

**EMPOWERING** 

# muscle

**EMPOWERING** 

# lives



# Forward-Looking Statements

This Presentation contains forward-looking statements for purposes of the Private Securities Litigation Reform Act of 1995 (the "Act"). Cytokinetics disclaims any intent or obligation to update these forward-looking statements and claims the protection of the Act's Safe Harbor for forward-looking statements. Examples of such statements include, but are not limited to, statements express or implied related Cytokinetics' research and development and commercial readiness activities, including the initiation, conduct, design, enrollment, progress, continuation, completion, timing and results of clinical trials, projections regarding growing prevalence, low survival rates and market opportunity in heart failure, hypertrophic cardiomyopathy (HCM) or heart failure with preserved ejection fraction (HFpEF); projections regarding the size of the addressable patient population for aficamten, omecamtiv mecarbil, CK-136, CK-586 or any of our other drug candidates; Cytokinetics' commercial readiness for aficamten or omecamtiv mecarbil; our ability to submit a new drug application for aficamten with FDA in the third quarter 2024 or a marketing authorization application with EMA in the fourth quarter 2024, the likelihood and/or timing of regulatory approval for our planned new drug application for aficamten, omecamtiv mecarbil or any future new drug application for any of our other drug candidates or the anticipated timing of any interactions with FDA, EMA or any other regulatory authorities in connection thereto; the timing of completion of MAPLE-HCM, ACACIA-HCM, CEDAR-HCM or any of our other clinical trials, the efficacy or safety of aficamten, *omecamtiv mecarbil*, CK-136, CK-586 or any of our other drug candidates, our ability to fully enroll or to announce the results of any of our clinical trials by any particular date; Cytokinetics' cash expenditures or runway; the properties, potential benefits and commercial potential of aficamten, omecamtiv mecarbil, CK-136, CK-586 or any of Cytokinetics' other drug candidates. Such statements are based on management's current expectations; but actual results may differ materially due to various risks and uncertainties, including, but not limited to, potential difficulties or delays in the development, testing, regulatory approvals for trial commencement, progression or product sale or manufacturing, or production of Cytokinetics' drug candidates that could slow or prevent clinical development or product approval, including risks that current and past results of clinical trials or preclinical studies may not be indicative of future clinical trial results, patient enrollment for or conduct of clinical trials may be difficult or delayed, Cytokinetics' drug candidates may have adverse side effects or inadequate therapeutic efficacy, the FDA or foreign regulatory agencies may delay or limit Cytokinetics' ability to conduct clinical trials, and Cytokinetics may be unable to obtain or maintain patent or trade secret protection for its intellectual property; Cytokinetics may incur unanticipated research, development and other costs or be unable to obtain financing necessary to conduct development of its products; standards of care may change, rendering Cytokinetics' drug candidates obsolete; and competitive products or alternative therapies may be developed by others for the treatment of indications Cytokinetics' drug candidates and potential drug candidates may target. These forward-looking statements speak only as of the date they are made, and Cytokinetics undertakes no obligation to subsequently update any such statement, except as required by law. For further information regarding these and other risks related to Cytokinetics' business, investors should consult Cytokinetics' filings with the Securities and Exchange Commission (the "SEC").



# **Our Mission**

To bring forward new medicines to improve the healthspan of people with devastating cardiovascular and neuromuscular diseases of impaired muscle function.

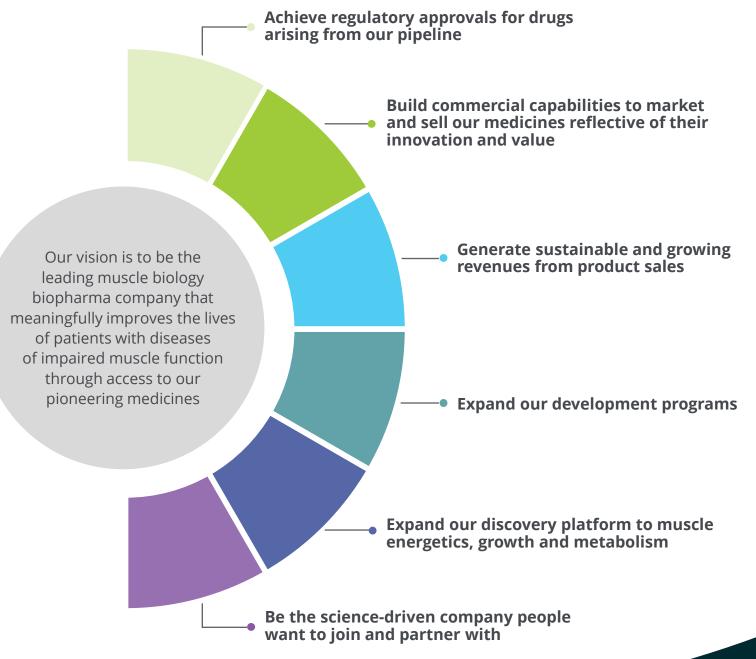


# VISION 2025

Leading with Science,

### **Delivering for Patients**

As always, we will support disease advocacy groups elevating the patient voice and live by our values of integrity, fairness and compassion in all that we do.





## A Great Place to Work; Uncommon Continuity of Team

#### **VALUES**







we > me



make it happen

#### **RETENTION**



Turnover rate of leadership; low attrition

#### **AWARDS**













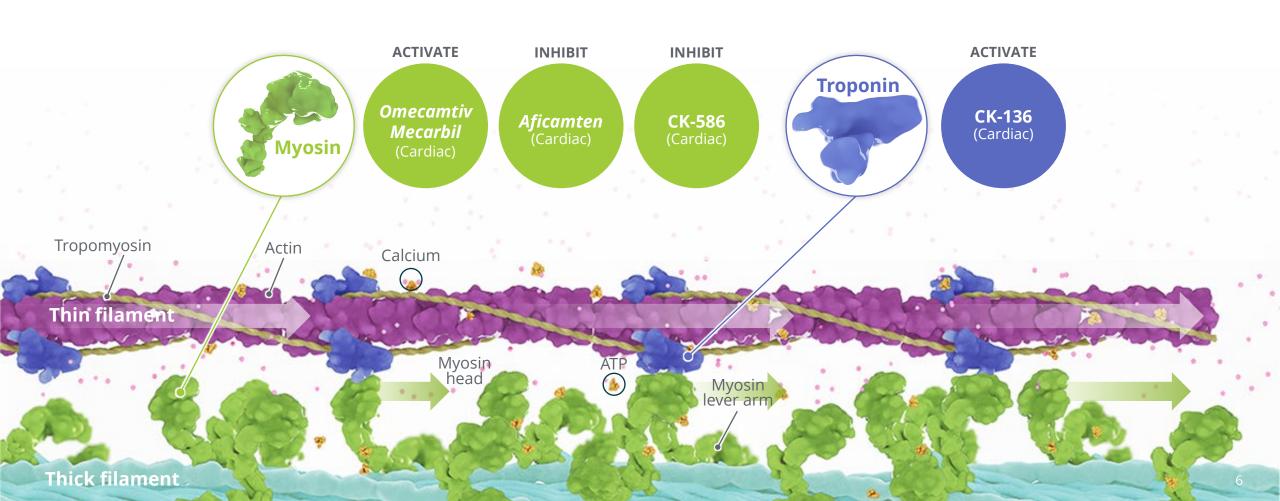


Average tenure of leadership; high continuity



# Sarcomere Directed Drug Development

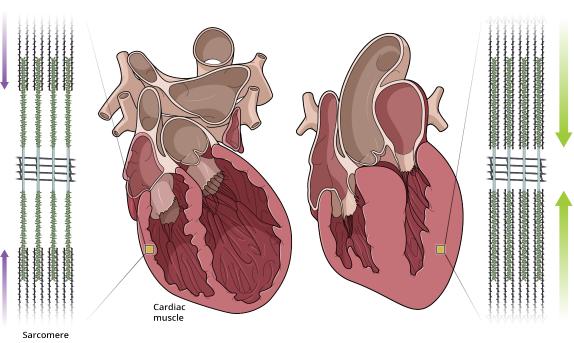
The sarcomere is a molecular structure found in skeletal and cardiac muscle that enables myocytes to contract and generate force



## Contractile Dysfunction Underlies Cardiac Diseases

# Decreased Cardiac Contractility

- Heart Failure with Reduced Ejection Fraction (HFrEF)
- Genetic Dilated Cardiomyopathy
- Pulmonary Hypertension with Right Ventricular Heart Failure



# **Increased / Preserved Cardiac Contractility**

- Non-obstructive Hypertrophic Cardiomyopathy (nHCM)
- Obstructive Hypertrophic Cardiomyopathy (oHCM)
- Heart Failure with Preserved Ejection Fraction (certain HFpEF subsets)



### A Commitment to Muscle-Directed Cardiac Medicines

### Building a specialty cardiology franchise anchored by aficamten

	Protein Target	Therapeutic Area	Drug Candidate	Research	Pre-Clinical	Phase 1	Phase 2	Phase 3	Approval
Myos	sin	оНСМ	Aficamten						Preparing for regulator submissions in 2H 2024
		oHCM (First-line*)	Aficamten						
	Myosin-Targeted	Pediatric oHCM	Aficamten						
	Therapy	пНСМ	Aficamten						
		НҒрЕҒ	СК-586						
		HFrEF	Omecamtiv Mecarbil						
			_						
Troponin	Troponin- Targeted Therapy	Heart Failure, other	СК-136						
	Other Biology	Muscle Biology Directed	Research						

\*Pending results from MAPLE-HCM, an ongoing Phase 3 clinical trial evaluating for the potential superiority of aficamten as monotherapy compared to metoprolol as monotherapy in patients with obstructive HCM.

All drug candidates above are investigational products and are not approved as safe or effective for any indication.



