiced as a result of such failure. Thereafter, the indemnified party shall deliver to the indemnifying party, as promptly as reasonably practicable after the indemnified party's receipt thereof, copies of all notices and documents (including court papers) received by the indemnified party relating to the Third Party Claim and the indemnified party shall provide the indemnifying party with such other information with respect to any such Third Party Claim reasonably requested by the indemnifying party.

(b) If a Third Party Claim is made against an indemnified party, the indemnifying party shall be entitled to participate in the defense thereof and, if it so chooses, to assume the defense thereof with counsel selected by the indemnifying party; *provided*, *however*, that (i) prior to assuming the defense of any Third Party Claim, the indemnifying party shall acknowledge in writing that, assuming the facts alleged in such Third Party Claim are true, it would have been an indemnity obligation for Losses resulting from such Third Party Claim (subject to the limitations set forth herein) and (ii) the indemnifying party shall not be entitled to assume the defense of any Third Party Claim that (A) involves criminal liability or (B) seeks solely equitable relief or any other non-monetary remedy against the indemnified party. If the indemnifying party elects to assume the defense of a Third Party Claim in accordance with this Section 6.05(b), the indemnifying party shall not be liable to the indemnified party for legal expenses subsequently incurred by the indemnified party in connection with the defense thereof; *provided*, *however*, that if (1) the indemnified party reasonably concludes, based on advice from outside counsel, that representation of the indemnified party and the indemnifying party by the same counsel presents or is reasonably likely to present an actual material conflict of interest or (2) the indemnified party determines, based on advice from outside counsel, that it has legal defenses available to it which are different from or in addition to the defenses available to the indemnifying party, then the indemnified party may retain its own counsel at the expense of the indemnifying party (provided that in no event shall the indemnifying party be responsible for the expenses of more than one counsel for the indemnified party (plus any appropriate local counsel)). If the indemnifying party elects to assume the defense of a Third Party Claim in accordance with this Section 6.05(b), the indemnified party shall have the right to participate in the defense thereof and, without limiting the preceding sentence, to employ counsel, at its own expense, separate from the counsel employed by the indemnifying party.

(c) If the indemnifying party so elects to assume the defense of a Third Party Claim in accordance with Section 6.05(b), the indemnified party shall cooperate with the

indemnifying party in the defense or prosecution thereof. Such cooperation shall include the retention and (upon the indemnifying party's request) the provision to the indemnifying party of records and information which are reasonably relevant to such Third Party Claim, and making employees available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder. If the indemnified party is conducting the defense of any Third Party Claim, the indemnifying party shall cooperate with the indemnified party in the defense or prosecution thereof. Such cooperation shall include the retention and (upon the indemnified party's request) the provision to the indemnified party of records and information which are reasonably relevant to such Third Party Claim, and making employees available on a mutually convenient basis to provide additional information and explanation of any material provided hereunder. The indemnifying party shall not admit any liability with respect to, or settle, compromise or discharge, any Third Party Claim without the indemnified party's prior written consent, unless (i) the proposed settlement or disposition involves only the payment of money damages by the indemnifying party for which the indemnified party shall have no liability (other than, for the avoidance of doubt, the payment of the Basket Amount, to the extent applicable), (ii) the proposed settlement or disposition does not impose an injunction or other equitable relief upon the indemnified party, (iii) the proposed settlement or disposition does not include any admission of wrongdoing or misconduct by the indemnified party and (iv) the indemnified party is fully and unconditionally released from any liability relating to claims that are the subject matter of such Third Party Claim. If the indemnifying party does not elect to assume the defense of a Third Party Claim in accordance with Section 6.05(b), the indemnified party shall not compromise or settle any such claim without the prior written consent of the indemnifying party (such consent not to be unreasonably delayed, conditioned or withheld).

SECTION 6.06 Procedures Related to Indemnification for Other Claims. In the event any indemnified party should have a claim against any indemnifying party under Section 6.01 or 6.02 that does not involve a Third Party Claim being asserted against or sought to be collected from such indemnified party, the indemnified party shall promptly deliver written notice of such claim, setting forth in reasonable detail such claim and the basis for indemnification and the amount of such Losses incurred or that such indemnified party reasonably estimates in good faith is likely to be incurred in connection with such claim (taking into account the information then available to the indemnified party) to the indemnifying party; *provided, however*, that failure by any indemnified party to so notify the indemnifying party shall not relieve the indemnifying party from any liability which it may have to such indemnified party under Section 6.01 or 6.02, except and only to the extent that the indemnifying party shall have been materially prejudiced as a result of such failure. If the indemnifying party disputes its liability with respect to such claim, the indemnifying party and the indemnified party shall proceed in good faith to negotiate a resolution of such dispute and, if not resolved through negotiations, such dispute shall be resolved by litigation in an appropriate court of competent jurisdiction determined pursuant to Section 7.11.

SECTION 6.07 Sources of Indemnification Recoveries. Notwithstanding anything else in this Agreement to the contrary, any indemnification obligations of the Sellers pursuant to this Article VI shall be recoverable exclusively from the following sources in the following order of priority, subject to and limited by the other limitations of this Article VI: (a) first and up to, but not exceeding, [***], by check or wire transfer of immediately available

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funds or, if applicable and at Purchaser's option, by setting off any indemnification payments to the extent permitted under Section 6.03(b) and (b) second and for any amounts up to, but not exceeding, the Overall Cap, at Sellers' option, either by (i) check or wire transfer of immediately available funds or (ii) transferring (or having its Affiliate transfer) to Purchaser a number of shares of Purchaser Shares equal to (x) such portion of the Losses to be paid using Purchaser Shares divided by (y) [***] (adjusted for stock splits, stock dividends, recapitalizations and other similar events). Each Seller (or its Affiliate) shall promptly execute any documents reasonably required by Purchaser to transfer the shares of Purchaser Shares to Purchaser and return any original certificates representing such shares to Purchaser. For the avoidance of doubt, the per share dollar amount described in Section 6.07(b)(ii)(y) is not intended to be indicative of the per share price of the Purchaser Shares for any purposes other than this Agreement.

SECTION 6.08 Tax Treatment of Indemnification Payments. Purchaser, Sellers and each of their respective Affiliates agree to treat any indemnity payment under this Agreement as an adjustment to the Purchase Price received by Sellers for the transactions contemplated by this Agreement unless otherwise required by Applicable Law.

ARTICLE VII

Miscellaneous

SECTION 7.01 Assignment.

(a) This Agreement and the rights and obligations hereunder shall not be assignable or transferable by Purchaser or Sellers without the prior written consent of the other parties hereto; *provided*, *however*, that (i) Purchaser may assign this Agreement in whole or in relevant part in the event of a Product Sale in accordance with and as contemplated by Section 1.05, (ii) Purchaser may assign its rights and obligations hereunder to any direct or indirect wholly owned subsidiary of Purchaser, (iii) the Sellers may assign the right to receive the Milestone Consideration and the Contingent Payments in accordance with Section 7.01(b), (iv) a party may assign this Agreement in its entirety to its successor in interest in connection with a merger, consolidation or sale of substantially all of such party's assets and (v) each of the Sellers may assign any of its rights, interests and obligations hereunder, in whole or from time to time in part to any person; *provided*, *further*, that no such assignment shall limit, relieve or offset the assigning party's obligations hereunder. Any attempted assignment in violation of this Section 7.01 shall be void. This Agreement shall be binding upon, inure to the benefit of, and be enforceable by, the parties and their successors and permitted assigns.

(b) Notwithstanding anything in this Agreement to the contrary, the right to receive the Milestone Consideration and the Contingent Payments or any portion thereof, if payable pursuant to the terms and conditions of this Agreement, may be sold, assigned or otherwise transferred (including any transfer by operation of law) by Sellers to any person, subject to the conditions set forth below. Sellers will provide written notice to Purchaser within [***] calendar days of any such sale, assignment or other transfer, and which written notice will include the name, contact, address and telephone number of any such purchaser, assignee or transferee, and written authorization to direct the payment of the Milestone Consideration and/or the Contingent Payments to such purchaser, assignee or transferee rather than Sellers.

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Sellers acknowledge that the right to receive the Milestone Consideration and the Contingent Payments is not a security, shall not be represented by a certificate or other instrument and shall not represent a security interest or an ownership interest in Purchaser, its Affiliates or any of their respective assets.

SECTION 7.02 No Third-Party Beneficiaries. This Agreement is for the sole benefit of the parties hereto and their permitted assigns and nothing herein expressed or implied shall give or be construed to give to any person, other than the parties hereto and such assigns, any legal or equitable rights hereunder.

SECTION 7.03 Expenses. Whether or not the transactions contemplated hereby are consummated, and except as otherwise specifically provided in this Agreement, all costs and expenses incurred in connection with this Agreement and the transactions contemplated hereby shall be paid by the party incurring such costs or expenses.

SECTION 7.04 Amendments. This Agreement may not be amended except by an instrument in writing signed on behalf of each of the parties hereto. By an instrument in writing Purchaser, on the one hand, or Sellers, on the other hand, may waive compliance by the other with any term or provision of this Agreement that such other party was or is obligated to comply with or perform. Any such waiver will only be effective in the specific instance and for the specific and limited purpose for which it was given and will not be deemed a waiver of any other provision of this Agreement or of the same breach or default upon any recurrence thereof. No failure on the part of any party to exercise any power, right, privilege or remedy under this Agreement, and no delay on the part of any party in exercising any power, right, privilege or remedy under this Agreement, shall operate as a waiver of such power, right, privilege or remedy, and no single or partial exercise of any such power, right, privilege or remedy shall preclude any other or further exercise thereof or of any other power, right, privilege or remedy.

SECTION 7.05 Notices. All notices, requests, claims, demands or other communications required or permitted to be given hereunder shall be in writing and shall be deemed to have been duly given when delivered in person, or upon confirmation of receipt when transmitted by facsimile transmission or by electronic mail, or if mailed, three days after mailing (one business day in the case of overnight mail or overnight courier service), as follows:

(a) if to Purchaser, to:

Phoenix Tissue Repair, Inc.
c/o BridgeBio Pharma LLC
421 Kipling Street
Palo Alto, CA 94301
Attention: Neil Kirby, PhD.
E-mail: [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

with a copy (which shall not constitute notice) to:

Goodwin Procter LLP
100 Northern Avenue
Boston, MA 02110
Attention: Mitchell S. Bloom, Esq. and Robert E. Puopolo, Esq.
Facsimile No.: (617) 523-1231
E-mail: [***]

(b) if to Sellers, to:

Shire Human Genetic Therapies, Inc.
Legal Department
300 Shire Way
Lexington, MA USA 02421
Attention: Legal Counsel
Facsimile No.: 781-482-2918
E-mail: [***]

with a copy (which shall not constitute notice) to:

Davis Polk & Wardwell LLP
450 Lexington Avenue
New York, New York 10017
Attention: William J. Chudd and Brian Wolfe
Facsimile: (212) 701-5800
E-mail: [***]

SECTION 7.06 Interpretation; Definitions.

(a) The definitions of the terms herein shall apply equally to the singular and plural forms of the terms defined. Whenever the context may require, any pronoun shall include the corresponding masculine, feminine and neuter forms. The words “include”, “includes” and “including” shall be deemed to be followed by the phrase “without limitation”. The word “will” shall be construed to have the same meaning and effect as the word “shall”. Unless the context requires otherwise, (i) any definition of or reference to any agreement, instrument or other document herein shall be construed as referring to such agreement, instrument or other document as from time to time amended, supplemented or otherwise modified, (ii) the words “herein”, “hereof” and “hereunder”, and words of similar import, shall be construed to refer to this Agreement in its entirety and not to any particular provision hereof, (iii) all references herein to Articles, Sections, Exhibits or Schedules shall be construed to refer to Articles, Sections, Exhibits and Schedules of or to this Agreement, as the case may be, and (iv) the headings contained in this Agreement or any Exhibit or Schedule hereto and in the table of contents to this Agreement are for reference purposes only and shall not affect in any way the meaning or interpretation of this Agreement. Any capitalized terms used in any Exhibit or Schedule hereto but not otherwise defined therein shall have the meanings as defined in this Agreement. Whenever this Agreement refers to a number of days, such number shall refer to

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calendar days unless business days are specified. In the event of an ambiguity or a question of intent or interpretation, this Agreement shall be construed as if drafted jointly by the parties and no presumption or burden of proof shall arise favoring or disfavoring any party by virtue of the authorship of any provisions of this Agreement.

(b) For all purposes hereof:

"Acquired Product" means any Covered Product (as defined in the Stock Purchase Agreement) owned by Sellers or their Affiliates, in such form existing during the Ownership Period.

"Affiliate" or "Affiliates" means, with respect to any specified person, any other person directly or indirectly controlling or controlled by or under direct or indirect common control with such specified person; and for the purposes of this definition, "control" when used with respect to any specified person means the power to direct the management and policies of such person, directly or indirectly, whether through the ownership of voting securities, by contract or otherwise; and the terms "controlling" and "controlled" have meanings correlative to the foregoing. References to "Affiliates" of Sellers or a Seller in this Agreement shall be deemed to include only [***].

"Applicable Law" means, with respect to any person, any transnational, domestic or foreign federal, state or local law (statutory, common or otherwise), constitution, treaty, convention, ordinance, code, rule, regulation, order, injunction, judgment, decree, ruling or other similar requirement enacted, adopted, promulgated or applied by a Governmental Authority that is binding upon or applicable to such person, as amended unless expressly specified otherwise.

"Approval" or "Approved" means, with respect to any product in any regulatory jurisdiction, approval from the applicable Governmental Authority sufficient to manufacture, distribute, use (including in clinical trials), market or sell such product in such regulatory jurisdiction in accordance with Applicable Laws, including receipt of pricing and reimbursement approvals, where applicable.

"Assignment and Assumption Agreement" means the Assignment and Assumption Agreement, made and entered into effective as of the date hereof, among Purchaser and Sellers to evidence Purchaser's assumption of the Assumed Liabilities and Sellers' assignment of the Acquired Assets.

"BLA" means, with respect to a Product, the biologics license application for such Product submitted to the FDA under the provisions of Section 351 of the Public Health Service Act and applicable regulations set forth in 21 C.F.R. Part 601, including all supplements and amendments thereto.

"business day" means any day, other than a Saturday or Sunday, on which commercial banks are not required or authorized to close in New York, New York.

"Calendar Quarter" means the respective periods of three (3) consecutive calendar months ending March 31, June 30, September 30 and December 31.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

"Calendar Year" means each successive period of twelve (12) calendar months commencing on January 1 and ending on December 31.

"Closing Date IP" means any and all Intellectual Property Controlled by Lotus immediately prior to the Lotus Closing and acquired by Shire in each case in connection with the transactions contemplated by the Stock Purchase Agreement, but solely to the extent such Intellectual Property existed as of the Lotus Closing, including, but not limited to, the Intellectual Property listed on Section 7.06(b)(i) of the Sellers Disclosure Schedule.

"Closing Date IP Assets" means all of Sellers' and their Affiliates' right, title and interest in and to the Closing Date IP, including, in the case of Patents included in the Closing Date IP, all non-provisional patent applications that are conversions of provisional patent applications included in the Closing Date IP (but only to the extent all claims of such conversions are exclusively directed to subject matter described in the applicable provisional patent applications included in the Closing Date IP to which such conversions claim priority), substitutions, divisions, requests for continuations, continuations, continuations-in-part (but only to the extent that all claims in such continuations in part are exclusively directed to subject matter described in applicable patent applications or patents included in the Closing Date IP to which such continuations-in-part claim priority), reissues, extensions, supplementary protection certificates and reexaminations thereof, and all equivalents of such conversions, substitutions, divisions, continuations, continuations-in-part, reissues, extensions, supplementary protection certificates and reexaminations in any jurisdiction, all as prosecuted by Sellers or any of their Affiliates through the Closing.

"Code" means the U.S. Internal Revenue Code of 1986, as amended.

"Combination Product" means a product that includes a Product and at least one additional active ingredient (whether co-formulated or co-packaged) other than a Product. Pharmaceutical dosage form vehicles, adjuvants, and excipients shall not be deemed to be "active ingredients", except in the case where such vehicle, adjuvant, or excipient is recognized by the FDA as an active ingredient in accordance with 21 C.F.R. § 210.3(b)(7).

"Commercially Reasonable Efforts" means, [***].

"Confidentiality Agreement" means the Confidentiality Agreement, dated as of December 5, 2016, between Shire and BridgeBio, Inc.

"Contract" means any legally binding contract, agreement, lease, sublease, license, commitment, sale or purchase order, indenture, note, bond, loan, mortgage, deed of trust, instrument or other arrangement, whether written or oral.

"Contribution Agreement" means the Contribution Agreement, made and entered into effective as of the date hereof, by and among Purchaser and the Equityholders.

"Controlled" means with respect to any Intellectual Property, that a person (i) either owns such Intellectual Property or (ii) has been granted a license (other than by a license or sublicense granted pursuant to this Agreement) to such Intellectual Property, and has the ability to grant to another person a license, sublicense or other access on the terms and conditions

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set forth herein without violating the terms of any agreement or arrangement with any third party in existence as of the time such first person would first be required hereunder to grant to the other person such license, sublicense or access.

"Covered Indication" means the treatment of DEB in humans.

"Covers" means, with respect to any Product (or any element thereof) and Patent, that, in the absence of ownership of, or a license granted under, such Patent, the manufacture, use, offer for sale, sale or importation of such Product (or any element thereof) would infringe such Patent.

"DEB" means dystrophic epidermolysis bullosa.

"Dollars" or "$" means lawful money of the United States of America.

"EMA" means the European Medicines Agency, or any successor entity.

"Equity Documents" means the Right of First Refusal and Co-Sale Agreement, the Voting Agreement and the Investors' Rights Agreement.

"EU" means (i) all countries that are member states of the European Union as of the date hereof or at any time thereafter and (ii) the United Kingdom.

"Exploit" means to research, have researched, develop, have developed, use, have used, make, have made, sell, have sold, offer for sale, have offered for sale, commercialize, have commercialized, import, have imported, export, have exported, register, have registered, and otherwise exploit or have exploited. "Exploitation" has a correlative meaning.

"FDA" means the United States Food and Drug Administration, or any successor entity.

"First Commercial Sale" means, with respect to a Product, the first sale for use or consumption by the general public of such Product in any country after Approval of such Product has been granted, or such marketing and sale is otherwise permitted, by the applicable Regulatory Authority of such country.

"GAAP" means generally accepted accounting principles in the United States.

"Generic Product" means, with respect to a Product in a country, a pharmaceutical product that (i) contains the same active ingredient(s) as such Product and (ii) is Approved as a substitute for such Product as a therapeutic equivalent for commercial sale and use in such country pursuant to Section 505(b)(2) or Section 505(j) of the FDCA (21 U.S.C. § 355(b)(2) and 21 U.S.C. § 355(j), respectively) as amended, or any similar Approval under Applicable Law in such country based on a demonstration of bioequivalence and similarity to such Product. For the avoidance of doubt, Generic Product excludes any Over the Counter Product.

"Generic Product Event" means, [***].

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"Governmental Authority" means any transnational, domestic or foreign federal, state or local governmental, regulatory or administrative authority, department, court, agency or official, including any political subdivision thereof.

"IND" means an Investigational New Drug Application filed with the FDA pursuant to Part 312 of Title 21 of the U.S. Code of Federal Regulations (or its successor regulation) with respect to a Product, or the equivalent application or filing filed with any equivalent agency or Governmental Authority outside the United States of America (including any supra-national agency such as the EMA), and all supplements, amendments, variations, extensions and renewals thereof that may be filed with respect to the foregoing.

"Intellectual Property" means all (i) national and multinational statutory invention registrations, patents and patent applications issued or applied for in any jurisdiction, including all certificates of invention, provisionals, nonprovisionals, substitutions, divisions, continuations, continuations-in-part, reissues, extensions, supplementary protection certificates, reexaminations and the equivalents of any of the foregoing in any jurisdiction, and all inventions disclosed in each such registration, patent or patent application, and all rights and priorities in any of the foregoing (collectively, "Patents"), (ii) trademarks, service marks, trade dress, logos, brand names, certification marks, domain names, trade names, corporate names and other indications of origin, whether or not registered, in any jurisdiction, and all registrations and applications for registration of the foregoing in any jurisdiction, and all goodwill associated with the foregoing (collectively, "Trademarks"), (iii) copyrights (whether or not registered) and registrations and applications for registration thereof in any jurisdiction, including all derivative works, moral rights, renewals, extensions, reversions or restorations associated with such copyrights, regardless of the medium of fixation or means of expression (collectively, "Copyrights"), (iv) trade secrets, know-how, information, data, databases, database rights, specifications, processes, methods, knowledge, experience, formulae, skills, techniques, schematics, drawings, blue prints, utility models, designs, technology, software, inventions (whether or not patentable or reduced to practice), discoveries, ideas and improvements, including manufacturing information and processes, assays, engineering and other manuals and drawings, standard operating procedures, flow diagrams, regulatory, chemical, pharmacological, toxicological, pharmaceutical, physical and analytical, safety, quality assurance, quality control and clinical data, technical information, research records and similar data and information (collectively, "Know-How"), (v) database rights, industrial designs, industrial property rights, publicity rights and privacy rights and (vi) similar intellectual property or proprietary rights.

"Investors' Rights Agreement" means the Investors' Rights Agreement, made and entered into effective as of the date hereof, by and among Purchaser, Lotus and the other parties named therein.

"knowledge of Sellers" means the actual knowledge, after due and reasonable inquiry of current employees of Shire, of [***], as of the date hereof.

"Liability" means any debt, liability or obligation (whether direct or indirect, absolute or contingent, accrued or unaccrued, liquidated or unliquidated, known or unknown, determined or determinable or due or to become due), including all costs and expenses relating thereto.

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"Lotus Closing" means the "Closing" as defined in the Stock Purchase Agreement.

"NDA" means, with respect to a Product, a new drug application for such Product submitted in accordance with 21 C.F.R. Part 314, and all supplements submitted pursuant to the requirements of the FDA, including all documents, data and other information concerning such Product which are necessary for FDA approval to market such Product in the United States, and any equivalent application submitted to any other health authority.

"Net Sales" means, [***].

"Other Transaction Documents" means (i) the Assignment and Assumption Agreement, (ii) the Patent Assignment, (iii) the Transition Services Agreement, (iv) the Subscription Agreement, (v) the Contribution Agreement, (vi) the Purchaser SPA and (vii) the Equity Documents.

"Over the Counter Product" means any drug product that may be sold over-the-counter without prescription under Applicable Law.

"Ownership Period" means the period from the date of the Lotus Closing to the date hereof.

"Patent Assignment" means the Patent Assignment, made and entered into effective as of the date hereof, among Purchaser and Sellers.

"Permits" means each material license, franchise, permit, certificate, approval, registration, concession, order, decree or other similar authorization in each case granted by Governmental Authorities primarily affecting, relating to, or arising out of or in connection with, the Acquired Assets (other than the FDA Permits).

"Permitted Liens" means (i) Liens disclosed on Section 7.06(b)(ii) of the Sellers Disclosure Schedule, (ii) Liens for Taxes that are not yet due and payable or are being contested in good faith, (iii) statutory Liens (including mechanic's, materialman's, carrier's, repairer's and other similar Liens) arising or incurred in the ordinary course of business, (iv) any restrictions, limitations or conditions contained in the Transferred Contracts, (v) any non-exclusive license of any Intellectual Property granted in the ordinary course of business or (vi) any other Liens affecting the Acquired Assets that were not incurred in connection with the borrowing of money or the advance of credit and that do not materially impede the ownership or operation of, or materially impair the value of, the Acquired Assets, taken as a whole.

"person" or "persons" means any individual, firm, corporation, partnership, limited liability company, trust, joint venture, Governmental Authority or other entity.

"Phase I Clinical Trial" means a human clinical trial in any country intended to obtain data regarding safety and/or pharmacokinetics of any Product (whether alone or in combination with any other product) for any indication that would satisfy the requirements of 21

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C.F.R. § 312.21(a) (including, for the avoidance of doubt, any such trial that would satisfy the requirements of both 21 C.F.R. § 312.21(a) and 21 C.F.R. § 312.21(b)) or other comparable requirement imposed by the FDA (or the foreign equivalent thereof).

"[***]" means [***].

"Phase I/II Clinical Trial" means a human clinical trial designed to obtain sufficient data regarding safety, dose ranging and/or efficacy of any Product (whether alone or in combination with any other product) for any indication to make a decision about whether to commence a Phase III Clinical Trial for the such indication that would satisfy the requirements of 21 C.F.R. § 312.21(b) or other comparable requirement imposed by the FDA (or the foreign equivalent thereof).

"Phase III Clinical Trial" means (i) a pivotal human clinical trial in any country intended to obtain data regarding safety and efficacy of any Product (whether alone or in combination with any other product) for any indication as expected for the approval of an orphan product or (ii) that would satisfy the requirements of 21 C.F.R. 312.21(c) or other comparable requirement imposed by the FDA (or the foreign equivalent thereof) with respect to any Product (whether alone or in combination with any other product) for any indication.

"[***]" means [***].

"Pre-Closing Tax Period" means (i) any Tax period ending on or before the Closing Date and (ii) with respect to a Tax period that commences before but ends after the Closing Date, the portion of such period up to and including the Closing Date.

"Product" means recombinant human collagen type VII (i) that (a) is in the form of the recombinant human collagen VII manufactured by or on behalf of the Sellers as of the Closing Date (or a form with only changes to the form manufactured by or on behalf of the Sellers as of the Closing Date that do not materially affect the three dimensional structure of such recombinant human collagen type VII), or (b) specifically embodies, or is developed, manufactured, used, conceived or otherwise reduced to practice specifically based upon or as a direct result of using, the Closing Date IP or Product IP or (ii) the development, manufacture, use, making, keeping, sale, importation or exportation of which, if occurring in the United States, would (a) infringe a Valid Claim of the Closing Date IP or Product IP or (b) infringe any other Valid Claim Controlled by Purchaser or any Affiliate of Purchaser that claims an invention that is specifically based upon, is the direct result of using or directly incorporates the Closing Date IP or Product IP. For the avoidance of doubt, "Product" includes any Acquired Product.

"Product Licensed IP" means any Intellectual Property (other than the Product IP and any Trademarks) Controlled by Sellers or their Affiliates as of the date hereof and related (but not exclusively related) to the Acquired Product (including any such Intellectual Property with respect to any assay and any cell line Controlled by Sellers as of the date hereof and used in the Research Program), but only to the extent reasonably necessary or useful for Purchaser to Exploit the Acquired Product, in each case to the extent such Intellectual Property is used (or was used or is reasonably likely to be used in the future) by Sellers in the Research Program as of the date hereof.

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"Product Sale" means any sale or transfer (whether through an asset sale, sale of equity interests, merger or otherwise) or exclusive license of all or substantially all of the Purchaser's and its Affiliates' right, title and interest in and to any Product in all fields of use material to such Product or any other material portion of any Acquired Assets to a third party (other than a wholly-owned subsidiary of the Purchaser), through one or more transactions or series of transactions.

"Purchaser Rights Group" means (a) the Purchaser, (b) with respect to any Product, any person to which any right to Exploit such Product is licensed, sublicensed, assigned or transferred by the Purchaser or any of its Affiliates, (c) with respect to any Product, any person to which the right to Exploit such Product is licensed, sublicensed, assigned or transferred by any person described in clause (b) above, (d) with respect to any Product, any successor or assign of any person described in clauses (a), (b) or (c) above with respect to such person's interest in such Product, and (e) with respect to any Product, any Affiliate of any person described in clauses (a), (b), (c), or (d) involved in the Exploitation of such Product with or on behalf of such person.

"Purchaser SPA" means the Stock Purchase Agreement, made and entered into effective as of the date hereof, by and among Purchaser and the other parties named therein.

"Regulatory Authority" means any national or supranational Governmental Authority, including the FDA or the EMA, with responsibility for granting any license, registrations or Approvals with respect to a Product.

"Regulatory Exclusivity" means, with respect to a Product, any exclusive marketing rights or data exclusivity rights conferred by any Regulatory Authority in respect of such Product, other than under any Patents, but including orphan drug exclusivity, new chemical entity exclusivity, data exclusivity, marketing exclusivity and pediatric exclusivity.

"Regulatory Filing" means collectively: (a) all INDs, NDAs, BLAs, establishment license applications, drug master files, applications for designation as an orphan drug under the Orphan Drug Act (21 U.S.C. §§ 360aa-ee), for "Fast Track" status under Section 506 of the FDCA (21 U.S.C. § 356) or for a Special Protocol Assessment under Section 505(b)(5)(B) and (C) of the FDCA (21 U.S.C. § 355(b)(5)(B) and (C)) and all other similar filings (including, without limitation, counterparts of any of the foregoing in any country or region) and (b) all supplements and amendments to any of the foregoing.

"Research Program" means the preclinical and clinical program conducted by the Sellers and their Affiliates as of the date hereof to research, develop, test and/or manufacture the Acquired Product in the Covered Indication.

"Research Program Assets" means:

(i) Any Intellectual Property (other than the Closing Date IP) Controlled by the Sellers or any Affiliates of the Sellers as of the date hereof and exclusively related to the Acquired Product, including the Intellectual Property listed on Section 7.06(b)(iii) of the Sellers Disclosure Schedule (the "Product IP");

(ii) All of the Sellers' and their Affiliates' right, title and interest in and to any Regulatory Filings and Approvals then in their names solely applicable to the Acquired Product, including, but not limited to, the Regulatory Filings and Approvals listed on Schedule 7.06(b)(iv) of the Sellers Disclosure Schedule, and, to the extent permitted by Applicable Law, copies of all formal submissions and formal correspondence between each of the Sellers and its Affiliates, on the one hand, and the applicable Regulatory Authorities, on the other hand, relating solely to such Regulatory Filings and Approvals;

(iii) all supplies of the Acquired Product owned by each of the Sellers and its Affiliates as of the date hereof;

(iv) copies of all documents and materials Controlled by each of the Sellers or any Affiliate of such Seller as of the date hereof and embodying the Research Program IP (including the Know-How included in such Research Program IP), but only to the extent reasonably necessary to enable the manufacture of the Acquired Product by Purchaser, its Affiliates or any third party manufacturer or supplier selected by Purchaser or its Affiliates; and

(v) copies of all reports and data generated or obtained by each of the Sellers and its Affiliates that solely relate to the Acquired Product that have not been previously provided to the Equityholders (as such term is defined in the Stock Purchase Agreement).

"Research Program IP" means the Closing Date IP and Product IP.

"Right of First Refusal and Co-Sale Agreement" means the Right of First Refusal and Co-Sale Agreement, made and entered into effective as of the date hereof, by and among Purchaser, Lotus and the other parties named therein.

"Sellers Names and Marks" means any and all (i) Trademarks of any Seller or any of its Affiliates, including the names, marks and logos set forth on Section 7.06(b)(v) of the Sellers Disclosure Schedule, and (ii) Trademarks derived from, confusingly similar to or including any of the foregoing.

"Spot Exchange Rate" means, in relation to any amount of currency to be converted into Dollars, the Dollar exchange rate as published in the Wall Street Journal on the last business day of the immediately preceding calendar month.

"Stock Purchase Agreement" means the Amended and Restated Stock Purchase Agreement dated as of August 11, 2016 by and among Shire, Fortis Advisors, LLC, a Delaware limited liability company, and Third Rock.

"subsidiary" of any person means another person, an amount of the voting securities, other voting ownership or voting partnership interests of which is sufficient to elect at

least a majority of its Board of Directors or other governing body (or, if there are no such voting interests, more than fifty percent (50%) of the equity interests of which) is owned directly or indirectly by such first person or by another subsidiary of such person.

"Tax" or "Taxes" means (i) any and all taxes, charges, duties, contributions, levies or other similar assessments or liabilities, including income, gross receipts, corporation, ad valorem, premium, value-added, consumption, net worth, capital stock, capital gains, documentary, recapture, alternative or add-on minimum, registration, recording, excise, real property, personal property, sales, use, license, lease, service, service use, transfer, withholding, business license, business organization, environmental, profits, severance, stamp, occupation, windfall profits, escheat, unclaimed property, customs duties, import, export, franchise, estimated and other taxes of any kind whatsoever imposed by any Governmental Authority, whether payable directly or by withholding, together with any interest, fines, penalties, assessments, additions to tax or additional amounts imposed with respect to such items, including any liability for payment of taxes as a transferee or successor by contract or otherwise.

"Tax Asset" or "Tax Assets" means any net operating loss, net capital loss, investment tax credit, foreign tax credit, charitable deduction or any other credit or tax attribute that could be carried forward or back to reduce Taxes (including without limitation deductions and credits related to alternative minimum Taxes).

