ACORAMIDIS IMPROVES CLINICAL OUTCOMES IN TRANSTHYRETIN AMYLOID CARDIOMYOPATHY

Daniel P. Judge, MD | Medical University of South Carolina

<u>Authors</u>: Daniel P. Judge, Francesco Cappelli, Marianna Fontana, Pablo Garcia-Pavia, Simon Gibbs, Martha Grogan, Mazen Hanna, Ahmad Masri, Mathew S. Maurer, Laura Obici, Prem Soman, Kevin M. Alexander, Xiaofan Cao, Jing Du, Ted Lystig, Jean-François Tamby, Suresh Siddhanti, Lenny Katz, Jonathan C. Fox, Julian D. Gillmore









UPDATED DISCLOSURES

In the past 3 years, Daniel Judge MD has received payments as an advisor or consultant to ADRx, Alleviant Medical, Astra Zeneca, BridgeBio, Capricor, Cytokinetics, Pfizer, Novo Nordisk, and Tenaya Therapeutics.

Acoramidis is an investigational molecule. The safety and efficacy have not been fully evaluated by regulatory authorities.

ACORAMIDIS: A 2ND GENERATION, POTENT, ORAL TTR STABILIZER FOR THE TREATMENT OF ATTR-CM



Disease mechanism



~130 known destabilizing mutations

Protective
T119M mutation

Dissociation into monomers initiates pathogenesis



Monomers aggregate, causing disease



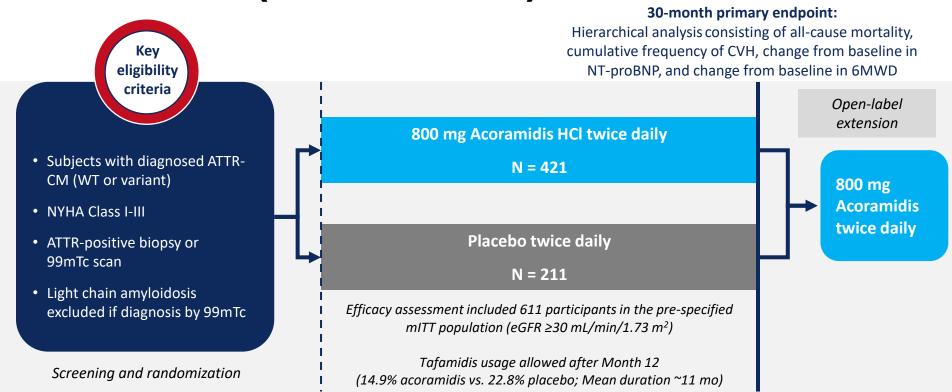
Therapeutic hypothesis

Acoramidis was designed to mimic protective T119M mutation.

Phase 3 results confirm differential stabilization via effects on serum TTR.

PH. 3 STUDY (ATTRIBUTE-CM): STUDY DESIGN





ATTRIBUTE-CM: BASELINE DEMOGRAPHIC CHARACTERISTICS



Characteristic	Acoramidis (N=421)	Placebo (N=211)
Age (years), mean (SD)	77.4 (6.5)	77.1 (6.8)
Male sex, n (%)	384 (91.2)	186 (88.2)
ATTRwt-CM, n(%)	380 (90.3)	191 (90.5)
NT-proBNP (pg/mL), median (IQR) [nl <300]	2326 (1332, 4019)	2306 (1128, 3754)
eGFR (mL/min/1.73m²), mean (SD)	60.9 (18.2)	61.0 (18.7)
NAC Stage I n(%)	241 (57.2)	120 (56.9)
NAC Stage II n(%)	134 (31.8)	69 (32.7)
NAC Stage III n(%)	46 (10.9)	22 (10.4)
Serum TTR (mg/dL), mean (SD) [nl 20-40]	23.2 (5.6)	23.6 (6.1)
KCCQ-OS, mean (SD) [range 0-100]	71.5 (19.4)	70.3 (20.5)
6MWD (m), mean (SD)	361.2 (103.7)	348.4 (93.6)

RESULTS ACHIEVED ON PRIMARY AND SELECT SECONDARY ENDPOINTS



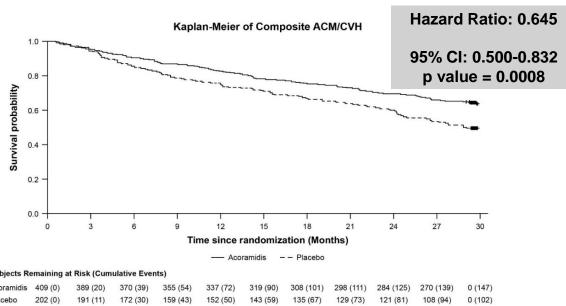
Primary endpoint ¹	p-value	
Hierarchical analysis (F-S test¹) consisting of: • All-cause mortality² • Cumulative frequency of CVH • Change from baseline in NT-proBNP • Change from baseline in 6MWD	p<0.0001	58% of ties broken by first
Win Ratio	1.8	two components
Select secondary endpoints	p-value	of Win Ratio
Cumulative frequency of CVH ³	p<0.0001	analysis
Change from baseline in 6MWD ⁴	p<0.0001	
Change from baseline in KCCQ-OS ⁴	p<0.0001	<u> </u>
Change from baseline in serum TTR ⁴	p<0.0001	<u> </u>
Change from baseline in NT-proBNP ⁵	p<0.0001	_
All-cause mortality ^{2,6}	p=0.057	25% RRR in ACM ⁸
CV-related mortality ⁷	p=0.037	30% RRR in CVM ⁹