# Building a Specialty Cardiology Franchise Anchored by *Aficamten*

Growing addressable patient market through specialty cardiology franchise strategy

оНСМ

**MAPLE-HCM** 

Potential to

expand to

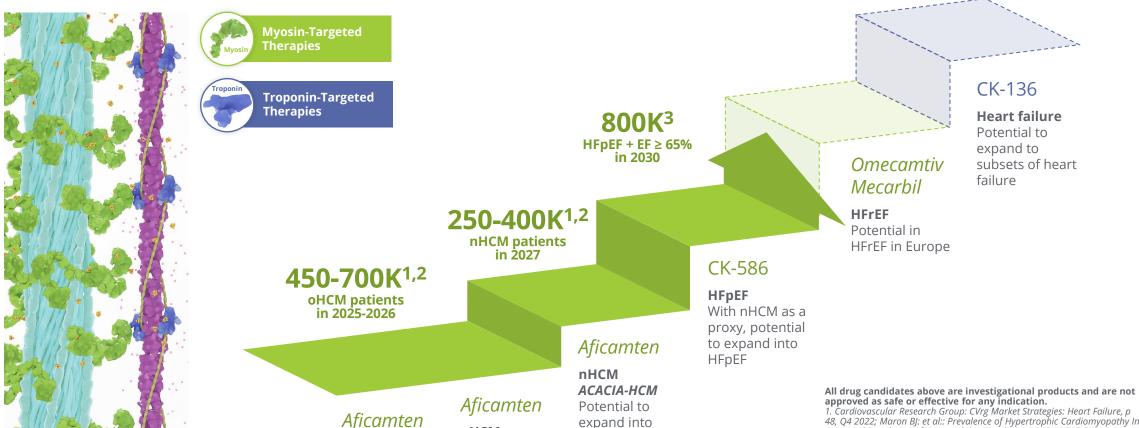
first-line treatment

oHCM

SEQUOIA-HCM

First potential

indication



nHCM

1. Cardiovascular Research Group: CVrg Market Strategies: Heart Failure, p 48, Q4 2022; Maron BJ: et al:: Prevalence of Hypertrophic Cardiomyopathy In A General Population of Young Adults, Circulation 1995;92;785-789; Semsarian C. et al: New Perspectives on the Prevalence of Hypertrophic Cardiomyopathy, J. Am, Coll. Cardiol. 2015; 65: 1249-1254; 2. Lu DY et al: Clinical Outcomes in Patients With Nonobstructive, Labile, and Obstructive Hypertrophic Cardiomyopathy. J. Am. Heart Assoc. 2018;7:1-11 3. Dunlay et al (2012) Circ Heart Fail. 2012 Nov;5(6):720-6. doi: 10.1161/CIRCHEARTFAILURE.111.966366. Epub 2012 Aug 30.



# **Specialty Cardiovascular Portfolio**

Aficamten
Omecamtiv Mecarbil
CK-586
CK-136

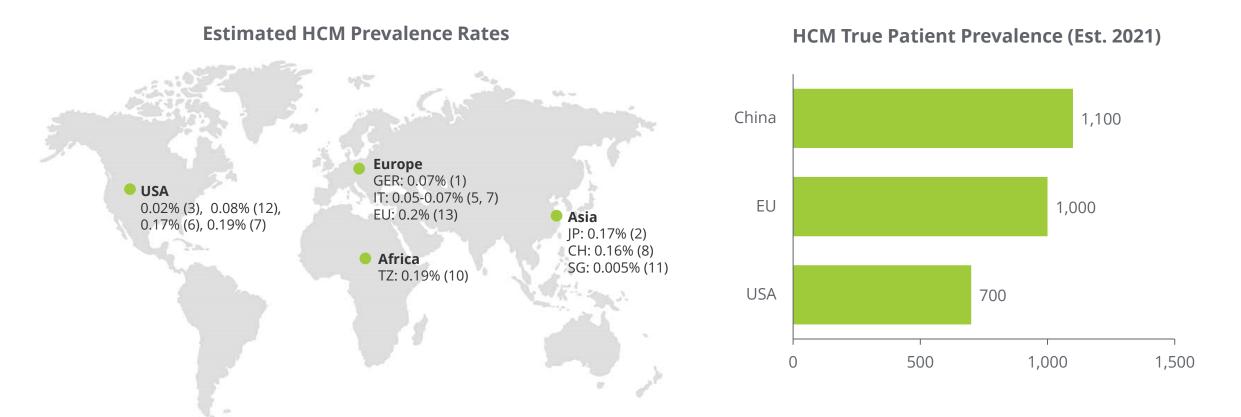


# **Aficamten**



# HCM Prevalence: Significant and Growing Globally

HCM prevalence estimates vary across geography and over time

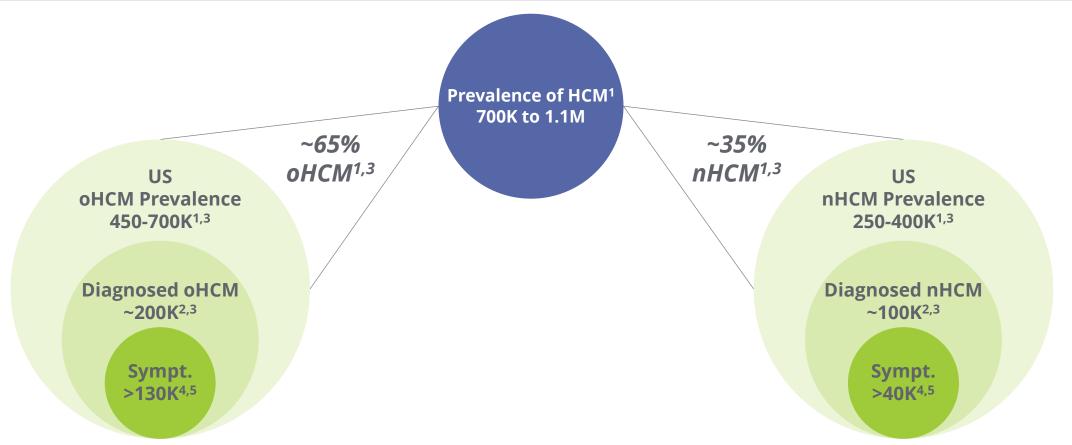


Sources: 1. Husser et al 2018 doi.org/10.1371/journal.pone.0196612; 2. Hada et al 10.1016/s0002-9149(87)80107-8; 3. Codd 1989 10.1161/01.cir.80.3.564; 4. Maron et al 1995 10.1161/01.cir.92.4.785; 5. Corrado et al 1998 10.1056/NEJM199808063390602; 6. Maron et all 1999 10.1001/jama.281.7.650; 7. Nistri et al 2003 10.1016/s0002-9149(03)00132-2; 8. Zou et al 2004 10.1093/aje/kwh090; 9. Maron 2004 https://doi.org/10.1016/j.amjmed.2003.10.012; 10. Maro 2006 10.1258/004947506778604904; 11. Ng et al 2011 10.1093/europace/eur051; 12. Butzner et al 2021 10.1016/j.amjcard.2021.08.024; 13. Cardim et al 2011 10.1016/j.repc.2011.09.005



# Opportunity for CMIs in Diagnosed, Symptomatic HCM Patients

Potential for nearly 200K patients eligible for CMIs in 2025



#### Projections and forecasts for illustration.

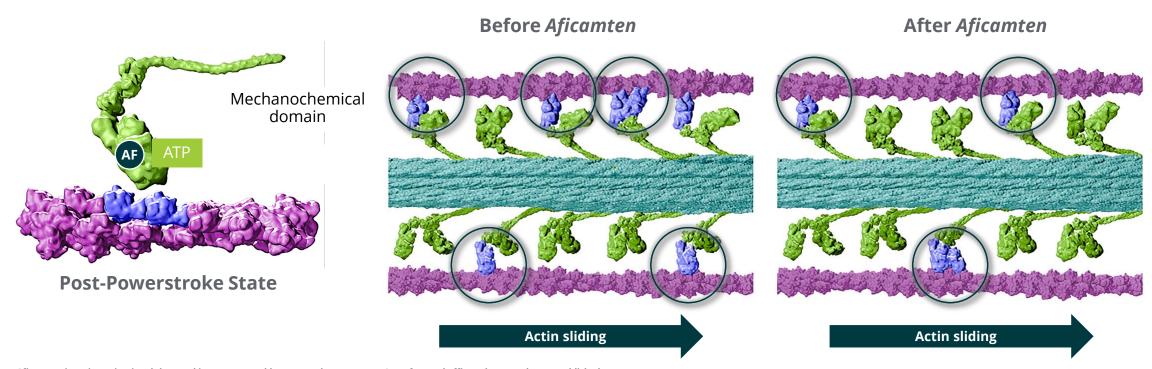
- 1. Cardiovascular Research Group: CVrg Market Strategies: Heart Failure, p 48, Q4 2022; Maron BJ: et al.: Prevalence of Hypertrophic Cardiomyopathy In A General Population of Young Adults, Circulation 1995;92;785-789; Semsarian C. et al. New Perspectives on the Prevalence of Hypertrophic Cardiomyopathy, J. Am, Coll. Cardiol. 2015; 65: 1249-1254; 2. DoF: SHA; Symphony PTD (Patient Transaction Data): Includes patients diagnosed since 2016 and having any HC transaction in the claims data universe in the last year June 2022-May 2023);
- 3. Lu DY et al. Clinical Outcomes in Patients With Nonobstructive, Labile, and Obstructive Hypertrophic Cardiomyopathy. J. Am. Heart Assoc.2018;7:1-11
- 4. DoF: SHA Symphony PTD (Patient Transaction Data) includes any patients with symptoms in the last 2 years: angina, dyspnea, fatigue, palpitations, syncope, tachycardia; and/or treatments in the past 2 years: bb, ccb, dyso, ralo, Camzyos; 5. DoF Primary market research: 443 HCPs treating HCM - % of nHCM patients not considered under control with current SOC.