"Tax Returns" means all reports, returns, declarations, statements, claim for refund, or other information required to be supplied to any Governmental Authority in connection with Taxes (including any attachments, amendments, and supplements thereof).

"[***]" means [***].

"Transferred Patent" means (i) any Patent within the Closing Date IP Assets or Product IP and/or (ii) any Patent Controlled by any member of the Purchaser Rights Group that claims, and is entitled to, priority to or common priority with any of the foregoing.

"Transfer Tax" shall mean any documentary, sales, use, registration, filing, recordation, ad valorem, value added, bulk sales, stamp duties, excise, license or similar fees or Taxes (including any real property transfer Tax and any other similar Tax), including any penalties and interest.

"Transition Services Agreement" means the Transition Services Agreement, made and entered into effective as of the date hereof, between Purchaser and Lotus.

"U.S." or "United States" means the United States of America, including its territories and possessions (excluding all military bases and other military installations outside of the continental United States, Alaska, Hawaii and Washington, D.C.).

"Valid Claim" means a claim of any (i) issued, unexpired patent that has not been revoked or held unenforceable or invalid by a decision of a court or other Governmental Authority of competent jurisdiction from which no appeal can be taken, or with respect to which an appeal is not taken within the time allowed for appeal, and that has not been disclaimed or

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admitted to be invalid or unenforceable through reissue, disclaimer or otherwise or (ii) pending patent application that has been pending without issuance for a period not longer than [***] from the earliest priority date of such application and that has not been abandoned in compliance with the terms hereof or finally rejected without the possibility of appeal or refiling.

"VAT" means value added tax imposed in any member state of the EU pursuant to Council Directive (EC) 2006/112 on the common system of value added tax and national legislation implementing that Directive or any predecessor to it, or supplemental to that Directive, or any similar tax which may be substituted for or levied in addition to it or any value added, sales turnover, goods and services or similar Tax imposed in a country which is not a member of the EU.

"Voting Agreement" means the Voting Agreement, made and entered into effective as of the date hereof, by and among Purchaser, Lotus and the other parties named therein.

SECTION 7.07 Counterparts. This Agreement may be executed in one or more counterparts (including by facsimile or other means of electronic transmission, such as by electronic mail in "pdf" form), all of which shall be considered one and the same agreement, and shall become effective when one or more such counterparts have been signed by each of the parties and delivered to the other party.

SECTION 7.08 Entire Agreement. This Agreement, the Other Transaction Documents and the Confidentiality Agreement and the schedules and exhibits hereto and thereto contain the entire agreement and understanding between the parties hereto with respect to the subject matter hereof and supersede all prior agreements, drafts, understandings, promises, undertakings or implications relating to such subject matter, whether written or oral. No provision of this Agreement shall be interpreted in favor of, or against, any party by reason of the fact that any such provision is inconsistent with any prior draft hereof.

SECTION 7.09 Severability. If any provision of this Agreement (or any portion thereof) or the application of any such provision (or any portion thereof) to any person or circumstance shall be held invalid, illegal or unenforceable in any respect by a court of competent jurisdiction, such invalidity, illegality or unenforceability shall not affect the validity or enforceability of any other provision hereof (or the remaining portion thereof) or the application of such provision (or the remaining portion thereof) to any other persons or circumstances. In the event that any provision of this Agreement shall be held by a court of competent jurisdiction to be invalid, illegal or unenforceable, such provision shall be limited or eliminated, but only to the minimum extent necessary so that this Agreement shall otherwise remain in full force and effect.

SECTION 7.10 Governing Law. This Agreement and any claims arising therefrom shall be governed by and construed in accordance with the law of the State of New York, without regard to the conflicts of law rules of such state.

SECTION 7.11 Consent to Jurisdiction. Each of Purchaser and Sellers irrevocably submits to the exclusive jurisdiction of (a) the state courts of the State of New York,

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

and (b) the United States District Court for the Southern District of New York for the purposes of any suit, action or other proceeding arising out of this Agreement, the Other Transaction Documents or any transaction contemplated hereby or thereby. Each of Purchaser and Sellers further agrees that service of any process, summons, notice or document by U.S. registered mail to such party's respective address(es) set forth above shall be effective service of process for any action, suit or proceeding in New York with respect to any matters to which it has submitted to jurisdiction in this Section 7.11. Each of Purchaser and Sellers irrevocably and unconditionally waives any objection to the laying of venue of any action, suit or proceeding arising out of this Agreement, the Other Transaction Documents or the transactions contemplated hereby or thereby in (i) the state courts of the State of New York, and (ii) the United States District Court for the Southern District of New York, and hereby further irrevocably and unconditionally waives and agrees not to plead or claim in any such court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum.

SECTION 7.12 WAIVER OF JURY TRIAL. EACH PARTY HERETO HEREBY WAIVES TO THE FULLEST EXTENT PERMITTED BY APPLICABLE LAW, ANY RIGHT IT MAY HAVE TO A TRIAL BY JURY IN RESPECT OF ANY LITIGATION DIRECTLY OR INDIRECTLY ARISING OUT OF, UNDER OR IN CONNECTION WITH THIS AGREEMENT, THE OTHER TRANSACTION DOCUMENTS OR ANY TRANSACTION CONTEMPLATED HEREBY OR THEREBY. EACH PARTY HERETO (A) CERTIFIES THAT NO REPRESENTATIVE, AGENT OR ATTORNEY OF ANY OTHER PARTY HAS REPRESENTED, EXPRESSLY OR OTHERWISE, THAT SUCH OTHER PARTY WOULD NOT, IN THE EVENT OF LITIGATION, SEEK TO ENFORCE THAT FOREGOING WAIVER AND (B) ACKNOWLEDGES THAT IT AND THE OTHER PARTIES HERETO HAVE BEEN INDUCED TO ENTER INTO THIS AGREEMENT AND THE OTHER TRANSACTION DOCUMENTS, AS APPLICABLE, BY, AMONG OTHER THINGS, THE MUTUAL WAIVERS AND CERTIFICATIONS IN THIS SECTION 7.12.

SECTION 7.13 Remedies. The parties hereto agree that irreparable damage would occur in the event that any of the provisions of this Agreement were not performed in accordance with their specific terms or were otherwise breached. It is accordingly agreed that the parties shall be entitled to seek an injunction or injunctions to prevent breaches of this Agreement and to enforce specifically the terms and provisions of this Agreement, this being in addition to any other remedy to which they are entitled at law or in equity.

[*Remainder of page intentionally left blank; signature page follows.*]

IN WITNESS WHEREOF, Purchaser and Sellers have duly executed this Agreement as of the date first written above.

PHOENIX TISSUE REPAIR, INC.

By: /s/ Neil Kirby
Name: Neil Kirby
Title: President and Chief Executive Officer

SHIRE HUMAN GENETIC THERAPIES, INC.

By: /s/ Jason E. Baranski
Name: Jason E. Baranski
Title: Secretary and Director

LOTUS TISSUE REPAIR, INC.

By: /s/ Jason E. Baranski
Name: Jason E. Baranski
Title: Secretary and Director

Exhibit 10.14

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXCLUSIVE LICENSE AGREEMENT

between

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

and

TheRas, Inc.

for

Covalent Modification on CAAX- box Cysteine of K-Ras 4B Using Tethering Compounds
UC Case No. [***]

TABLE OF CONTENTS

UC Case No(s). [***]

EXCLUSIVE LICENSE AGREEMENT

for

Covalent Modification on CAAX- box Cysteine of K-Ras 4B Using Tethering Compounds

This exclusive license agreement ("Agreement") is made effective this 28th day of September, 2016 ("Effective Date"), by and between The Regents of the University of California, a California public corporation, having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200 ("The Regents") and acting through its Office of Innovation, Technology, and Alliances, University of California San Francisco ("UCSF"), 3333 California Street, Suite S-11, San Francisco, CA 94143 and TheRas, Inc., a Delaware corporation, having a principal place of business at 165 University Avenue, Suite 5, Palo Alto, CA 94301 ("Licensee") and a subsidiary of BridgeBio, LLC.

BACKGROUND

A. Certain inventions, generally characterized as "Covalent Modification on CAAX-box Cysteine of K-Ras 4B Using Tethering Compounds" ([***]) (collectively "Invention"), made in the course of research at UCSF and Leidos Biomedical Research, Inc. ("Leidos") by Drs. Frank P. McCormick, Stephan C. Gysin, Adam R. Renslo, and David Turner at UCSF and by Drs. Anna E. Maciag and Oleg Chertov of Leidos (collectively, the "Inventors") and are claimed in Patent Rights as defined below.

B. The development of the Invention was sponsored in part by the National Institutes of Health and, as a consequence, this license is subject to overriding obligations to the United States Federal Government under 35 U.S.C. §§ 200-212 and applicable regulations including a nonexclusive, non-transferable, irrevocable, paid-up license to practice or have practiced the Invention for or on behalf of the United States Government throughout the world.

C. The Regents and Leidos have executed an Inter-Institutional Agreement (UC Control No. 2017-18-0104) with an effective date of August 22, 2016, which grants The Regents the right to license the Invention on behalf of both parties (the "IIA").

D. The Licensee and The Regents have executed a Secrecy Agreement (UC Control No. 2016-20-0326) with an effective date of February 28, 2016.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

E. The scope of such rights granted by The Regents is intended to extend to the scope of the patents and patent applications in Patent Rights, but only to the extent that The Regents has proprietary rights in and to the Valid Claims of such Patent Rights.

F. Both parties recognize and agree that Earned Royalties are due under this Agreement with respect to products, services and methods and that such royalties will be paid with respect to both pending patent applications and issued patents, in accordance with the terms and conditions set forth herein,

G. The Licensee is a “small business firm” as defined in 15 U.S.C. §632.

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The parties agree as follows:

1. DEFINITIONS

As used in this Agreement, the following terms, whether used in the singular or plural, shall have the following meanings:

1.1 “Affiliate” of the Licensee means any entity which, directly or indirectly, Controls the Licensee, is Controlled by the Licensee or is under common Control with the Licensee. “Control” means (i) having the actual, present capacity to elect a majority of the directors of the applicable entity; (ii) having the power to direct at least fifty percent (50%) of the voting rights entitled to elect directors of the applicable entity; or (iii) in any country where the local law will not permit foreign equity participation of a majority, ownership or control, directly or indirectly, of the maximum percentage of such outstanding stock or voting rights permitted by local law.

1.2 “Combination Product” means a product that in a single formulation or in a single package contains both a compound that is a Licensed Product and one or more Combination Product Component(s), provided that (i) such Combination Product Component and such Licensed Product are capable of being Sold (but may not be actually Sold) either separately from such combined product, with or without other therapeutic products by the Licensee or any Affiliate, or Sublicensee or the patent holder of the Combination Product Component and (ii) the market price of such combined

product is higher than the market price for such Licensed Product (or what should have been if such Licensed Product is not Sold separately) as a result of such combined product containing or using such Combination Product Component.

1.3 "Combination Product Component" means [***].

1.4 "Field of Use" means prophylactic and therapeutic uses in humans.

1.5 "Licensed Method" means any process, art or method the use or practice of which, but for the license granted in this Agreement, would infringe, or contribute to, or induce the infringement of, any Patent Rights in any country were they issued at the time of the infringing activity in that country.

1.6 "Licensed Product(s)" means any product, including, without limitation, a product for use or used in practicing a Licensed Method and any product made by practicing a Licensed Method, the manufacture, use, Sale, offer for Sale or import of which, but for the license granted in this Agreement, would infringe, or contribute to, or induce the infringement of, any Patent Rights in any country were they issued at the time of the infringing activity in that country.

1.7 "Licensed Service(s)" means any service provided for consideration (whether in cash or any other form), when such service (i) involves the use of a Licensed Product or (ii) involves the practice of a Licensed Method.

1.8 "Method of Use Licensed Product" means any Licensed Product or Licensed Service, the method of use of which is claimed by at least one Valid Claim included in the Patent Rights and is not a Therapeutic Licensed Product.

1.9 "Net Sale" means [***].

[***]

Notwithstanding the foregoing, transfers or other dispositions of Licensed Products for [***]. Licensee shall include in its progress reports submitted pursuant to Paragraph 14.1 a description of all Sales occurring in the relevant reporting period that it believes are within the scope of this paragraph. If it is unclear to The Regents that a transfer or other disposition of Licensed Products falls within the scope of this paragraph, the parties will promptly confer and attempt to resolve the matter in good faith.

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1.10 “Option Invention” means inventions which (i) constitute patentable advancements, developments or improvements to the Invention, whether or not the subject of any patent application, which are not sufficiently supported by the specification of a previously-filed patent or patent application within the Patent Rights to be entitled to the priority date of the previously-filed patent or patent application; (ii) are conceived and reduced to practice by Dr. Frank McCormick after [***] and before [***]; and (iii) are solely assigned to or otherwise obtained by The Regents.

1.11 “Patent Rights” means the Valid Claims of, to the extent assigned to or otherwise obtained by The Regents and/or Leidos, the following United States patents and patent applications:

UC Case Number	PCT Application Number	Filing or Issue Date
[***]	[***]	[***]

Patent Rights shall further include the Valid Claims of, to the extent assigned to or otherwise obtained by The Regents and/or Leidos, the corresponding foreign patents and patent applications and any reissues, extensions, substitutions, continuations, divisions, and continuation-in-part applications (but only those Valid Claims in the continuation-in-part applications that are entirely supported in the specification and entitled to the priority date of the parent application). Further, The Regents agrees that it will not file or prosecute additional; patent applications, outside the scope of the Patent Rights, based on the invention disclosure existing as of the Effective Date that is identified as [***]. For the avoidance of doubt, this definition of Patent Rights excludes any rights in and to Option Inventions, except as provided under Article 4.

1.12 “Profit Sharing Income” means amounts received by Licensee under a sublicense agreement between Licensee and a Sublicensee under which Licensee is funding a share of the development or commercialization costs of the Licensed Product and receives a share of net profit from such Sublicensee specifically resulting from any actual Licensed

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Product Sales that actually occurred. It does not, however, include any other amounts received by Licensee from such Sublicensee that are not [***], including but not limited to [***]. For the avoidance of doubt, the negotiated Earned Royalty shall be paid on any such product Sales that give rise to such a Profit Sharing Income to Licensee.

1.13 "Sale" means the act of selling, leasing or otherwise transferring, providing, or furnishing for use for any consideration.

1.14 "Sublicensee" means any person or entity (including any Affiliate) to which any of the license rights granted to the Licensee hereunder are granted a sublicense or an option to a sublicense, but not including any subcontractors or vendors provided that Licensee is responsible for performance of such subcontractors in compliance with this Agreement and that such subcontractors or vendors do not provide any cash or in-kind consideration to Licensee in exchange for Patent Rights.

1.15 "Sublicensing Revenues" means amounts (including, without limitation, any [***], received by or payable to the Licensee from any Sublicensee in consideration for the rights granted under a sublicense of the Licensee's rights under this Agreement, provided that Sublicensing Revenues will not include amounts received by or payable to the Licensee that are reasonably and fairly attributable to any of the following to the extent that each is bona fide: (a) [***] of the Licensee, (b) amounts received by the Licensee as the [***] of the Licensee; (c) reimbursements to the Licensee of [***]; (d) reimbursement to the Licensee for [***] after the Effective Date of this Agreement, on the basis of [***].

1.16 "Therapeutic Licensed Product" means any Licensed Product, the composition of matter of which is claimed by at least one Valid Claim included in the Patent Rights or any Licensed Service that uses such Licensed Product. For the avoidance of doubt, any Licensed Product covered by a claim that combines screening, composition of matter and/or method of use in the same claim, shall be considered a Therapeutic Licensed Product.

1.17 "Valid Claim" means a claim of a patent or patent application in any country that (i) has not expired; (ii) has not been disclaimed; (iii) has not been cancelled or superseded, or if cancelled or superseded, has been reinstated; and (iv) has not been revoked, held invalid,

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or otherwise declared unenforceable or not allowable by a tribunal or patent authority of competent jurisdiction over such claim in such country from which no further appeal has or may be taken.

2. GRANT

2.1 Subject to the limitations and other terms and conditions set forth in this Agreement including the license granted to the United States Government and those reserved by The Regents set forth in the Background and in Paragraphs 2.2.1 (obligations to the United States Government) and 2.4 (Government Requirements), The Regents grants to the Licensee an exclusive license under its rights in and to Patent Rights to make, have made, use, Sell, offer for Sale and import Licensed Products, to provide Licensed Services, and to practice Licensed Methods, in the United States and in other countries where The Regents may lawfully grant such Licenses, only in the Field of Use.

2.2 The license granted in Paragraph 2.1 is subject to the following:

2.2.1 The obligations to the United States Government under 35 U.S.C. §§ 200-212 and all applicable governmental implementing regulations, as amended from time to time, including the obligation to report on the utilization of the Invention as set forth in 37 CFR. § 401.14(h), and all applicable provisions of any license to the United States Government executed by The Regents; and

2.2.2 the National Institutes of Health “Principles and Guidelines for Recipients of NIH Research Grants and Contracts on Obtaining and Disseminating Biomedical Research Resources,” 64 F.R. 72090 (Dec. 23, 1999), as amended from time to time.

2.3 **Reservation of Rights.** The Regents reserves and retains the right (and the rights granted to the Licensee in this Agreement shall be limited accordingly), on behalf of itself and Leidos, to make, use and practice the Invention and any technology relating to any of the foregoing and to make and use any products and to practice any process that is the subject of the Patent Rights (and to grant any of the foregoing rights to other educational and non-profit institutions) for educational and research purposes, including without limitation, any sponsored research performed for or on behalf of commercial

entities and including publication and other communication of any research results, provided that the right and interest of any such commercial entity shall be subject to the license granted to Licensee under this Article 2.

2.4 **Government Requirements.** Because the Invention was made under funding provided by the United States Government, the parties agree to comply with the terms set forth in 35 U.S.C. § 204. The Regents will offer reasonable assistance in obtaining a waiver of these requirements upon Licensee's request.

2.5 **Option Grant.** To the extent it is lawfully able to, and subject to the limitations and other terms and conditions set forth in this Agreement including the license granted to the United States Government set forth in the Background and in Paragraph 2.2.1 and the terms of the option set forth in Section 4 (Option), The Regents shall (i) use commercially reasonable efforts to keep Licensee informed of the development of any Option Inventions, and (ii) shall grant the Licensee a time-limited, exclusive option on such Option Inventions as outlined in Section 4.

3. SUBLICENSES

3.1 **Permitted Sublicensing.** The Regents also grants to the Licensee the right to sublicense the rights granted to the Licensee hereunder, through multiple tiers, to Affiliates and third parties, as long as the Licensee has current exclusive rights thereto under this Agreement. For purposes of this Agreement, any further sublicense granted by any sublicensee will be considered a Sublicense and Licensee will ensure that such further sublicensees will be compliant with this Section 3.1. Licensee will ensure that each sublicense is subject to a written sublicense agreement. All sublicenses will include all of the applicable rights of, and will require the performance of all the applicable obligations due to, The Regents (and, if applicable, the United States Government and other sponsors), other than those rights and obligations specified in Article 6 (License Issue Fee), Article 7 (License Maintenance Fee) and Paragraph 9.2 (Minimum Annual Royalty) and Paragraphs 21.3 and 21.4 (reimbursement of Patent Prosecution Costs). For the purposes of this Agreement, the operations of all Sublicensees shall be deemed to be the operations of the Licensee, for which the Licensee shall be responsible.

3.2 **Sublicense Requirements.** The Licensee shall provide The Regents with a copy of each sublicense issued within thirty (30) days of execution of such sublicense or sublicense amendment; collect and guarantee payment of all payments due The Regents from Sublicensees; and summarize and deliver all reports due The Regents from Sublicensees. In the event that a Sublicensee does not pay payments owed to Licensee, Licensee shall use reasonable efforts, to obtain such owed and unpaid payments. If Licensee has (a) sent at least two (2) notices of default to its Sublicensee by return receipt mail, or (b) its Sublicensee has not paid following efforts by a collection agency to obtain payment of such payments, then (i) if Licensee terminates the corresponding sublicense within such [***] period and declares the uncollectable debt owed by Sublicensee to Licensee in Licensee's books, then Sublicense Fees with respect to such uncollectible payments shall not be due to The Regents; provided that if such payments is actually paid to Licensee thereafter, then Sublicense Fees with respect to such payments shall accrue to The Regents within [***] of the date that Licensee receives payment of such payments; or (ii)y if Licensee does not terminate the corresponding sublicense within such [***], Licensee shall pay Sublicense Fees with respect to such payments, even though Licensee did not receive payment of such payments from its Sublicensee.

3.3 **Mandatory Sublicensing.** If Licensee is unable or unwilling to serve or develop a potential market or market territory for which there is a company willing to be a Sublicensee, Licensee will, at The Regents' request, negotiate in good faith a Sublicense with any such Sublicensee. The Regents would like licensees to address unmet needs, such as those of neglected patient populations or geographic areas, giving particular attention to improved therapeutics, diagnostics and agricultural technologies for the developing world.

3.4 **License Termination or Conversion to Non-Exclusive.** Any sublicense granted hereunder shall survive any early termination of this Agreement or conversion of this Agreement to a non-exclusive license, provided that: (i) the relevant Sublicensee is not in default of its sublicense and there are no Uncollectable Amounts, as defined in 1.9.5 associated with the Sublicensee, (ii) such Sublicensee agrees in writing to an assignment to The Regents of such sublicense; (iii) all of the terms of this Agreement are agreed to fully in writing by such Sublicensee; (iv) such Sublicensee acquires no rights from or

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obligations on the part of The Regents other than those that, are specifically granted under this Agreement; and (v) such Sublicensee assumes all liability and obligations to The Regents required of Licensee by this Agreement with respect to The Regents' sublicensed rights, including past due obligations existing at the tune of assignment of this Agreement by Licensee. If any Sublicensee fails to meet the above provisions described in this Paragraph 3.4 (i) - (v) then The Regents may terminate its sublicense, in accordance with Article 17 (Termination by The Regents). The Regents will not be bound to perform any duties or obligations set forth in any sublicense to any Sublicensees that extend beyond the duties and obligations of The Regents set forth in this Agreement, and the Licensee's obligations to The Regents hereunder will be binding upon each Sublicensee. Any such assignment will include a modification to the sublicense that requires payment of all financial obligations (including, without limitation milestone payments and Earned Royalties) directly to The Regents by the Sublicensee as if it were the Licensee at a rate that is no lower than the rate set forth in the applicable section of this Agreement, in accordance with Article 5 (Payment Terms).

4. OPTION

4.1 The Licensee shall have [***] from the day it received written notification from The Regents of an Option Invention in which to notify The Regents in writing of Licensee's desire to take a license to the Option Invention. If applicable and reasonable, such notification will identify the particular patent applications, patents, and territories for which the Licensee wishes to obtain a license from The Regents and those for which it has no interest.

4.2 The failure of the Licensee to so notify The Regents within the required time period will be deemed by The Regents as an election by the Licensee not to secure a license to the Option Invention, and The Regents will then be free to market and license the Option Invention to others without any further obligation to the Licensee.

4.3 If Licensee does elect to take a license for an Option Invention under Paragraph 4.1, Licensee will provide The Regents with a written Plan of Commercialization for Licensed Products and Licensed Services within [***] of the effective date of such notification. A "Plan of Commercialization" is a reasonably detailed plan containing, but

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not limited to, the following information for each Licensed Product and Licensed Service: a plan and timetable for commercial development and market-introduction of each Licensed Product and Licensed Service, including specific performance milestones representing technical achievements necessary for their commercialization and the date each such milestone will be met; projected Sales; the anticipated date of their first commercial Sale; projected costs and profits; proposed financial terms for License; whether Licensee requests an exclusive or nonexclusive license; and other terms commonly included in business plans. The failure of the Licensee to provide a Plan of Commercialization reasonable acceptable to The Regents will be deemed an election by the Licensee not to secure a license to the Option Invention, and The Regents will then be free to market and license the Option Invention to others without any further obligation to the Licensee.

4.4 If the Licensee exercises its rights under this Article 4 (Option) with respect to any Option Invention, for a period for which not to exceed a total of [***] the Licensee and The Regents will, in good faith, negotiate the outstanding terms and conditions of a new license agreement ("New License Agreement"). The Regents has no obligation to file any patent application for Option Invention but may do so at its own discretion or at the request of the Licensee. [***]. Notwithstanding any other provision of this Agreement to the contrary, neither party will be obligated to negotiate the New License Agreement beyond [***] from the Licensee's written election under Paragraph 4.1, unless the six month period is extended upon mutual written agreement of the parties.

4.5 The parties mutually acknowledge that good-faith negotiations may not result in the execution of that New License Agreement, but the parties will use reasonable efforts to reach agreement on commercially reasonable terms.

4.6 The New License Agreement will include, but not be limited to, the following provisions, in a form similar to this Agreement if appropriate:

[***].

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5. PAYMENT TERMS

5.1 **Payment Obligations.** Paragraphs 1.5, 1.6, 1.7, and 1.11 define Licensed Method, Licensed Product, Licensed Service and Patent Rights, so that Earned Royalties are payable on products and methods covered by Valid Claims in both pending patent applications and issued patents. Earned Royalties will accrue in each country for the duration of the Valid Claims contained in the Patent Rights in that country and will be payable to The Regents in accordance with Section 5.2.when Licensed Products or Licensed Services are invoiced, or if not invoiced, when delivered or otherwise exploited by the Licensee or Sublicense in a manner constituting a Net Sale as defined in Paragraph 1.9. Sublicense Fees with respect to any Sublicensing Revenue shall accrue to The Regents within [***] of the date that such Sublicensing Revenue is received by the Licensee provided that Licensee uses reasonable efforts to obtain such payments in accordance with Paragraph 3.2.

5.2 **Schedule.** The Licensee will pay to The Regents all Earned Royalties, Sublicense Fees and other consideration payable to The Regents [***]. Each payment will be for Earned Royalties, Sublicense Fees and other consideration which has accrued within the Licensee's most recently completed calendar quarter.

5.3 **Currency.** All consideration due The Regents will be payable and will be made in United States dollars by check payable to "The Regents of the University of California" or by wire transfer to an account designated by The Regents. The Licensee is responsible for all bank or other transfer charges. When Licensed Products or Licensed Services are Sold for monies other than United States dollars, the Earned Royalties and other consideration will first be determined in the foreign currency of the country in which such Licensed Products or Licensed Services were Sold and then converted into equivalent United States dollars. The exchange rate will be the average exchange rate quoted in the *The Wall Street Journal* during the last thirty (30) days of the reporting period.

5.4 **Taxes.** Sublicense Fees and Earned Royalties on Net Sales of Licensed Products or Licensed Services and other consideration accrued in, any country outside the United States may not be reduced by any taxes, fees or other charges imposed by the government of such country, except those taxes, fees and charges allowed under the provisions of Paragraph 1.9 (Net Sales).

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5.5 **Accrual.** In the event that any patent or claim thereof included within the Patent Rights is held invalid in a final decision by a court of competent jurisdiction and last resort and from which no appeal has or can be taken, then all obligation to pay royalties based on that patent or claim or any claim patentably indistinct therefrom will cease as of the date of final decision. The Licensee will not, however, be relieved from paying any royalties that accrued before such final decision and the Licensee shall be obligated to pay the full amount of royalties due hereunder to the extent that The Regents licenses one or more Valid Claims within the Patent Rights to the Licensee with respect to Licensed Products or Licensed Services.

5.6 **Late Payments.** In the event that royalties, fees, reimbursements for Patent Prosecution Costs or other monies owed to The Regents are not received by The Regents when due, the Licensee will pay to The Regents interest at a rate of [***], or the maximum amount allowable by law, whichever is lower. Such interest will be calculated from the date payment was due until actually received by The Regents. Such accrual of interest will be in addition to and not in lieu of, enforcement of any other rights of The Regents due to such late payment.

6. LICENSE ISSUE FEE

6.1 The Licensee will pay to The Regents a license issue fee of seventy five thousand dollars ($75,000) within [***] of the Effective Date. This fee is non-refundable, non-cancelable and is not an advance or otherwise creditable against any royalties or other payments required to be paid under the terms of this Agreement.

7. LICENSE MAINTENANCE FEE

7.1 The Licensee will also pay to The Regents a license maintenance fee as follows:

7.1.1 [***] on [***].

7.1.2 [***] beginning on the [***] and continuing annually on each subsequent anniversary of the Effective Date.

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7.1.3 Notwithstanding the payment obligations set forth in Section 7.1.1 and 7.1.2, license maintenance fee is not due on any anniversary of the Effective Date if on that date, the Licensee is Selling or otherwise exploiting Licensed Products or Licensed Services and is paying an Earned Royalty to The Regents on the Net Sales of such Licensed Product or Licensed Service. The license maintenance fee is non-refundable and is not an advance or otherwise creditable against any royalties or other payments required to be paid under the terms of this Agreement.

8. PAYMENTS ON SUBLICENSES

8.1 The Licensee will pay to The Regents the following non-refundable and non-creditable sublicense fees ("Sublicense Fees"):

8.1.1 [***] percent ([***]%) of all Sublicensing Revenues received prior to [***].

8.1.2 [***] percent ([***]%) of all Sublicensing Revenues received after [***] but prior to [***].

8.1.3 [***] percent ([***]%) of all Sublicensing Revenues received after [***].

9. EARNED ROYALTIES AND MINIMUM ANNUAL ROYALTIES

9.1 **Earned Royalty.** The Licensee will pay to The Regents an Earned Royalty as described below on the Net Sales of each Licensed Product or Licensed Service subject to the terms and conditions of this Agreement ("Earned Royalty"):

9.1.1 For each Therapeutic Licensed Product

9.1.1.1 [***] up to the portion of annual Net Sales of the applicable Therapeutic Licensed Product under [***] and;

9.1.1.2 [***] for the portion of annual Net Sales of the applicable Therapeutic Licensed Product above [***].

9.1.2 For Method of Use Licensed Products

9.1.2.1 [***].

9.1.3 A Licensed Product will be paid royalties at either the rates set forth in 9.1.1 or 9.1.2 above, but not both. For the avoidance of doubt, the method of use rate will

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apply to Method of Use Licensed Products that are covered by method of use claims of the Patent Rights only and in which the therapeutic product utilizing the method of use claim is not a Therapeutic Licensed Product.

9.2 **Minimum Annual Royalty.** The Licensee will also pay to The Regents a minimum annual royalty of [***] for the life of Patent Rights, beginning with the year of the first Sale of Licensed Product or Licensed Service. The minimum annual royalty will be paid to The Regents by [***] and will be credited against the Earned Royalty due for the calendar year in which the minimum payment was made. Licensee's obligation to pay the minimum annual royalty will be pro-rated for the number of months remaining in the calendar year when Sales commence and will be due the following [***] (along with the minimum annual royalty payment for that year), to allow for crediting of the pro-rated year's Earned Royalties.

10. MILESTONE PAYMENTS

10.1 With respect to each Licensed Product, the Licensee will pay to The Regents the following one-time per Licensed Product, non-refundable, non-creditable amounts:

10.1.1 For the first indication for each Licensed product:

[***]

10.1.2 For the second indication for each Licensed Product:

[***]

10.2 For the avoidance of doubt, each of the milestone payments set forth in Paragraphs 10.1.1 and 10.1.2 will be payable with respect to each Licensed Product and regardless of whether the applicable milestone event has been achieved by the Licensee, Sublicensee, or any Affiliate, provided that, if Licensee discontinues the development and/or commercialization of a particular Licensed Product and instead develops and/or commercializes another Licensed Product in place of such discontinued Licensed Product, then Licensee shall not be required to make any milestone payments for such second Licensed Product for any milestone events that have already triggered Licensee's milestone payment obligations for the discontinued Licensed Product for that particular indication.

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10.3 All milestone payments set forth in Paragraphs 10.1 are due to The Regents within [***] of the occurrence of the applicable milestone event.

11. INDEXED MILESTONE

11.1 Within [***] of the Indexed Milestone Event (as defined in 11.4 below), the Licensee will pay to The Regents a cash payment (**"Indexed Milestone Payment"**) equal to N times $P, where:

11.1.1 N shall be the number equivalent of the number of shares equal to [***] of the then-outstanding shares of common stock of Licensee (assuming full conversion of all then-outstanding preferred stock and convertible securities and full exercise of any then-outstanding options and warrants) calculated on an as-converted basis as of immediately after the closing of a Licensee Financing (as defined in Paragraph 11.6 below); and

11.1.2 $P shall be

11.1.2.1 in the case of an IPO (as defined in 11.3 below), the offering price per share of the securities sold to the underwriters at the closing of the IPO (net of any underwriting discounts and commissions), or

11.1.2.2 in the case of a Change of Control Transaction (as defined in 11.5 below), the per share consideration (including the fair market value of any non-cash consideration paid by such acquiring third party therefore) that would be received by the Licensee's stockholders in the Change of "^Control Transaction, calculated after payment to the Licensee's preferred shareholders of the aggregate of capital invested in the Licensee by such preferred shareholders provided that such payment, including any fair market value of non-cash consideration, shall not be greater than [***] amount of capital invested in the Licensee by such preferred shareholders. Any amounts received from any earn-out escrow, milestones and/or other deferred payments would be considered and subsequently paid to the Regents as $P when the actual cash or amounts are distributed to Licensee's holders of common stock.