¹Primary analysis assessed using the Finkelstein-Schoenfeld method. ²Heart transplant and implantation of cardiac mechanical assistance device were treated as death for this analysis. ³Negative binomial regression model. ⁴Least squares mean difference change from baseline at 30 months, ⁶Assessed by Cochran-Mantel-Haenszel test; p=0.15 as assessed by Cox Proportional Hazard Model. ⁷Assessed by Cochran-Mantel-Haenszel test; p=0.089 as assessed by Cox Proportional Hazard Model. 8- 19.3% for acoramidis and 25.7% for placebo. 9-14.9% in acoramidis vs. 21.3% for placebo. CV-mortality is any all-cause mortality event adjudicated as due to a cardiovascular or undetermined cause

COMPOSITE ACM/CVH: TIME-TO-FIRST EVENT & F-S TEST



K-M curves separate early, at Month 3, and steadily diverge through Month 30



Number Needed to Treat (NNT) to avoid a death or first CVH over 2.5 years

Subjects Remaining at Risk (Cumulative Events)

2-Component F-S Test (ACM,CVH)



Favors acoramidis over placebo

p value = 0.0182

CUMULATIVE FREQUENCY OF CV HOSPITALIZATIONS (CVH):



50% REDUCTION WITH ACORAMIDIS

	Acoramidis (N=409)	Placebo (N=202)
Number of subjects with CVH ¹	109 (26.7%)	86 (42.6%)
Frequency CVH per year (modeled) ²		
Mean (95% CI)	0.22 (0.18-0.28)	0.45 (0.35-0.58)
Relative Risk Ratio (95% CI)	0.496 (0.355-0.695)	
p value	< 0.0	0001

Number Needed to Treat (NNT) to prevent one CV Hospitalization per year

5



NO SAFETY SIGNALS OF POTENTIAL CLINICAL CONCERN IDENTIFIED

Subjects with one or more event(s)	Acoramidis N=421 N (%)	Placebo N=211 N (%)
Any treatment-emergent adverse events (TEAEs)	413 (98.1%)	206 (97.6%)
TEAE with fatal outcome	60 (14.3%)	36 (17.1%)
TEAE leading to hospitalization	212 (50.4%)	128 (60.7%)
TEAE leading to study drug discontinuation	39 (9.3%)	18 (8.5%)
Any treatment-emergent serious adverse events (SAEs)	230 (54.6%)	137 (64.9%)
Treatment-emergent SAEs leading to study drug discontinuation	21 (5.0%)	15 (7.1%)
Severe TEAEs ¹	157 (37.3%)	96 (45.5%)



PUTTING RESULTS IN CONTEXT

- These contemporary data reset clinical expectations in the treatment and management of today's ATTR-CM patients, who are diagnosed earlier and live longer
 - Mortality rate of ATTRibute-CM placebo (25.7%) less than ATTR-ACT tafamidis (29.5%)
- Outcomes in acoramidis treatment population (previously presented at ESC 2023) approach age-matched general population
 - 81% survival rate on acoramidis approaches survival rate in age-matched US database (~85%)^{1,2}
 - 0.29 observed mean annual CVH frequency on acoramidis approaches annual hospitalization rate observed in broader US Medicare population (~0.26)³
- Time-to-separation demonstrated at 3 months, representing the most rapid clinical benefit on the composite endpoint of all-cause mortality and CV hospitalization outcomes in ATTR-CM to our knowledge
- Early and profound reduction in CVH can have significant impact on public health and reduce overall treatment costs (~\$20k for each hospitalization in US⁴)
 - CVH has been shown to be a predictor of mortality in general heart failure⁵ and in ATTR-CM⁶



CONCLUSION: ACORAMIDIS IMPROVES CLINICAL OUTCOMES IN ATTR-CM

ATTRibute-CM study results demonstrate that acoramidis improves clinical outcomes (All-Cause Mortality/CV Hospitalization) in ATTR-CM patients:

- Primary Endpoint (4-component F-S analysis) showed a significant treatment benefit of acoramidis over placebo, with majority of ties broken by first 2 components (ACM, Frequency of CVH)
- Notable, early separation at 3 months, based on Time-to-First Event Kaplan-Meier Analysis
 - NNT to prevent an event of death or first CVH over 2.5 years: 7
- 2-component (ACM, Frequency of CVH) F-S analysis shows a significant treatment benefit of acoramidis over placebo

Individual Outcome Components:

- 25% relative risk reduction in All-Cause Mortality: Favorable trend
- 50% relative risk reduction in Cumulative Frequency of CVH (NNT to prevent one CVH/year: 5)

THANK YOU





#AHA23