# Aficamten: Proposed Mechanism of Action

Aficamten stabilizes myosin in the released post-powerstroke state unable to hydrolyze ATP

### "Fewer hands pulling on the rope"







# Aficamten: Aspirational Target Profile Potential next-in-class cardiac myosin inhibitor



Rapid onset



Rapid reversibility



**Speed to** optimal dose



**Predictable** dose response



No teratogenicity



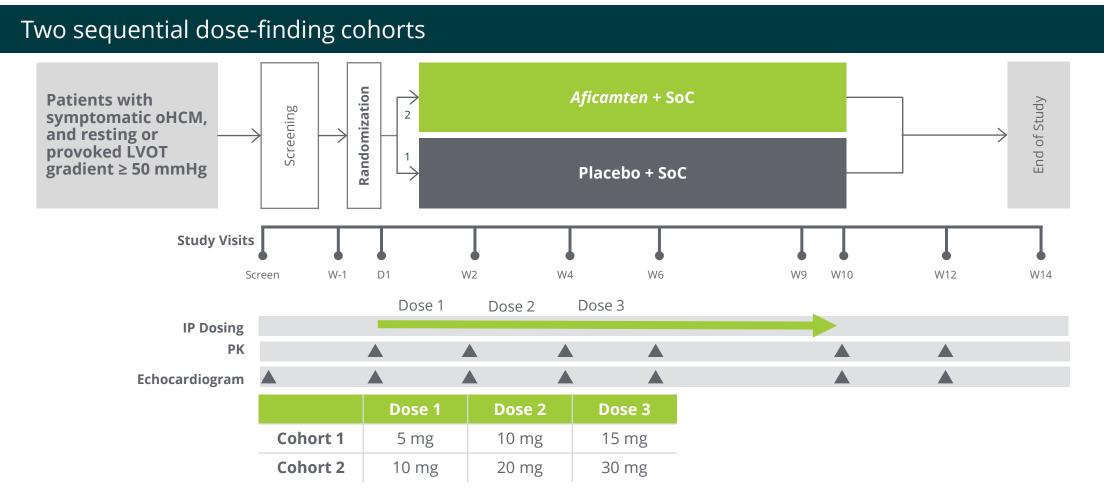
No clinically meaningful **P450 liabilities** 



### REDWOOD-HCM: Cohorts 1 & 2



### Patients with symptomatic oHCM on background therapy excluding disopyramide



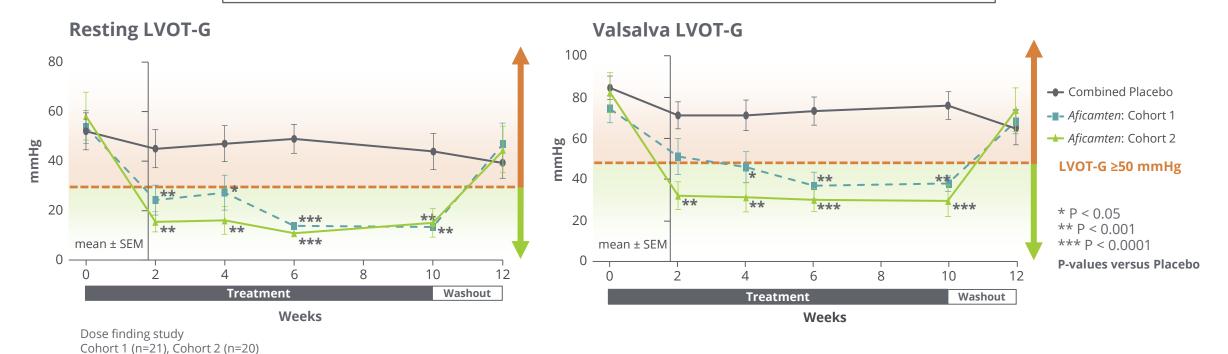


### REDWOOD-HCM: Robust Reduction of LVOT Gradients



Cohorts 1 & 2

Consistent, **clinically meaningful reductions in LVOT gradients** within two weeks **No treatment interruptions** or discontinuations **Reversibility of drug effect** demonstrated



Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.

Maron M, Abraham T, Masri A, et al. "REDWOOD-HCM: A Randomized, Double-blind, Placebo-controlled, Dose-finding Trial of the Cardiac Myosin Inhibitor, Aficamten, In Obstructive Hypertrophic Cardiomyopathy". HFSA 2021.

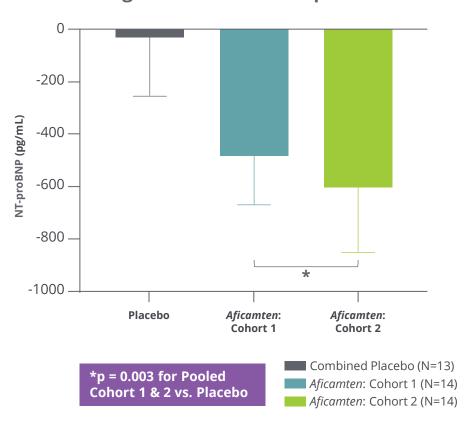


# Change from Baseline in NT-proBNP & NYHA Class

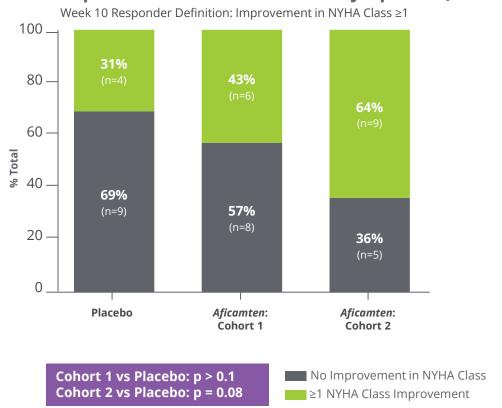


Cohorts 1 & 2

#### **Change from Baseline NT-proBNP to Week 10**



#### Improvement in Heart Failure Symptoms (NYHA Class)



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Maron M, Abraham T, Masri A, et al. "REDWOOD-HCM: A Randomized, Double-blind, Placebo-controlled, Dose-finding Trial of the Cardiac Myosin Inhibitor, Aficamten, In Obstructive Hypertrophic Cardiomyopathy". HFSA 2021.



## Improved Cardiac Structure and Diastolic Function



Cohorts 1 & 2: Early signs of improvement in cardiac structure and myocardial relaxation

Treatment with *aficamten* for 10 weeks resulted in:

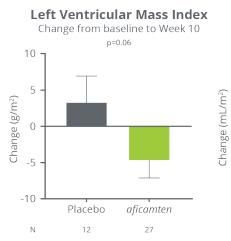
- Significant reduction in left atrial volume index
- Trend towards a reduction in LV mass index
- Improved diastolic function

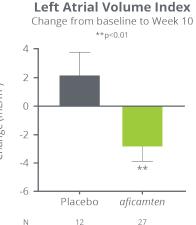
Cvtokinetics<sup>®</sup>

- reduction in lateral E/e' (p<0.01)</li>
- increase in lateral e' (p<0.05))

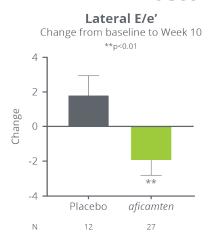
# Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established. Abraham T. et al. "Early Cardiac Structural and Functional Reverse Remodeling in Obstructive Hypertrophic Cardiomyopathy after 10 Weeks of Aficamten Therapy: Analyses from REDWOOD-HCM". ASE 2022.

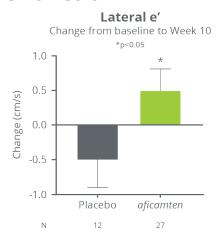
#### **Cardiac Structure**





#### **Diastolic Function**

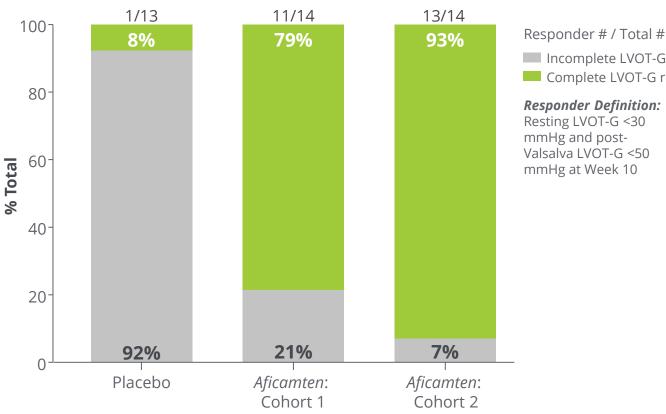




# Response Rates on Treatment with Aficamten



#### Cohorts 1 & 2



- Incomplete LVOT-G response
- Complete LVOT-G response

- Consistent, clinically meaningful reductions in LVOT gradients within two weeks
- No treatment interruptions or discontinuations
- No treatment-related SAFs
- Reversibility of drug effect demonstrated
- Statistically significant reductions in NT-proBNP
- Improvement in NYHA class

Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.

Maron M, Abraham T, Masri A, et al. "REDWOOD-HCM: A Randomized, Double-blind, Placebo-controlled, Dose-finding Trial of the Cardiac Myosin Inhibitor, Aficamten, In Obstructive Hypertrophic Cardiomyopathy". HFSA 2021.

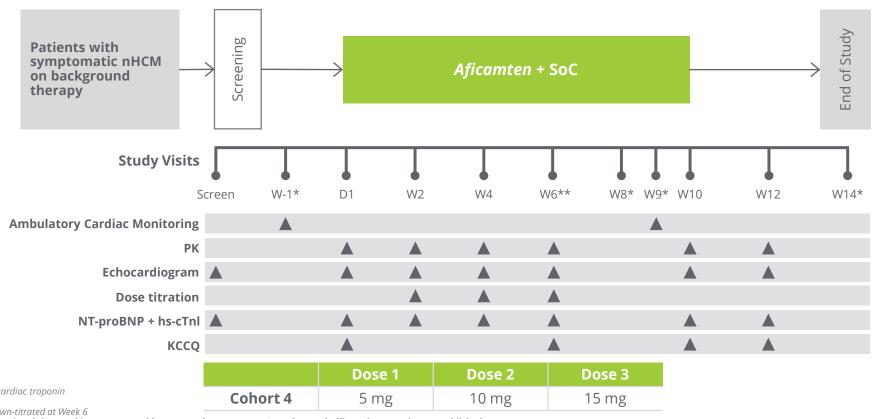


### REDWOOD-HCM: Cohort 4

# REDWOOD HCM

### Patients with symptomatic nHCM on background therapy

### Results presented at Heart Failure 2023



hs-cTnl: high- sensitivity cardiac troponin \*Telephone visits

\*\*Patient can only be down-titrated at Week 6



# Significant Improvements in KCCQ & NYHA Class Cohort 4

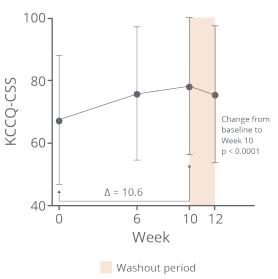


### 85% of patients achieved 15 mg dose; no discontinuations due to adverse events

#### Kansas City Cardiomyopathy Questionnaire

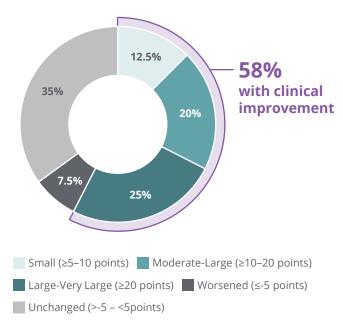
Mean improvement in KCCQ of 10.6 points

#### All nHCM Patients (N = 41)



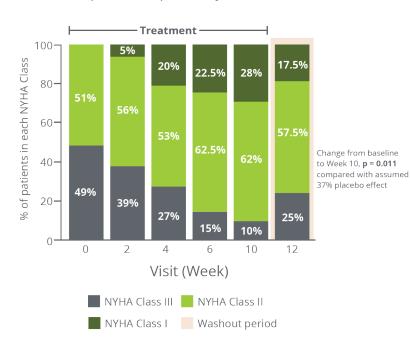
Data presented as mean and standard deviation

#### **Categorical Changes at Week 10 in KCCQ-CSS**



#### **NYHA Functional Class**

56% of patients improved by ≥1 NYHA class



Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.