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11.2 N shall be adjusted in the same manner as the common stock in the event of a reverse or forward split of Licensee's stock, any dividends, a recapitalization or other similar adjustment subsequent to the Licensee Financing. For the avoidance of doubt, calculation of such share number shall be treated no differently than other issued or outstanding common stock of the Licensee and specifically The Regents' interest will not be subject to any greater dilution than the interest of any other holder of Licensee's common stock.

11.3 "**IPO**" means an initial public offering of the equity securities of the Licensee or a subsidiary of Licensee pursuant to a registration statement filed with the Securities and Exchange Commission or a similar filing on an international exchange or market.

11.4 "**Indexed Milestone Event**" means the earlier to occur of (i) an IPO and (ii) a Change of Control Transaction.

11.5 "**Change of Control Transaction**" means; the first acquisition, consolidation, merger, reorganization or other transaction or series of transactions in which (x) either (i) Licensee is a constituent party or (ii) a subsidiary of Licensee is a constituent party and the licensee issues shares of its capital stock pursuant to such transaction, and (y) pursuant to which greater than fifty percent (50%) of the voting power of Licensee or subsidiary of Licensee is transferred to a third party. However, a transaction involving a third party will not be considered as a Change of Control Transaction if such transaction or series of transactions does not provide liquidity to at least a majority of Licensee's stockholders, existing prior such transaction, either in the form of cash or stock that is freely tradable and listed on a national or international securities exchange or market.

11.6 "**Licensee Financing**" means the first issuance after the Effective Date of equity securities of the Licensee in a bona fide financing transaction or a series of related bona fide financing transactions with aggregate proceeds to Licensee of at least forty five million dollars $45,000,000(including the conversion of any convertible debt) and in which the proceeds to be received by Licensee are principally from investors who are venture capital, private equity, or similar investors.

11.7 Notwithstanding the above, in the event that a Change of Control Transaction or IPO occurs prior to the Licensee Financing date, the Indexed Milestone Payment shall be equal to the greater of a) N times $P, where $P is determined as in 11.1.2.2 above, and where N equals [***] of the then-outstanding shares of Licensee (assuming foil conversion of all then-outstanding convertible securities and full exercise of any then-outstanding options and warrants) immediately after the closing of a Change of Control Transaction, and (b) [***].

11.8 The Indexed Milestone Payment shall be a one-time payment obligation (other than any payments from an earn-out, escrow, milestone or other deferred consideration, or similar arrangement which shall be paid as and when received by the Licensee or its equity holders) and will survive termination or expiration of the license agreement. Payment of the Indexed Milestone Payment shall be in priority and preference to payment to any holders of equity securities of the Licensee.

12. PARTICIPATION RIGHTS

12.1 If the Licensee proposes to sell any equity securities or securities that are convertible into equity securities of the Licensee, then The Regents and/or its Assignee (as defined below) will have the right to purchase up to [***] of the securities issued in each offering on the same terms and conditions as are offered to the other purchasers in each such financing. Licensee shall provide [***] advanced written notice of each such financing, including reasonable detail regarding the terms and purchasers in the financing. The term “Assignee” means (a) any entity to which Licensee has consented to the assignment of The Regents’ participation rights under this section, or (b) any entity that is controlled by The Regents. This paragraph shall survive the termination of this agreement. Licensee hereby consents to assignment of the participation rights of The Regents to [***].

13. DUE DILIGENCE

13.1 The Licensee, upon execution of this Agreement, will diligently proceed with the development, manufacture and Sale of at least one (1) Licensed Products and/or Licensed Services and will earnestly and diligently market the same after receipt of any requisite regulatory approvals and in quantities sufficient to meet the market demands therefor.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

13.2 The Licensee or a Sublicensee will obtain all necessary governmental approvals in each country where Licensed Products or Licensed Services are manufactured, used, Sold, offered for Sale or imported.

13.3 The Licensee will:

[***]

The Regents recognizes that there are uncertainties associated with the development of therapeutic products and the regulatory process required by the FDA (and Foreign regulatory authorities that are equivalent to the FDA), and that it may be necessary from time to time to amend one or more of the milestones under Paragraphs 13.3,3.2 through 13.3.3.6. Accordingly, if Licensee is unable to meet one or more of such specified milestones and Licensee demonstrates to The Regents, based on the Regents' reasonable, objective, good faith assessment of Licensee's demonstration and supporting documentation, that Licensee has used and is using Licensee's diligent efforts (with supporting documentation) to meet such milestone and [***], then upon submission in writing by Licensee to The Regents of the aforementioned diligent efforts and a plan to overcome such regulatory hurdles, The Regents will extend the deadline for each such milestone under Paragraphs 13.3.1 through 13.3.3.7 for a [***], provided Licensee also has paid to The Regents a fee, for each such extension, [***]. An extension of one milestone will extend all remaining milestones in Paragraphs 13.3.1 through 13.3.3.7 by the same extension time period.

and

13.3.1 use commercially reasonable efforts to fill the market demand for Licensed Products and Licensed Services following commencement of marketing at any time.

13.4 If the Licensee is unable to perform any of the above provisions, [***].

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

14. PROGRESS AND ROYALTY REPORTS

14.1 **Progress Reports.** Beginning on June 30, 2017, and semiannually thereafter, Licensee will submit a written summary report to The Regents covering the Licensee's (and any Affiliates' or Sublicensees') activities related to this Agreement. The report will include information sufficient to enable The Regents to satisfy reporting requirements of the U.S. Government and to ascertain progress by Licensee toward meeting this Agreement's diligence requirements set forth in Article 13 (Due Diligence). Each report will describe, where relevant: progress toward commercialization of Licensed Products and Licensed Services, including work completed, identification of key scientific discoveries, summary of work in progress, current schedule of anticipated events or milestones, market plans for introduction of Licensed Products and Licensed Services, and significant corporate transactions involving Licensed Products and Licensed Services. Notwithstanding the foregoing, Licensee shall be deemed to have fulfilled its obligations under this Section 14.1 if such report is generated using the standard form provided by The Regents for such reporting purposes and that such form is filled out with sufficient detail as determined by the Licensing Professional responsible for the oversight of this Agreement. All information contained in such reports shall be deemed Proprietary Information of Licensee.

14.2 **First Sale.** The Licensee will report to The Regents the date of first Sale of a Licensed Product or Licensed Service in each country in its first progress and royalty reports following such first Sale of a Licensed Product or Licensed Service.

14.3 **Royalty Reports.** Beginning with the earlier of (i) the first Sale of a Licensed Product or Licensed Service or (ii) the first transaction that results in Sublicense Fees accruing to The Regents, the Licensee shall make quarterly royalty reports to The Regents on or before each February 28, May 31, August 31 and November 30 of each year. Each royalty report will [***]. All information contained in such royalty reports shall be deemed Proprietary Information of Licensee.

14.4 **Entity Status.** The Licensee has a continuing responsibility to keep The Regents informed of the large/small business entity status (as defined by the United States Patent and Trademark Office) of itself and its Sublicensees and Affiliates.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

15. BOOKS AND RECORDS

15.1 **Accounting.** The Licensee shall keep accurate books and records showing all Licensed Products and Licensed Services manufactured, used, and/or Sold under the terms of this Agreement. Books and records must be preserved for at least five (5) years from the date of the royalty payment to which they pertain.

15.2 **Auditing.** Books and records must be open to inspection by representatives or agents of The Regents at reasonable times during normal business hours with reasonable notice of at least two (2) weeks, and such inspections shall not exceed more than once per calendar year. The Regents shall bear the fees and expenses of examination but if an error in royalties of more than [***] of the total royalties due for any year is discovered in any examination then the [***] of that examination and shall [***] of the examination results. Any information obtained by The Regents during such inspection shall be deemed Proprietary Information of Licensee.

16. LIFE OF THE AGREEMENT

16.1 **Term.** Unless otherwise terminated by operation of law, Paragraph 16.2 (Bankruptcy), or by acts of the parties in accordance with the terms of this Agreement, this Agreement will remain in effect from the Effective Date until, on a Licensed Product-by-Licensed Product and country-by-country basis, the expiration or abandonment of the last of the Valid Claim within a Patent Rights licensed hereunder. Notwithstanding Section 16.3 below, upon the expiration of this Agreement in a particular country for a particular Licensed Product, Licensee's obligation to make earned royalty payment under Section 9.1 shall expire with; respect to such Licensed Product made, used, Sold, offered for Sale or imported, Licensed Service offered, or Licensed Method practiced in such country after such termination. Furthermore, Licensee's obligation to make minimum royalty payment under Section 9.2 shall expire after the expiration of any and all earned royalty obligations with respect to any and all Licensed Products and/or Licensed Services then being developed and/or commercialized by or on behalf of Licensee except that except that Earned Royalties shall be due in accordance with this Agreement on any Licensed Products and/or Licensed Services made prior to the expiration of this Agreement.

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16.2 **Bankruptcy.** This Agreement will automatically terminate without the obligation to provide [***] notice as set forth in Paragraph 17.1 (Termination By The Regents) upon the filing of a petition for relief under the United States Bankruptcy Code by or against the Licensee as a debtor or alleged debtor, provided that such filing is not withdrawn or otherwise dismissed within such [***].

16.3 **Surviving Provisions.** Any termination or expiration of this Agreement will not affect the rights and obligations set forth in the following Articles:

Article 1	Definitions
Paragraph 5.6	Late Payments
Article 6	License Issue Fee
Article 8	Payments on Sublicenses
Paragraphs 9.1 and 9.2	Earned Royalties and Minimum Annual Royalties
Article 11	Indexed Milestone
Article 12	Participation Rights
Article 15	Books and Records
Article 16	Life of the Agreement
Article 18	Use of Names and Trademarks
Article 19	Limited Warranty
Article 20	Limitation of Liability
Paragraphs 21.3 and 21.4	Patent Prosecution Costs and Effects of Termination
Article 24	Indemnification
Article 25	Notices
Article 28	Governing Laws; Venue
Article 31	Confidentiality

16.4 **Effects of Termination.** The termination or expiration of this Agreement will not relieve the Licensee of its obligation to pay any fees, royalties or other payments owed to The Regents at the time of such termination or expiration and will not impair any accrued right of The Regents, including the right to receive Earned Royalties in accordance with Article 9 (Earned Royalties and Minimum Annual Royalties).

17. TERMINATION

17.1 **By The Regents.** If the Licensee commits a Material Default of this Agreement, then The Regents may give written notice of default (Notice of Default) to the Licensee. A “Material Default” includes, but is not limited to: the failure of Licensee to: (i) perform any of its sublicensing obligations set forth in Article 3, (ii) make any payment in accordance with Articles 5, 6, 7, 8, 9,10 and 11; (iii) perform the diligence obligations

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described in Article 13; (iv) submit the progress and royalty reports in accordance with Article 14; or (iv) indemnify an Indemnitee in accordance with Section 24.1. If the Licensee fails to repair the default within [***] of the effective date of Notice of Default, The Regents may terminate this Agreement and its licenses by a second written notice (Notice of Termination). If a Notice of Termination is sent to the Licensee, this Agreement will automatically terminate on the effective date of that notice.

17.2 **By Licensee.** The Licensee, has the right at any time to terminate this Agreement by providing a Notice of Termination to The Regents. Moreover, the Licensee will be entitled to terminate the rights under Patent Rights on a country-by-country basis by giving notice in writing to The Regents. Termination of this Agreement (but not termination of any patents or patent applications under Patent Rights, which termination is subject to Paragraph 21.4 (Effects of Termination) will be effective [***] from the date such termination notice is sent by Licensee.

17.3 **Immediate Termination**. The Agreement will terminate with [***] written notification if the Licensee files a claim that includes in any way the assertion that any portion of The Regents' Patent Rights is invalid or unenforceable whether the filing is by Licensee, a third party on behalf of Licensee, or a third party at the written urging of, or with the assistance of, the Licensee, provided that such termination shall not become effective if Licensee withdraws or causes the withdrawal of such claim within such [***] notice period. Licensee shall not be construed as having breached this Section 17.3 if Licensee's action is in connection with any claim of infringement asserted, alleged or filed by or on behalf of the Regents against Licensee or any of its Affiliates and/or sublicensees.

18. USE OE NAMES AND TRADEMARKS

18.1 Nothing contained in this Agreement will be construed as conferring any right to either party to use in advertising, publicity or other promotional activities any name, trade name, trademark or other designation of the other party (including a contraction, abbreviation or simulation of any of the foregoing). Without the Licensee's consent case-by-case, The Regents may list Licensee's name as a licensee of technology from The Regents and identify Licensee as a UCSF startup without further identifying the

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technology. Unless required by ‘ law or unless consented to in writing by Director of Technology Management, Office of Innovation, Technology, and Alliances, the use by the Licensee of the name “The Regents of the University of California” or the name of any campus of the University of California in advertising, publicity or other promotional activities is expressly prohibited, except that Licensee shall have the right to state the fact that The Regents is the licensor of the Patent Rights without obtaining the prior consent of The Regents

19. LIMITED WARRANTY

19.1 To the extent of the knowledge of the licensing professional administering this Agreement and as of the Effective Date, The Regents warrants to the Licensee that (a) it is the joint owner of the Patent Rights with Leidos, which is the National Cancer Institute’s Operations and Technical Support (OTS) contractor to the Frederick National Laboratory for Cancer Research (FNLCR), a Federally Funded Research and Development Center (FFRDC) and a Federal Laboratory; (b) The Regents is the party having the sole and exclusive right to grant any commercial rights under the Patent Rights on behalf of both The Regents and Leidos; (c) neither The Regents nor Leidos has granted any option or license, or otherwise transferred or encumbered any Patent Rights, prior to the Effective Date with the exception of the statutorily required government license; and (d) The Regents has the lawful right to grant this license. The Regents agree that, during the Term, it will first notify Licensee in writing and discuss with Licensee in good faith any proposed modification or termination of the IIA before any such modification or termination becomes effective.

19.2 Except as expressly set forth in this Agreement, this license and the associated Invention, Patent Rights, Licensed Products, Licensed Services, and Licensed Methods are provided by The Regents WITHOUT WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR ANY OTHER WARRANTY OF ANY KIND, EXPRESS OR IMPLIED. THE REGENTS- MAKES NO EXPRESS OR IMPLIED REPRESENTATION OR WARRANTY THAT THE INVENTION, PATENT RIGHTS, LICENSED PRODUCTS, LICENSED SERVICES OR LICENSED METHODS WILL NOT INFRINGE ANY PATENT, COPYRIGHT, TRADEMARK OR OTHER RIGHTS.

19.3 This Agreement does not:

19.3.1 express or imply a warranty or representation as to the validity, enforceability, or scope of any Patent Rights; or

19.3.2 express or imply a warranty or representation that anything made, used, Sold, offered for Sale or imported or otherwise exploited under any license granted in this Agreement is or will be free from infringement of patents, copyrights, or other rights of third parties; or

19.3.3 obligate The Regents to bring or prosecute actions or suits against third parties for patent infringement except as provided in Article 23 (Patent Infringement); or

19.3.4 confer by implication, estoppel or otherwise any license or rights under any patents or other rights of The Regents other than Patent Rights, regardless of whether such patents are dominant or subordinate to Patent Rights; or

19.3.5 obligate The Regents to furnish any advancements, developments, or other improvements to Patent Rights which are not entitled to the priority dates of Patent Rights, or know-how, technology or information not provided in Patent Rights; or

20. LIMITATION OF LIABILITY

20.1 EXCEPT AS SET FORTH IN SECTION 24 (INDEMNIFICATION), NEITHER PARTY WILL BE LIABLE FOR ANY LOST PROFITS, COSTS OF PROCURING SUBSTITUTE GOODS OR SERVICES, LOST BUSINESS, ENHANCED DAMAGES FOR INTELLECTUAL PROPERTY INFRINGEMENT OR ANY INDIRECT, INCIDENTAL, CONSEQUENTIAL, PUNITIVE OR OTHER SPECIAL DAMAGES SUFFERED BY THE OTHER PARTY ARISING OUT OF OR RELATED TO THIS AGREEMENT FOR ALL CAUSES OF ACTION OF ANY KIND (INCLUDING TORT, CONTRACT, NEGLIGENCE, STRICT LIABILITY AND BREACH OF WARRANTY) EVEN IF SUCH PARTY HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES.

21. PATENT PROSECUTION AND MAINTENANCE

21.1 **Patent Prosecution.** As long as the Licensee has paid patent costs as provided for in this Article, The Regents shall diligently endeavor to prosecute and maintain the United States and foreign patents comprising Regents' Patent Rights using counsel of its choice. The Regents will provide the Licensee with copies of all relevant documentation so that the Licensee will be informed of the continuing prosecution and may comment upon such documentation sufficiently in advance of any initial deadline for filing a response (and The Regents shall incorporate such comments when appropriate and/or reasonable), provided, however, that if the Licensee has not commented upon such documentation in a reasonable time for The Regents to sufficiently consider the Licensee's comments prior to a deadline with the relevant government patent office, or The Regents must act to preserve the Patent Rights, The Regents will be free to respond without consideration of the Licensee's comments, if any. The Licensee agrees to keep this documentation confidential. The Regents' counsel will take instructions only from The Regents, and all patents and patent applications under this Agreement will be assigned solely to The Regents. The Regents shall use all reasonable efforts to amend any patent application to include claims reasonably requested by the Licensee to protect the products contemplated to be sold under this Agreement and to file and prosecute patents in foreign countries indicated by and [***].

21.2 **Patent Term.** The Licensee may apply for an extension of the term of any patent included within Regents' Patent Rights if appropriate under the Drug Price Competition and Patent Term Restoration Act of 1984 and/or European, Japanese and other foreign counterparts of this Law. If the Licensee, at its commercially-reasonable discretion, elects to file for such an extension, it shall prepare all documents, and The Regents agrees to execute the documents and to take additional action as the Licensee reasonably requests in connection therewith.

21.3 **Costs.** [***] of preparing, filing, prosecuting and maintaining all United States and foreign patent applications contemplated by this Agreement ("Patent Prosecution Costs"). Patent Prosecution Costs billed by [***] counsel during the term of the Agreement and for the three (3) month period after a Notice of Termination as set forth in Paragraph 21.4

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

(Effects of Termination) below will be rebilled to the [***] and are due within [***] of rebilling by [***]. These Patent Prosecution Costs will include, without limitation, patent prosecution costs for the Invention incurred by [***] prior to the execution of this Agreement and any patent prosecution costs that may be incurred for patentability opinions, re-examination, re-issue, interferences, oppositions or inventorship determinations. Prior Patent Prosecution Costs will be due upon execution of this Agreement and billing by [***] and are at least [***].

21.4 **Effects of Termination.** The [***] will be obligated to pay any Patent Prosecution Costs incurred during the [***] period after receipt by either party of a Notice of Termination, even if the invoices for such Patent Prosecution Costs are received by the [***] after the end of the [***] period following receipt of a Notice of Termination. The [***] may terminate its obligation to pay Patent Prosecution Costs with respect to any given patent application or patent under Patent Rights in any or all designated countries upon [***] written notice to [***]. The Regents may continue prosecution and/or maintenance of such application(s) or patent(s), and applications in foreign countries where Licensee has elected not to file, at its sole discretion [***] and Licensee will have no further right or licenses thereunder. For the avoidance of doubt, the written notification in the previous sentence shall not relieve [***] from the obligation to [***] for such Patent Prosecution Costs in connection therewith incurred during the [***] period following such notice. Non-payment of Patent Prosecution Costs may be deemed by [***] as an election by the [***] not to maintain such application(s) or patent(s).

22. PATENT MARKING

22.1 The Licensee will mark all Licensed Products made, used or Sold under the terms of this Agreement or their containers in accordance with the applicable patent marking laws.

23. PATENT INFRINGEMENT

23.1 **Infringement Notice.** In the event that The Regents (to the extent of the knowledge of the licensing professional responsible for the administration of this Agreement) or the Licensee learns of infringement of potential commercial significance of any patent licensed under this Agreement, the knowledgeable party will provide the other (i) with written notice of such infringement and (ii) with any evidence of such infringement

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

available to it (the "Infringement Notice"). During the period in which, and in the jurisdiction where, the Licensee has exclusive rights under this Agreement, neither The Regents nor the Licensee will notify a possible infringer of infringement or put such infringer on notice of the existence of any Patent Rights without first obtaining consent of the other. If the Licensee puts such infringer on notice of the existence of any Patent Rights with respect to such infringement without first obtaining the written consent of The Regents and if a declaratory judgment action is filed by such infringer against The Regents, then Licensee's right to initiate a suit against such infringer for infringement under Paragraph 23.2 (Company Suit and Joining) below will terminate immediately without the obligation of The Regents to provide notice to the Licensee. Both The Regents and the Licensee will use their diligent efforts to cooperate with each other to terminate such infringement without litigation.

23.2 **Company Suit and Joining.** If infringing activity of potential commercial significance by the infringer has not been abated within [***] following the date the Infringement Notice takes effect, then the Licensee may institute suit for patent infringement against the infringer. The Regents may voluntarily join such suit, at its own expense, but may not otherwise commence suit against the infringer for the acts of infringement that are the subject of the Licensee's suit or any judgment rendered in that suit. The Licensee may not join The Regents as a party in a suit initiated by the Licensee without The Regents' prior written consent. If The Regents joins a suit initiated by the Licensee, then the Licensee will pay any costs incurred by The Regents arising out of such suit, including but not limited to, any legal fees of counsel that The Regents selects and retains to represent it in the suit.

23.3 **Regents' Suit.** If, within a [***] following the date the Infringement Notice takes effect, infringing activity of potential commercial significance by the infringer has not been abated and if the Licensee has not brought suit against the infringer, then The Regents may institute suit for patent infringement against the infringer. If The Regents institutes such suit, then the Licensee may not join such suit without The Regents' consent and may not thereafter commence suit against the infringer for the acts of infringement that are the subject of The Regents' suit or any judgment rendered in that suit.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

23.4 **Infringement Notice.** Notwithstanding anything to the contrary in this Agreement, in the event that the infringement or potential infringement pertains to an issued patent included within the Patent Rights and written notice is given under the Drag Price Competition and Patent Term Restoration Act of 1984 (and/or foreign counterparts of this Law), then the party in receipt of such notice under the Act (in the case of The Regents to the extent of the actual knowledge of the licensing officer responsible for the administration of this Agreement) shall provide the Infringement Notice to the other party promptly. If the time period is such that the Licensee will lose the right to pursue legal remedy for infringement by not notifying a third party or by not filing suit, the notification period and the time period to file suit will be accelerated to within [***] of the date of such notice under the Act to either party.

23.5 **Recovery.** Any recovery or settlement received in connection with any suit will first be shared by The Regents and the Licensee equally to cover any litigation costs each incurred and next shall be paid to The Regents or the Licensee to cover any litigation costs it incurred in excess of the litigation costs of the other. In any suit initiated by the Licensee, any recovery in excess of litigation costs will be shared between Licensee and The Regents as follows: (a) for any recovery other than amounts paid for willful infringement: (i) The Regents will receive [***] of the recovery if The Regents was not a party in the litigation and did not incur any litigation costs associated with the use of outside counsel, (ii) The Regents will receive [***] of the recovery if The Regents was a party in the litigation whether joined as a party under the provisions of Paragraph 23.2 (Company Suit and Joining) or otherwise, but The Regents did not incur any litigation costs, and (iii) The Regents will receive [***] of the recovery if The Regents incurred any litigation costs associated with the use of outside counsel in connection with the litigation; and (b) for any additional recovery obtained based on a ruling of willful infringement, The Regents will receive, [***] of such additional the recovery, provided that, in each the case of (a) and (b), The Regents shall only be deemed to have incurred any outside counsel litigation costs to the extent the Licensee has not reimbursed The Regents for such costs. In any suit initiated by The Regents, any recovery in excess of litigation costs will belong to The Regents. The Regents and the Licensee agree to be bound by all determinations of patent infringement, validity and enforceability (but no other issue) resolved by any adjudicated judgment in a suit brought in compliance with this Article 23 (Patent Infringement).

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

23.6 **Sublicenses.** Any agreement made by the Licensee for purposes of settling litigation or other dispute shall comply with the requirements of Article 3 (Sublicenses) of this Agreement.

23.7 **Cooperation.** Each party will cooperate with the other in any litigation proceedings instituted hereunder, provided that such cooperation shall be at the expense of the party who initiated the suit (unless such suit is being jointly prosecuted by the parties).

23.8 **Control.** Any litigation proceedings will be controlled by the party bringing the suit, except that each Party may be represented by counsel of its choice in any suit brought by the Licensee,

24. INDEMNIFICATION

24.1 **Indemnification.** The Licensee will, and will require its Sublicensees to, indemnify, hold harmless and defend The Regents, the sponsors of the research that led to the Invention and the inventors of any invention claimed in patents or patent applications under Patent Rights (including the Licensed Products, Licensed Services and Licensed Methods contemplated thereunder) and their employers, and the officers, employees and agents of any of the foregoing, against any and all third party claims, suits, losses, damages, costs, fees and expenses resulting from, or arising out of, the exercise of this license or any sublicense. This indemnification will include, but not be limited to, any product liability claims. If The Regents believes that there will be a conflict of interest or it will not otherwise be adequately represented by counsel chosen by the Licensee to defend The Regents in accordance with this Paragraph 24.1, then The Regents may retain counsel of its choice to represent it and will pay all expenses for such representation.

24.2 **Insurance.** The Licensee, at its sole cost and expense, will insure its activities in connection with any work performed hereunder and will obtain, keep in force, and maintain general liability insurance with a limit no less than [***] prior to or coinciding with the Effective Date of this Agreement consistent with sound business practices.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Commencing with the dosing of the first subject in the first Phase I clinical trial such insurance levels will be at least as follows:

24.2.1 Commercial Form General Liability Insurance (contractual liability included) with limits as follows:

24.2.2 Each Occurrence [***]

24.2.3 Products/Completed Operations Aggregate [***]

24.2.4 Personal and Advertising Injury [***]

24.2.5 General Aggregate (commercial form only) [***]

(if written on a claims-made form, it shall continue for [***] following termination or expiration of this Agreement).

24.3 Upon the employment of the first employee by Licensee, worker's compensation as legally required in the jurisdiction in which the Licensee is doing business.

24.4 The coverage and limits above will not in any way limit the Licensee's liability under this Article 24 (Indemnification.)

24.5 **Certificates.** Upon the execution of this Agreement, the Licensee will furnish The Regents with certificates of insurance evidencing compliance with all requirements. Such certificates will:, indicate The Regents as an additional insured(s) under the coverage described above in Paragraph 24.2 (Insurance); and include a provision that the coverage will be primary and will not participate with, nor will be excess over, any valid and collectable insurance or program of self-insurance maintained by The Regents.

24.6 **Notification.** The Regents will promptly notify the Licensee in writing of any claim or suit brought against The Regents for which The Regents intends to invoke the provisions of this Article 24 (Indemnification). The Licensee will control the defense and settlement of any claims pursuant to this Article 24, and will keep the Regents informed of its defense of any claims pursuant.to this Article 24 (Indemnification), except that Licensee may not settle any claims absent the Regents' prior written consent.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

25. NOTICES

25.1 Any notice or payment hereunder shall be deemed to have been properly given when sent in writing in English to the respective address below and shall be deemed effective:

25.1.1 on the date of delivery if delivered in person,

25.1.2 on the date of mailing if mailed by first-class certified mail, postage paid, or

25.1.3 on the date of mailing if mailed by any global express earner service that requires the recipient to sign the documents demonstrating the delivery of such notice or payment, or

25.1.4 in the case of notices, if sent by email, on the date the recipient acknowledges having received that email by either an email sent to the sender or by a notice delivered by another method in accordance with this section 25.1, provided that, automated replies and "read receipts" shall not be considered acknowledgement of receipt and any provision of notice of breach or termination shall be send using certified mail or global express earner.

In the case of Licensee:

TheRas, Inc.
165 University Avenue, Suite 5
Palo Alto, CA 94301
Attention: Neil Kumar
Email: [***]

In the case of The Regents:

For notices:

Office of Innovation, Technology, and Alliances
3333 California Street, Suite S-11
San Francisco, CA 94143-1209
(for express mail and deliveries use zip 94118)
Attention: Director, Technology Management
Referring to: UC Case No. [***]
Email: [***]

For remittance of payments:

Innovation Alliances and Services
Attn: Accounts Receivable
University of California
Office of the President
1111 Franklin Street, 5th Floor
Oakland, CA 94607-5200
Referring to: UC Case No. [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

26. ASSIGNABILITY

26.1 The Licensee may assign or transfer this Agreement, without The Regents' prior written consent, only in the case of assignment or transfer to a third party that succeeds to (whether by purchase or otherwise) all or substantially all of Licensee's business or assets relating to this Agreement, whether by Sale, merger, operation of law or otherwise, provided that (a) such assignee or transferee promptly agrees to be bound by the terms and conditions of tins Agreement and signs The Regents' standard substitution of party letter (attached here as Appendix A), (b) Licensee gives The Regents of reasonably prompt notice, but not longer than [***] following such assignment, and (c) [***]. Any attempted assignment by Licensee other than in accordance with this Paragraph 26.1 will be null and void. This Agreement is binding upon and will inure to the benefit of The Regents, its successors and assigns.

27. FORCE MAJEURE

27.1 Except for the Licensee's obligation to make any payments to The Regents hereunder, the parties shall not be responsible for failure to perform due to the occurrence of any events beyond their reasonable control which render their performance impossible or onerous, including, but not limited to: accidents (environmental, toxic spill, etc.); acts of God; biological or nuclear incidents; casualties; earthquakes; fires; Hoods; governmental acts; orders or restrictions; inability to obtain suitable and sufficient labor, transportation, fuel and materials; local, national or state emergency; power failure and power outages; acts of terrorism; strike; and war.

28. GOVERNING LAWS; VENUE

28.1 **Choice of Law.** THIS AGREEMENT WILL BE INTERPRETED AND CONSTRUED IN ACCORDANCE WITH THE LAWS OF THE STATE OF CALIFORNIA, excluding any choice of law rales that would direct the application of the laws of another jurisdiction and without regard to which party drafted particular provisions of this Agreement, but the scope and validity of any patent or patent application will be governed by the applicable laws of the country of such patent or patent application.

28.2 **Venue.** Any legal action brought by the parties hereto relating to this Agreement will be conducted in San Francisco, California.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

29. GOVERNMENT APPROVAL OR REGISTRATION

29.1 If this Agreement or any associated transaction is required by the law of any nation to be either approved or registered with any governmental agency, the Licensee will assume all legal obligations to do so. The Licensee will notify The Regents if it becomes aware that this Agreement is subject to a United States or foreign government reporting or approval requirement. The Licensee will make all necessary filings and pay all costs including fees, penalties and all other out-of-pocket costs associated with such reporting or approval process.

30. COMPLIANCE WITH LAWS

30.1 The Licensee shall comply with all applicable international, national, state, regional and local laws and regulations in performing its obligations hereunder and in its use, manufacture, Sale or import of the Licensed Products, Licensed Services or practice of the Licensed Method. The Licensee will observe all applicable United States and foreign laws with respect to the transfer of Licensed Products and related technical data and the provision of Licensed Services to foreign countries, including, without limitation, the International Traffic in Arms Regulations (ITAR) and the Export Administration Regulations. The Licensee shall manufacture Licensed Products and practice the Licensed Method in compliance with applicable government importation laws and regulations of a particular country for Licensed Products made outside the particular country in which such Licensed Products are used, Sold or otherwise exploited.

31. CONFIDENTIALITY

31.1 **Confidential Information.** The Licensee and The Regents will treat and maintain the other party's proprietary business, patent prosecution, software, engineering drawings, process and technical information and other proprietary information, including the negotiated terms of this Agreement and any progress reports and royalty reports and any sublicense agreement issued pursuant to this Agreement ("Proprietary Information") in confidence using at least the same degree of care as the receiving party uses to protect its own proprietary information of a like nature from the date of disclosure until five (5) years after the termination or expiration of this Agreement. Proprietary Information can be written, oral, or both. This confidentiality obligation will apply to the information defined as "Data" under the Secrecy Agreement and such Data will be treated as Proprietary Information hereunder.