Masri A. et al. "Aficamten in Patients with Symptomatic Non-Obstructive Hypertrophic Cardiomyopathy (REDWOOD-HCM Cohort 4)". ESC HF 2023.



# Change in Baseline in Biomarkers & Angina Frequency Cohort 4



### **Proportional Change from Baseline in Cardiac Biomarkers**

Mean reduction in high-sensitivity cardiac troponin of 21% Mean reduction in NT-proBNP of 55%



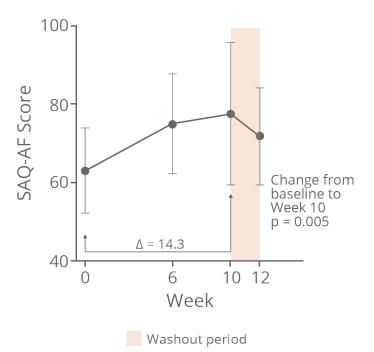
Data presented as the mean proportional change and 95% CI

Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.

Masri A. et al. "Aficamten in Patients with Symptomatic Non-Obstructive Hypertrophic Cardiomyopathy (REDWOOD-HCM Cohort 4)". ESC HF 2023.

### **Seattle Angina Questionnaire Angina Frequency (SAQ-AF)**

Reduction in frequency of angina from daily or weekly, to weekly or monthly



Data presented as mean and standard deviation



### FOREST-HCM: Baseline Characteristics

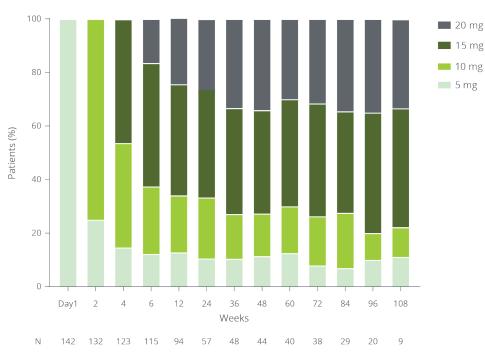


### **FOREST-HCM data cut as of September 15, 2023**

### Baseline characteristics indicate substantial disease burden; ~2/3 patients achieving 15 or 20 mg

Age (Years), Mean (SD)       60.4 (1)         Female, n (%)       65 (45)         BMI (kg/m2), Mean (SD) [Range]       29.2 (4)         NYHA Class, n (%)       82 (5)         Class II       82 (5)         Class III       60 (4)         Familial HCM, n (%)       40 (28)	3 2)
BMI (kg/m2), Mean (SD) [Range]       29.2 (4)         NYHA Class, n (%)       82 (5)         Class II       60 (4)	5.2)
NYHA Class, n (%)  Class II  Class III  60 (4)	5.5)
Class II 82 (5 Class III 60 (4	4.5)
Class III 60 (4	
	(8)
Familial HCM, n (%) 40 (28	-2)
	3.0)
Beta Blocker Use, n (%) 90 (62	2.9)
Calcium Channel Blocker Use, n (%) 14 (9)	.8)
Disopyramide Use, n (%) 27 (18	3.9)
LVEF* at Screening (%), Mean (SD) 69 (5	5)
LVOT-G*, Rest at Screening (mmHg), Mean (SD) 56.8 (3	3.2)
LVOT-G*, Valsalva at Screening (mmHg), Mean (SD) 93.1 (3	37.9)

#### Dose of *Aficamten*





# Few Dose Reductions During Maintenance

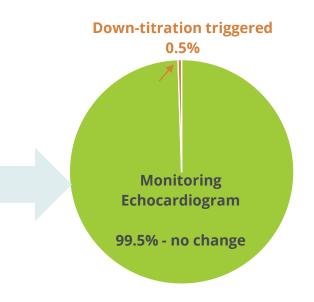


#### **Dose Titration Phase**

- No treatment-related LVEF <50% during the titration period
- Of the 94 patients having completed the titration period, ~2/3 are receiving 15 and 20 mg qd
- Approximately 30% of patients have reduced doses or discontinued background therapy at the discretion of the treating physician and/or request from the patient

#### **Maintenance Phase**

- 579 monitoring echocardiograms completed\* in oHCM patients
- None with LVEF <40% requiring treatment interruption
- 3 patients (0.5%) with LVEF <50%
  - Two asymptomatic patients (LVEF of 47% and 49%) resulting in per-protocol dose reduction
  - One patient with atrial fibrillation (unrelated) and LVEF of 47%
  - All 3 patients are currently receiving *aficamten* with apparent relief from obstruction, symptoms & improved biomarkers



Target dose defined as achieved if Valsalva LVOT-G ≤ 30 mmHg or no dose change for 2 consecutive visits

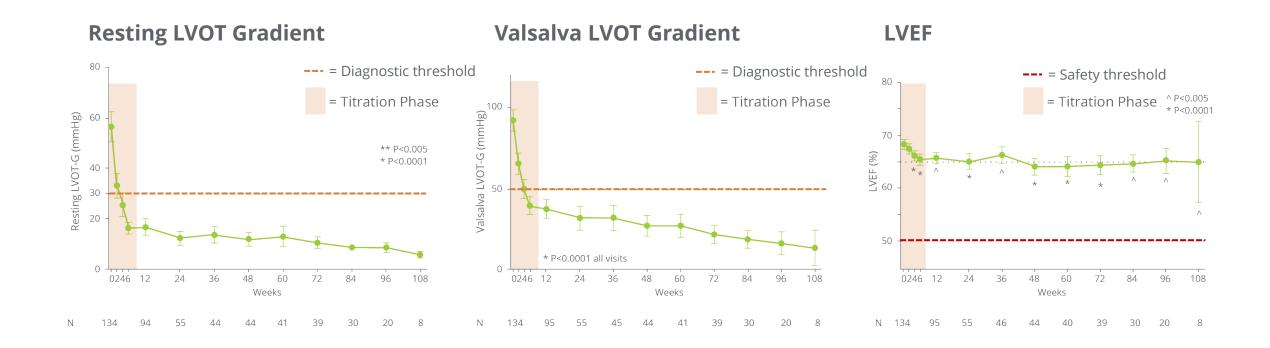


### Observed Durable Effects of Aficamten on LVOT-G & LVEF



FOREST-HCM data cut as of September 15, 2023

Resting & provoked gradients remain below diagnostic threshold for >2 years, LVEF remains flat after titration



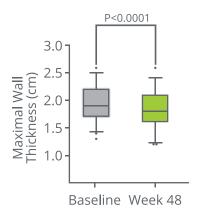


### Observed Durable Effects of Aficamten on Cardiac Structure, Function & NT-proBNP FORES



#### **Maximal Wall Thickness**

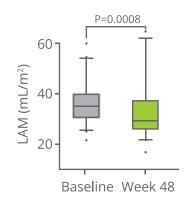
Data cut as of October 31, 2023



Mean and 95% CI in all figures

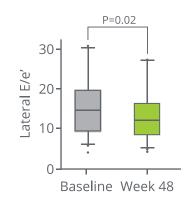
#### **LA Volume Index**

Data cut as of October 31, 2023



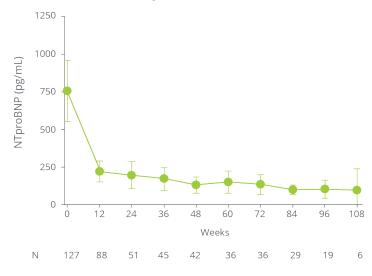
#### Lateral E/e'

Data cut as of October 31, 2023



#### **NT-proBNP**

Data cut as of September 15, 2023





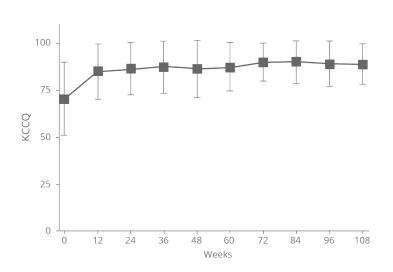
### Observed Durable Effects of Aficamten on Clinical Endpoints



#### **KCCQ-CSS**

#### Data cut as of September 15, 2023

71% of patients had ≥ 5-point KCCQ-CSS increase 30% of patients had ≥ 10-point KCCQ-CSS increase

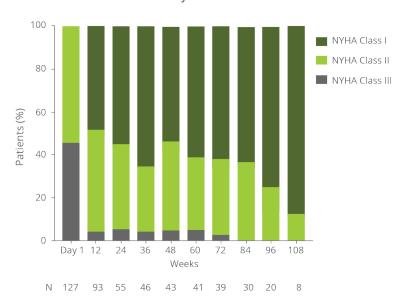


#### **NYHA Class**

#### Data cut as of September 15, 2023

~50% of patients were asymptomatic at 1 year

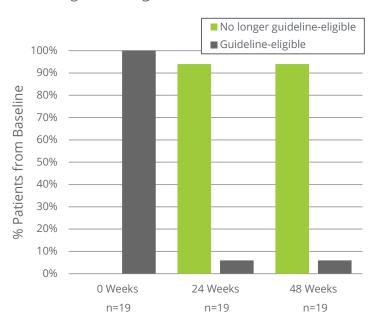
>80% of patients improved ≥1 NYHA Class at every visit after initiation of *aficamten* 



#### **Guideline-Eligible for SRT**

Data cut as of October 31, 2023

94% of SRT-eligible patients at baseline are no longer SRT-eligible





# Safety Data: Phase 2 & OLE



#### oHCM → Cohorts 1, 2, & 3: After 10-weeks of treatment

- 2 SAEs reported in 41 *aficamten*-treated → none were related to *aficamten* treatment
- No treatment interruptions or discontinuations
- Transient and asymptomatic decrease in LVEF < 50% occurred in 2 of 41 aficamten-treated patients

#### nHCM → Cohort 4: After 10-weeks of treatment

- Well tolerated 85% achieved maximal dose (15 mg)
- Transient and asymptomatic decrease in LVEF < 50% occurred in 3 of 41 aficamten-treated patients
- One death unrelated to aficamten treatment sudden cardiac death (SCD) in patient with history of aborted SCD x 2 prior to participation. Two days before event, LVEF was normal, NT-proBNP was lower and plasma concentration of aficamten was within the expected range



- Almost all eligible patients choose to participate in the OLE
- Echocardiography-guided dose titration of aficamten is managed entirely by the treating physicians
- 2/3 of patients achieve higher doses; no low LVEF events requiring treatment interruption
- 94 patients have completed the titration period none have experienced LVEF <50%</li>
- 99.5% of monitoring echocardiograms have not led to a dose reduction
- Clinical, hemodynamic & biochemical markers of efficacy continue to indicate sustained efficacy following exposures for > 2-years
- Of the patients that are guideline-eligible for septal reduction therapies at baseline, **~90% are no longer eligible** after dose titration
- Aficamten has been **generally well-tolerated**, with 60% of patients experiencing at least one treatment emergent adverse event (TEAE) but there were no treatment-related serious adverse events (SAEs) as assessed by investigators, and no patient deaths



## SEQUOIA-HCM: Phase 3 Trial



### Announced positive topline results in December 2023; presented primary results at Heart Failure 2024

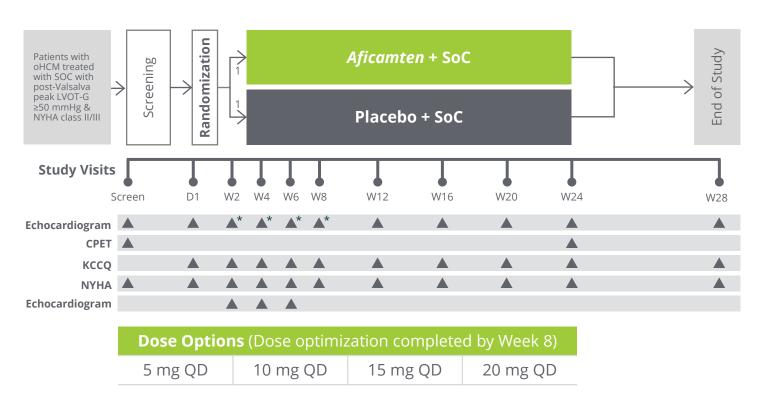
Primary endpoint: Change in pVO<sub>2</sub> by CPET from baseline to Week 24

Secondary objectives include measuring change in KCCQ & improvement in NYHA class at week 12 and 24

Enrolled 282 patients treated with standard of care with:

- resting LVOT-G ≥30 mmHg,
- post-Valsalva LVOT-G ≥50 mmHg,
- NYHA Class II or III,
- exercise performance <80% predicted

Individualized dose up-titration based on echocardiography: LVEF ≥55%, post-Valsalva LVOT-G ≥30 mmHg



SOC: standard of care \*Focused echocardiogram



# SEQUOIA-HCM: Efficacy & Safety Summary



### **Efficacy**

- Primary endpoint and all 10 pre-specified secondary endpoints were clinically meaningful and statistically significant (<u>all p-values < 0.0001</u>)
- Treatment with aficamten increased pVO<sub>2</sub> by a least square mean difference of 1.74 mL/kg/min (p=0.000002)
  - No evidence of subgroup heterogeneity
  - No attenuation of effect in patients treated with beta-blockers
- Aficamten improved heart failure symptoms based on improvement in both KCCQ-CSS and NYHA functional class

### Safety

- Aficamten was safe and well-tolerated with an overall incidence of adverse events similar to that of placebo
  - Serious AEs were more frequent with placebo
- There was a **low incidence** of core laboratory reported LVEF <50% with *aficamten* (n=5); **none of these patients experienced coincident heart failure AEs**
- There were **no treatment interruptions for low LVEF**



# SEQUOIA-HCM: Probability Values (p-value)



Endpoints	p-value			
Primary Endpoint				
pVO <sub>2</sub> change from baseline to Week 24	<0.0001			
Secondary Endpoints				
KCCQ-CSS change from baseline to Week 24	<0.0001			
NYHA Class Improvement by at least 1 class at Week 24	<0.0001			
Valsalva LVOT-G change from baseline to Week 24	<0.0001			
% Valsalva LVOT-G < 30 mmHg at Week 24	<0.0001			
Duration of SRT Eligible during 24 Weeks of Treatment	<0.0001			
KCCQ-CSS change from baseline to Week 12	<0.0001			
NYHA Class Improvement by at least 1 class at Week 12	<0.0001			
Valsalva LVOT-G change from baseline to Week 12	<0.0001			
% Valsalva LVOT-G < 30 mmHg at Week 12	<0.0001			
Total workload change from baseline to Week 24	<0.0001			



## SEQUOIA-HCM: Baseline Characteristics



### Baseline characteristics reflect highly symptomatic patient population with reduced exercise capacity

- Significant symptom burden despite background therapy
- 61% of patients on **beta-blockers**
- Baseline pVO2 reflects patient population with reduced exercise capacity

Baseline Characteristics (N=282)	n (%) or Mean (SD) <sup>a</sup>
Demographics	
Age, years	59.1 (12.9)
Female	114 (40.4)
Race/ethnicity <sup>b</sup>	
White	222 (78.7)
Black	3 (1.1)
Asian	53 (18.8)
Hispanic	9 (3.2)
Other	4 (1.4)
Region	
United States	94 (33.3)
China	46 (16.3)
Europe and Israel	142 (50.4)
Vital Signs	
Weight, kg	81.6 (15.7)
Body mass index, kg/m <sup>2</sup>	28.1 (3.7)
Systolic blood pressure, mmHg	125.3 (16.1)
Diastolic blood pressure, mmHg	74.4 (10.6)
Heart rate, bpm	65.6 (11.2)
HCM History	
History of known HCM-causing	48 (17.0)
gene mutation	
Positive family history of HCM	71 (25.2)
Time since initial HCM diagnosis,	4.3 (1.7 – 8.5)
median (IQR), years	
and the second s	

Development (all and all all and all and all all all and all all all all all all all all all al	(0/) (5D)
Baseline Characteristics (N=282)	n (%) or Mean (SD) <sup>a</sup>
HCM Medical Therapies	
Beta-blocker	172 (61.0)
Non-dihydropyridine calcium	75 (26.6)
channel blocker	
Disopyramide	36 (12.8)
HCM Symptoms	
KCCQ-CSS	74.7 (18.0)
NYHA class II/III/IV	214 (75.9)
	67 (23.8)
	1 (0.4)
SRT guideline eligible	68 (24.1)
Comorbidities	
Hypertension <sup>d</sup>	136 (48.2)
Diabetes <sup>e</sup>	24 (8.5)
Permanent atrial fibrillation	1 (0.4)
Paroxysmal atrial fibrillation	40 (14.2)
CPET Metrics	
Treadmill	155 (55.0)
Peak VO <sub>2</sub> , mL/kg/min	18.5 (4.5)
Peak VO <sub>2</sub> , % of predicted	56.9 (11.8)
maximum <sup>f</sup>	
Total workload, watts	122.4 (41.2)
Biomarker	
hs-cTnl median (IQR), ng/L	12.1 (7.7 – 27.3)

a Unless otherwise indicated.



b >100% total due to overlap in ethnicity and race. c NYHA FC III and any LVOTO ≥50 mmHg

d Combines hypertension and essential hypertension.

e Combines T2DM, T1DM, and DM

CCB, calcium channel blocker; DM, diabetes mellitus, including types 1 and 2; IQR, interquartile range

# Preparing for Regulatory Submissions to FDA, EMA



Positive Results from SEQUOIA-HCM

2024

- Participated in two meetings with FDA in Q1 2024
- Type B meeting with FDA to occur in Q2 2024
- Meetings with EMA in Q2 2024
- Expect to submit NDA to FDA in Q3 2024 and MAA to EMA in Q4 2024: development of all modules underway and manufacturing activities on track



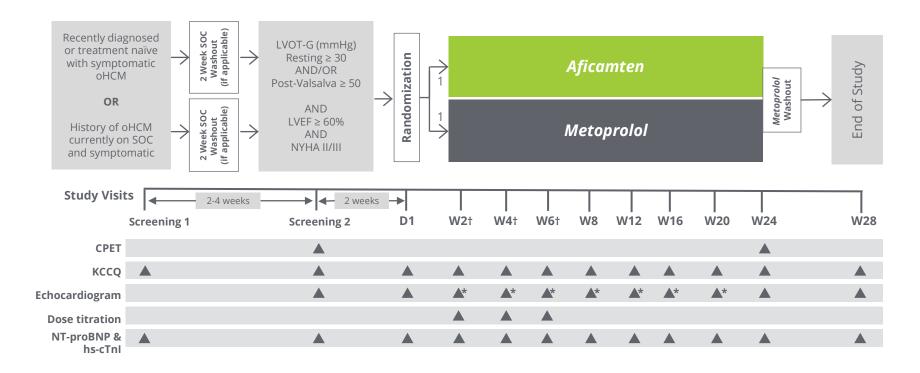
## MAPLE-HCM: Phase 3 Monotherapy Trial



### **Currently enrolling**

### Active-comparator trial of aficamten as monotherapy vs. metoprolol in patients with oHCM

- Trial to enroll approximately170 patients
- Primary endpoint: change in peak VO2, assessed by CPET from baseline to Week 24
- Secondary endpoints: change in NYHA class, KCCQ, NT-proBNP, and measures of structural remodeling





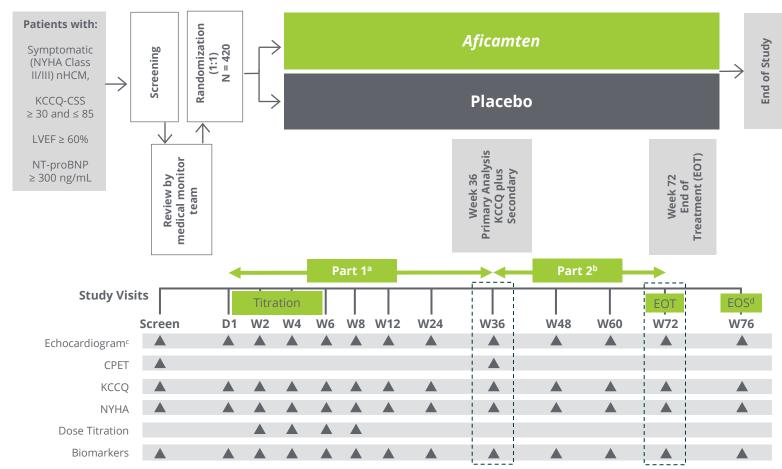


### ACACIA-HCM: Pivotal Phase 3 Trial in nHCM



### **Currently enrolling**

- Trial to enroll approximately
   420 symptomatic nHCM
   patients
- Primary endpoint: change in KCCQ Clinical Summary Score from baseline to Week 36
- **5-20 mg doses**; 6-week titration period
- Secondary endpoints:
  - Change in pVO2, Ve/VCO2,
  - Left atrial volume index (LAVI)
  - NT-proBNP
  - Proportion of patients with ≥1 class improvement in NYHA from baseline to Week 36
  - Time to first cardiovascular event



Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



<sup>&</sup>lt;sup>a</sup> Part 1: All participants followed until week 36

b Part 2: Participants completing Week 36 continue until either Week 72 (followed by EOS at Week 76) OR the last randomized participant in Part 1 completes Week 36.

c Site-read focused echocardiogram for titration visit (sole criterion). *Aficamten* dose range 5-20 mg.