31.2 The Licensee and The Regents may use and disclose Proprietary Information to their employees, agents, consultants, contractors and, in the case of the Licensee, its sublicensees, provided that such parties are bound by a like duty of confidentiality as that found in this Article 31 (Confidentiality). Notwithstanding anything to the contrary contained in this Agreement, The Regents may release this Agreement, including any terms contained herein and information regarding payments or other income received in connection with this Agreement to the inventors, senior administrative officials employed by The Regents and individual Regents upon their request. If such release is made, then The Regents will request that such terms be kept in confidence in accordance with the provisions of this Article 31 (Confidentiality). In addition, notwithstanding anything to the contrary in this Agreement, if a third party inquires whether a license to Patent Rights is available, then The Regents may disclose the existence of this Agreement and the extent of the grant in Articles, *2* (Grant) and 3 (Sublicenses) and related definitions to such third party, but will not disclose the name of the Licensee unless the Licensee has already made such disclosure publicly.

31.3 **Limitations.** Nothing contained herein will restrict or impair, in any way, the right of the Licensee or The Regents to use or disclose any Proprietary Information:

31.3.1 that recipient can demonstrate by written records was previously known to it prior to its disclosure by the disclosing party;

31.3.2 that recipient can demonstrate by written records is now, or becomes in the future, public knowledge other than through acts or omissions of recipient;

31.3.3 that recipient can demonstrate by written records was obtained lawfully and without restrictions on the recipient from sources independent of the disclosing party; and

31.3.4 that The Regents is required to disclose pursuant to the California Public Records Act or other applicable law.

The Licensee or The Regents also may disclose Proprietary Information that is required to be disclosed (i) to a governmental entity or agency in connection with seeking any

governmental or regulatory approval, governmental audit, regulatory requirement (including any regulation promulgated by any securities exchange) or other governmental contractual requirement or (ii) by law, provided that the recipient uses reasonable efforts to give the party owning the Proprietary Information sufficient notice of such required disclosure to allow the party owning the Proprietary Information reasonable opportunity to object to, and to take legal action to prevent, such disclosure. Nothing in this Agreement will be construed to prevent The Regents from reporting de-identified raw terms of the Agreement as part of a larger database.

31.4 **Return of Information.** Upon termination of this Agreement, the Licensee and The Regents will destroy or return any of the disclosing party's Proprietary Information in its possession within [***] following the termination of this Agreement and provide each other with prompt written notice that such Proprietary Information has been returned or destroyed. Each party may, however, retain one copy of such Proprietary Information for archival purposes in non-working files.

32. MISCELLANEOUS

32.1 **Appendices.** This Agreement includes the attached Appendix A.

32.2 **Headings.** The headings of the several sections are inserted for convenience of reference only and are not intended to be a part of or to affect the meaning or interpretation of this Agreement.

32.3 **Binding Agreement.** This Agreement is not binding on the parties until it has been signed below on behalf of each party. It is then effective as of the Effective Date.

32.4 **Amendments.** No amendment or modification of this Agreement is valid or binding on the parties unless made in writing and signed on behalf of each party.

32.5 **Waiver.** No waiver by either party of any breach or default of any of the agreements contained herein will be deemed a waiver as to any subsequent and/or similar breach or default.

32.6 **Entire Agreement.** This Agreement embodies the entire understanding of the parties and supersedes all previous communications, representations or understandings, either oral or written, between the parties relating to the subject matter hereof.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

32.7 **Invalidity.** In case any of the provisions contained in this Agreement is held to be invalid, illegal or unenforceable in any respect, such invalidity, illegality or unenforceability will not affect any other provisions of this Agreement and this Agreement will be construed as if such invalid, illegal or unenforceable provisions had never been contained in it.

32.8 **Independent Contractors.** In performing their respective duties under this Agreement, each of the parties will be operating as an independent contractor. Nothing contained herein will in any way constitute any association, partnership, or joint venture between the parties hereto, or be construed to evidence the intention of the parties to establish any such relationship. Neither party will have the power to bind the other party or incur obligations on the other party's behalf without the other patty's prior written consent.

32.9 **Counterparts.** This Agreement may be executed in one or more counterparts, each of which together shall constitute one and the same Agreement. For purposes of executing this Agreement, a facsimile (including a PDF image delivered via email) copy of this Agreement, including the signature pages, will be deemed an original. The parties agree that neither party will have any rights to challenge the use or authenticity of a counterpart of this Agreement based solely on that its signature, or the signature of the other party, on such counterpart is not an original signature.

32.10 **Execution.** The terms and conditions of this Agreement shall be considered by The Regents to be withdrawn from the Licensee's consideration and the Agreement itself to be null and void, unless this Agreement is executed by both The Regents and the Licensee within thirty (30) days of when the execution copy is circulated for signatures.

IN WITNESS WHEREOF, both The Regents and the Licensee have executed this Agreement by their respective and duly authorized officers on the day and year written.

THERAS, INC.		THE REGENTS OF THE UNIVERSITY OF CALIFORNIA	
By:	/s/ Neil Kumar (Signature)	By:	/s/ Karin Immergluck (Signature)
Name:	Neil Kumar (Please Print)	Name:	Karin Immergluck (Please Print)
Title:	CEO	Title:	Executive Director
Date:	September 28, 2016	Date:	September 30, 2016

APPENDIX A: CONSENT TO SUBSTITUTION OF PARTY

UC Case Nos. SF2015-143

This substitution of parties ("Agreement") is effective this day of , 20 , among The Regents of the University of California ("The Regents"), a California corporation, having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200 and acting through its Office of Innovation, Technology, and Alliances, University of California San Francisco ("UCSF"), 3333 California Street, Suite S-11, San Francisco, California 94143; [licensee name] ("XXX"), a corporation, having a principal place of business ; and [new licensee name] [("YYY")] a corporation, having a principal place of business at .

BACKGROUND

A. The Regents and [XXX] entered into a License Agreement effective (UC Control No. - -), entitled ("License Agreement"), wherein XXX was granted certain rights.

B. [XXX] desires that [YYY] be substituted as Licensee (defined in the License Agreement) in place of [XXX], and The Regents is agreeable to such substitution.

C. [YYY] has read the License Agreement and agrees to abide by its terms and conditions.

The parties agree as follows:

1. [YYY] assumes all liability and obligations under the License Agreement and is bound by all its terms in all respects as if it were the original Licensee of the License Agreement in place of XXX.

2. [YYY] is substituted for [XXX], provided that [YYY] assumes all liability and obligations under the License Agreement as if [YYY] were the original party named as Licensee as of the effective date of the License Agreement.

3. The Regents releases [XXX] from all liability and obligations under the License Agreement arising before or after the effective date of this Agreement.

The parties have executed this Agreement in triplicate originals by their respective authorized officers on the following day and year.

[XXX] LICENSEE

By: _____
(Signature)

Name: _____
(Please print)

Title: _____

Date: _____

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By: _____

Name: _____

Title: _____

Date: _____

[YYY] COMPANY

By: _____
(Signature)

Name: _____
(Please print)

Title: _____

Date: _____

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

FIRST AMENDMENT
to the
Exclusive License Agreement
Effective September 28, 2016

Between

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

and

THERAS, INC.

Effective January 10, 2017, (the "First Amendment Effective Date") THE REGENTS OF THE UNIVERSITY OF CALIFORNIA ("THE REGENTS"), a California corporation, having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, California 946075200 and acting through its Office of Innovation, Technology, and Alliances, University of California San Francisco ("UCSF"), 3333 California Street, Suite S-l 1, San Francisco, CA 94143 and TheRas, Inc., a Delaware corporation and a subsidiary of BridgeBio, LLC, having a principal place of business at 165 University Avenue, Suite 5, Palo Alto, CA 94301 ("LICENSEE"), agree as follows:

1. BACKGROUND

1.1. THE REGENTS and LICENSEE are parties to a License Agreement effective September 28, 2016 with UC Agreement Control No. 2017-03-0138 ("Original Agreement") for "Covalent Modification on CAAX- box Cysteine of K-Ras 4B Using Tethering Compounds" as described in UC Case No. [***].

1.2. THE REGENTS and LICENSEE wish to amend the Original Agreement for the purpose of updating the PCT Application Number in the Original Agreement.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2. AMENDMENTS

2.1. Delete the table in Paragraph 1.11 and replace with the following:

UC Case Number	PCT Application Number	Filing or Issue Date
[***]	[***]	[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

All other terms and conditions of the Original Agreement will remain in full force and effect.

IN WITNESS WHEREOF, the parties hereto have executed these presents by their duly authorized officers or representatives as of the dates below:

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By /s/ Sunita Rajdev

Name Sunita Rajdev, Ph.D.

Title Associate Director, Technology Management
Innovation, Technology & Alliances UCSF

Date 1/17/17

THERAS, INC.

By /s/ Neil Kumar

Name Neil Kumar

Title CEO

Date 1/12/2017

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

SECOND AMENDMENT

to the

Exclusive License Agreement

Effective September 28, 2016

Between

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

and

THERAS, INC.

Effective , (the "Second Amendment Effective Date") THE REGENTS OF THE UNIVERSITY OF CALIFORNIA ("THE REGENTS"), a California corporation, having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200 and acting through its Office of Technology Management, University of California San Francisco ("UCSF"), 3333 California Street, Suite S-l 1, San Francisco, CA 94143 and TheRas, Inc., a Delaware corporation, having a principal place of business at 165 University Avenue, Suite 5, Palo Alto, CA 94301 ("LICENSEE"), agree as follows:

1. BACKGROUND

1.1 THE REGENTS and LICENSEE are parties to a License Agreement effective September 28, 2016 with UC Agreement Control No. 2017-03-0138 ("Original Agreement") for "Covalent Modification on CAAX- box Cysteine of K-Ras 4B Using Tethering Compounds" as described in UC Case No. SF2015-143 and a first subsequent amendment with an effective date of January 10, 2017 (the "First Amendment").

1.2 THE REGENTS and LICENSEE wish to amend the Original Agreement for the purpose adding additional patent rights to "Phenylacetamide- and triazole-based covalent inhibitors targeting H95 in Kras" as described in UC Case No. [***] to the Original Agreement.

2. AMENDMENTS

2.1 Background Paragraph A is hereby deleted and replaced with the following:

> "A. Certain inventions, generally characterized as "Covalent Modification on CAAX-box Cysteine of K-Ras 4B Using Tethering Compounds" (UC Case Nos. [***] and Leidos Biomedical No. [***]) (collectively "Original Invention"), made in the course of research at UCSF and Leidos Biomedical Research, Inc. ("Leidos") by Drs. Frank P. McCormick, Stephan C. Gysin, Adam R. Renslo, and David Turner at UCSF and by Drs. Anna E. Maciag and Oleg Chertov of Leidos (collectively, the "Original Inventors") and are claimed in Patent Rights as defined below. Furthermore, certain inventions generally characterized as "Phenylacetamide- and triazole-based covalent inhibitors targeting H95 in Kras" as described in UC Case No. [***] and Leidos Biomedical No. [***] (collectively the "Second Invention"), made in the course of research at UCSF by Drs. Frank P. McCormick, Adam R. Renslo, and Elizabeth D. Vo at UCSF and by Drs. Anna E. Maciag, David Turner, and Marcin Dyba of Leidos Biomedical Research, Inc. ("Leidos") (collectively, the "Second Inventor List"). The Original Invention and the Second Invention are collectively referred to as the "Invention". The Original Inventors and the Second Inventor List are collectively referred to as the "Inventors".

2.2 Background Paragraph C is hereby deleted and replaced with the following"

> "C. The Regents and Leidos have executed an Inter-Institutional Agreement (UC Control No. 2017-18-0104) with an effective date of August 22, 2016 and an hater-Institutional Agreement (UC Control No. 2018-18-0028) with an effective date of July 10, 2017, both of which grant The Regents the right to license the Invention on behalf of both parties (the "IIA").

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.3 The following is hereby added to the end of Background Paragraph D.

"Furthermore, the Licensee and The Regents have executed a Second Secrecy Agreement (UC Control No. 2017-20-0376) with an effective date of March 28, 2017."

2.4 Paragraph 1.11 is hereby deleted and replaced with the following:

"1.11 Patent Rights" means the Valid Claims of, to the extent assigned to or otherwise obtained by The Regents and/or Leidos, the following United States patents and patent applications:

UC Case Number	PCT Application Number	Filing or Issue Date
[***]	[***]	[***]
[***]	[***]	[***]

Patent Rights shall further include the Valid Claims of, to the extent assigned to or otherwise obtained by The Regents and/or Leidos, the corresponding foreign patents and patent applications and any reissues, extensions, substitutions, continuations, divisions, and continuation-in-part applications (but only those Valid Claims in the continuation-in-part applications that are entirely supported in the specification and entitled to the priority date of the parent application). Further, The Regents agrees that it will not file or prosecute additional patent applications, outside the scope of the Patent Rights, based on the invention disclosure existing as of the Effective Date of the Original Agreement that is identified as UC Case No. [***] and Leidos Biomedical No. [***] or existing as of the Second Amendment Effective Date that is identified as UC Case No. [***] and Leidos Biomedical No. [***]. For the avoidance of doubt, this definition of Patent Rights excludes any rights in and to Option Inventions, except as provided under Article 4."

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.5 Paragraph 7.1 is hereby deleted and replaced with the following:

"7.1 The Licensee will also pay to The Regents a license maintenance fee as follows for UC Case No. SF2015-143:

7.1.1 [***] on [***].

7.1.2 [***] beginning on the [***] and continuing annually on each subsequent anniversary of the Effective Date of the Original Agreement

7.1.3 Notwithstanding the payment obligations set forth in Section 7.1.1 and 7.1.2, license maintenance fees set forth in Paragraphs 7.1.1 and 7.1.2 are not due on any anniversary of the Effective Date of the Original Agreement if on that date, the Licensee is Selling or otherwise exploiting Licensed Products or Licensed Services covered by Patent Rights under UC Case No. [***] and is paying an Earned Royalty to The Regents on the Net Sales of such Licensed Product or Licensed Service.

7.2 The Licensee will also pay to The Regents a license maintenance fee as follows for UC Case No. SF2017-066:

7.2.1 [***] on [***].

7.2.2 [***] beginning on the [***] and continuing annually on each subsequent anniversary of the Second Amendment Effective Date.

7.2.3 Notwithstanding the payment obligations set forth in Section 7.2.1 and 7.2.2, license maintenance fees set forth in Paragraphs 7.2.1 and 7.2.2 are not due on any anniversary of the Second Amendment Effective Date if on that date, the Licensee is Selling or otherwise exploiting Licensed Products or Licensed Services covered by Patent Rights under UC Case No. [***] and is paying an Earned Royalty to The Regents on the Net Sales of such Licensed Product or Licensed Service.

7.3 The license maintenance fees set forth above in Paragraphs 7.1 and 7.2 are non-refundable and are not an advance or otherwise creditable against any royalties or other payments required to be paid under the terms of this Agreement.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.6 The following Paragraph is hereby added to the end of Paragraph 8.1:

"8.1.4. Licensee shall report to The Regents which Patent rights are included in each Sublicense. If the patent rights from both cases (i.e., UC Case Nos. [***] and [***]) are being sublicensed, then Sublicense Fees due in accordance with the foregoing shall be split and distributed evenly between the cases. If only one case is being sublicensed, then the Sublicense Fees shall be distributed to that case only."

2.7 The follow Paragraph is hereby added to the end of Paragraph 9.1:

"9.1.4 Licensee shall indicate to The Regents in royalty reports which Patent Rights corresponds to the royalty payments for which Licensed Products."

2.8 The following Paragraphs are hereby added to the end of Article 10:

"10.4 If the Patent Rights from both cases (i.e., UC Case Nos. [***] and [***]) cover a Licensed Product that triggers a Milestone Payment, then Milestone Payments due in accordance with the foregoing shall be [***]. If such Licensed Product is only covered by patent rights from one case, then the Milestone Payments shall be [***].

10.5. Licensee shall indicate to The Regents in progress reports which Patent Rights corresponds to which Licensed Product that triggers a Milestone Payment."

2.9 Paragraph 11.1.1 is hereby deleted and replaced with the following:

"11.1.1 N shall be the number equivalent of the number of shares equal to [***] of the then-outstanding shares of common stock of Licensee (assuming full conversion of all then-outstanding preferred stock and convertible securities and full exercise of any then-outstanding options and warrants) calculated on an as-converted basis as of immediately after the closing of a Licensee Financing (as defined in Paragraph 11.6 below); and"

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.10 Paragraph 11.7 is hereby deleted and replaced with the following:

"11.7 Notwithstanding the above, in the event that a Change of Control Transaction or IPO occurs prior to the Licensee Financing date, the Indexed Milestone Payment shall be equal to the greater of a) N times $P, where $P is determined as in 11.1.2.2 above, and where N equals [***] of the then-outstanding shares of Licensee (assuming full conversion of all then-outstanding convertible securities and full exercise of any then-outstanding options and warrants) immediately after the closing of a Change of Control Transaction, and (b) one million eight hundred thousand dollars ($1,800,000)."

2.11 Paragraph 13.3 is hereby deleted and replaced with the following:

"13.3 The Licensee will:

13.3.1 [***]

13.3.2 [***]

13.3.3 [***]

13.3.4 With respect to one Licensed Product covered by Patent Rights described in UC Case No. [***]:

[***]

The Regents recognizes that there are uncertainties associated with the development of therapeutic products and the regulatory process required by the FDA (and Foreign regulatory authorities that are equivalent to the FDA), and that it may be necessary from time to time to amend one or more of the milestones under Paragraphs 13.3.3.2 through 13.3.3.7 and Paragraphs 13.3.4.1 through 13.3.4.7. Accordingly, if Licensee is unable to meet one or more of such specified milestones and Licensee demonstrates to The Regents, based on the Regents' reasonable, objective, good faith assessment of Licensee's demonstration and supporting documentation, that Licensee has used and is using Licensee's diligent efforts (with supporting documentation) to meet such milestone and [***] then upon submission in writing by Licensee to The Regents of the aforementioned

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

diligent efforts and a plan to overcome such regulatory hurdles, The Regents will extend the deadline for each such milestone under Paragraphs 13.3.3.2 through 13.3.3.7 and/or Paragraphs 13.3.4.1 through 13.3.4.7 for a [***] provided Licensee also has paid to The Regents a fee, for each such extension, [***]. An extension of one milestone in Paragraph 13.3.3 will extend all remaining milestones in Paragraph 13.3.3 by the same extension time period, and an extension of one milestone in Paragraph 13.3.4 will extend all remaining milestones in Paragraph 13.3.4. and

13.3.5 use commercially reasonable efforts to fill the market demand for Licensed Products and Licensed Services following commencement of marketing at any time.

2.12 Paragraph 25.1.4 is hereby deleted and replaced with the following:

"in the case of notices, if sent by email, on the date the recipient acknowledges having received that email by either an email sent to the sender or by a notice delivered by another method in accordance with this section 25.1, provided that, automated replies and "read receipts" shall not be considered acknowledgement of receipt and any provision of notice of breach or termination shall be send using certified mail or global express carrier.

In the case of Licensee:
TheRas, Inc.
165 University Avenue, Suite 5
Palo Alto, CA 94301
Attention: Neil Kumar
Email: [***]

In the case of The Regents:

For notices:
Office of Innovation, Technology, and Alliances
3333 California Street, Suite S-11
San Francisco, CA 94143-1209
(for express mail and deliveries use zip 94118)
Attention: Director, Technology Management
Referring to: UC Case Nos. [***]
Email: [***]

For remittance of payments:
Innovation Alliances and Services
Attn: Accounts Receivable
University of California
Office of the President
1111 Franklin Street, 5th Floor
Oakland, CA 94607-5200
Referring to: UC Case Nos. [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

3. FEES

3.1 Amendment Issue Fee: the Licensee will pay to The Regents an amendment license issue fee of [***] within [***] of the Second Amendment Effective Date. This fee is non-refundable, non-cancelable and is not an advance or otherwise creditable against any royalties or other payments required to be paid under the terms of this Second Amendment or Original Agreement.

4. Miscellaneous

4.1 All other terms and conditions of the Original Agreement will remain in full force and effect.

4.2 This Second Amendment may be executed in one or more counterparts, each of which together shall constitute one and the same Agreement. For purposes of executing this Agreement, a facsimile (including a PDF image delivered via email) copy of this Agreement, including the signature pages, will be deemed an original. The parties agree that neither party will have any rights to challenge the use or authenticity of a counterpart of this Agreement based solely on that its signature, or the signature of the other party, on such counterpart is not an original signature.

[*signature page follows*]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

IN WITNESS WHEREOF, the parties hereto have executed these presents by their duly authorized officers or representatives as of the dates below:

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By	/s/ Sunita Rajdev
Name	Sunita Rajdev
Title	Associate Director, Technology Management Innovation, Technology & Alliances UCSF
Date	8-10-17

THERAS, INC.

By	/s/ Cameron Turtle
Name	Cameron Turtle
Title	VP, Business Development and Operations
Date	8/8/2017

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

THIRD AMENDMENT

to the

Exclusive License Agreement

Effective September 28, 2016

Between

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

and

THERAS, INC.

Effective September 7th. 2018, (the "Third Amendment Effective Date") THE REGENTS OF THE UNIVERSITY OF CALIFORNIA ("THE REGENTS"), a California corporation, having its statewide administrative offices at 1111 Franklin Street, 12th Floor, Oakland, California 94607-5200 and acting through its Office of Technology Management, University of California San Francisco ("UCSF"), 600 16th Street, Suite S-272, San Francisco, CA 94143and TheRas, Inc., a Delaware corporation, having a principal place of business at 421 Kipling Street, Palo Alto, CA 94301 ("LICENSEE"), agree as follows:

1. BACKGROUND

1.1. THE REGENTS and LICENSEE are parties to a License Agreement effective September 28, 2016 with UC Agreement Control No. 2017-03-0138 ("Original Agreement") for "Covalent Modification on CAAX- box Cysteine of K-Ras 4B Using Tethering Compounds" as described in UC Case No. [***], a first subsequent amendment with an effective date of January 10, 2017 (the "First Amendment"), and a subsequent amendment with an effective date of August 10, 2017 (the "Second Amendment").

1.2. THE REGENTS and LICENSEE wish to amend the Original Agreement for the purpose adding additional patent rights to "Sulfonamide-based modulators of KRAS4b with enhanced biochemical and biological activity over analogous amides" as described in UC Case No. [***] to the Original Agreement.

2. AMENDMENTS

2.1. Background Paragraph A is hereby deleted and replaced with the following:

"A. Certain inventions, generally characterized as "Covalent Modification on CAAX-box Cysteine of K-Ras 4B Using Tethering Compounds" (UC Case Nos. [***] and Leidos Biomedical No. [***]) (collectively "Original Invention"), made in the course of research at UCSF and Leidos Biomedical Research, Inc. ("Leidos") by Drs. Frank P. McCormick, Stephan C. Gysin, Adam R. Renslo, and David Turner at UCSF and by Drs. Anna E. Maciag and Oleg Chertov of Leidos (collectively, the "Original Inventors") and are claimed in Patent Rights as defined below. Furthermore, certain inventions generally characterized as "Phenylacetamide- and triazole-based covalent inhibitors targeting H95 in Kras" as described in UC Case No. [***] and Leidos Biomedical No. [***] (collectively the "Second Invention"), made in the course of research at UCSF by Drs. Frank P. McCormick, Adam R. Renslo, and Elizabeth D. Vo at UCSF and by Drs. Anna E. Maciag, David Turner, and Marcin Dyba of Leidos Biomedical Research, Inc. ("Leidos") (collectively, the "Second Inventor List"). The Original Invention and the Second Invention are collectively referred to as the "Initial Invention Set". Moreover, certain inventions generally characterized as "Sulfonamide-based modulators of KRAS4b with enhanced biochemical and biological activity over analogous amides" as described in UC Case No [***] (the "Subsequent Invention"), were made in the course of research at UCSF by Drs. Francis P McCormick and Adam R Renslo at UCSF, by Drs. Anna E. Maciag, David M Turner, Christopher Brassard, Vandana Kumari, and Marcin Dyba at Leidos, and

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

by Drs. Matthew Duncton and Eddie Low, of Licensee ("Third Inventor List"). The Initial Invention Set and the Subsequent Invention are collectively referred to as the "Invention". The Original Inventors, the Second Inventor List, and the Third Inventor List are collectively referred to as the "Inventors".

2.2. Background Paragraph C is hereby deleted and replaced with the following"

"C. The Regents and Leidos have executed an Inter-Institutional Agreement (UC Control No. 2017-18-0104) with an effective date of August 22, 2016 and an Inter-Institutional Agreement (UC Control No. 2018-18-0028) with an effective date of July 10, 2017, both of which grant The Regents the right to license the Initial Invention Set on behalf of both parties (the "IIA").

2.3. The following is hereby added to the end of Background Paragraph D.

"Furthermore, the Licensee and The Regents have executed a third Secrecy Agreement (UC Control No. 2018-20-0107) with an effective date of October 12, 2017."

2.4. Paragraph 1.11 is hereby deleted and replaced with the following:

"1.11 Patent Rights" means the Valid Claims of the following:

(a) to the extent assigned to or otherwise obtained by The Regents and/or Leidos, the following United States patents and patent applications, herein as defined as "Initial Patent Rights":

UC Case Number	Application Number	Filing or Issue Date
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

Initial Patent Rights shall further include the Valid Claims of, to the extent assigned to or otherwise obtained by The Regents and/or Leidos, the corresponding foreign patents and patent applications and any reissues, extensions, substitutions, continuations, divisions, and continuation-in-part applications (but only those Valid Claims in the continuation-in-part applications that are entirely supported in the specification and entitled to the priority date of the parent application). Further, The Regents agrees that it will not file or prosecute additional patent applications, outside the scope of the Patent Rights, based on the invention disclosure existing as of the Effective Date of the Original Agreement that is identified as UC Case No. [***] and Leidos Biomedical No. [***] or existing as of the Second Amendment Effective Date that is identified as UC Case No. [***] and Leidos Biomedical No. [***]. For the avoidance of doubt, this definition of Patent Rights excludes any rights in and to Option Inventions, except as provided under Article 4."

(b) to the extent assigned to or otherwise obtained by The Regents, the following United States patents and patent applications, herein defined as the "Subsequent Patent Rights":

UC Case Number	U.S. Provisional Patent Application Number	Filing Date
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

Subsequent Patent Rights shall further include the Valid Claims of, to the extent assigned to or otherwise obtained by The Regents, the corresponding foreign patents and patent applications and any reissues, extensions, substitutions, continuations, divisions, and continuation-in-part applications (but only those Valid Claims in the continuation-in-part applications that are entirely supported in the specification and entitled to the priority date of the parent application). For

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

the avoidance of doubt, Subsequent Patent Rights shall further include provisional or nonprovisional applications filed within the Paris convention year with claims to additional compounds or sub-genera that fall within the scope of the genus described in the Subsequent Patent Rights existing as of the Third Amendment Effective Date, provided that (1) such applications are conceived and reduced to practice by Dr. Frank McCormick and/or Dr. Adam Renslo (including together with inventors at Leidos and/or Licensee), (2) such applications are assigned to or otherwise obtained by only The Regents, Leidos, and Licensee, and (3) within sixty (60) days of the filing of such patent applications, the parties amend in writing the table in this Section 2.4(b).

For the avoidance of doubt, Patent Rights shall include both the Initial Patent Rights and the Subsequent Patent Rights. For the avoidance of doubt, this definition of Patent Rights excludes any rights in and to Option Inventions, except as provided under Article 4."

2.5. Paragraph 7.1 is hereby deleted and replaced with the following:

"7.1 The Licensee will also pay to The Regents a license maintenance fee as follows for UC Case No. [***]:

7.1.1 [***] on both [***]

7.1.2 [***] beginning on the [***] and continuing annually on each subsequent anniversary of the Effective Date of the Original Agreement

7.1.3 Notwithstanding the payment obligations set forth in Section 7.1.1 and 7.1.2, license maintenance fees set forth in Paragraphs 7.1.1 and 7.1.2 are not due on any anniversary of the Effective Date of the Original Agreement if on that date, the Licensee is Selling or otherwise exploiting Licensed Products or Licensed Services covered by Patent Rights under UC Case No. [***] and is paying an Earned Royalty to The Regents on the Net Sales of such Licensed Product or Licensed Service.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

7.2 The Licensee will also pay to The Regents a license maintenance fee as follows for UC Case No. [***]:

7.2.1 [***]

7.2.2 [***] and continuing annually on each subsequent anniversary of the Second Amendment Effective Date.

7.2.3 Notwithstanding the payment obligations set forth in Section 7.2.1 and 7.2.2, license maintenance fees set forth in Paragraphs 7.2.1 and 7.2.2 are not due on any anniversary of the Second Amendment Effective Date if on that date, the Licensee is Selling or otherwise exploiting Licensed Products or Licensed Services covered by Patent Rights under UC Case No. [***] and is paying an Earned Royalty to The Regents on the Net Sales of such Licensed Product or Licensed Service.

7.3 The Licensee will also pay to The Regents a license maintenance fee as follows for UC Case No. [***]:

7.3.1 [***] on both the [***].

7.3.2 [***] beginning on the [***] and continuing annually on each subsequent anniversary of the Third Amendment Effective Date.

7.2.1 Notwithstanding the payment obligations set forth in Section 7.3.1 and 7.3.2, license maintenance fees set forth in Paragraphs 7.3.1 and 7.3.2 are not due on any anniversary of the Second Amendment Effective Date if on that date, the Licensee is Selling or otherwise exploiting Licensed Products or Licensed Services covered by Patent Rights under UC Case No. [***] and is paying an Earned Royalty to The Regents on the Net Sales of such Licensed Product or Licensed Service.

7.3 The license maintenance fees set forth above in Paragraphs 7.1, 7.2, and 7.3 are non-refundable and are not an advance or otherwise creditable against any royalties or other payments required to be paid under the terms of this Agreement.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.6. The following Paragraph is hereby added to the end of Paragraph 8.1:

"8.1.4. Licensee shall report to The Regents which Patent rights are included in each Sublicense. If the patent rights from more than one case is being sublicensed, then Sublicense Fees due in accordance with the foregoing shall be [***]. If only one case is being sublicensed, then the Sublicense Fees shall be distributed [***]."

2.7. The follow Paragraph is hereby added to the end of Paragraph 9.1:

"9.1.4 Licensee shall indicate to The Regents in royalty reports which Patent Rights corresponds to the royalty payments for which Licensed Products."

2.8. The following Paragraphs are hereby added to the end of Article 10:

"10.4 If the Patent Rights from more than one case cover a Licensed Product that triggers a Milestone Payment, then Milestone Payments due in accordance with the foregoing shall be [***]. If such Licensed Product is only covered by patent rights from one case, then the Milestone Payments shall be [***].

10.5. Licensee shall indicate to The Regents in progress reports which Patent Rights corresponds to which Licensed Product that triggers a Milestone Payment."

2.9. Paragraph 13.3 is hereby deleted and replaced with the following:

"13.3 The Licensee will:

13.3.1 [***]

13.3.2 [***]

13.3.3 [***]

13.3.4 With respect to one Licensed Product covered by Patent Rights described in UC Case No. [***]:

[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

13.3.5 With respect to one Licensed Product covered by Patent Rights described in UC Case No. [***]:

[***]

The Regents recognizes that there are uncertainties associated with the development of therapeutic products and the regulatory process required by the FDA (and Foreign regulatory authorities that are equivalent to the FDA), and that it may be necessary from time to time to amend one or more of the milestones under Paragraphs 13.3.3.2 through 13.3.3.7, Paragraphs 13.3.4.1 through 13.3.4.7, and Paragraphs 13.3.5.1 through 13.3.5.7. Accordingly, if Licensee is unable to meet one or more of such specified milestones and Licensee demonstrates to The Regents, based on the Regents' reasonable, objective, good faith assessment of Licensee's demonstration and supporting documentation, that Licensee has used and is using Licensee's diligent efforts (with supporting documentation) to meet such milestone and to [***], then upon submission in writing by Licensee to The Regents of the aforementioned diligent efforts and a plan to overcome such regulatory hurdles, The Regents will extend the deadline for each such milestone under Paragraphs 13.3.3.2 through 13.3.3.7 and/or Paragraphs 13.3.4.1 through 13.3.5.7 for a maximum of [***] provided Licensee also has paid to The Regents a fee, for each such extension, [***]. An extension of one milestone in Paragraph 13.3.3 will extend all remaining milestones in Paragraph 13.3.3 by the same extension time period, an extension of one milestone in Paragraph 13.3.4 will extend all remaining milestones in Paragraph 13.3.4, and an extension of one milestone in Paragraph 13.3.5 will extend all remaining milestones in Paragraph 13.3.5.

and

13.3.5 use commercially reasonable efforts to fill the market demand for Licensed Products and Licensed Services following commencement of marketing at any time.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.10. Notwithstanding anything to the contrary in Paragraph 21.1, the following shall govern the Parties' respective rights and obligations with respect to the filing, prosecution and maintenance of Initial Patent Rights and Subsequent Patent Rights:

"21.1 **Patent Prosecution.**

21.1.1 For Initial Patent Rights: As long as the Licensee has paid patent costs as provided for in this Article, The Regents shall diligently endeavor to prosecute and maintain the United States and foreign patents comprising Regents' Patent Rights using counsel of its choice. The Regents will provide the Licensee with copies of all relevant documentation so that the Licensee will be informed of the continuing prosecution and may comment upon such documentation sufficiently in advance of any initial deadline for filing a response (and The Regents shall incorporate such comments when appropriate and/or reasonable), provided, however, that if the Licensee has not commented upon such documentation in a reasonable time for The Regents to sufficiently consider the Licensee's comments prior to a deadline with the relevant government patent office, or The Regents must act to preserve the Patent Rights, The Regents will be free to respond without consideration of the Licensee's comments, if any. The Licensee agrees to keep this documentation confidential. The Regents' counsel will take instructions only from The Regents, and all patents and patent applications under the Initial Patent Rights will be assigned solely to The Regents, and when applicable, Leidos. The Regents shall use all reasonable efforts to amend any patent application to include claims reasonably requested by the Licensee to protect the products contemplated to be sold under this Agreement and to file and prosecute patents in foreign countries indicated by and [***].

21.1.2 For Subsequent Patent Rights: Licensee, with the input of The Regents and Leidos as outlined below, will be the party having the first right to file, prosecute, extend and maintain, and shall be responsible for filing, prosecuting, extending and maintaining, in good faith, the United States

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

and foreign patent application(s) encompassing the Subsequent Patent Rights using patent counsel selected by Licensee, provided that such patent counsel is reasonably acceptable to The Regents and Leidos. The Regents hereby confirms that Licensee's selection of Cooley LLP as its patent counsel is acceptable to The Regents as of the Third Amendment Effective Date.

Licensee and its selected patent counsel shall be responsible for keeping The Regents and Leidos reasonably informed of such activities with respect to the Subsequent Patent Rights. Specifically, Licensee will instruct its counsel to copy The Regents and Leidos on all communications regarding Subsequent Patent Rights and provide The Regents and Leidos with copies of all relevant correspondence and filings with respect to the Subsequent Patent Rights so that The Regents and Leidos will be informed of the continuing prosecution and may comment upon such filings sufficiently (and [***] when practicable) in advance of any initial deadline for filing a response. In the event Licensee inadvertently omits providing The Regents and Leidos with any such copy, Licensee shall do so or instruct its counsel to do so as soon as practical. In the event such omissions are ongoing and persistent, then at any Party's request, Licensee, The Regents and Leidos shall discuss in good faith to establish a process of communication to address such omission. Licensee agrees to take such timely comments into consideration and shall advise if such comments are not incorporated into any filing. Licensee and The Regents will cooperate in the prosecution of Subsequent Patent Rights.

Licensee shall use all reasonable efforts to amend any patent application to include claims reasonably requested by The Regents in the Subsequent Patent Rights. The Regents and Licensee hereby acknowledge that Licensee, The Regents, and Leidos jointly own the Subsequent Patent Rights. Licensee shall not abandon or make inventorship changes on any

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

patent applications jointly owned by The Regents without first consulting The Regents. If [***] chooses to abandon a patent application jointly owned by either The Regents and/or Leidos Biomedical, [***] (in consultation with each other if both The Regents and Leidos are co-owners) have the right to take over the prosecution and maintenance of such patent application [***]. The obligations of the Parties under this Agreement shall terminate to the extent applicable to the abandoned patent or patent application. Licensee shall promptly transfer any applicable documents necessary for The Regents and/or Leidos to continue the prosecution and maintenance of such patents or patent applications.

The Regents shall not file any patent application claiming or disclosing solely the Subsequent Invention or claiming priority to Subsequent Patent Rights unless Licensee decides to abandon the prosecution or maintenance of any Subsequent Patent Rights or breaches its obligation to notify The Regents of its decision to abandon Subsequent Patent Rights (the "Notification Breach"). If The Regents wishes to file a patent application covering an aspect of the Subsequent Invention that is not already covered by the Subsequent Patent Rights ("New Subsequent Invention"), The Regents shall notify Licensee in writing. If Licensee chooses not to file on such New Subsequent Invention, The Regents is free to file on such New Subsequent Invention. In addition, if the Regents notifies the Licensee of its Notification Breach and Licensee does not cure such breach or resume or continue such prosecution or maintenance of such Subsequent Patent Rights after the earlier of [***] notice of such breach, or [***] before an applicable patent or patent prosecution bar date, The Regents is then free to discuss in good faith with Leidos a plan to assume the prosecution and/or maintenance of such Subsequent Patent Rights and to carry out such plan. For the avoidance of doubt, provided that there are jointly owned Subsequent Patent Rights, Licensee shall not file any patent application that claims or discloses an invention related to the Subsequent Invention or claims priority to Subsequent Patent Rights without having a good faith discussion with The Regents and Leidos Biomedical first regarding the filing strategy and inventorship."

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.11. Paragraph 25.1.4 is hereby deleted and replaced with the following:

"in the case of notices, if sent by email, on the date the recipient acknowledges having received that email by either an email sent to the sender or by a notice delivered by another method in accordance with this section 25.1, provided that, automated replies and "read receipts" shall not be considered acknowledgement of receipt and any provision of notice of breach or termination shall be send using certified mail or global express carrier.

In the case of Licensee:
TheRas, Inc.
421 Kipling Street
Palo Alto, CA 94301
Attention: Neil Kumar
Email: [***]

In the case of The Regents:

For notices:
University of California, San Francisco
Innovation Ventures, Office of Technology Management, Box 2142
600 16th Street, Suite S272
San Francisco, CA 94143
(for Fed-Ex use postal code 94158)
Attention: Director, Technology Management
Referring to: UC Case Nos. [***]
Email: [***]

For remittance of payments:
Innovation Alliances and Services
Attn: Accounts Receivable
University of California
Office of the President
1111 Franklin Street, 5th Floor
Oakland, CA 94607-5200
Referring to: UC Case Nos. [***]

3. FEES

3.1. Amendment Issue Fee: the Licensee will pay to The Regents an amendment license issue fee of [***] within [***] of the Second Amendment Effective Date. This fee is

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

non-refundable, non-cancelable and is not an advance or otherwise creditable against any royalties or other payments required to be paid under the terms of this Second Amendment or Original Agreement.

4. Miscellaneous

4.1. All other terms and conditions of the Original Agreement will remain in full force and

4.2. This Agreement hereby supersedes the Memorandum of Understanding between The Regents, Licensee, and Leidos, dated February 20, 2018.

4.3. This Second Amendment may be executed in one or more counterparts, each of which together shall constitute one and the same Agreement. For purposes of executing this Agreement, a facsimile (including a PDF image delivered via email) copy of this Agreement, including the signature pages, will be deemed an original. The parties agree that neither party will have any rights to challenge the use or authenticity of a counterpart of this Agreement based solely on that its signature, or the signature of the other party, on such counterpart is not an original signature.

[signature page follows]

IN WITNESS WHEREOF, the parties hereto have executed these presents by their duly authorized officers or representatives as of the dates below:

THE REGENTS OF THE UNIVERSITY OF CALIFORNIA

By	/s/ Sunita Rajdev
Name	Sunita Rajdev
Title	Interim Executive Director
Date	9/10/18

THERAS, INC.

By	/s/ Michael Henderson
Name	Michael Henderson
Title	CBO
Date	9/7/2018

Exhibit 10.15

EXECUTION VERSION

[***]	**Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.**

COLLABORATION AND LICENSE AGREEMENT

by and among

The University of Texas M.D. Anderson Cancer Center,

The Board of Regents of the University of Texas System,

And

PTP Pharmaceuticals, Inc.

COLLABORATION AND LICENSE AGREEMENT

This Agreement is effective as of March 3, 2017 (the "Effective Date"), by and among The Board of Regents ("Board") of The University of Texas System ("System"), The University of Texas M.D. Anderson Cancer Center, a member institution of System and an agency of the State of Texas, with offices at 1515 Holcombe Blvd., Houston, Texas 77030 ("MDACC"), and PTP Pharmaceuticals, Inc., a Delaware corporation located at 165 University Avenue, Suite #5, Palo Alto, CA 94301 ("Company"). Board, MDACC, and Company are each sometimes referred to herein as a "Party" or collectively as the "Parties."

RECITALS

WHEREAS, MDACC is an institution of higher education and a comprehensive cancer research, treatment and prevention center;

WHEREAS, Board is the owner of certain Licensed Technology and Company wishes to obtain an exclusive license under Board's rights in the Licensed Technology;

WHEREAS, in partial consideration for the issuance of [***] shares of common stock of Company to Board [***] set forth in the Stock Purchase Agreement dated March 3, 2017 (the "Stock Purchase Agreement"), by and between Board and Company, Board has agreed to grant Company an exclusive license to the Licensed Technology;

WHEREAS, in addition to granting and receiving the exclusive license mentioned above, Company and MDACC desire to engage in a collaboration pursuant to which the Parties will collaborate in research and development of products covered by the Licensed Technology, using their respective technologies and expertise ("Collaboration").

NOW, THEREFORE, in consideration of the mutual covenants contained herein, and for other good and valuable consideration, the Parties hereto, intending to be legally bound, hereby agree as follows:

ARTICLE 1
DEFINITIONS

1.1 "Affiliate" of a Party shall mean any entity which directly or indirectly controls, or is controlled by, or is under common control with such Party. The term "control" as used herein means: (a) in the case of corporate entities, direct or indirect ownership of at least fifty percent (50%) of the stock or shares entitled to vote for the election of directors; or (b) the power to direct the management and policies of such entities.

1.2 "Applicable Law" means the applicable laws, rules and regulations, including any rules, regulations, guidelines or other requirements of Governmental Authorities (e.g., Regulatory Authorities), that may be in effect from time to time. Specifically and without limiting the foregoing, Applicable Law includes the Foreign Corrupt Practices Act of 1977, as amended.

1.3 "Collaboration Technology" means all inventions or discoveries (whether or not patentable or copyrightable) that are invented or discovered at MDACC, solely by a MDACC employee who is a member of IACS or jointly by such MDACC employee and an employee of Company, during the performance of MDACC Development Activities.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

1.4 "Combination Product" shall mean any Licensed Product sold or used in combination with one or more other products or processes which are not Licensed Products.

1.5 "Commercialization" means the marketing, promotion, sale and/or distribution of a Licensed Product in the Territory, including, without limitation, any post marketing surveillance and marketing and promotional activities conducted in preparation for Licensed Product launch. "Commercialize" has a correlative meaning.

1.6 "Commercially Reasonable Efforts" means, with respect to a Party's obligations under this Agreement to Develop, manufacture or Commercialize a Licensed Product, the carrying out of such obligations or tasks with [***].

1.7 "Confidential Information" means any confidential or proprietary information disclosed or otherwise made available by or on behalf of the disclosing party to the receiving party for the purposes of the Collaboration, whether in oral, visual, written electronic, or any other form. Information to which the receiving party gains access during visits to the facilities of the disclosing party or its Affiliates shall also be deemed Confidential Information. For the avoidance of doubt, Confidential Information may include, but is not limited to: (a) data, know-how, formulas, compositions, processes, documents, designs, sketches, photographs, plans, graphs, drawings or specifications; (b) chemical structures, amino/nucleic acid sequences, structural biology, or descriptions of any devices, cell lines or molecular models; (c) clinical trial protocols, assays, services, studies, results, findings, inventions, ideas and other knowledge; or (d) finances, financial models, business plans and marketing plans, reports, customer lists or pricing information. To the extent permitted by Applicable Laws, Confidential Information also includes the existence, terms and purpose contemplated by this Agreement, the terms of any other agreements being discussed by the parties related to the Collaboration, as well as the fact that any such discussions are taking place with respect thereto. Confidential Information does not include information that: (v) is at the time of disclosure in the public domain; (w) comes into the public domain through no fault of the receiving Party; (x) was at the time of disclosure known to the receiving Party prior to its disclosure by the disclosing Party; as evidenced by contemporaneous written documentation; (y) is disclosed to the receiving Party by a third party who has a right to disclose and who is not under an obligation of nondisclosure; or (z) is independently developed by the receiving Party without reference to or use of the Confidential Information, as evidenced by contemporaneous written records.

1.8 "Control" or "Controlled" means, with respect to any Information or Patent Rights, possession (whether by ownership or license, other than pursuant to this Agreement), by a Party of the right to grant a license or sublicense without violating the terms of any agreement with any Third Party.

1.9 "Develop" or "Development" means all activities that relate to obtaining, maintaining or expanding Regulatory Approval of a Licensed Product. This includes: (a) nonclinical testing, toxicology, and clinical trials; (b) preparation, submission, review, and development of data or information for the purpose of submission to a Governmental Authority to obtain, maintain and/or expand Regulatory Approval of a Licensed Product, and outside counsel, regulatory, and legal services related thereto; provided, however, that Development shall exclude Commercialization and the building of commercial inventory of a Licensed Product.

1.10 "FD&C Act" means the United States Federal Food, Drug and Cosmetic Act, as amended.

1.11 "Field" shall mean all fields.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

1.12 "First Commercial Sale" means, with respect to any Licensed Product in any country in the Territory, the first sale, transfer or disposition for value to an end user of that Licensed Product in that country after Regulatory Approval for the Licensed Product has been received in that country; provided, that, the following will not constitute a First Commercial Sale: (a) any sale to an Affiliate or distributor (unless the Affiliate or distributor is the last entity in the distribution chain of the Licensed Product); (b) any sale or transfer that restricts the use of the Licensed Product solely to use of the Licensed Product in clinical trials, pre-clinical studies or other research or Development activities; or (c) the disposal or transfer of Licensed Products for a bona fide charitable purpose, including compassionate use or "named patient sales".

1.13 "FTE Cost" means, for any period, the FTE Rate multiplied by the number of FTEs used in such period.

1.14 "FTE Rate" means the rate per full time equivalent ("FTE"). which will be deemed to be [***] hours of research or development time per annum for FTEs engaged in the conduct of research and Development activities, which rate will be equal to [***] Dollars ($[***]). The above FTE Rate will be adjusted annually for each calendar year after 2018 to be equal to the FTE Rate as of the Effective Date, or the preceding calendar year, as the case may be, plus a percentage increase equal to the percentage increase in the Consumer Price Index for all Urban Consumers, as published by the U.S. Department of Labor, Bureau of Statistics.

1.15 "Governmental Authority" means any multi-national, federal, state, local, municipal or other government authority of any nature (including any governmental division, subdivision, department, agency, bureau, branch, office, commission, council, court or other tribunal).

1.16 "IACS" means the MDACC Institute for Applied Cancer Science.

1.17 "IACS Improvements" means any and all Information and/or Patent Rights Controlled by Board that is/are: (i) reasonably necessary for the research, development, manufacture or commercialization of a Licensed Product in the Field; (ii) invented or discovered at MDACC during the IACS Improvement Term by a MDACC employee who is a member of IACS; and (iii) not Collaboration Technology.

1.18 "IACS Improvement Term" means the time period beginning on the Effective Date and ending on the [***] anniversary of the Effective Date; provided, however, that if this Agreement terminates earlier than the foregoing date, then the IACS Improvement Term shall terminate on the effective date of termination of this Agreement.

1.19 "IND" means: (a) an Investigational New Drug Application as defined in the FD&C Act and applicable regulations promulgated thereunder by the FDA; or (b) the equivalent application to the equivalent Regulatory Authority in any other regulatory jurisdiction, the filing of which is necessary to initiate or conduct clinical testing of a pharmaceutical product in humans in such jurisdiction.

1.20 "Information" means any data, results, and information of any type whatsoever, in any tangible or intangible form, including, without limitation, know-how, trade secrets, practices, techniques, methods, processes, inventions, developments, specifications, formulations, formulae, materials or compositions of matter of any type or kind (patentable or otherwise), software, algorithms, marketing reports, clinical and non-clinical study reports, regulatory submission documents and summaries, expertise, stability, technology, test data including pharmacological, biological, chemical, biochemical, toxicological, and clinical test data, analytical and quality control data, stability data, studies and procedures.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

1.21 "Licensed Know-How" shall mean (a) the inventions and discoveries set forth in the MDACC Invention Disclosure Report listed on Exhibit A and (b) all Information Controlled by Board, as of the Effective Date, that: (i) is reasonably necessary for the research, development, manufacture or commercialization of a Licensed Product in the Field and (ii) was invented or discovered at MDACC before the Effective Date by a MDACC employee who is a member of IACS.

1.22 "Licensed Patents" shall mean all Patent Rights Controlled by Board, as of the Effective Date, that: (i) are reasonably necessary for the research, development, manufacture or commercialization of a Licensed Product in the Field and (ii) were invented or discovered at MDACC before the Effective Date by a MDACC employee who was a member of IACS at the time of invention or discovery, including the patents and patent applications listed on Exhibit A.

1.23 "Licensed Product" shall mean any product the composition, manufacture, use, sale, offer for sale or import of which comprises or uses any Licensed Technology.

1.24 "Licensed Technology" shall mean all Licensed Patents, Licensed Know-How, and IACS Improvements.

1.25 "Net Sales" [***].

1.26 "Company Know-How" shall mean all Information Controlled as of the Effective Date or thereafter during the Term by Company that is reasonably necessary or useful for the research, development, manufacture or commercialization of a Product in the Field.

1.27 "Company Patents" shall mean all Patent Rights Controlled as of the Effective Date or thereafter during the Term by Company that are reasonably necessary or useful for the research, development, manufacture or commercialization of a Product in the Field.

1.28 "Company Technology" shall mean all Company Know-How and Company Patents.

1.29 "Non-Dilutive Financing" means any financing received by Company or a direct or indirect subsidiary of Company that is not in exchange for equity securities of Company or a direct or indirect subsidiary of Company or any securities convertible into equity securities of the Company or a direct or indirect subsidiary of Company.

1.30 "Patent Rights" shall mean: (a) any national, regional or international patent or patent application, including any provisional patent application; (b) any patent application filed either from such a patent, patent application or provisional application or from an application claiming priority from any of these, including any divisional, continuation, continuation-in-part (to the extent the claims of such continuations-in-part are entitled to claim priority to the aforesaid patents and/or patent applications), provisional, converted provisional, and continued prosecution application; (c) any patent that has issued or in the future issues from any of the foregoing patent applications ((a) and (b)), including any utility model, petty patent, design patent and certificate of invention; (d) any extension or restoration by existing or future extension or restoration mechanisms, including any revalidation, reissue, re-examination and extension (including any supplementary protection certificate and the like) of any of the foregoing patents or patent applications ((a), (b) and (c)); and (e) any similar rights, including so-called pipeline protection, or any importation, revalidation, confirmation or introduction patent or registration patent or patent of additions to any such foregoing patent application or patent.

1.31 "Phase II Trial" shall mean a human clinical trial of a Licensed Product, the principal purpose of which is the preliminary determination of efficacy and/or preliminary establishment of

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

appropriate dose ranges for efficacy and safety in the target patient population and that would satisfy the requirements under 21 C.F.R. § 312.21(b) for the United States, as amended from time to time, or the corresponding regulations for a comparable filing with a comparable regulatory authority in a country other than the United States.

1.32 "Phase III Trial" means that portion of the United States Food and Drug Administration approval process in which expanded clinical trials are conducted to gather additional information about effectiveness and safety that is needed to evaluate the overall benefit-risk relationship of the Licensed Product, as more specifically defined under 21 C.F.R. § 312.21(c) for the United States, as amended from time to time, or the corresponding regulations for a comparable filing with a comparable regulatory authority in a country other than the United States.

1.33 "Proof of Concept" shall have the meaning set forth in the Stock Purchase Agreement.

1.34 "Proprietary Materials" means any tangible chemical, biological or physical materials furnished by or on behalf of one Party to the other Party in connection with this Agreement, whether or not specifically designated as proprietary by the Transferring Party.

1.35 "Regulatory Approval" means all approvals necessary for the manufacture, marketing, importation and sale of a Licensed Product for one or more indications in the Field and in a country or regulatory jurisdiction, which may include, without limitation, satisfaction of all applicable regulatory and notification requirements, [***].

1.36 "Regulatory Authority" means, in a particular country or regulatory jurisdiction, any applicable Governmental Authority involved in granting Regulatory Approval and/or, to the extent required in such country or regulatory jurisdiction, pricing or reimbursement approval of a Licensed Product in such country or regulatory jurisdiction.

1.37 "Reporting Period" shall begin on the first day of each calendar quarter (i.e., January 1, April 1, July 1, and October 1) and end on the last day of such calendar quarter (i.e., March 31, June 30, September 30, and December 31)^

1.38 "Royalty Termination Date" shall mean, on a country-by-country and Licensed Product-by Licensed Product basis, the date of the expiration or termination of the last to expire of a Valid Claim within the Licensed Patents that covers such Licensed Product in such country or, if there is no Valid Claim within the Licensed Patents that covers the use, composition or sale of such Licensed Product in such country, the date that is ten (10) years after the First Commercial Sale of such Licensed Product in such country.

1.39 "Sublicensee" shall mean any person or entity to which a sublicense has been granted by Company under the Licensed Technology, or with respect to the Licensed Products, pursuant to this Agreement.

1.40 "Term" shall mean the term of this Agreement, which shall commence on the Effective Date and shall remain in effect until the first to occur of: (a) the date that is the thirtieth (30th) anniversary of the Effective Date; or (b) a date when the Agreement is earlier terminated pursuant to Article 15.

1.41 "Territory" shall mean worldwide.

1.42 "Third Party" means any person other than Company or MDACC or an Affiliate of either of them.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

1.43 "Valid Claim" shall mean either: (i) a claim of any issued, unexpired patent that has not been revoked or held unenforceable or invalid by a decision of a court or governmental agency of competent jurisdiction, unappealable or unappealed within the time allowed for appeal, and that has not been admitted to be invalid or unenforceable through reissue, disclaimer or otherwise, or (ii) [***].

ARTICLE 2
GRANT OF RIGHTS

2.1 License Grants to Company.

(a) Subject to the terms and conditions of this Agreement, Board hereby grants to Company for the Term an exclusive license, with the right to sublicense through multiple tiers, under the Licensed Technology, to research, have researched, develop, have developed, make, have made, use, have used, sell, have sold, offer to sell, have offered for sale, import, have imported, export and have exported Licensed Products in the Field in the Territory.

(b) MDACC and Board acknowledge and agree that, during the Term, subject only to a license granted to the United States Government pursuant to federal law, neither shall directly or indirectly grant any licenses or other rights inconsistent with this Section 2.1.

2.2 Sublicenses.

(a) Company shall have the right to grant sublicenses of the rights and licenses granted to Company hereunder through multiple tiers, provided that each such sublicense is in writing.

(b) Company shall incorporate terms and conditions into its sublicense agreements sufficient to enable Company to comply with this Agreement.

(c) All sublicense agreements will terminate upon termination of this Agreement for any reason; provided, however, if Company has sublicensed to a Sublicensee all license rights granted to Company under Section 2.1, then such sublicense agreement shall survive termination of this Agreement if the Sublicensee: (i) is not an Affiliate of Company; (ii) is not in material breach of the sublicense agreement; (in) agrees to assume all financial obligations of Company owed to Board and/or MDACC under the Stock Purchase Agreement and this Agreement; (iv) agrees to assume the non-financial obligations of Company under this Agreement, and (v) agrees to pay MDACC all consideration owed or that would have been owed to Company under the sublicense agreement.

2.3 License Grant to MDACC. Subject to the terms and conditions of this Agreement, Company hereby grants to MDACC for the Term a non-exclusive license under the Company Technology solely to the extent necessary for MDACC to carry out its obligations under the Development Plan.

2.4 Rights from BridgeBio Pharma LLC. Company shall obtain from BridgeBio Pharma LLC ("BridgeBio") at no cost to Company, a license to (with the right to sublicense to MDACC) or assignment of any rights arising under the laws of patent, copyright, or other intellectual property, to the extent that BridgeBio has the right to license or assign the foregoing and to the extent reasonably necessary for the research, development, manufacture, or commercialization of a Licensed Product in the Field.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

2.5 Retained Rights.

(a) Board and MDACC shall retain the right to use the Licensed Patents in performing non-commercial, non-clinical, basic research or for educational purposes (but in no case when such research is sponsored by any for-profit entity).

(b) Board and/or MDACC shall retain the right to grant non-exclusive licenses to other nonprofit or academic institutions to use the Licensed Patents for use in performing non-commercial, non-clinical, basic research or for educational purposes (but in no case when sponsored by any for-profit entity).

(c) Board and/or MDACC shall retain the right to publish the general scientific findings from research related to Licensed Technology, subject to the terms of Article 13-Confidential Information.

2.6 No Additional Rights. Nothing in this Agreement shall be construed to confer any rights upon Company by implication, estoppel, or otherwise as to any rights of Board or MDACC other than the Licensed Technology.

ARTICLE 3
GOVERNANCE

3.1 Joint Steering Committee.

(a) Formation; Composition. Within thirty (30) days of the Effective Date, the Parties will establish a joint steering committee (the "Joint Steering Committee" or "JSC") comprised of three (3) representatives from MDACC and three (3) representatives from Company with sufficient seniority within the applicable Party to make decisions arising within the scope of the JSC's responsibilities. The JSC may change its size from time to time by mutual consent of its members, provided that the JSC will consist at all times of an equal number of representatives of each of MDACC and Company. Each Party may replace its JSC representatives at any time upon written notice to the other Party.

(b) Specific Responsibilities. The JSC will:

(i) oversee the Development Plan;

(ii) approve any amendments to the Development Plan (including any changes to the budget that are greater than [***] of the then-current budget for the then-current Calendar Year);

(iii) resolve any disagreement between the Parties relating to the Development Plan:

(iv) establish such additional subcommittees as it deems necessary to achieve the objectives and intent of the Development Plan;

(v) resolve issues presented to it by, and disputes within the JDC; and

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(vi) perform such other functions as appropriate, and direct the JDC to perform such other functions as appropriate, to further the purposes of this Agreement, in each case as agreed in writing by MDACC and Company.

(c) Meetings. During the Term, the JSC will meet at least [***] unless agreed upon otherwise by the Parties. The JSC may meet in person, by videoconference or by teleconference. Each of MDACC and Company will bear the expense of its respective JSC members' participation in JSC meetings. Meetings of the JSC will be effective only if at least one (1) representative of each such Party is present or participating in such meeting.

(d) Decision Making. The representatives from each Party on the JSC will have, collectively, one (1) vote on behalf of that Party, and all decision making will be by consensus. If the JSC is unable to reach consensus on any issue or matter for which it is responsible, it will be escalated to Company's chief executive officer for decision.

3.2 Joint Development Committee.

(a) Formulation: Composition. Within [***] days of the Effective Date, the Parties will establish a development committee (the "Development Committee" or "JDC") comprised of an equal number of representatives from MDACC and Company. The JDC may change its size from time to time by mutual consent of its members, provided that the JDC will consist at all times of an equal number of representatives of each of MDACC and Company. Each Party may replace its JDC representatives at any time upon written notice to the other Party.

(b) Specific Responsibilities. The JDC will:

(i) oversee, manage, coordinate and integrate the activities of the Parties under the Development Plan;

(ii) make key decisions during the progress of the Development Plan; and

(iii) perform such other functions as appropriate to further the purposes of this Agreement, as directed by the JSC in accordance with Article 4.

(c) Meetings. The JDC will meet at least [***], unless MDACC and Company mutually agree in writing to a different frequency. The JDC may meet in person, by videoconference, or by teleconference. Meetings of the JDC will be effective only if all representatives of each Party are present or participating in such meeting. Each Party will bear the expense of its respective JDC members' participation in JDC meetings.

ARTICLE 4
DEVELOPMENT

4.1 Overview. MDACC and Company desire and intend to collaborate with respect to the research and Development of Licensed Products in the Field in the Territory under the direction of the JDC and JSC. Such Parties' respective responsibilities for the research and Development of the Licensed Products are set forth in this Article 4 and in the Development Plan. In general, Company shall be primarily responsible for the Development and Regulatory Approval of the Licensed Products in the Territory, and MDACC shall assist Company with Development activities with respect to clinical candidate identification, translational research and management and coordination of IND-enabling activities or as the Parties may otherwise agree in writing, in each case as set forth in the Development Plan and subject to reimbursement under this Agreement.

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4.2 Development Plan.

(a) *General.* The development activities of MDACC and Company with respect to the Licensed Products shall be governed by a development plan agreed upon by such Parties, which will include a summary of all clinical studies to be performed for the Licensed Products in the Territory and will include budgets and timelines regarding such activities (the "Development Plan"). The Development Plan shall also specific the plans and timeline for preparing the necessary regulatory filings and for obtaining Regulatory Approval for the Licensed Products in the Territory. The initial Development Plan agreed to by MDACC and Company is attached to this Agreement as Exhibit B. Each of MDACC and Company shall conduct its Development activities in accordance with the then-current Development Plan.

(b) *Updates to Development Plan.* From time to time during the term of this Agreement, the JDC shall update and amend, as appropriate, the then-current Development Plan, including to identify specific Development activities to be performed by MDACC and Company, and shall submit such amended Development Plan to the JSC for approval. Once approved by the JSC, each updated or amended Development Plan shall become effective and supersede the previous Development Plan as of the date of such approval. Notwithstanding the provisions in Section 3.1(d), Company shall not exercise its final decision making authority on the JSC to amend the Development Plan to modify the Development activities assigned to MDACC thereunder without the consent of MDACC. Each update to the Development Plan shall reflect that time is of the essence for the Development of Licensed products.

4.3 MDACC Development Activities.

(a) MDACC shall use Commercially Reasonable Efforts to conduct the Development activities assigned to it in the Development Plan (the "MDACC Development Activities"). MDACC shall conduct all MDACC Development Activities in accordance with the Development Plan and under the direction of the JDC and JSC.

(b) For as long as MDACC is conducting MDACC Development Activities, the status, progress and results of MDACC Development activities shall be discussed in reasonable detail at meetings of the JDC, and MDACC shall provide the JDC with a written report on the status and progress of such MDACC Development Activities on a [***] basis. In addition, MDACC shall make available to Company such information about MDACC Development Activities as may be reasonably requested by Company from time to time.

4.4 Company Development Activities.

(a) Company shall use Commercially Reasonable Efforts to conduct all Development activities assigned to Company under the Development Plan (the "Company Development Activities"), in accordance with the Development Plan and the direction of the JDC and JSC. Company shall conduct all Company Development Activities in accordance with the Development Plan and under the direction of the JDC and JSC.

(b) The status, progress and results of Company's Development Activities shall be discussed in reasonable detail at meetings of the JDC, and Company shall provide the JDC with a written report on the status and progress of such Company Development Activities on a [***] basis. In addition, Company shall make available to MDACC such information about Company Development Activities as may be reasonably requested by MDACC from time to time.

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4.5 Development Costs.

(a) Company shall bear: (i) all Development costs and expenses incurred by or on behalf of Company in accordance with the Development Plan; (ii) all Development costs incurred by or on behalf of MDACC after the Effective Date in performance of the MDACC Development Activities in accordance with the Development Plan; and (iii) any and all other costs incurred by Company in connection with the research, Manufacture and development of the Licensed Products.

(b) On a [***] basis, MDACC shall provide an invoice to Company setting forth the total FTE Costs (including the amount of time actually spent by MDACC's FTEs on Development activities, and a brief description of the work performed by such FTEs) incurred by MDACC in the performance of MDACC Development Activities until the date of such invoice, and Company shall, within [***] days after receiving such invoice, reimburse MDACC for the full amount of such FTE Costs incurred by MDACC; provided that, Company shall not be responsible for the payment of any costs and expenses (including FTE Costs) that are incurred by MDACC for any Development activity that are not set forth in the then-current Development Plan, and such costs and expenses will be borne entirely by MDACC unless otherwise approved by Company in writing.

4.6 Compliance.

(a) Each of MDACC and Company agrees that in performing its obligations under this Agreement: (i) it shall comply with all Applicable Laws; and (ii) it will not employ or engage any person who has been debarred by any Regulatory Authority, or, to such Party's knowledge, is the subject of debarment proceedings by a Regulatory Authority.

(b) Each of MDACC and Company shall maintain complete, current and accurate records of all work conducted by it under the Development Plan, and all data and other Information resulting from such work. Such records shall fully and properly reflect all work done and results achieved in the performance of the Development activities in good scientific manner appropriate for regulatory purposes. Each such Party shall document all preclinical studies and clinical trials in formal written study reports according to applicable national and international (e.g., ICH, GCP, GLP, and GMP) guidelines. Each such Party shall have the right to review such records maintained by the other Party at reasonable times, upon written request, which shall not exceed once a year.