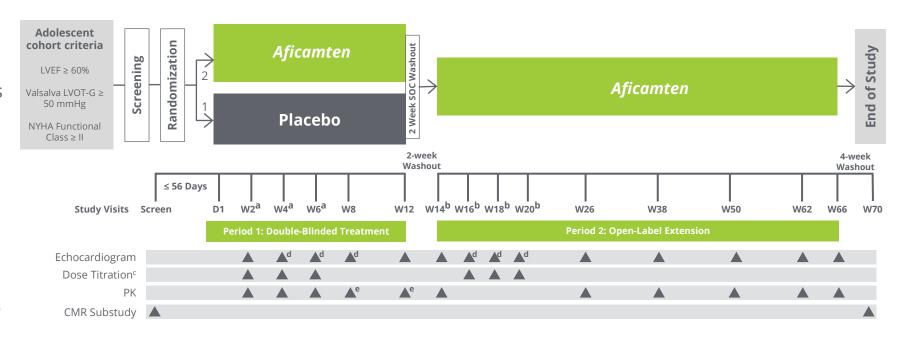
d 4-week follow up after last dose

# CEDAR-HCM: Clinical Trial in Pediatric Population



#### **Currently enrolling**

- Expected to enroll initial cohort of ~40 adolescent patients aged 12 to 17
- Data from adolescent patients will support decision to enroll cohort of ~8 to 10 patients aged 6 to 11
- **5-20 mg doses**; 6-week titration period
- Primary endpoint: change in LVOT-G from baseline to Week 12
- Secondary endpoints: change in resting LVOT-G, NYHA Functional Class, pharmacokinetics & cardiac biomarkers



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<sup>•</sup> Up-titration to the next dose in Period 1 will be managed by the IRT system and will only occur if Valsalva LVOT-G is ≥ 30 mmHg and biplane LVEF is ≥ 55%

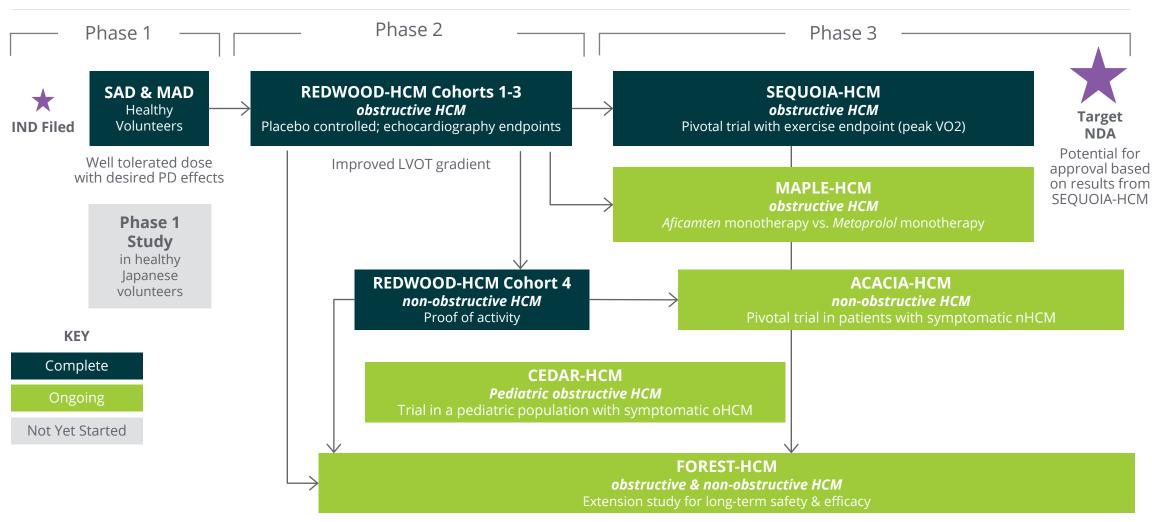
b In Period 2, participants will start dosing with aficamten at the lowest dose (5 mg) and up-titration to the next dose (10, 15, or 20 mg) will be managed by the Principal Investigator or designee if Valsalva LVOT-G is ≥ 30 mmHg and biplane LVEF is ≥ 55%. Up-titrations may occur no more frequently than every 2 weeks

c Additional ad hoc titrations after Week 20 may occur at ad hoc titration visits (at least 2 weeks apart) or during a planned visit (ie, Weeks 26, 38, 50, or 62). A titration follow-up visit is required 2 weeks after any titration occurring after Week 20

d Focused echocardiogram (LVOT-G and LVEF only)

e Intensive PK substudy may occur at Week 8 or Week 12

# Aficamten: Clinical Development Plan for HCM



Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



# Aficamten: Planned Commercial Approach

Driven by a relentless focus on our North Star: the HCM patient

#### Learn

Leverage **deep understanding** of
patients, HCPs, payers,
and community

#### Design

Engage with all stakeholders to design an optimal customer experience

#### Build

Tap into deep functional experience to build operational excellence across launch functions

**Our Focus in 2023** 

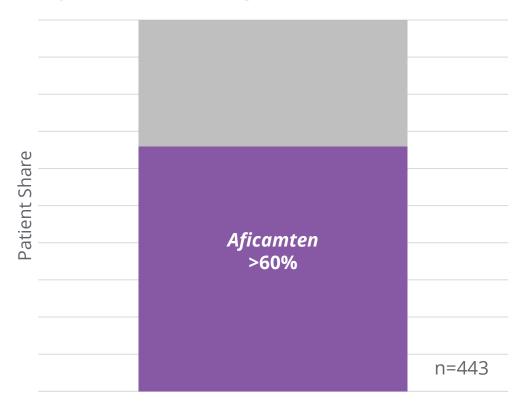
**Our 2024 Focus** 

Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



### Market Research Shows Aficamten May Achieve High Share & Grow Category

# **oHCM CMI Preference Shares in Eligible Patient Population\***



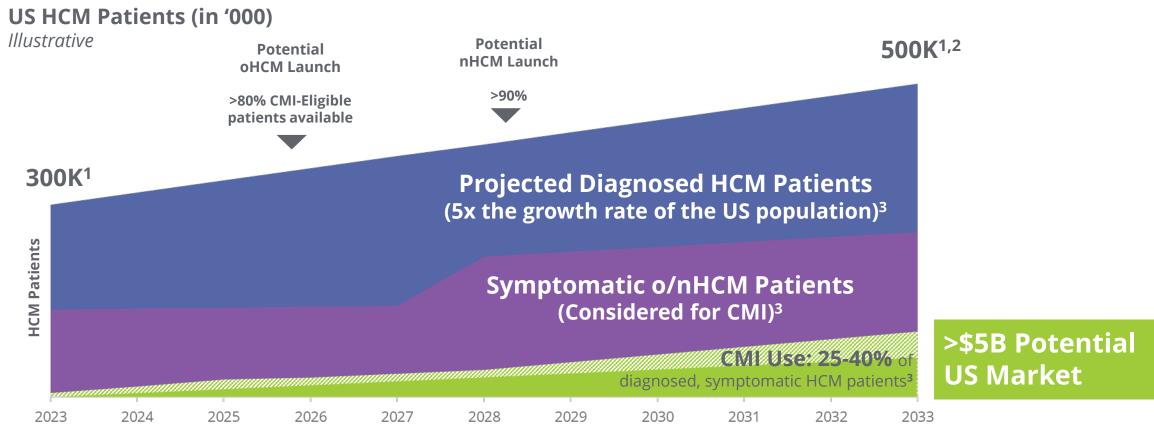
- Potential target product profile for aficamten interest creates share opportunity in newly treated CMI patients
- Aficamten is also expected to expand the total CMI market
- Key attributes that may drive preference include the potential for:
  - LVOT gradient reduction
  - Change in NYHA Functional Class
  - Pharmacodynamics/LVEF maintenance
  - Change in KCCQ
  - Absence of DDI

\*Source: Aficamten Impact of Product Attributes on Product Preference Share n=443 cardiologists, Quantitative research including conjoint - Cogent Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



#### If Aficamten is Approved, Expect Majority of CMI-Eligible Patients Available at Launch

#### Diagnosis of HCM anticipated to grow 5x the rate of the general population



<sup>1.</sup> DoF: SHA; Symphony PTD (Patient Transaction Data): Includes patients diagnosed since 2016 and having any HC transaction in the claims data universe in the last year June 2022-May 2023);

Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established. Projections and forecasts for illustration

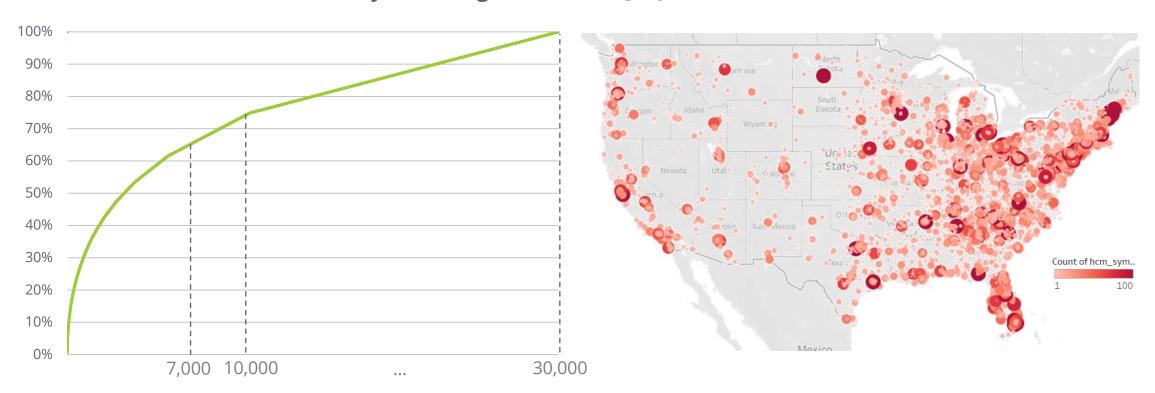


<sup>2.</sup> Butzner et al 2021 estimated a 8% growth rate in diagnosed HCM patients between 2013-2019 <a href="https://www.ajconline.org/article/S0002-9149(21)00783-9/fulltext">https://www.ajconline.org/article/S0002-9149(21)00783-9/fulltext</a>; CYTK is forecasting an average growth rate of 5% over the coming decade;