4.7 Third Party Contractors. Each of MDACC and Company will have the right to engage Third Party contractors to perform its respective Development activities, subject to the execution by each such Third Party contractor of an agreement containing provisions with respect to confidentiality and assignment of Collaboration Technology that are consistent with, and comparable in scope to, Articles 9 and 13 of this Agreement. Each such Party remains primarily responsible for the performance of such Third Party contractor(s).

4.8 Use of Proprietary Materials. From time to time during the Term, either of MDACC or Company (the "Transferring Party") may supply the other Party (the "Receiving Party") with Proprietary Materials of the Transferring Party for use in the Research Project or any Development Program. In connection therewith, each Receiving Party hereby agrees that: (a) upon the reasonable written request of the Transferring Party, the Receiving Party will document the material transfer in writing prior to transfer of any such Proprietary Materials; (b) even in the absence of written documentation of such material transfer, the Receiving Party will not use the Proprietary Materials for any purpose other than exercising its rights or performing its obligations hereunder; (c) it will use such Proprietary Materials only in compliance with all Applicable Laws; (d) it will not transfer any such Proprietary Materials to any Third Party without the prior written consent of the Transferring Party, except for the transfer of Development

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Candidates and Licensed Products for use in Clinical Trials; (e) it will not acquire any rights of ownership, or title in or to such Proprietary Materials as a result of such supply by the Transferring Party; and (f) upon the expiration or termination of this Agreement, if requested by the Transferring Party, it will destroy or return any such Proprietary Materials that are not the subject of the grant of a continuing license hereunder.

ARTICLE 5
COMMERCIALIZATION

5.1 Commercialization Responsibility. As between the Parties, Company will be solely responsible for the Commercialization of the Licensed Products in the Field in the Territory, in compliance with all Applicable Laws.

5.2 Diligence. Company shall use Commercially Reasonable Efforts to Commercialize the Licensed Product following Regulatory Approval of the Licensed Products in the Territory in accordance with this Agreement. Notwithstanding anything to the contrary herein, Company or its Affiliates will not be obligated to undertake or continue any Commercialization activities with respect to any Licensed Product if Company (or any of its Affiliates) reasonably determines that performance of such Commercialization activity would violate Applicable Law or infringe or misappropriate a Third Party's intellectual property.

5.3 Trademarks. Subject to Section 14.3, Company shall have the right to select the trademark to be used in connection with the commercialization of the Licensed Products in the Territory (the "Product Trademark"), and, as between the Parties, shall have all rights in and to such Product Trademark in the Territory, provided that the Product Trademark is not already owned by the Board at the time of Company's selection of the trademark. Provided that the Product Trademark is not already owned by the Board at the time of Company's selection of the trademark, Company will be responsible for the filing, prosecution, maintenance and defense of all registrations of the Product Trademark, and will be responsible for the payment of any costs relating to filing, prosecution, maintenance and defense of all Product Trademarks in the Territory.

5.4 Commercialization Reports. Company will inform MDACC concerning the progress of its efforts to Commercialize the Licensed Products, through annual updates that will: (a) summarize Company's efforts to Commercialize such Licensed Products; and (b) identify any regulatory filings or Regulatory Approval applications with respect to the Licensed Products that Company has filed, sought or obtained in the prior [***] month period.

ARTICLE 6
MANUFACTURING

6.1 Generally. As between the Parties, Company shall be solely responsible for manufacture of Licensed Product for supply in the Territory, for both clinical and commercial purposes. Company will identify and engage with Third Party contract manufacturers to handle manufacturing of the Licensed Products. Company will consult with MDACC on the selection of any Third Party contract manufacturers and will consider in good faith any MDACC input on such Third Party contract manufacturers.

6.2 Manufacturing Costs. [***] shall be solely responsible for all fees and costs for the manufacture of Licensed Products in the Field in the Territory.

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ARTICLE 7
FINANCIAL TERMS

7.1 Consideration for Grant of Rights. In addition to the issuance of the Shares (as defined in the Stock Purchase Agreement) to Board and the other obligations of Company pursuant to the Stock Purchase Agreement, as further consideration for Board's grant of rights in the Licensed Technology, Company hereby agrees as follows:

(a) *Milestone*. [***].

(b) *Running Royalties.* Company shall pay to MDACC royalties on Net Sales of Licensed Products sold by Company, its Affiliates and Sublicensees as follows:

(i) If [***], MDACC shall receive a [***] Percent ([***]%) royalty on Net Sales;

(ii) If a [***], MDACC shall receive, in addition to any other royalties or amounts paid hereunder to MDACC, an amount equal to [***] Percent ([***]%) royalty on Net Sales;

(iii) If [***], MDACC shall receive, in addition to any other royalties or amounts paid hereunder to MDACC, an amount equal to [***] Percent ([***]%) royalty on Net Sales; and

(iv) If [***], MDACC shall receive, in addition to any other royalties or amounts paid hereunder to MDACC, an amount equal to [***] Percent ([***]%) royalty on Net Sales.

Running royalties shall be payable for each Reporting Period and shall be due to MDACC within [***] days of the end of each Reporting Period. Notwithstanding the provisions of this Section 7.1(b), in countries in the Territory where the use, composition or sale of a Licensed Product would not infringe a Valid Claim of Licensed Patents, then the royalties as they become due under this Section 7.1(b) on Net Sales of such Licensed Product in such countries shall be reduced by [***].

(c) *Royalty Stacking.* To the extent that Company or any of its Affiliates or Sublicensees obtains licenses to Third Party patent rights or other intellectual property in order to practice the Licensed Patents or to Develop or Commercialize any Licensed Products, Company may deduct up to [***] of the royalties payable and actually paid to such Third Party(ies) for such patents rights or other intellectual property from any royalty due to MDACC under Section 7.1(b) up to an amount equal to [***] of the running royalties owed in any Reporting Period hereunder, with any excess Third Party royalties carried over into next succeeding Reporting Periods until exhausted.

(d) *Royalty Floor.* In no event shall the royalty payable by Company pursuant to Section 7.1(b) be reduced by application of Section 7.1(c) to less than [***] Percent ([***]%) royalty on Net Sales.

(e) *No Multiple Royalties.* If the manufacture, use or sale of any Licensed Product is covered by more than one of the Licensed Patents, multiple royalties shall not be due.

(f) *Duration of Royalty Obligations.* The royalty obligations of Company shall be on a country-by-country and Licensed Product-by-Licensed Product basis, and shall begin on the First

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Commercial Sale of such Licensed Product in a country and continue (i), with respect to the royalties pursuant to Sections 7. l(b)(i)and 7. l(b)(ii), for three (3) years thereafter, and (ii) with respect to the royalties pursuant to Sections 7.1(b)(iii) and 7.1(b)(iv), until the Royalty Termination Date for such Licensed Product in such country. Upon the Royalty Termination Date with respect to a Licensed Product in a country and full payment of all amounts due and payable to MDACC, the license grants contained in Sections 2.1 shall become fully paid-up and royalty-free for such Licensed Product in such country.

(g) *Combination Products*. In the event that all components of a Combination Product were not sold or provided separately during the same or immediately preceding Reporting Period as described in the definition of "Net Sales" in Section 1.25, then until the Parties agree upon a proration factor as described in Section 1.25, Company shall place in escrow an amount equal to the payment that MDACC would be due if the no proration factor is applied such that the entire product sold or otherwise transferred to a final customer was a Licensed Product.

(h) *Method of Payment.* All amounts payable hereunder by Company will be paid in United States funds without deductions for taxes, assessments, fees, or charges of any kind. Checks are to be made payable to The University of Texas M.D. Anderson Cancer Center, and sent by United States mail to Box 4390, Houston, Texas 77210-4390, or by wire transfer to:

[***]

REFERENCE: include title and Effective Date of Agreement and type of payment (e.g., royalty, patent expense reimbursement (identify patent number), etc.

(i) *Payments in U.S. Dollars.* All payments due under this Agreement shall be payable in United States dollars. Conversion of foreign currency to U.S. dollars shall be made at the conversion rate existing in the United States (as reported in the Wall Street Journal) on the last working day of the calendar quarter of the applicable Reporting Period.

ARTICLE 8
REPORTS AND RECORDS

8.1 Frequency of Reports.

(a) *Before First Commercial Sale.* Prior to the First Commercial Sale of any Licensed Product, Company shall deliver reports to MDACC annually, within [***] days after the end of each calendar year, containing information concerning the immediately preceding calendar year, as further described in Section 8.2.

(b) *Upon First Commercial Sale of a Licensed Product.* Company shall report to MDACC the date of First Commercial Sale of a Licensed Product within [***] days of occurrence in each country.

(c) *After First Commercial Sale.* After the First Commercial Sale of a Licensed Product in a country, Company shall deliver reports to MDACC within [***] days of the end of each Reporting Period through the Royalty Termination Date for such Licensed Product in such country, containing information concerning the immediately preceding Reporting Period, as further described in Section 8.2.

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8.2 Content of Reports and Payments. Each report delivered by Company to MDACC shall contain at least the following information for the immediately preceding Reporting Period:

(a) the number of Licensed Products sold by Company, its Affiliates and Sublicensees to independent third parties in each country;

(b) Company the gross price charged by Company, its Affiliates and Sublicensees for each Licensed Product Company in each country;

(c) calculation of Net Sales for the applicable Reporting Period in each country, including, without limitation, a listing of applicable deductions; and

(d) total royalty payable on Net Sales in U.S. dollars, together with the exchange rates used for conversion. ,

If no amounts are due to MDACC for any Reporting Period, the report shall so state.

8.3 Records. Company shall maintain, and shall cause its Affiliates and Sublicensees to maintain, complete and accurate records relating to amounts payable to MDACC in relation to this Agreement. The relevant entity shall retain such records for at least [***] following the end of the calendar year to which they pertain, during which time a certified, independent public accountant selected by MDACC and reasonably acceptable to Company shall have the right, [***], to inspect such records during normal business hours to verify any reports and payments made or compliance in other respects under this Agreement. In the event that any audit performed under this Section 8.3 reveals [***] shall bear the full out-of-pocket cost of such audit. Company shall promptly remit any past due amounts to MDACC within [***] days of receiving notice thereof from MDACC, regardless of whether such notice is the result of an audit.

8.4 Confidentiality. The reports and records provided by Company hereunder shall be regarded as Company's Confidential Information and subject to the terms and conditions of Article 13.

ARTICLE 9
INTELLECTUAL PROPERTY

9.1 Ownership of Inventions. Ownership of innovations, inventions or discoveries (whether or not patentable or copyrightable) that are invented or discovered under this Agreement shall be determined by inventorship in accordance with United States law. Notwithstanding the foregoing, Collaboration Technology shall be solely owned by Company. MDACC must promptly disclose to Company all Collaboration Technology, and Board and MDACC hereby assign all Collaboration Technology to Company. At Company's request [***], MDACC shall execute, or cause to have executed, such documents and take such other actions and Company reasonably deems necessary or appropriate to assist Company in obtaining, recording or enforcing patents, copyrights, or assignments thereof in Company's name covering any Collaboration Technology hereunder.

9.2 Responsibility for Licensed Patents. MDACC will, to the extent approved by System, appoint Company as its agent to prepare, file, prosecute, maintain and defend in all agency proceedings (e.g., reissues, reexaminations, oppositions and interferences) all of the Licensed Patents during the Term. Company shall copy MDACC on all patent prosecution documents and give MDACC reasonable opportunities to advise Company on such filing, prosecution and maintenance. In the event Company desires to abandon any patent or patent application within the Licensed Patents, Company shall provide MDACC with reasonable prior written notice of such intended abandonment or decline of responsibility.

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If MDACC elects to continue such patent or patent application, the Parties shall consult and Company may elect to retain responsibility therefor. Otherwise, the right to prepare, file, prosecute, maintain and defend the relevant Licensed Patents shall revert to MDACC and the costs arising from exercising such right shall be at [***]. In such event, such [***] paid-for rights shall be removed from the definition of Licensed Patents under this Agreement and the licenses granted to Company and its Affiliates as to such rights shall terminate.

9.3 Responsibility for Collaboration Technology. Company shall be solely responsible to file, prosecute and maintain Patent Rights covering any Collaboration Technology (collectively, "Collaboration Patents"), in its sole discretion [***].

9.4 Payment of Expenses. Payment of all fees and costs, including, without limitation, attorneys' fees, for the filing, prosecution and maintenance of the Licensed Patents incurred by [***] before the Effective Date shall be the responsibility of [***]. As of the Effective Date, [***] has incurred approximately [***] for such patent-related fees and costs. [***] shall reimburse [***] for such expenses within [***] days after receipt of an invoice for expenses from [***].

9.5 Patent Extensions and Orange Book Listings. If elections with respect to obtaining patent term extensions (including, without limitation, any available pediatric extensions) or supplemental protection certificates or their equivalents in any country with respect to Licensed Patents are available, Company shall have the sole and exclusive right to make any such elections based on Licensed Products. With respect to data exclusivity periods (such as those periods listed in the FDA's Orange Book (including, without limitation, any available pediatric extensions) or periods under national implementations of Article 10.1(a)(iii) of Directive 2001/EC/83 or orphan exclusivity periods, and all equivalents in any country), Company shall have the sole and exclusive right to seek and maintain all such data exclusivity periods available for the Licensed Products. With respect to all of the rights and activities identified in this Section 9.5, MDACC will, to the extent approved by System, appoint Company as its agent for such purposes with the authority to act on MDACC's behalf with respect to the Licensed Patents in a manner consistent with this Agreement.

ARTICLE 10
INFRINGEMENT

10.1 Notification of Infringement. Each of MDACC and Company agrees to provide written notice to the other promptly after becoming aware of any existing or threatened infringement of the Licensed Patents or Collaboration Patents by a Third Party and of any available evidence thereof, including any "patent certification" filed in the United States under 21 U.S.C. §355(b)(2) or 21 U.S.C. §355(j)(2) or similar provisions in other jurisdictions and of any declaratory judgment, opposition, or similar action alleging the invalidity, unenforceability or non-infringement of any of the Licensed Patents or Collaboration Patents.

10.2 Right to Prosecute Infringements.

(a) *Company Right to Prosecute.* Company shall have the first and exclusive right, but not the obligation, under its own control [***], to prosecute any Third Party infringement of the Licensed Patents and Collaboration Patents, subject to Section 10.3. The total cost of any such infringement action commenced or defended solely by Company shall be borne by [***].

(b) *MDACC Right to Prosecute.* If within [***] after having been notified of any alleged infringement that is material and competitive in the marketplace Company is unsuccessful in persuading the alleged infringer to desist and shall not have brought and shall not be diligently prosecuting an infringement action, then MDACC shall have the right, but shall not be obligated, under its own control [***], to prosecute any infringement of the Licensed Patents.

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10.3 Recovery. In the event that either Party exercises the rights conferred in this Article 10 with respect to the Licensed Patents and recovers any damages or other sums in such action, such damages or other sums recovered shall first be applied to all out-of-pocket costs and expenses incurred by the Parties in connection therewith (including, without limitation, attorneys' fees). If such recovery is insufficient to cover all such costs and expenses of both Parties, then the recovery shall be proportionately allocated between the Parties in accordance with the amounts of documented out-of-pocket costs and expenses that were incurred by each Party in connection with prosecuting any infringement of the Licensed Patents. If after such reimbursement of out-of-pocket costs and expenses any funds remain from such damages or other sums recovered, MDACC shall receive a percentage of the recovery that corresponds to MD Anderson's equity ownership of Company (or if Company has been merged into another entity, the percentage of the recovery that corresponds to MD Anderson's equity ownership of Company at the time of such merger). Notwithstanding the foregoing, in the event that Company does not file suit but MDACC chooses to file suit, then the recovery that remains after reimbursement of out-of-pocket costs and expenses shall be allocated as follows: MDACC shall receive [***] and Company shall receive [***] of the remaining recovery.

10.4 Cooperation. In any suit or dispute involving an infringer, at the request and expense of the party bringing suit, the other party will permit access during regular business hours, to all relevant personnel, records, papers, information, samples, specimens, and the like in its possession.

10.5 Patent Certifications. MDACC shall notify and provide Company with copies of any allegations of alleged patent invalidity, unenforceability or non-infringement of a Patent Right pursuant to a Paragraph IV Patent Certification by a Third Party filing an Abbreviated New Drug Application, an application under §505(b)(2) or any other similar patent certification by a Third Party, and any foreign equivalent thereof. Such notification and copies shall be provided to Company within [***] business days after MDACC receives such certification.

10.6 Claims by Third Parties. If legal action is threatened or brought against either of Company or MDACC (or any Affiliate of either Party) by a Third Party alleging misappropriation of Information or infringement of Patent Rights, by reason of activities involving the Licensed Product, such Party will notify the other Party within [***] days of the earlier of receipt of service of process in such action, suit or proceeding, or the date such Party becomes aware that such action, suit or proceeding has been instituted, or in the case of MDACC, the date MDACC's Office of Technology Commercialization becomes aware that such action, suit or proceeding has been instituted. Promptly after such notification, MDACC and Company will confer to consider the Third Party claim, and an appropriate course of action. Each Party will have the right to defend itself against a law suit that names it as a defendant. Neither MDACC nor Company will enter into any settlement of any claim described in this Section 10.6 that affects the other Party's rights or interests, without such other Party's written consent, which will not be unreasonably withheld or delayed.

ARTICLE 11
INDEMNIFICATION AND INSURANCE

11.1 Indemnification by Company. Company will indemnify, subject to the statutory duties of the Texas State Attorney General defend, and hold harmless MDACC, System, and their respective Regents, directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, the "MDACC Indemnitees"), against all liabilities, damages, losses and expenses (including reasonable attorneys' fees and expenses of litigation) (collectively, "Losses") incurred by or imposed

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upon any of the MDACC Indemnitees, as a direct result of claims, suits, actions, demands or judgments of Third Parties, arising out of: (a) the conduct of Company Development Activities by Company or any of its Affiliates; (b) the manufacture and Commercialization of any Licensed Product by Company or any of its Affiliates; (c) any breach of this Agreement by Company or any of its Affiliates; but only to the extent that any such Loss is the result of gross negligence or willful misconduct of Company or its Affiliates, excluding any Losses that result from the breach of this Agreement by MDACC, or for which MDACC has an obligation to indemnify Company Indemnitees pursuant to Section 11.2.

11.2 Indemnification by MDACC. To the extent authorized by the constitution and laws of the State of Texas, MDACC will indemnify, defend and hold harmless Company, its subsidiaries, their respective directors, officers, employees and agents, and their respective successors, heirs and assigns (collectively, the "Company Indemnitees"), against all Losses incurred by or imposed upon any of the Company Indemnitees, as a direct result of claims, suits, actions, demands or judgments of Third Parties, arising out of: (a) the conduct of MDACC Development Activities by MDACC or any of its Affiliates; (b) any breach of this Agreement by MDACC or any of its Affiliates; but only to the extent that any such Loss is the result of gross negligence or willful misconduct of MDACC or its Affiliates, excluding any Losses that result from the breach of this Agreement by Company, or for which Company has an obligation to indemnify MDACC Indemnitees pursuant to Section 11.1

11.3 Insurance. Each Party will procure and maintain insurance, or self-insure at its own expense, in a manner adequate to cover its obligations under this Agreement and consistent with normal business practices of prudent companies similarly situated, at all times during the Term and for a period of [***] years thereafter. It is understood that such insurance will not be construed to create a limit of either Party's liability with respect to its indemnification obligations under this Article 11.

ARTICLE 12
REPRESENTATIONS OR WARRANTIES

12.1 Mutual Representations and Certifications. MDACC and Company each represents and certifies to the other, as follows:

(a) *Organization*. It is a corporation or other legal entity duly organized, validly existing and in good standing under the laws of the jurisdiction of its organization, and has all requisite power and authority, corporate or otherwise, to execute, deliver and perform this Agreement.

(b) *Authorization*. The execution and delivery of this Agreement and the performance by it of the transactions contemplated hereby have been duly authorized by all necessary legally required action and will not violate: (i) such Party's certificate of incorporation or bylaws, or other terms and conditions of such Party's existence; (ii) any agreement, instrument or contractual obligation to which such Party is bound in any material respect; or (iii) any order, writ, judgment, injunction, decree, determination or award of any court or governmental agency presently in effect applicable to such Party.

(c) *Binding Agreement*. This Agreement is a legal, valid and binding obligation of such Party, enforceable against it in accordance with its terms and conditions.

(d) *No Inconsistent Obligation*. It is not under any obligation, contractual or otherwise, to any Person that conflicts with or is inconsistent in any respect with the terms of this Agreement.

12.2 Additional Representations and Warranties of MDACC. MDACC represents and warrants that: (a) it and/or Board solely and exclusively owns the patents and applications included within

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the Licensed Patents(b) it and/or Board solely and exclusively owns the inventions and discoveries set forth in the MDACC Invention Disclosure Report listed on Exhibit A and the Information included within the Licensed Know-How; (c) it and/or Board has the power and authority to grant the licenses provided for herein to Company, and to the knowledge of MDACC, neither MDACC nor Board has earlier granted, or assumed any obligation to grant, any rights in the Licensed Patents or Licensed Know-How to any Third Party that would conflict with the rights granted to Company herein, subject to Section 17.11; and (d) to MDACC's knowledge, there is no infringement of the Licensed Patents or misappropriation of the Licensed Know-How by any Third Party.

12.3 Additional Representations and Warranties of COMPANY. Company represents and warrants that: (a) it solely and exclusively owns the patents and applications included within Company Patents; (b) it solely and exclusively owns all of the Information included within Company Know-How, (c) it has the power and authority to grant the licenses provided for herein to MDACC, and that it has not earlier granted, or assumed any obligation to grant, any rights in the Company Patents or Company Know-How to any Third Party that would conflict with the rights granted to MDACC herein; and (d) to Company's knowledge, there is no infringement of the Company Patents or misappropriation of the Company Know-How by any Third Party.

12.4 Disclaimer of Warranties. EXCEPT AS OTHERWISE EXPRESSLY PROVIDED IN THIS AGREEMENT, NEITHER PARTY MAKES ANY WARRANTY WITH RESPECT TO ANY KNOW-HOW, PATENT SCOPE, VALIDITY, OR ENFORCEABILITY, REGULATORY APPROVAL, COST OF DEVELOPMENT, RIGHTS OR OTHER SUBJECT MATTER OF THIS AGREEMENT AND EACH PARTY HEREBY DISCLAIMS ALL WARRANTIES, EXPRESS OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY, OPERABILITY, FITNESS FOR A PARTICULAR PURPOSE AND NONINFRINGEMENT.

12.5 Limitation of Liability. TO THE EXTENT PERMITTED BY APPLICABLE LAWS, NEITHER PARTY WILL BE LIABLE TO THE OTHER PARTY OR ANY OF ITS AFFILIATES FOR ANY SPECIAL, PUNITIVE, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES, INCLUDING LOST PROFITS OR LOST REVENUES, REGARDLESS OF ANY NOTICE OF THE POSSIBILITY OF SUCH DAMAGES. NOTWITHSTANDING THE FOREGOING, NOTHING IN THIS SECTION 12.5 IS INTENDED TO OR WILL LIMIT OR RESTRICT THE INDEMNIFICATION RIGHTS OR OBLIGATIONS OF ANY PARTY HEREUNDER.

ARTICLE 13
CONFIDENTIAL INFORMATION

13.1 Confidentiality.

(a) *Obligations*. MDACC and Company each recognizes that the other Party's Confidential Information and Proprietary Materials constitute highly valuable assets of such other Party. MDACC and Company each agrees that, subject to Section 13.1(b), during the Term and for an additional [***] years after termination or expiration of this Agreement: (i) it will not disclose, and will cause its Affiliates not to disclose, any Confidential Information or Proprietary Materials of the other Party; and (ii) it will not use, and will cause its Affiliates not to use, any Confidential Information or Proprietary Materials of the other Party, except as expressly permitted in this Agreement.

(b) *Limited Disclosure*. MDACC and Company each agree that disclosure of its Confidential Information or any transfer of its Proprietary Materials may be made by the other Party to any of its Affiliates, employees, consultants, contractors, subcontractors, agents or other Third Parties to enable such other Party to exercise its rights or to carry out its responsibilities under this Agreement;

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provided, that any such disclosure or transfer will be made only to Persons who are bound by obligations no less stringent than those described in the provisions herein. In addition, MDACC and Company each agrees that the other Party may disclose its Confidential Information: (i) on a need-to-know basis to such other Party's professional, legal and financial advisors; (ii) as reasonably necessary in connection with an actual or potential (A) permitted license or sublicense of such other Party's rights hereunder, (B) debt or equity financing of such other Party, or (C) merger, acquisition, consolidation, share exchange or other similar transaction involving such Party and any Third Party; (iii) to any Third Party that is or may be engaged by a Party to perform services in connection with the research, Development or the Commercialization of Licensed Products as necessary to enable such Third Party to perform such services; and (iv) for any other purpose with the other Party's written consent, which consent will not be unreasonably withheld, conditioned or delayed; provided, that, any such disclosure or transfer in (i) - (iv) will only be made to persons who are bound by written obligations no less restrictive than those described in Section 13.1 (c). Each of MDACC and Company further agrees that the other Party may disclose such Party's Confidential Information or provide such Party's Proprietary Materials: (v) as reasonably necessary to file, prosecute or maintain Patent Rights, or to file, prosecute or defend litigation related to Patent Rights, in accordance with this Agreement, provided, that in the case of any disclosure under this clause (v), to the extent reasonably possible, the disclosing Party will provide the other Party with reasonable advance notice of and an opportunity to comment on any such required disclosure; or (vi) as required by Applicable Laws; provided, that in the case of any disclosure under this clause (vi), the disclosing Party will (A) if practicable, provide the other Party with reasonable advance notice of and an opportunity to comment on any such required disclosure, and (B) if requested by the other Party, cooperate in all reasonable respects with the other Party's efforts to obtain confidential treatment or a protective order with respect to any such disclosure, at the other Party's expense.

(c) *Employees and Consultants*. MDACC and Company each hereby represents that all of its respective employees, consultants and Third Party contractors, and all of the employees and consultants of its Affiliates, who have access to Confidential Information or Proprietary Materials of the other Party, prior to having such access, are or will be bound by obligations to maintain such Confidential Information or Proprietary Materials in confidence and not to use such Confidential Information, except as expressly permitted in this Agreement. Each of MDACC and Company agrees to use, and to cause its Affiliates to use, Commercially Reasonable Efforts to enforce such obligations and to prohibit its employees and consultants from using Confidential Information except as expressly permitted hereunder. In any and all events, each of MDACC and Company will be liable to the other Party for any disclosure or misuse by such receiving Party's employees, consultants, Affiliates and Third Party contractors of Confidential Information or Proprietary Materials of the disclosing Party.

13.2 Publications and Presentations. The JSC will establish rules and procedures for scientific and medical publications and presentations containing results, data or other information obtained in the collaboration under this Agreement. Such rules and procedures will include requirements for reasonable advance notice and expeditious review of proposed publications and presentations. Notwithstanding the foregoing: (a) either MDACC or Company, if proposing to make a publication, will deliver to the other Party a copy of the proposed written publication or an outline of an oral disclosure at least [***] days prior to submission for publication or presentation; (b) the reviewing Party will have the right to require a delay of up to [***] days in publication or presentation in order to enable preparation and filing of patent applications protecting intellectual property rights in such information; and (c) each of MDACC and Company will have the right to prohibit disclosure of any of its Confidential Information in any such proposed publication or presentation. In any permitted publication or presentation by a Party, the other Party's contribution will be duly recognized, and authorship will be determined in accordance with customary standards.

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ARTICLE 14
GENERAL COMPLIANCE WITH LAW

14.1 Compliance with Laws. Each Party shall use Commercially Reasonable Efforts to comply with all commercially material Applicable Laws relating to the development, manufacture, use, and sale of Licensed Products.

14.2 Export Control. Company and its Affiliates and Sublicensees shall comply with all United States laws and regulations controlling the export of certain commodities and technical data, including, without limitation, all Export Administration Regulations of the United States Department of Commerce. Among other things, these laws and regulations prohibit or require a license for the export of certain types of commodities and technical data to specified countries. Company hereby gives written assurance that it shall comply with, and shall cause its Affiliates and Sublicensees to comply with, all United States export control laws and regulations, that it bears sole responsibility for any violation of such laws and regulations by itself or its Affiliates or Sublicensees.

14.3 Non-Use by Company. Company and its Affiliates and Sublicensees shall not use the name of Board, System, MDACC, or any variation, adaptation, or abbreviation thereof, or of any of its trustees, officers, faculty, students, employees, or agents, or any trademark owned by Board, System, or MDACC, or any terms of this Agreement in any promotional material or other public announcement or disclosure without the prior written consent of MDACC. The foregoing notwithstanding, without the consent of MDACC, Company may use the name of (or name of employee of) MDACC, System or Board in routine business correspondence, or as needed in appropriate regulatory submissions without express written consent.

14.4 Marking of Licensed Products. To the extent commercially feasible and consistent with prevailing business practices, Company shall mark, and shall cause its Affiliates and Sublicensees to mark, all Licensed Products that are manufactured or sold under this Agreement with the number of each issued patent under the Licensed Patents that applies to such Licensed Product.

ARTICLE 15
TERMINATION

15.1 Voluntary Termination by Company. Company shall have the right to terminate this Agreement, for any reason, upon at least [***] months prior written notice to MDACC, such notice to state the date at least [***] months in the future upon which termination is to be effective. Notwithstanding anything in this Agreement or the Stock Purchase Agreement to the contrary, in the event that Company terminates this Agreement pursuant to this Section 15.1, MDACC shall not be required to return or forfeit any payments made to MDACC or equity issued to MDACC under this Agreement or the Stock Purchase Agreement.

15.2 Termination.

(a) *Nonpayment*. In the event Company fails to pay any undisputed amounts due and payable to MDACC under this Agreement or issue "Funding Shares" to Board that are required to be issued under the Stock Purchase Agreement, and fails to make such payment or payments or issue such shares within [***] days after receiving written notice of such failure, MDACC may terminate this Agreement immediately upon written notice to Company.

(b) *Material Breach*. If either of MDACC or Company commits a material breach of its obligations under this Agreement or the Stock Purchase Agreement, except for breach as described in

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Section 15.2(a), and fails to cure that breach within [***] days after receiving written notice thereof, the non-breaching Party may terminate this Agreement immediately upon written notice to the breaching Party, subject to completion of the dispute resolution process set forth in Article 16 and subsequent cure. Moreover, if BridgeBio commits a material breach of its obligations under any agreement with the Company, including, but not limited to, the Series A PSPA, or if the Company breaches its obligations under the Series A PSPA, MDACC may terminate this Agreement immediately upon Written notice to Company. For purposes of this Agreement, "Series A PSPA" means the Series A Preferred Stock Purchase Agreement dated March 3,2017 and entered into by and between Company and BridgeBio, notwithstanding any amendments or other modifications after such date.

15.3 Effect of Expiration or Termination.

(a) All licenses and rights granted pursuant to this Agreement will terminate as of the effective date of termination.

(b) If the Agreement is terminated by either Party for any reason other than MDACC's material breach of this Agreement, then Company hereby agrees to assign and shall immediately assign all rights in Collaboration Technology to Board and shall execute such other documentation to memorialize such assignment as may be requested by Board.

(c) Each Party will promptly return all Confidential Information and Proprietary Materials of the other Party; provided, that each Party may retain one (1) copy of the Confidential Information of the other Party in its archives solely for the purpose of establishing the contents thereof and ensuring compliance with its obligations hereunder.

(d) Upon the early termination of this Agreement, Company and its Affiliates and Sublicensees may complete and sell any work-in-progress and inventory of Licensed Products that exist as of the effective date of termination, provided that (i) Company pays MDACC the applicable running royalty or other amounts due on such sales of Licensed Products in accordance with the terms and conditions of this Agreement, and (ii) Company and its Affiliates and Sublicensees shall complete and sell all work-in-progress and inventory of Licensed Products within [***] months after the effective date of termination.

(e) In addition to the assignment of Collaboration Technology set forth in Section 15.3(b), if the Agreement is terminated prior to the achievement of Proof of Concept, and Company terminates the Agreement other than pursuant to Section 15.2(b) for MDACC's material breach, Company agrees to discuss in good faith with MDACC the terms and conditions that Company may grant any necessary licenses under all other Company Technology to MDACC in order for MDACC to continue the Development of the Licensed Products, either independently or in collaboration with one or more Third Parties; provided that, Company shall have no obligation to enter into any such license agreement with MDACC unless the Parties mutually agree on the terms and conditions of such license agreement.

(f) Expiration or termination of this Agreement for any reason shall not relieve any Party of any liability or obligation which accrued hereunder prior to the effective date of such termination or expiration.

15.4 Survival. The following provisions shall survive the expiration or termination of this Agreement: Article 1, Article 11, Article 12, Article 16 and Article 17, and Sections 7.1(f), 8.2 (but only with respect to obligation to provide final report and payment), 8.3, 12.4, 12.5, 14.1, 14.2, 15.3 and 15.4.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

ARTICLE 16
DISPUTE RESOLUTION

16.1 Mandatory Procedures. The Parties agree that any dispute arising out of or relating to this Agreement shall be resolved solely by means of the procedures set forth in this Article 16, and that such procedures constitute legally binding obligations that are an essential provision of this Agreement. If either Party fails to observe the procedures of this Article 16, as may be modified by their written agreement, the other Party may bring an action for specific performance of these procedures in any court of competent jurisdiction. Notwithstanding the foregoing or anything in this Agreement, the provisions of this Article 16 as applied to Board and/or MDACC shall only apply to the extent authorized by the constitution and laws of the State of Texas, and shall not apply to Board or MDACC to the extent that such Party(ies) are not authorized to participate in the Dispute Resolution procedures of this Article 16 pursuant to the constitution and laws of the State of Texas.

16.2 Equitable Remedies. Although the procedures specified in this Article 16 are the sole and exclusive procedures for the resolution of disputes arising out of or relating to this Agreement, either Party may seek a preliminary injunction or other provisional equitable relief if, in its reasonable judgment, such action is necessary to avoid irreparable harm to itself or to preserve its rights under this Agreement.

16.3 Dispute Resolution Procedures. Any controversy or claim arising out of or relating to this Agreement, or the breach thereof, shall be settled by binding confidential arbitration in accordance with the Commercial Arbitration Rules of the American Arbitration Association ("AAA"), and the procedures set forth below. In the event of any inconsistency between the Rules of AAA and the procedures set forth below, the procedures set forth below shall control. Judgment upon the award rendered by the arbitrators may be enforced in any court having jurisdiction thereof.

(a) The arbitration shall be conducted by a panel of three neutral arbitrators who are independent and disinterested with respect to the Parties, this Agreement, and the outcome of the arbitration. Each Party shall appoint one neutral arbitrator, and these two arbitrators so selected by the Parties shall then select the third arbitrator, and all arbitrators must have at least ten (10) years' experience in mediating or arbitrating cases regarding the same or substantially similar subject matter as the dispute between MDACC and Company. If one Party has given written notice to the other Party as to the identity of the arbitrator appointed by the Party, and the Party thereafter makes a written demand on the other Party to appoint its designated arbitrator within the next [***] days, and the other Party fails to appoint its designated arbitrator within [***] days after receiving said written demand, then the arbitrator who has already been designated shall appoint the other two arbitrators.

(b) The arbitrators shall decide any disputes and shall control the process concerning these pre-hearing discovery matters. Pursuant to the Rules of AAA, the Parties may subpoena witnesses and documents for presentation at the hearing.

(c) Prompt resolution of any dispute is important to the Parties; and the Parties agree that the arbitration of any dispute shall be conducted expeditiously. The arbitrators are instructed and directed to assume case management initiative and control over the arbitration process (including, without limitation, scheduling of events, pre-hearing discovery and activities, and the conduct of the hearing), in order to complete the arbitration as expeditiously as is reasonably practical for obtaining a just resolution of the dispute.

(d) The arbitrators may grant any legal or equitable remedy or relief that the arbitrators deem just and equitable, to the same extent that remedies or relief could be granted by a state

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or federal court, provided however, that no punitive damages may be awarded. No court action shall be maintained seeking punitive damages. The decision of any two (2) of the three (3) arbitrators appointed shall be binding upon the Parties. Notwithstanding anything to the contrary in this Agreement, prior to or while an arbitration proceeding is pending, either Party has the right to seek and obtain injunctive and other equitable relief from a court of competent jurisdiction to enforce that Party's rights hereunder.

(e) The expenses of the arbitration, including, without limitation, the arbitrators' fees, expert witness fees, and attorney's fees, may be awarded to the prevailing Party, in the discretion of the arbitrators, or may be apportioned between the Parties in any manner deemed appropriate by the arbitrators. Unless and until the arbitrators decide that one Party is to pay for all (or a share) of such expenses, both Parties shall share equally in the payment of the arbitrators' fees as and when billed by the arbitrators.

(f) Notwithstanding the foregoing, any disputes arising hereunder with respect to the inventorship, validity, enforceability or other aspect of intellectual property rights shall be resolved by a court of competent jurisdiction and not by arbitration.

(g) Except as set forth below and as necessary to obtain or enforce a judgment upon any arbitration award, the Parties shall keep confidential the fact of the arbitration, the dispute being arbitrated, and the decision of the arbitrators. Notwithstanding the foregoing, the Parties may disclose information about the arbitration to persons who have a need to know, such as directors, trustees, management employees, witnesses, experts, investors, attorneys, lenders, insurers, actual or potential collaborators or corporate partners of Company, actual or potential acquirors of Company, and others who may be directly affected provided that such persons are bound to keep such information confidential. Additionally, if a Party has stock which is publicly traded, the Party may make such disclosures as are required by applicable securities laws, but shall use commercially reasonably efforts to seek confidential treatment for such disclosure.

16.4 Performance to Continue. Each Party shall continue to perform its undisputed obligations under this Agreement pending final resolution of any dispute arising out of or relating to this Agreement; provided, however, that a Party may suspend performance of its undisputed obligations during any period in which the other Party fails or refuses to perform its undisputed obligations.

16.5 Statute of Limitations. The Parties agree that all applicable statutes of limitation and time-based defenses (such as estoppel and laches) shall be tolled while the procedures set forth in Article 16 are pending. The Parties shall cooperate in taking any actions necessary to achieve this result.

ARTICLE 17
MISCELLANEOUS

17.1 Notice. Any notice required by this Agreement shall be in writing and shall be deemed to have been sufficiently given for all purposes thereof when sent by first class mail or reputable international courier (e.g., Federal Express or UPS) and shall be evidenced by the postmark at the point of mailing or by the dated delivery receipt of the courier. All notices and any correspondence respecting this Agreement shall be transmitted as follows:

To Board/MDACC. if by mail:
[***]

To Board/MDACC. if by courier:
[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

To Company by mail or courier:
PTP Pharmaceuticals, Inc.
[***]

or other addresses as may be given from time to time under the terms of this notice provision.

Communications (if any) regarding patent prosecution may be transmitted by electronic mail. For such communications to Board/MDACC sent via electronic mail, the electronic mail shall be addressed or copied to [***].

All notices under this Agreement shall be deemed effective upon receipt. A Party may change its contact information immediately upon written notice to the other Party in the manner provided in this Section 17.1.

17.2 Assignment and Successors. Neither this Agreement nor any obligation of a Party hereunder may be assigned by any Party without the written consent of the other, which consent will not be unreasonably withheld, conditioned or delayed, *provided, however, a* Party may assign this Agreement and the rights, obligations and interests of such Party, in whole but not in part, to any unrelated third party in connection with the arms-length transfer or sale to such third party of all or substantially all of the Party's business "to which this Agreement relates, whether by merger, sale of stock, sale of assets or otherwise.

17.3 Governing Law. This Agreement and all disputes arising out of or related to this Agreement, or the performance, enforcement, breach or termination hereof, and any remedies relating thereto, shall be construed, governed, interpreted and applied in accordance with the laws of the State of Texas, without regard to conflict of laws principles, except that questions affecting the construction and effect of any patent shall be determined by the law of the country in which the patent shall have been granted.

17.4 Force Majeure. No Party shall be responsible for delays resulting from causes beyond the reasonable control of such Party, including, without limitation fire, explosion, flood, war, strike, or riot, provided that such Party uses Commercially Reasonable Efforts to avoid or remove such causes of nonperformance and continues performance under this Agreement with reasonable dispatch whenever such causes are removed.

17.5 Amendment and Waiver. This Agreement may be amended, supplemented, or otherwise modified only by means of a written instrument signed by the Parties. Any waiver of any rights or failure to act in a specific instance shall relate only to such instance and shall not be construed as an agreement to waive any rights or fail to act in any other instance, whether or not similar.

17.6 Severability. In the event that any provision of this Agreement shall be held invalid or unenforceable for any reason, such invalidity or unenforceability shall not affect any other provision of this Agreement, and the Parties shall negotiate in good faith to modify the Agreement to preserve (to the extent possible) their original intent. If the Parties fail to reach a modified agreement within [***] days after the relevant provision is held invalid or unenforceable, then the dispute shall be resolved in accordance with the procedures set forth in Article 16. While the dispute is pending resolution, this Agreement shall be construed as if such provision were deleted by agreement of the Parties.

17.7 Binding Effect. This Agreement shall be binding upon and inure to the benefit of the Parties and their respective legal representatives, successors and assigns.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

17.8 Headings. All headings are for convenience only and shall not affect the meaning of any provision of this Agreement.

17.9 Entire Agreement. This Agreement constitutes the entire agreement between the Parties with respect to its subject matter and supersedes all prior agreements or understandings between the parties relating to its subject matter.

17.10 Third Party Beneficiaries. No Person other than the Parties and their respective Affiliates and permitted assignees hereunder shall be deemed an intended beneficiary hereunder or have any right to enforce any obligation of this Agreement, except any Sublicensee who is party to a sublicense agreement that would survive in accordance with Section 2.2 shall be designated an intended third party beneficiary with respect to Section 2.2 and entitled to enforce its rights under Section 2.2 hereunder.

17.11 Government Funding. Company understands that the subject matter of this Agreement may have been developed under a funding agreement with the Government of the United States of America ("Government") and, if so, that the Government may have certain rights relative thereto. This Agreement is explicitly made subject to the Government's rights under any such agreement and any applicable law or regulation. To the extent that there is a conflict between any such agreement, applicable law or regulation and this Agreement, the terms of such Government agreement, applicable law or regulation shall prevail.

17.12 Privacy. Any data provided to Company that contains information acquired from MDACC's patients or study participants is intended to constitute fully de-identified data. MDACC shall ensure that all Protected Health Information ("PHI") is de-identified in accordance with the standards set forth at 42 C.F.R 164.514. In the event PHI, as defined by the federal Health Insurance Portability and Accountability Act of 1996 ("HIPAA"), as amended, is inadvertently disclosed to Company by MDACC in connection with this Agreement, Company will immediately notify MDACC and will return or destroy such PHI, in accordance with MDACC's instructions. Pending return or destruction of any PHI, Company shall maintain the confidentiality of all information (including the PHI) and use reasonable efforts to prevent access to, use, or disclosure of the information (including the PHI).

17.13 No Improper Inducement. Company, by execution hereof, acknowledges, covenants and agrees that Company has not been induced in any way by Board, System, MDACC or employees thereof to enter into this Agreement, and further warrants and represents that (a) Company is entering into this Agreement voluntarily; (b) Company has conducted sufficient due diligence with respect to all items and issues pertaining to this Agreement; and (c) Company has adequate knowledge and expertise, or has used knowledgeable and expert consultants, to adequately conduct such due diligence, and agrees to accept all risks inherent herein.

17.14 Texas State Agency. MDACC is an agency of the State of Texas and under the constitution and laws of the State of Texas possesses certain rights and privileges, is subject to certain limitations and restrictions, and only has such authority as is granted to it under the constitution and laws of the State of Texas. Notwithstanding any provision hereof, nothing in this Agreement is intended to be, nor will it be construed to be, a waiver of the sovereign immunity of the State of Texas or a prospective waiver or restriction of any of the rights, remedies, claims, and privileges of the State of Texas. Moreover, notwithstanding the generality or specificity of any provision hereof, the provisions of this Agreement as they pertain to MDACC are enforceable only to the extent authorized by the constitution and laws of the State of Texas; accordingly, to the extent any provision hereof conflicts with the constitution or laws of the State of Texas or exceeds the right, power or authority of MDACC to agree to such provision, then that provision will not be enforceable against MDACC or the State of Texas.

[remainder of this page intentionally left blank]

IN WITNESS WHEREOF, the Parties have caused this Agreement to be executed by their duly authorized representatives.

THE UNIVERSITY OF TEXAS M. D. ANDERSON CANCER CENTER

By: /s/ Dan Fontaine
Name: Dan Fontaine
Title: Executive VP, Administration

THE BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

By: /s/ Dan Fontaine
Name: Dan Fontaine
Title: Executive VP, Administration

PTP PHARMACEUTICALS, INC.

By: /s/ Neil Kumar
Name: Neil Kumar
Title: CEO

EXHIBIT A

MDACC Invention Disclosure Report No.	Inventors	IDR Title	Licensed Patents
[***]	[***]	[***]	[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

EXHIBIT B

INITIAL DEVELOPMENT PLAN

Objective: [***]

Activity	Responsible	Timeline
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]
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[***]	[***]	[***]
[***]	[***]	[***]
[***]	[***]	[***]

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AMENDMENT NO. 1 TO THE COLLABORATION AND LICENSE AGREEMENT

This Amendment No. 1, effective this 10th day of July, 2017, to the Collaboration and License Agreement between the Parties dated March 3, 2017 ("Original Agreement"), is made by and among the Board of Regents ("Board") of The University of Texas System ("System"), an agency of the State of Texas, whose address is 201 West 7th Street, Austin, Texas 78701, The University of Texas M. D. Anderson Cancer Center (hereinafter "MDACC"), a member institution of System, and Navire Pharma, Inc., a Delaware corporation formerly known as PTP Pharmaceuticals, Inc. ("Company"). Board, MDACC, and Company may herein be referred to collectively as the "Parties."

NOW, THEREFORE, in consideration of the mutual covenants contained herein, the sufficiency of which is hereby acknowledged, the Parties hereby agree to the following:

BACKGROUND

A. Board, MDACC, and PTP Pharmaceuticals, Inc. entered into the Original Agreement.

B. On or about April 26, 2017, PTP Pharmaceuticals, Inc. formerly changed its name to Navire Pharma, Inc., such that Navire Pharma, Inc. is now the legal name of the "Company" as that term is used in the Original Agreement

C. Board, MDACC, and Company desire to amend the Original Agreement.

AMENDED TERMS

1. Exhibit A of the Original Agreement shall be deleted in its entirety and replaced with the form of Exhibit A attached hereto.

2. The Parties acknowledge and agree that, except as set forth in this Amendment No. 1 to the Collaboration and License Agreement, the terms and conditions of the Original Agreement shall remain in full force and effect.

IN WITNESS WHEREOF, the Parties hereto have caused their duly authorized representatives to execute this Amendment No. 1 to the Collaboration and License Agreement.

BOARD OF REGENTS OF THE UNIVERSITY OF TEXAS SYSTEM

By: /s/ Christopher H. McKee
Christopher H. McKee
Senior Vice President
The University of Texas
M. D. Anderson Cancer Center

THE UNIVERSITY OF TEXAS
M. D. ANDERSON CANCER CENTER

By: /s/ Ferran Prat
Ferran Prat, J.D., Ph.D.
Senior Vice President
The University of Texas
M. D. Anderson Cancer Center

NAVIRE PHARMA, INC.

By: /s/ Cameron Turtle
Printed Name: Cameron Turtle
Title: VP, BD & Ops

EXHIBIT A

MDACC Invention Disclosure Report No.	Inventors	IDR Title	Licensed Patents
[***]	[***]	[***]	[***]
[***]	[***]	[***]	[***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

PATENT LICENSE AGREEMENT — *EXCLUSIVE*

This Cover Page identifies the Parties to this **Agreement:**

The Frederick National Laboratory for Cancer Research, operated by Leidos Biomedical Research, Inc. under sponsorship from the National Cancer Institute (NCI)

(hereinafter referred to as "**Leidos Biomedical**")

and

THERAS, INC.

hereinafter referred to as the "**Licensee**"

having offices at 421 Kipling St, Palo Alto, Ca 94301,

created and operating under the laws of Delaware.

Tax ID No.:

For the **LBR** internal use only:

License Number: [***]

Serial Number(s) of Licensed Patent(s) or Patent Application(s):

Cooperative Research and Development Agreement (CRADA) Number (if a subject invention):

Additional Remarks:

Public Benefit(s):

This Patent License Agreement, hereinafter referred to as the "**Agreement**", consists of this Cover Page, an attached **Agreement**, a Signature Page, Appendix A (List of Patent(s) or Patent Application(s)), Appendix B (Fields of Use and Territory), Appendix C (Royalties), Appendix D (Benchmarks and Performance), Appendix E (Commercial Development Plan), Appendix F (Example Royalty Report), and Appendix G (Royalty Payment Options).

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

The **Leidos Biomedical** and the **Licensee** agree as follows:

1. BACKGROUND

1.1 In the course of conducting research under a Cooperative Research and Development Agreement (CRADA) entered into with Licensee, the **Leidos Biomedical** investigators made inventions that may have commercial applicability and are of interest to Licensee.

1.2 By assignment of rights from **Leidos Biomedical** employees and other inventors, **Leidos Biomedical** owns (either solely or jointly) certain intellectual property rights claimed in any United States or foreign patent applications or patents corresponding to the assigned inventions. **Leidos Biomedical** also owns any tangible embodiments of these inventions actually reduced to practice. The Government has certain rights in inventions.

1.3 Leidos Biomedical desires to transfer these inventions to the private sector through commercialization licenses to facilitate the commercial development of products and processes for public use and benefit.

1.4 The **Licensee** desires to acquire commercialization rights to certain of these inventions in order to develop processes, methods, or marketable products for public use and benefit.

2. DEFINITIONS

2.1 "**Affiliate(s)**" means a corporation or other business entity, which directly or indirectly is controlled by or controls, or is under common control with the **Licensee**. For this purpose, the term "control" shall mean ownership of more than fifty percent (50%) of the voting stock or other ownership interest of the corporation or other business entity, or the power to elect or appoint more than fifty percent (50%) of the members of the governing body of the corporation or other business entity.

2.2 "**Benchmarks**" mean the performance milestones that are set forth in Appendix D.

2.3 "**Combination Product**" means a product that in a single formulation or in a single package or otherwise sold for a single price contains both a compound that is a Licensed Product, as defined herein, and one or more Combination Product Component(s), provided that (i) such Combination Product Component and such Licensed Product are capable of being sold (but may not be actually sold) either separately from such combined product, with or without other therapeutic products, by the Licensee or any Affiliate, or Sublicensee or the patent holder of the Combination Product Component and (ii) the market price of such combined product is higher than the market price for such Licensed Product (or what should have been if such Licensed Product is not Sold separately) as a result of such combined product containing or using such Combination Product Component.

2.4 "**Combination Product Component**" means a therapeutically active compound, a proprietary device (if applicable), or a proprietary formulation that is not a Licensed Product but is covered by the intellectual property rights owned or controlled by the Licensee, without which compound or device the Licensed Product would deliver less therapeutic effect (but no an excipient, coating, capsule or other non-proprietary delivery system or formulation) that is not a Licensed Product but that is included in a Combination Product. For the sake of clarity, a drug delivery device that is

used for the delivery of drug products in general and is readily available for hospital, clinic and/or in-home use, such as a syringe, intravenous inject ports and the like, would not be deemed a proprietary device and therefore, would not be deemed a Combination Product Component. In addition, a proprietary formulation or proprietary device shall only include formulation or devices that are developed by or on behalf of Licensee or in-licensed, purchased or otherwise procured by the Licensee, its Affiliates and/or sublicensees from a third party for value.

2.5 "**Commercial Development Plan**" means the written commercialization plan attached as Appendix E.

2.6 "**CRADA**" means a Cooperative Research and Development Agreement.

2.7 "**FDA**" means the Food and Drug Administration.

2.8 "**First Commercial Sale**" means the initial transfer by or on behalf of the **Licensee** or its sublicensees of the **Licensed Products** or the initial practice of a **Licensed Process** by or on behalf of the **Licensee** or its sublicensees in exchange for cash or some equivalent to which value can be assigned for the purpose of determining **Net Sales**.

2.9 "**Government**" means the Government of the United States of America.

2.10 "**Licensed Fields of Use**" means the fields of use identified in Appendix B.

2.11 "**Licensed Patent Rights**" shall mean:

(a) Patent applications (including provisional patent applications and PCT patent applications) or patents listed in Appendix A, further provisional or nonprovisional applications filed within the Paris convention year of the patent applications listed in Appendix A and with claims to additional compounds or sub-genera that fall within the scope of the genus described in the provisional applications listed and/or claiming priority benefit of the provisional applications in Appendix A that are, as of the effective date of this agreement, still within their Paris convention year (the "Paris Convention Year Additional Claims"), all divisions and continuations of these applications, all patents issuing from these applications, divisions, and continuations, and any reissues, reexaminations, and extensions of these patents;

(b) to the extent that the following contain one or more claims directed to the invention or inventions disclosed in 2.11(a):

(i) continuations-in-part of 2.11(a);

(ii) all divisions and continuations of these continuations-in-part;

(iii) all patents issuing from these continuations-in-part, divisions, and continuations;

(iv) priority patent application(s) of 2.11(a); and

(v) any reissues, reexaminations, and extensions of these patents;

(c) to the extent that the following contain one or more claims directed to the invention or inventions disclosed in 2.11(a): all counterpart foreign and U.S. patent applications and patents to 2.11(a) and 2.11(b), including those listed in Appendix A; and

(d) **Licensed Patent Rights** shall *not* include 2.11(b) or 2.11(c) to the extent that they contain one or more claims directed to new matter which is not the subject matter disclosed in 2119(a), except for the Paris Convention Year Additional Claims.

2.12 "**Licensed Processes**" means processes which, in the course of being practiced, would be within the scope of one or more claims of the **Licensed Patent Rights** that have not been held unpatentable, invalid or unenforceable by an unappealed or unappealable judgment of a court of competent jurisdiction

2.13 "**Licensed Product(s)**" means tangible materials which, in the course of manufacture, use, sale, or importation, would be within the scope of one or more claims of the Licensed Patent Rights that have not been held unpatentable, invalid or unenforceable by an unappealed or unappealable judgment of a court of competent jurisdiction.

2.14 "**Licensed Territory**" means the geographical area identified in Appendix B.

2.15 "**Net Sales**" means the total gross receipts for Sales of Licensed Products for commercial use or provision of Licensed Processes as services for a fee by or on behalf of the Licensee or its sublicensees, less [***]. For the sake of clarity, Net Sales shall not include the [***].

2.16 "**Practical Application**" means to manufacture in the case of a composition or product, to practice in the case of a process or method, or to operate in the case of a machine or system; and in each case, under these conditions as to establish that the invention is being utilized and that its benefits are to the extent permitted by law or Government regulations available to the public on reasonable terms.

2.17 "**Sale**" means the act of selling, leasing or otherwise transferring, providing or furnishing for use for any consideration.

3. GRANT OF RIGHTS

3.1 **Leidos Biomedical** hereby grants and the **Licensee** accepts, subject to the terms and conditions of this **Agreement**, an exclusive license under the **Licensed Patent Rights** in the **Licensed Territory** to make and have made, to use and have used, to sell and have sold, to offer to sell, and to import any **Licensed Products** in the **Licensed Fields of Use** and to practice and have practiced any **Licensed Process(es)** in the **Licensed Fields of Use**. To the extent any Licensed Patents Rights is jointly owned by Leidos Biomedical and another entity (including Licensee), such exclusive license shall encompass only Leidos Biomedical's interest in such jointly owned Licensed Patent Rights.

3.2 This **Agreement** confers no license or rights by implication, estoppel, or otherwise under any patent applications or patents of the **Leidos** Biomedical other than the **Licensed Patent Rights** regardless of whether these patents are dominant or subordinate to the **Licensed Patent Rights**.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

3.3 Notwithstanding the foregoing, the Parties acknowledge that, the inventions claimed in the Licensed Patent Rights are results of an ongoing research collaboration between Leidos Biomedical and Licensee, and Licensee has an option to any inventions resulting from such research collaboration. To that end, if and when Licensee exercises any such option, the Parties shall execute an amendment to this Agreement to include such optioned inventions as part of the license hereunder with additional consideration to be negotiated by the Parties that would include [***] without changing the rates and percentages for earned royalties and sublicensing royalties under this Agreement.

4. SUBLICENSING

4.1 The **Licensee** shall have the right to grant sublicenses in multiple tiers to its Affiliates and third party sublicensees (in the event of third party sublicensees, by entering into sublicensing agreements under the **Licensed Patent Rights**), and all such sublicenses are consistent with the terms and conditions of this Agreement. For the purposes of this **Agreement**, a sublicensee shall include any person or entity (including any Affiliate) to which any of the license rights granted to the **Licensee** hereunder are granted a sublicense or an option to a sublicense, but not including any subcontractors or vendors provided that Licensee is responsible for performance of such subcontractors (or vendors) in compliance with this **Agreement** and that such subcontractors or vendors do not provide any cash or in-kind consideration to **Licensee** in exchange for **Licensed Patent Rights**.

4.2 The **Licensee** agrees that any sublicenses granted by it shall provide that the obligations to **Leidos Biomedical** of Paragraphs 5.1-5.4, 8.1, 10.1, 10.2, 12.5, and 13.8-13.10 of this **Agreement** shall be binding upon the sublicensee as if it were a party to the applicable provisions of this **Agreement**. The **Licensee** further agrees to attach copies of these Paragraphs to all sublicense agreements.

4.3 Any sublicenses granted by the **Licensee** shall provide for the termination of the sublicense, or the conversion to a license directly between the sublicensees and **Leidos Biomedical**, at the option of the sublicensee, upon termination of this **Agreement** under Article 13. This conversion is subject to **Leidos Biomedical** approval and contingent upon acceptance by the sublicensee of the remaining provisions of this **Agreement**.

4.4 The Licensee agrees to forward to Leidos Biomedical a complete copy of each fully executed sublicense agreement postmarked within thirty (30) days of the execution of the agreement, provided that Licensee may redact portions of such sublicense agreement that is pertinent to technology other than the Licensed Patent Rights. Leidos Biomedical agrees to maintain each sublicense agreement in confidence.

5. STATUTORY REQUIREMENTS AND RESERVED GOVERNMENT RIGHTS

5.1 (a) Licensee agrees and Leidos Biomedical reserves on behalf of itself and the **Government** an irrevocable, nonexclusive, nontransferable, royalty-free license for the practice of all inventions licensed under the **Licensed Patent Rights** throughout the world by or on behalf of the **Government** and on behalf of any foreign government or international organization pursuant to any existing or future treaty or agreement to which the **Government** is a signatory. Upon request, prior to the **First Commercial Sale**, the **Licensee** agrees to provide Leidos Biomedical with reasonable quantities of the **Licensed Products** or materials made through the **Licensed Processes** for Leidos Biomedical's internal research use; and

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(b) in the event that the **Licensed Patent Rights** are Subject inventions made under **CRADA**, the **Licensee** grants to the **Government**, pursuant to 15 U.S.C. §3710a(c)(1)(A), a nonexclusive, nontransferable, irrevocable, paid-up license to practice the **Licensed Patent Rights** or have the **Licensed Patent Rights** practiced throughout the world by or on behalf of the **Government**. In the exercise of this license, the **Government** shall not publicly disclose trade secrets or commercial or financial information that is privileged or confidential within the meaning of 5 U.S.C. §552(b)(4) or which would be considered as such if it had been obtained from a non-Federal party. Prior to the **First Commercial Sale**, the **Licensee** agrees to provide Leidos Biomedical with reasonable quantities of the **Licensed Products** or materials made through the **Licensed Processes** for **Leidos Biomedical's** internal research use.

5.2 The **Licensee** agrees that products used or sold in the United States embodying the **Licensed Products** or produced through use of the **Licensed Processes** shall be manufactured substantially in the United States, unless a written waiver is obtained in advance from the **Leidos Biomedical**.

5.3 In exceptional circumstances, and in the event that the **Licensed Patent Rights** are Subject Inventions made under a **CRADA**, Leidos Biomedical, as a national laboratory and under the auspices and direction of the **Government**, pursuant to and to the extent required by 15 U.S.C. §3710a(b)(1)(B), retains the right to require the **Licensee** to grant to a responsible applicant a nonexclusive, partially exclusive, or exclusive sublicense to use the **Licensed Patent Rights** in the **Licensed Field of Use** on terms that are reasonable under the circumstances, or if the **Licensee** fails to grant this license, the **Government** retains the right to grant the license itself. The exercise of these rights by the **Government** shall only be in exceptional circumstances and only if the **Government** determines:

(i) the action is necessary to meet health or safety needs that are not reasonably satisfied by the **Licensee**;

(ii) the action is necessary to meet requirements for public use specified by Federal regulations, and these requirements are not reasonably satisfied by the **Licensee**; or

(iii) the **Licensee** has failed to comply with an agreement containing provisions described in 15 U.S.C. §3710a(c)(4)(B).

6. ROYALTIES AND REIMBURSEMENT

6.1 The **Licensee** agrees to pay **Leidos Biomedical** a noncreditable, nonrefundable license issue royalty as set forth in Appendix C.

6.2 The **Licensee** agrees to pay Leidos Biomedical a nonrefundable minimum annual royalty as set forth in Appendix C.

6.3 The **Licensee** agrees to pay Leidos Biomedical earned royalties as set forth in Appendix C.

6.4 The **Licensee** agrees to pay Leidos Biomedical benchmark royalties as set forth in Appendix C.

6.5 The **Licensee** agrees to pay Leidos Biomedical sublicensing royalties as set forth in Appendix C.

6.6 A patent or patent application licensed under this **Agreement** shall cease to fall within the **Licensed Patent Rights** for the purpose of computing earned royalty payments in any given country on the earliest of the dates that:

(a) the application has been abandoned and not continued;

(b) the patent expires or irrevocably lapses,

(c) the patent has been held to be invalid or unenforceable by an unappealed or unappealable decision of a court of competent jurisdiction or administrative agency.

No multiple royalties shall be payable because any **Licensed Products** or **Licensed Processes** are covered by more than one of the **Licensed Patent Rights**.

6.7 On sales of the **Licensed Products** by the **Licensee** to sublicensees or on sales made in other than an arm's-length transaction, the value of the **Net Sales** attributed under this Article 6 to this transaction shall be that which would have been received in an arm's-length transaction, based on sales of like quantity and quality products on or about the time of this transaction.

6.8 If applicable, in the event Leidos Biomedical is the Party responsible for the preparation, filing, prosecution and maintenance of any patent applications and patents included within the Licensed Patent Rights, Licensee will reimburse Leidos Biomedical of the expenses associated with the preparation, filing, prosecution, and maintenance of such patent applications and patents reasonably incurred and paid by Leidos Biomedical on or after the effective date of this **Agreement**.

6.9 The **Licensee** may elect to surrender its rights in any country of the **Licensed Territory** under any of the **Licensed Patent Rights** upon [***] written notice to Leidos Biomedical and owe no payment obligation for patent-related expenses paid in that country after [***] of the effective date of the written notice.

7. PATENT FILING, PROSECUTION, AND MAINTENANCE

7.1 Except as otherwise provided in this Article 7, as between Leidos and Licensee, **Licensee** will be responsible for, and consult with, Leidos Biomedical in the preparation, filing, prosecution, and maintenance of any and all patent applications or patents included in the **Licensed Patent Rights**.

7.2 Licensee shall, on a regular basis, furnish copies of all patent filings under Licensed Patent Rights to Leidos Biomedical. In this event, the **Licensee** shall select registered patent attorneys or patent agents to provide these services on behalf of the **Licensee** and Leidos Biomedical. Leidos Biomedical shall provide appropriate powers of attorney and other documents necessary to undertake this action to the patent attorneys or patent agents providing these services. The **Licensee** and its attorneys or agents shall consult with Leidos Biomedical reasonably and as practicable in the preparation, filing, prosecution and maintenance of patent applications and

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

patents included within the **Licensed Patent Rights** and shall provide Leidos Biomedical with sufficient opportunity to comment on any patent filing or response to office action that the **Licensee** intends to file or to cause to be filed with the relevant intellectual property or patent office.

7.3 In the event Licensee notifies Leidos Biomedical in writing that it decides to discontinue the prosecution or maintenance of certain Licensed Patent Rights, Leidos Biomedical may provide the **Licensee** with written notice that Leidos Biomedical wishes to assume control of the prosecution, and maintenance of such **Licensed Patent Rights**. If Leidos Biomedical elects to assume these responsibilities, the Licensee agrees to cooperate fully with Leidos Biomedical, its attorneys, and agents in the preparation, filing, prosecution, and maintenance of the applicable **Licensed Patent Rights** and to provide Leidos Biomedical with complete copies of any and all documents or other materials necessary to undertake such responsibilities. The **Licensee** shall be responsible for all costs of Licensee and Licensee's patent attorneys associated with transferring patent prosecution responsibilities to an attorney or agent of Leidos Biomedical's choice.