<sup>3.</sup> Internal forecasts

# Cardiologists Located in Concentrated Geographic Clusters Across the US 75% of the HCM patient volume is treated by 10,000 cardiologists

#### HCM Patient Concentration by Cardiologist Geographic Distribution of HCM Patients



Note: includes only patients who are treated by a cardiologist - not all patients see a cardiologist; sample of 67K HCM patients

Source: Symphony PTD (Patient Transaction Data); mapping of HCPs to HCOs using Definitive Healthcare Data 2023 and 7/2023 mapping; Patient volume by dominant Cardiologist Location 7/2023

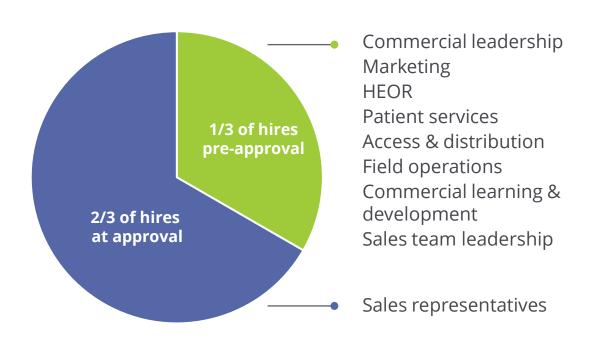
Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



# Gated Build of Commercial Infrastructure

#### Majority of spending to occur closer to approval in 2025

#### 2/3 of hiring to occur at-approval







Continued insight generation
Market access strategy validation
Pricing strategy finalization
Distribution approach
Payer engagement
Brand strategy evolution

Customer account identification Launch campaign development

Customer Experience

Payer Pre-approval Information Exchange

Sales force planning

Data & Technology Infrastructure build

Omnichannel execution

Market development rollout



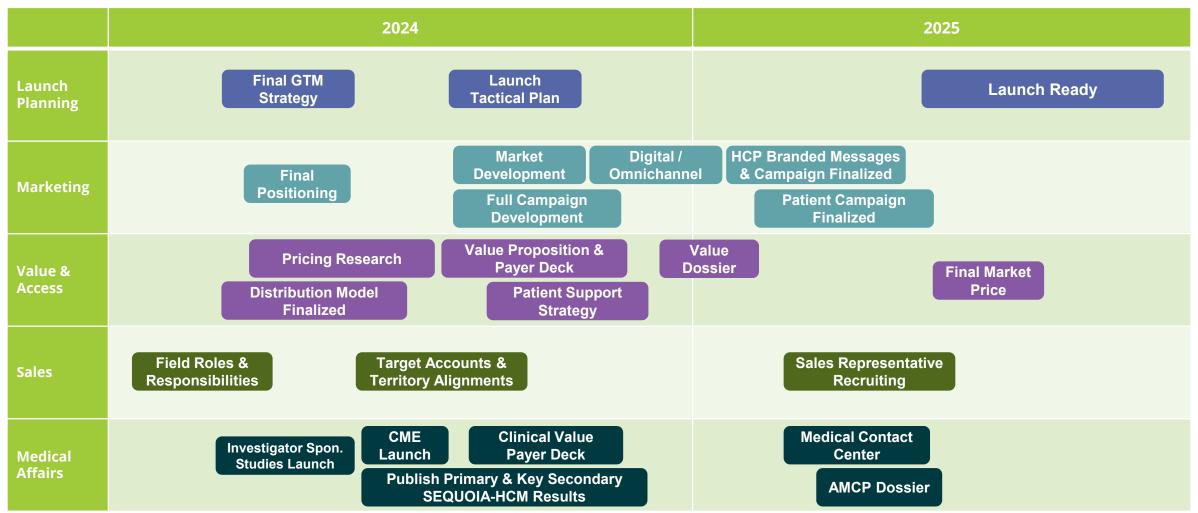
#### **Initiated upon FDA approval**

Media purchases
Patient support programs
Peer to peer engagement
HCP Omnichannel launched

Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



# US Commercial Readiness Milestones for *Aficamten*



Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



# Omecamtiv Mecarbil



## Omecamtiv Mecarbil: Current Status

#### **Received CRL from FDA**

GALACTIC-HF not sufficiently persuasive to establish substantial evidence of effectiveness for reducing the risk of heart failure events and cardiovascular death in adults with chronic HFrEF

#### Withdrew MAA from EMA

Withdrew the MAA from the EMA based on feedback from the CHMP indicating that the Committee will not be able to conclude that the benefits outweigh the risks on the basis of the results from GALACTIC-HF alone

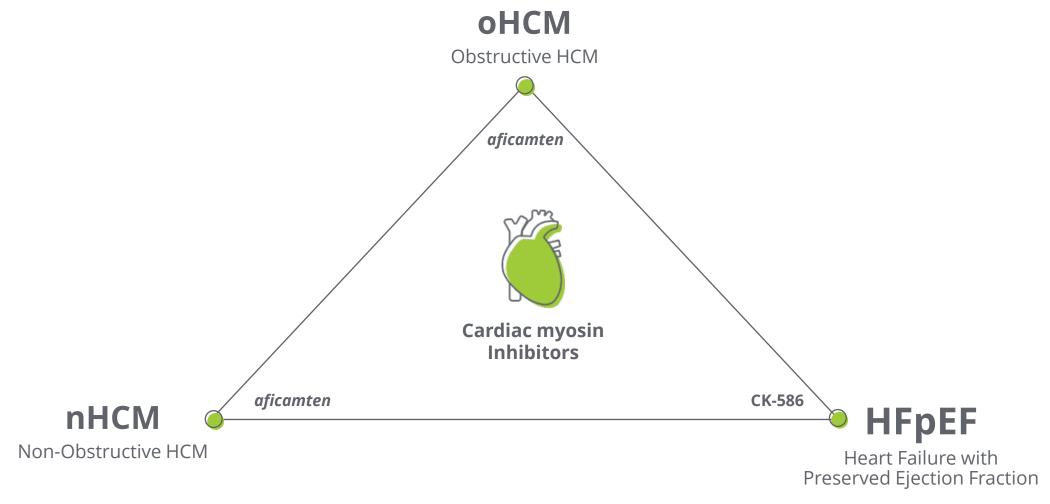
Omecamtiv mecarbil is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



# **CK-586**



# Novel Approach May Address Multiple Unmet Patient Needs





# Heart Failure with Preserved Ejection Fraction (HFpEF)

Despite broad use of standard treatments and advances in care, the prognosis for patients with heart failure is poor<sup>1</sup>



Americans will have heart failure by 2030<sup>2</sup>



HF patients have HFpEF<sup>3</sup> & prevalence of HFpEF is increasing<sup>2,4</sup>



HFpEF patients will die within five years of initial hospitalization<sup>2</sup>



HFpEF patients will be rehospitalized<sup>2</sup>

<sup>4.</sup> Yancy CW, Jessup M, Bozkurt B, et al. 2013 ACCF/AHA Guideline for the Management of Heart failure: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. Circulation. 2013;128:e240-e327.



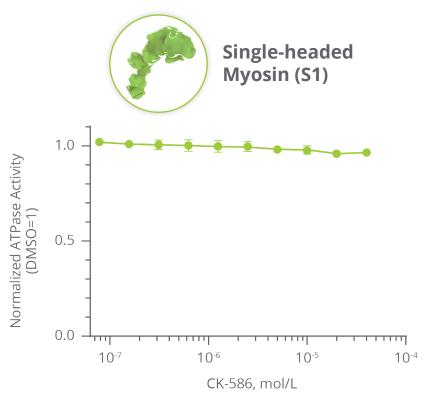
<sup>1.</sup> Jhund PS, MacIntyre K, Simpson CR, et al. Long-Term Trends in First Hospitalization for Heart Failure and Subsequent Survival Between 1986 and 2003. Circulation. 2009;119:515-523.

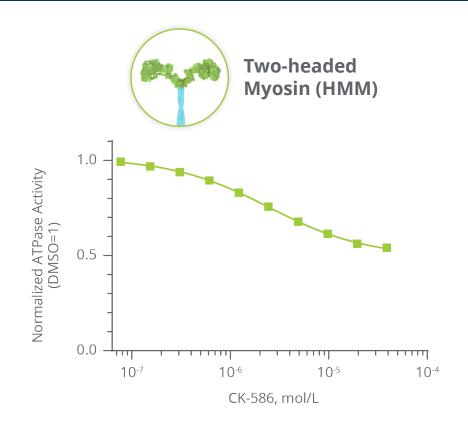
<sup>2.</sup> Bozkurt B, Ahmad T, Alexander KM, Baker WL, Bosak K, Breathett K, Fonarow GC, Heidenreich P, Ho JE, Hsich E, İbrahim NE, Jones LM, Khan SS, Khazanie P, Koelling T, Krumholz HM, Khush KK, Lee C, Morris AA, Page RL 2nd, Pandey A, Piano MR, Stehlik J, Stevenson LW, Teerlink JR, Vaduganathan M, Ziaeian B; Writing Committee Members. Heart Failure Epidemiology and Outcomes Statistics: A Report of the Heart Failure Society of America. J Card Fail. 2023 Oct;29(10):1412-1451. doi: 10.1016/j.cardfail.2023.07.006. Epub 2023 Sep 26. PMID: 37797885; PMCID: PMC10864030.

<sup>3.</sup> Dunlay SM, Roger VL, Weston SA, Jiang R, Redfield MM. Longitudinal changes in ejection fraction in heart failure patients with preserved and reduced ejection fraction. Circ Heart Fail. 2012 Nov;5(6):720-6. doi: 10.1161/CIRCHEARTFAILURE.111.966366. Epub 2012 Aug 30. PMID: 22936826: PMCID: PMC3661289.

# CK-586: Distinct Mechanism of Action from *Aficamten*

#### CK-586 inhibits actin-activated ATPase of HMM only; aficamten inhibits both S1 and HMM





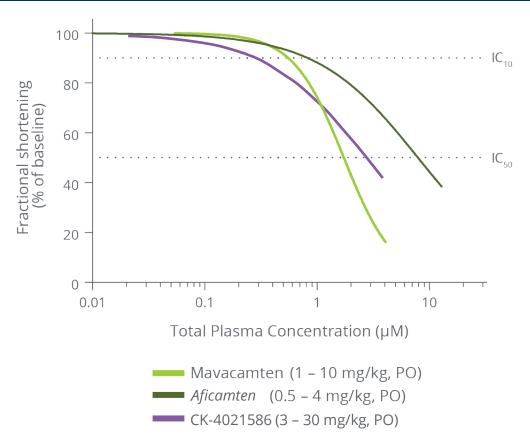
Based on preclinical testing

CK-586 is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



# CK-586: Shallow *In Vivo* Concentration-Response

#### CK-586 is predicted to have a shorter half-life in humans than *aficamten*



Pharmacodynamic window Fractional shortening IC <sub>50</sub> /IC <sub>10</sub> ratio			
mavacamten	2.8x		
aficamten	9.9x		
CK-586	9.3x		

 $IC_{10}$ : plasma concentration at 10% relative reduction in fractional shortening  $IC_{50}$ : plasma concentration at 50% relative reduction in fractional shortening

Compound half-life in humans	Actual	Predicted
aficamten	~3 days	2.8 days
CK-586	TBD	15 hours

CK-586 is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.