7.4 Each party shall promptly inform the other as to all matters that come to its attention that may materially affect the preparation, filing, prosecution, or maintenance of the **Licensed Patent Rights** and, reasonably and as practicable, permit each other to provide comments and suggestions with respect to the preparation, filing, prosecution, and maintenance of the **Licensed Patent Rights**, which comments and suggestions shall be considered by the other party.

8. RECORD KEEPING

8.1 The **Licensee** agrees to keep accurate and correct records of the **Licensed Products** made, used, sold, or imported and the **Licensed Processes** practiced under this **Agreement** appropriate to determine the amount of royalties due to Leidos Biomedical. These records shall be retained for at least [***] years following a given reporting period and shall be available during normal business hours for inspection with at least [***] prior written notice, at the expense of Leidos Biomedical, by an accountant or other designated auditor selected by Leidos Biomedical for the sole purpose of verifying reports and royalty payments hereunder, provided that such inspection shall be no more frequent than once per calendar year. The accountant or auditor shall only disclose to Leidos Biomedical information relating to the accuracy of reports and royalty payments made under this **Agreement**, and all information learned by such accountant or auditor, and all information disclosed to Leidos Biomedical, shall be deemed Confidential Information of Licensee. If an inspection shows an underreporting or underpayment in excess of [***] percent ([***]%) for any twelve (12) month period, then the **Licensee** shall reimburse Leidos Biomedical for the cost of the inspection at the time the **Licensee** pays the unreported royalties, including any additional royalties as required by Paragraph 9.8. All undisputed unreported royalty payments required under this Paragraph shall be due within [***] days of the date Leidos Biomedical provides to the **Licensee** notice of the payment due.

9. REPORTS ON PROGRESS, BENCHMARKS, SALES, AND PAYMENTS,

9.1 Prior to signing this **Agreement**, the **Licensee** has provided Leidos Biomedical with the **Commercial Development Plan** in Appendix E, under which the **Licensee** intends to bring the subject matter of the **Licensed Patent Rights** to the point of **Practical Application**. This **Commercial Development Plan** is hereby incorporated by reference into this **Agreement**. Based on this plan, performance **Benchmarks** are determined as specified in Appendix D.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

9.2 The **Licensee** shall provide written annual reports on its product development progress or efforts to commercialize under the **Commercial Development Plan** for the **Licensed Fields of Use** within [***] after December 31 of each calendar year. These progress reports shall be in summary form and include, but not be limited to: progress on research and development, status of applications for regulatory approvals, manufacture and status of sublicensing, marketing, importing, and sales during the preceding calendar year, as well as, plans for the present calendar year. Leidos Biomedical also encourages these reports to include information on any of the **Licensee's** public service activities that relate to the **Licensed Patent Rights**. If reported progress differs from that projected in the **Commercial Development Plan** and **Benchmark**, the **Licensee** shall explain the reasons for these differences.

9.3 In the annual report, the **Licensee** may propose amendments to the **Commercial Development Plan**, acceptance of which by Leidos Biomedical may not be denied unreasonably. The **Licensee** may amend the **Benchmarks** at any time upon written approval by Leidos Biomedical, which may not be unreasonably withheld. Leidos Biomedical shall not withhold approval of any request of the **Licensee** to extend the time periods of this schedule if the request is supported by a reasonable showing by the **Licensee** of diligence in its performance under the **Commercial Development Plan** and toward bringing the **Licensed Products** to the point of **Practical Application** as defined in 37 C.F.R. §404.3(d), or if the modification results from delays outside Licensee's reasonable control, such as for safety, efficacy and regulatory issues. The **Licensee** shall amend the **Commercial Development Plan** and **Benchmarks** at the request of Leidos Biomedical to address any **Licensed Fields of Use** not specifically addressed in the plan originally submitted.

9.4 The **Licensee** shall report to Leidos Biomedical the dates for achieving **Benchmarks** specified in Appendix D and the **First Commercial Sale** in each country in the **Licensed Territory** within [***] of such occurrences.

9.5 The **Licensee** shall submit to Leidos Biomedical, within [***] days after each calendar half-year ending June 30 and December 31, a royalty report, as described in the example in Appendix F, setting forth tor the preceding half-year period the amount of the **Licensed Product*** sold or **Licensed Processes** practiced by or on behalf of the **Licensee** in each country within the **Licensed Territory**, the **Net Sales**, and the amount of royalty accordingly due. With each royalty report, the **Licensee** skill submit payment of earned royalties due. If no earned royalties are due to Leidos Biomedical for any reporting period, the written report shall so state. The royalty report shall be certified as correct by an authorized officer of the **Licensee** and shall include a detailed listing of all deductions made under Paragraph 2.13 to determine **Net Sales** made under Article 6 to determine royalties due. The royalty report shall also identify the site of manufacture for the **Licensed Product(s)** sold in the United States.

9.6 The **Licensee** agrees to incorporate information received by Licensee regarding the Sales by its sublicensees during the preceding half-year period to the extent pertinent to a royalty accounting to Leidos Biomedical by the **Licensee** for activities under the sublicense.

9.7 Royalties due under Article 6 shall be paid in U.S. dollars and payment options are listed in Appendix G. For conversion of foreign currency to U.S. dollars, the conversion rate shall be the New York foreign exchange rate quoted in *The Wall Street Journal* on the day that the payment is due. Any loss of exchange, value, taxes, or other expenses incurred in the transfer or conversion to U.S. dollars shall be paid entirely by the **Licensee**. The royalty report required by Paragraph 9.4 shall be mailed to Leidos Biomedical at its address for **Agreement** Notices indicated on the Signature Page.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

9.8 The **Licensee** shall be solely responsible for determining if any tax on royalty income is owed outside the United States and shall pay the tax and be responsible for all filings with appropriate agencies of foreign governments. Leidos Biomedical shall be solely responsible for income tax imposed upon Leidos Biomedical as a result of payments it receives under this Agreement.

9.9 Additional royalties may be assessed by Leidos Biomedical on any payment that is more than [***] overdue at the rate of [***] percent ([***]%) per [***]. This [***] percent ([***]%) per [***] rate may be applied retroactively from the original due date until the date of receipt by the **Leidos Biomedical** of the overdue payment and additional royalties. The payment of any additional royalties shall not prevent Leidos Biomedical from exercising any other rights it may have as a consequence of the lateness of any payment.

9.10 All plans and reports required by this Article 9 shall, to the extent permitted by law, be treated by Leidos Biomedical as commercial and financial information obtained from a person and as privileged and confidential, and any proposed disclosure of these records by Leidos Biomedical under the Freedom of Information Act (FOIA), 5 U.S.C. §552 shall be subject to the predisclosure notification requirements of 45 C.F.R. §5.65(d),

10. PERFORMANCE

10.1 The **Licensee** shall use its reasonable commercial efforts to bring the **Licensed Products** and the **Licensed Processes** to **Practical Application**. The efforts of a sublicensee shall be considered the efforts of the **Licensee**.

10.2 Upon the **First Commercial Sale**, until the expiration or termination of this **Agreement**, the **Licensee** shall use Its reasonable commercial efforts to make the **Licensed Products** and the **Licensed Processes** reasonably accessible to the United States public.

10.3 The **Licensee** agrees, after its **First Commercial** Sale, to make commercially reasonable quantities of the **Licensed Products** or materials produced through the use of the **Licensed Processes** available to patient assistance programs.

10.4 The **Licensee** agrees, after its **First Commercial** Sale and as part of its marketing and product promotion, to the extent permitted by applicable law, to develop educational materials (e.g., brochures, website, etc.) directed to patients and physicians detailing the **Licensed Products** or medical aspects of the prophylactic and therapeutic uses of the **Licensed Products**.

11. INFRINGEMENT AND PATENT ENFORCEMENT

11.1 Leidos Biomedical and the **Licensee** agree to notify each other promptly of each infringement or possible infringement of the **Licensed Patent Rights**, as well as, any facts which may affect the validity, scope, or enforceability of the **Licensed Patent Rights** of which either party becomes aware.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

11.2 Pursuant to this **Agreement** and the provisions of 35 U.S.C. Chapter 29, the **Licensee** may:

(a) bring suit in its own name, at its own expense, and on its own behalf for infringement of presumably valid claims in the **Licensed Patent Rights**;

(b) in any suit, enjoin infringement and collect for its use, damages, profits, and awards of whatever nature recoverable for the infringement; or

(c) settle any claim or suit for infringement of the **Licensed Patent Rights** provided, however, that Leidos Biomedical shall have the first right to take such actions; and

(d) if the **Licensee** desires to initiate a suit for patent infringement, the **Licensee** shall notify Leidos Biomedical in writing. If Leidos Biomedical does not notify the **Licensee** of its intent to pursue legal action within [***] days, the Licensee shall be free to initiate suit. Leidos Biomedical shall have a continuing right to join the suit. The **Licensee** shall take no action to compel Leidos Biomedical either to initiate or to join in any suit for patent infringement. In all cases, the Licensee agrees to keep Leidos Biomedical reasonably apprised of the status and progress of any litigation. Before the **Licensee** commences an infringement action, the **Licensee** shall notify Leidos Biomedical and give careful consideration to the views of Leidos Biomedical and to any potential effects of the litigation on the public health in deciding whether to bring suit.

11.3 In the event that a declaratory judgment action alleging invalidity or non-infringement of any of the **Licensed Patent Rights** shall be brought against the **Licensee** or raised by way of counterclaim or affirmative defense in an infringement suit brought by the **Licensee** under Paragraph 11.2, pursuant to this **Agreement** and the provisions of 35 U.S.C. Chapter 29 or other statutes, the **Licensee** may:

(a) defend the suit in its own name, at its own expense, and on its own behalf for presumably valid claims in the **Licensed Patent Rights**;

(b) in any suit, ultimately to enjoin infringement and to collect for its use, damages, profits, and awards of whatever nature recoverable for the infringement; and

(c) settle any claim or suit for declaratory judgment involving the **Licensed Patent Rights**-provided, however, that Leidos Biomedical shall have the first right to take these actions and shall have a continuing right to intervene in the suit; and

(d) if Leidos Biomedical does not notify the **Licensee** of its intent to respond to the legal action within a reasonable time, the **Licensee** shall be free to do so. If the Licensee elects not to defend against the declaratory judgment action, Leidos Biomedical, at its option, may do so at its own expense. In all cases, the Licensee agrees to keep Leidos Biomedical reasonably apprised of the status and progress of any litigation. Before the **Licensee** commences an infringement action, the **Licensee** shall notify Leidos Biomedical and give careful consideration to the views of Leidos Biomedical and to any potential effects of the litigation on the public health in deciding whether to bring suit.

11.4 In any action under Paragraphs 11.2 or 11.3 the expenses including costs, fees, attorney fees, and disbursements, shall be paid by the **Licensee**. The value of any recovery made by the **Licensee** through court judgment or settlement shall be treated as **Net Sales** and subject to earned royalties.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

11.5 Leidos Biomedical shall cooperate fully with the **Licensee** in connection with any action under Paragraphs 11.2 or 11.3. Leidos Biomedical agrees promptly to provide access to all necessary documents and to render reasonable assistance in response to a request by the **Licensee**.

12. NEGATION OF WARRANTIES AND INDEMNIFICATION

12.1 Leidos Biomedical offers no warranties, other than that those facts specified in Article 1 are accurate and that Leidos Biomedical has not, as of the Effective Date, granted any rights to any third party under the Licensed Patent Rights.

12.2 Leidos Biomedical does not warrant the validity of the **Licensed Patent Rights** and makes no representations whatsoever with regard to the scope of the **Licensed Patent Rights**, or that the **Licensed Patent Rights** may be exploited without infringing other patents or other intellectual property rights of third parties.

12.3 LEIDOS BIOMEDICAL MAKES NO WARRANTIES, EXPRESS OR IMPLIED, OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OF ANY SUBJECT MATTER DEFINED BY THE CLAIMS OF THE **LICENSED PATENT RIGHTS** OR TANGIBLE MATERIALS RELATED THERETO.

12.4 Leidos Biomedical does not represent that it shall commence legal actions against third parties infringing the **Licensed Patent Rights**.

12.5 The **Licensee** shall indemnify and hold Leidos Biomedical, its employees, students, fellows, agents, and consultants, and that U.S. Government harmless from and against all third party liability, demands, damages, expenses, and losses, including but not limited to death, personal injury, illness, or property damage in connection with or arising out of:

(a) the use by or on behalf of the **Licensee**, its sublicensees, directors, employees, or third parties of any **Licensed Patent Rights**; or

(b) the design, manufacture, distribution, or use of any **Licensed Products**, **Licensed Processes** or materials by the **Licensee**, or other products or processes developed in connection with or arising out of the **Licensed Patent Rights**.

12.6 The Licensee agrees to maintain a liability insurance program consistent with sound business practice and with sufficient coverage to meet the requirements of this Paragraph 12.5.

13. TERM, TERMINATION, AND MODIFICATION OF RIGHTS

13.1 This **Agreement** is effective when signed by all parties, unless the provisions of Paragraph 14.16 are not fulfilled, and shall extend to the expiration of the last to expire of the **Licensed Patent Rights** unless sooner terminated as provided in this Article 13.

13.2 In the event that the **Licensee** is in default in the performance of any material obligations under this **Agreement**, including but not limited to the obligations listed in Paragraph 13.5, and if the default has not been remedied within [***] days after the date of notice in writing of the default, Leidos Biomedical may terminate this **Agreement** by written notice and pursue outstanding royalties owed through other procedures, including but not limited to judicial collection.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

13.3 In the event that the **Licensee** becomes insolvent, files a petition in bankruptcy, has such a petition filed against it, determines to file a petition in bankruptcy, or receives notice of a third party's intention to file an involuntary petition in bankruptcy, the **Licensee** shall immediately notify Leidos Biomedical in writing.

13.4 The **Licensee** shall have a unilateral right to terminate this **Agreement** or any licenses in any country or territory by giving Leidos Biomedical [***] days written notice to that effect,

13.5 Leidos Biomedical shall specifically have the right to terminate or modify (subject to Licensee's agreement to such modification), at its option, this **Agreement**, using the process set forth in Section 13.2, if Leidos Biomedical determines that the **Licensee**;

(a) is not using commercially reasonable efforts to execute the **Commercial Development Plan** submitted with its request for a license and the **Licensee** cannot otherwise demonstrate that the **Licensee** has taken, or can be expected to take within a reasonable time, effective steps to achieve the **Practical Application** of the **Licensed Products** or the **Licensed Processes**;

(b) has not achieved the **Benchmarks** as may be modified under Paragraph 9.2;

(c) has willfully made a false statement of, or willfully omitted a material fact in the license application or in any report required by this **Agreement**;

(d) has committed a material breach of a covenant or agreement contained in this **Agreement**.

13.6 In making the determination referenced in Paragraph 13.5, Leidos Biomedical shall take into account the normal course of such commercial development programs conducted with sound and reasonable business practices and judgment and the annual reports submitted by the **Licensee** under Paragraph 9,2, Prior to invoking termination or modification of this **Agreement** under Paragraph 13.5, Leidos Biomedical shall give written notice to the **Licensee** providing the Licensee specific notice of, and a [***] day opportunity to respond to, Leidos Biomedical's concerns as to the items referenced in 13.5(a)-13.5(g). If the **Licensee** fails to alleviate Leidos Biomedical's concerns as to the items referenced in 13.5(a)-13.5(g) or fails to initiate corrective action to Leidos Biomedical's satisfaction, Leidos Biomedical may terminate this **Agreement**.

13.7 When the public health and safety so require, and after written notice to the **Licensee** providing (he **Licensee** a [***] day opportunity to respond. Leidos Biomedical shall have the right to require the **Licensee** to grant sublicenses to responsible applicants, on reasonable terms, in any **Licensed Fields of Use** under the **Licensed Patent Rights**, unless the **Licensee** can reasonably demonstrate that the granting of the sublicense would not materially increase the availability to the public of the subject matter of the **Licensed Patent Rights**. Leidos Biomedical shall not require the granting of a sublicense unless the responsible applicant has first negotiated in good faith with the **Licensee**.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

13.8 Within [***] days of expiration or termination of this **Agreement** under this Article 13, a final report shall be submitted by the **Licensee**. Any royalty payments, including those incurred but not yet paid (such as the full minimum annual royalty), and those related to patent expenses, due to Leidos Biomedical shall become immediately due and payable upon termination or expiration. If terminated under this Article 13, sublicensees may elect to convert their sublicenses to direct licenses with Leidos Biomedical pursuant to Paragraph 4.3. Unless otherwise specifically provided for under this **Agreement**, upon termination or expiration of this **Agreement**, the Licensee shall return all **Licensed Products** or other materials included within the **Licensed Patent Rights** to Leidos Biomedical or provide Leidos Biomedical with certification of the destruction thereof. The **Licensee** may not be granted additional Leidos Biomedical licenses if the final reporting requirement is not fulfilled.

14. GENERAL PROVISIONS

14.1 Neither party may waive or release any of its rights or interests in this **Agreement** except in writing. The failure of Leidos Biomedical to assert a right hereunder or to insist upon compliance with any term or condition of this **Agreement** shall not constitute a waiver of that right by Leidos Biomedical or excuse a similar subsequent failure to perform any of these terms or conditions by the **Licensee**.

14.2 This **Agreement** constitutes the entire agreement between the parties relating to the subject matter of the **Licensed Patent Rights**, the **Licensed Products** and the **Licensed Processes**, and all prior negotiations, representations, agreements, and understandings are merged into, extinguished by, and completely expressed by this **Agreement**.

14.3 The provisions of this **Agreement** are severable, and in the event that any provision of this **Agreement** shall be determined to be invalid or unenforceable under any controlling body of law, this determination shall not in any way affect the validity or enforceability of the remaining provisions of this **Agreement**.

14.4 If either party desires a modification to this **Agreement**, the parties shall, upon reasonable notice of the proposed modification by the party desiring the change, confer in good faith to determine the desirability of the modification. No modification shall be effective until a written amendment is signed by the signatories to this **Agreement** or their designees.

14.5 The construction, validity, performance, and effect of this **Agreement** shall be governed by the laws of the State of Maryland.

14.6 All **Agreement** notices required or permitted by this **Agreement** shall be given by prepaid, first class, registered or certified mail or by an express/overnight delivery service provided by a commercial carrier, properly addressed to the other party at the address designated on the following Signature Page, or to another address as may be designated in writing by the other party. **Agreement** notices shall be considered timely if the notices are received on or before the established deadline date or sent on or before the deadline date as verifiable by U.S. Postal Service postmark or dated receipt from a commercial carrier. Parties should request a legibly dated U.S. Postal Service postmark or obtain a dated receipt from a commercial carrier or the U.S. Postal Service. Private metered postmarks shall not be acceptable as proof of timely mailing.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

14.7 This Agreement shall not be assigned or otherwise transferred (including any transfer by legal process or by operation of law, and any transfer in bankruptcy or insolvency, or in any other compulsory procedure or order of court) except to the Licensee's Affiliate(s) or successor-in-interest in connection with the sale of all or substantially all of Licensee's stock or assets to which this Agreement pertains, in each case without the prior written consent of Leidos Biomedical. Additionally, Leidos Biomedical may assign this Agreement to the successor-in-interest to the FFRDC contracts with the NCI for the operation of the Frederick National Laboratory for Cancer Research. The parties agree that the identity of the parties is material to the formation of this Agreement and that the obligations under this Agreement are nondelegable. In the event that the Leidos Biomedical approves a proposed assignment, the Licensee shall pay Leidos Biomedical, as an additional royalty, [***] percent ([***]%) of the fair market value of any consideration received for any assignment of this Agreement within [***] days of the assignment.

14.8 The **Licensee** agrees that if it uses any **Leidos Biomedical** supplied materials, **Licensee** will comply with all applicable statutes, regulations, and guidelines. The **Licensee** agrees not to use the materials provided by Leidos Biomedical for research involving human subjects or clinical trials in the United States without complying with 21 C.F.R. Part 50 and 45 C.F.R. Part 46. The **Licensee** agrees not to use the materials for research involving human subjects or clinical trials outside of the United States without notifying Leidos Biomedical, in writing, of the research or trials and complying with the applicable regulations of the appropriate national control authorities. Written notification to Leidos Biomedical of research involving human subjects or clinical trials outside of the United States shall be given no later than [***] days prior to commencement of the research or trials.

14.9 The **Licensee** acknowledges that it is subject to and agrees to abide by the United States laws and regulations (including the Export Administration Act of 1979 and Arms Export Control Act) controlling the export of technical data, computer software, laboratory prototypes, biological material, and other commodities. The transfer of these items may require a license from the appropriate agency of the U.S. **Government** or written assurances by the **Licensee** that it shall not export these items to certain foreign countries without prior approval of this agency. Leidos Biomedical neither represents that a license is or is not required or that, if required, it shall be issued.

14.10 The **Licensee** agrees to, to the extent required by applicable law, mark the **Licensed Products** or their packaging sold in the United States with all applicable U.S. patent numbers and similarly to indicate "Patent Pending" status. All the **Licensed Products** manufactured in, shipped to, or sold in other countries shall be marked in a manner to preserve Leidos Biomedical's patent rights in those countries.

14.11 By entering into this **Agreement**, Leidos Biomedical does not directly or indirectly endorse any product or service provided, or to be provided, by the **Licensee** whether directly or indirectly related to this **Agreement**. The **Licensee** shall not state or imply that this **Agreement** is an endorsement by Leidos Biomedical, the U.S. Government, or any Leidos Biomedical or **Government** employee. Additionally, the **Licensee** shall not use the names of Leidos Biomedical, Frederick National Laboratory for Cancer Research or of any unit of the Government or any of their employees or agents in any advertising, promotional, or sales literature without the prior written approval of Leidos Biomedical.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

14.12 The parties agree to attempt to settle amicably any controversy or claim arising under this **Agreement** or a breach of this **Agreement**, except for appeals of modifications or termination decisions provided for in Article 13. The **Licensee** agrees first to appeal any unsettled claims or controversies to the designated **Leidos Biomedical** official, or designee. If not resolved, **Licensee Licensee** may exercise any judicial remedies that may be available.

14.13 Nothing relating to the grant of a license, nor the grant itself, shall be construed to confer upon any person any immunity from or defenses under the antitrust laws or from a charge of patent misuse, and the acquisition and use of rights pursuant to 37 C.F.R. Part 404 shall not be immunized from the operation of state or Federal law by reason of the source of the grant.

14.14 Any forma! recordation of this **Agreement** required by the laws of any **Licensed Territory** as a prerequisite to enforceability of the **Agreement** in the courts of any foreign jurisdiction or for other reasons shall be carried out by the **Licensee** at its expense, and appropriately verified proof of recordation shall be promptly furnished to the **Leidos Biomedical**.

14.15 Paragraphs 2, 4.3, 8.1, 9.5-9.8 (solely with respect to any Sales made by Licensee prior to the effective date of such termination or expiration), 12.1-12.5 (with respect to Section 12.5, solely with respect to actions occurring during the Term), 13.8, and 14 of this **Agreement** shall survive the expiration or termination of this **Agreement**.

14.16 The terms and conditions of this **Agreement** shall, at Leidos Biomedical's sole option, be considered by Leidos Biomedical to be withdrawn from the **Licensee's** consideration and the terms and conditions of this **Agreement**, and the **Agreement** itself to be null and void, unless this **Agreement** is executed by the **Licensee** and a fully executed original is received by Leidos Biomedical within sixty (60) days from the date of the **Leidos Biomedical's** signature found at the Signature Page.

SIGNATURES BEGIN ON NEXT PAGE

SIGNATURE PAGE

For Leidos Biomedical Research, Inc.:

/s/ Ethan Dmitrovsky -S (Affiliate) — 12.21.18
Name — Date
Title
Office
Mailing Address or E-mail Address for **Agreement** notices and reports:

IP/SA, P.O. Box B, Frederick, MD 21702

For the **Licensee** (Upon, information and belief, the undersigned expressly certifies or affirms that the contents of any statements of the **Licensee** made or referred to in this document are truthful and accurate.):

by:

/s/ Michael Henderson — December 17th 2018
Signature of Authorized Official — Date

Michael Henderson
Printed Name

SVP, Business Development & Operations
Title

I. Official and Mailing Address for **Agreement** notices:

Eric Gomez
Name

VP of Business Development & Operations
Title

Mailing Address

75 Federal St. San Francisco. 94107

Email Address: [***]

Phone: [***]

Fax: N/A

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

II. Official and Mailing Address for Financial notices (the **Licensee's** contact person for royalty payments)

Tina Kraft
Name

Accounting
Title

Mailing Address

421 Kipling St

Palo Alto, CA 94301

Email Address: accounting@theras.com

Phone: 650-391-9740

Fax: 650-989-1331

APPENDIX A – PATENT(S) OR PATENT APPLICATION(S)

Patent(s) Or Patent Application(s):

I. [***]

II. [***]

III. [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

APPENDIX B – LICENSED FIELDS OF USE AND TERRITORY

I Licensed Fields of Use:

(a) Prophylactic, therapeutic and diagnostic use in humans and animals

II. Licensed Territory: Worldwide

APPENDIX C - ROYALTIES

Royalties:

I. The **Licensee** agrees to pay to Leidos Biomedical a noncreditable, nonrefundable license issue royalty in the amount of One Hundred and Fifty Thousand dollars ($150,000) within sixty (60) days from the effective date of this **Agreement**.

II. The Licensee **agrees** to pay to Leidos Biomedical a nonrefundable minimum annual royalty in the amount of [***] dollars ([***]) as follows:

(a) The first minimum annual royalty is due within sixty (60) days of the effective date of this **Agreement** and may be prorated according to the fraction of the calendar year remaining between the effective date of this **Agreement** and the next subsequent January 1; and

(b) Subsequent minimum annual royalty payments are due and payable on January 1 of each calendar year and may be credited against any earned royalties due for sales made in that year.

III. The **Licensee** agrees to pay Leidos Biomedical earned royalties of [***] percent ([***]%) on **Net Sales** by or on behalf of the **Licensee** and its sublicensees. For a Combination Product, Net Sales shall be calculated as:

A/(A+B) x [Net Sales, calculated without regard to this formula, of the Combination Product],

Where:

(i) "A" is the total average Net Sales price per unit of each Licensed Product contained within or used in the Combination Product when sold separately; and

(ii) "B" is either (a) the total average Net Sales price per unit if the Combination Product Component is sold separately by Licensee, a Sublicensee, or Affiliate; or (b) the total average gross invoice price (specifically for the Combination Product Component and not for any services provided or research and development costs, etc.) less deductions per unit if the Combination Product Component is sold by a third party; of each Combination Product Component contained within or used in the Combination Product when sold separately. Provided however, that in no event shall Net Sales for a Combination Product be less than fifty percent (50%) of "A" (as defined in the calculation above).

a. If either Licensed Product or the Combination Product Component is not sold separately, then A and/or B (as applicable) shall be calculated based on the gross invoice price less deductions for other products of the same or similar kind and quality, sold in similar quantities, currently being offered for Sale by Licensee or any Sublicensee. Where such similar products are not currently being offered for Sale by Licensee or Sublicensee, A and/or B (as applicable) shall be calculated based on the average gross selling price or published gross list price for sales to an unaffiliated third party in an arm's length transaction, less deductions at which products of the same or similar kind and quality, sold in similar quantities, are then

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currently being offered for Sale by other manufacturers or other parties. Where such products are not currently sold or offered for Sale by Licensee or any Sublicensee, nor by any other manufacturer or other party, then A and/or B (as applicable) will be one hundred fifty percent (150%) of as relevant, Licensee's or any Sublicensee's cost of manufacture of the relevant Licensed Product or Combination Product Component, determined in accordance with generally accepted accounting principles ("GAAP"); and

b. In such calculaton in no event shall Net Sales of a Licensed Product be disproportion ally discounted as compared to the Combination Product Component.

IV. The **Licensee** agrees to pay Leidos Biomedical Benchmark royalties within [***] days of achieving each Benchmark, with each payment due only once under this Agreement:

For the first indication for first Licensed Product:

(a) [***] upon [***];

(b) [***] upon [***];

(c) [***] upon [***];

(d) [***] upon [***];

(e) [***] upon [***]; and

(f) [***] upon [***].

For the second indication for each Licensed Product:

(a) [***] upon [***];

(b) [***] upon [***];

(c) [***] upon [***]; and

(d) [***] upon [***].

For the avoidance of doubt, each of the Benchmark payments set forth in this Appendix C will be payable with respect to each Licensed Product and regardless of whether the applicable Benchmark event has been achieved by Licensee, Sublicensee, or any Affiliate, provided that if Licensee discontinues the development and/or commercialization of a particular Licensed Product and instead develops and/or commercializes another Licensed Product in place of such discontinued Licensed Product, then Licensee shall not be required to make any Benchmark payments for such second Licensed Product for any Benchmark events that have already triggered Licensee's payment obligations for the discontinued Licensed Product for that particular indication. All Benchmark payments set forth in Appendix C are due within thirty (30) days of the occurrence. No benchmark payment will be due for any subsequent Licensed Product or subsequent indication(s) for the same Licensed Product.

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

V. The **Licensee** agrees to pay Leidos Biomedical additional sublicensing royalties of [***] Percent ([***]) on the fair market value of any consideration received for and attributable to the granting each third party sublicense within [***]) days of the execution of each sublicense if such sublicense is granted [***], [***] percent ([***]%) if such sublicense is granted [***], and [***] percent ([***]%) if such sublicense is granted [***]. Sublicensing revenues means amounts (including, without limitation, any licensing or optioning fees, or license maintenance fees, or milestone payments, and fair market value of any non-cash consideration), received by or payable to the Licensee from any sublicensee in consideration for the rights granted under a sublicense of the Licensee's rights under this Agreement, provided that sublicensing revenues will not include amounts received by or payable to the Licensee that are reasonably and fairly attributable to any of the following to the extent that each is bona fide; (a) [***], (b) amounts received by the Licensee as [***] of the Licensee; (c) [***]; (d) [***], and (e) [***], and (f) [***].

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

APPENDIX D-BENCHMARKS AND PERFORMANCE

The **Licensee** agrees to the following **Benchmarks** for its performance under this **Agreement** and, within thirty (30) days of achieving a **Benchmark**, shall notify Leidos Biomedical that the **Benchmark** has been achieved.

I. [***]

II. [***]

III. [***]

The above benchmarks shall be extended for regulatory and scientific reasons or other factors outside the reasonable control of Licensee. Licensee shall also have the right to extend any particular benchmark (and the subsequent benchmarks) by [***] by [***].

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

APPENDIX E - COMMERCIAL DEVELOPMENT PLAN

Theras will endeavor to achieve milestones as stated under Appendix D, and will [***], using commercially reasonable efforts to [***]. Ideally, Theras will identify and [***]. This is anticipated as [***]. Theras will initially seek approval in [***].

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

APPENDIX F - EXAMPLE ROYALTY REPORT

Required royalty report information includes:

- License reference number ([***])

)

- Reporting period
- Catalog number and units sold of each Licensed Product (domestic and foreign)
- Gross Sales per catalog number per country
- Total Gross Sales
- Itemized deductions from Gross Sales
- Total Net Sales
- Earned Royalty Rate and associated calculations
- Gross Earned Royalty
- Adjustments for Minimum Annual Royalty (MAR) and other creditable payments made
- Net Earned Royalty due

Example

Catalog Number	Product Name	Country	Units Sold	Gross Sales (US$)
1	A	US	[***]	[***]
1	A	UK	[***]	[***]
1	A	France	[***]	[***]
2	B	US	[***]	[***]
3	C	US	[***]	[***]
4	D	US	[***]	[***]
		Total Gross Sales		[***]
		Less Deductions:		
		Freight		[***]
		Returns		[***]
		Total Net Sales		[***]
		Royalty Rate		[***]
		Royalty Due		[***]
		Less Creditable Payments		[***]
		Net Royalty Due		**0**

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.

APPENDIX G - ROYALTY PAYMENT OPTIONS

New Payment Options Effective March 2018

The License Number MUST appear on payments, reports and correspondence.

License Number: [***]

To Mail Checks:

General Accounting
Leidos Biomedical Inc.
1050 Boyles Street
Frederick, Maryland 21702

For wires:

BANK: CITIBANK, N.A.
388 Greenwich St.
New York, NY 10013
FED ABA#: [***]
SWIFTCODE [***]
ACCOUNT NAME: Leidos Biomedical Research, Inc.
ACCOUNT #: [***]

[***] Certain information in this document has been omitted from this exhibit because it is both (i) not material and (ii) would be competitively harmful if publicly disclosed.