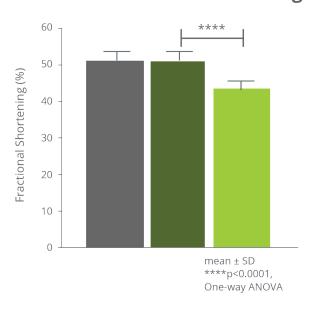


# CK-586 is Efficacious in ZSF1 Obese Rat Model of HFpEF

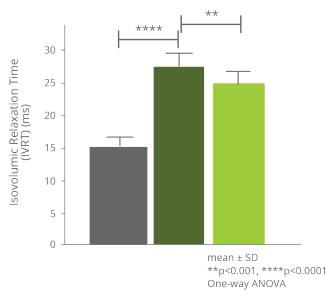
Model is representative of hypertensive, diabetic, metabolic aspects of HFpEF

#### 10 weeks of treatment improved diastolic function and reduced cardiac fibrosis

#### **Reduced Fractional Shortening**



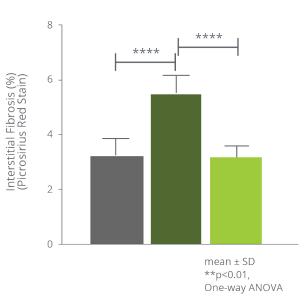
#### **Improved Diastolic Function**



ZSF1 Obese + Vehicle

#### **Reduced Fibrosis**

ZSF1 Obese + CK-586 (10 mg/kg, PO QD)



CK-586 is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.

ZSF1 Lean + Vehicle



# Phase 1 Data Support Advancement to Phase 2 Clinical Trial

Full data to be presented at a medical congress in 2H 2024

#### **Phase 1 Design**

- **7 SAD cohorts** (10 mg to 600 mg) comprised of 10 participants each
- 2 MAD cohorts (100 and 200 mg once daily) comprised of 10 participants each

#### **Key Findings**

- Pharmacodynamics were evaluated using echocardiography and consistent with expectations
- CK-586 was safe and well-tolerated with linear PK
- No series adverse events were observed
- Stopping criteria were not met in the study

CK-586 is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



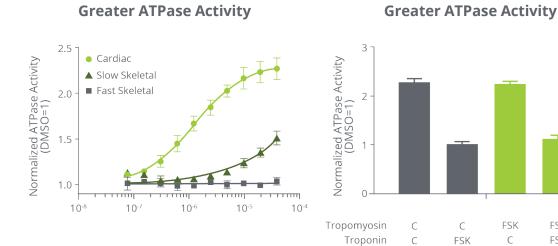
# **CK-136**

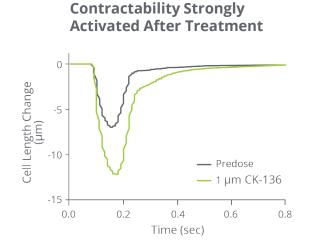


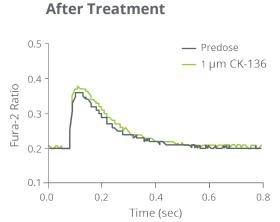
## CK-136: Mechanism of Action

#### **Key biochemical and cellular features**

#### The first selective cardiac troponin activator







**Calcium Transients Unchanged** 

<sup>1</sup>PD Window = Maximum Tolerated Concentration (MTC) / 10% increase in Fractional Shortening (FS)

CK-136 is an investigational agent and has not been approved for use by any regulatory agency. Its safety and efficacy have not been established.

FSK

FSK

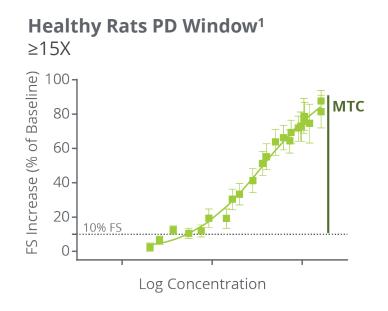


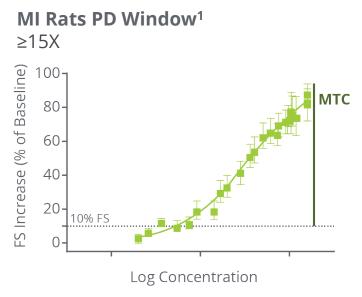
# CK-136: Exposure Response Relationship

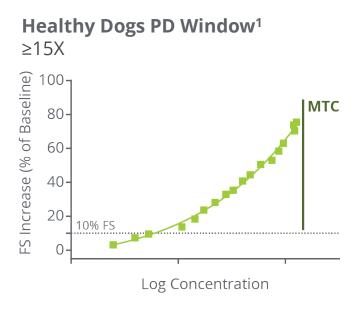
## Exposure-response of troponin activator is shallower than myosin activator

#### Completed Phase 1 study and have begun analyzing data

#### **Animal Models of Cardiac Function**







CK-136 is an investigational agent and has not been approved for use by any regulatory agency. Its safety and efficacy have not been established.



<sup>&</sup>lt;sup>1</sup>PD Window = Maximum Tolerated Concentration (MTC) / 10% increase in Fractional Shortening (FS)

# **Corporate Profile**



# Robust Pipeline, Solid Financial Position

**Pipeline** 

**Potential commercial** launch in 2025

**Clinical stage** programs

**Ongoing muscle biology** directed research

**Programs** 

#### **HCM**

#### **Aficamten**

- o **SEQUOIA-HCM:** Positive Phase 3 results
- o **MAPLE-HCM:** Phase 3 monotherapy trial in oHCM ongoing
- o **ACACIA-HCM:** Phase 3 trial in nHCM ongoing
- o **CEDAR-HCM:** Trial in pediatric population
- o FOREST-HCM: OLE ongoing

#### **Heart Failure**

#### Omecamtiv mecarbil

 Considering potential next steps

#### CK-586

o Phase 1 results support advancement to Phase 2

#### **CK-136**

 Analyzing data from Phase 1 studv

## **Ongoing** R&D

energetics & metabolism

Additional research in muscle biology,

**Foundations** 



~\$634M

At Q1 2024

# Approximately 2 years

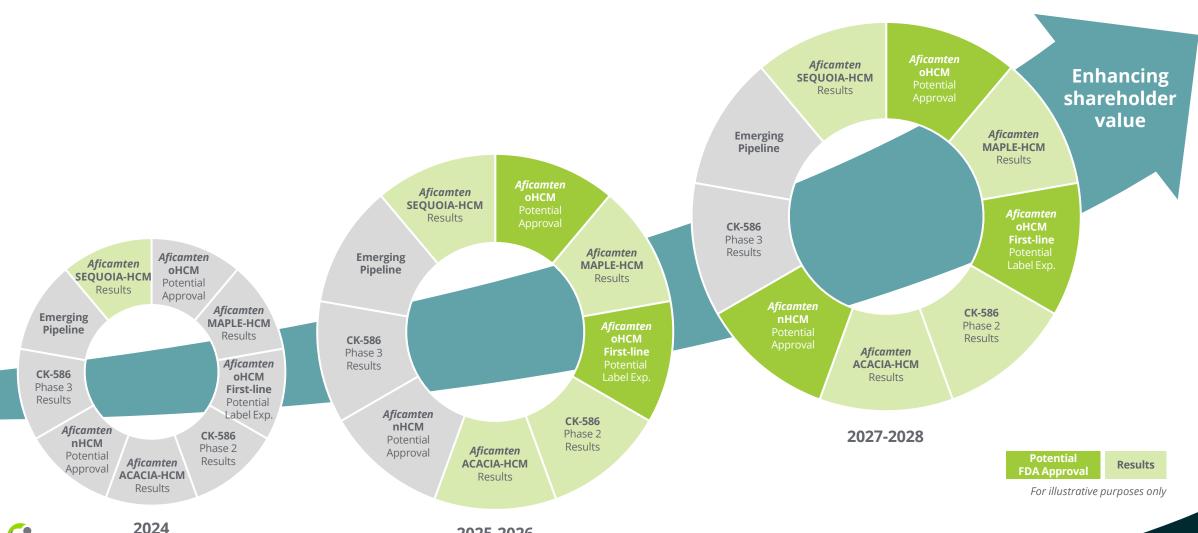
of cash runway based on 2024 Financial Guidance\*

\*Including capital we expect to be available to us under our deal with Royalty Pharma, upon satisfaction of conditions



# Expected Value Unlocked with Future Catalysts

Myosin platform drives value and growth with multiple data milestones and expected approvals



2025-2026

# Cytokinetics: Uniquely Positioned for Success



**Leadership** in muscle biology

Pioneer in CMI space

Multiple drug candidates arising from our research

Core research engine



**Depth** in cardiology

Late-stage HCM program
HFrEF opportunity in Europe

Bridge to HFpEF

Expand to advanced HF



**Relationships** with stakeholders

Seasoned commercial team

Strong existing payer relationships

Strong relationships with cardiologists and institutions



**Access** to capital

Strong cash runway based on 2024 financial guidance

Access to capital through Royalty Pharma transaction, subject to satisfaction of certain conditions

CMI: cardiac myosin inhibitor



## Balance Sheet & Financial Guidance

#### Approximately 2 years of cash runway based on 2024 guidance\*

#### 2024 Condonsed Palance Shoot

2024 Condensed Balance Sheet	
As of 3/31/2024	in millions
	Total
Cash and investments	\$634.3
Accounts receivable	\$0.8
PPE	\$68.0
Leased assets	\$78.2
Other assets	\$26.8
Total Assets	\$808.1
Convertible Debt, net	\$549.8
Liability related to sale of future royalties	\$390.2
Lease liability	\$136.8
Other liabilities	\$127.4
Total Liabilities	\$1,204.2
Working capital	\$549.8
Accumulated deficit	(\$2,247.9)
Stockholders' deficit	(\$396.2)
Wtd Avg Basic Shares Outstanding (million)	101.9

#### 2024 Financial Guidance

		ns

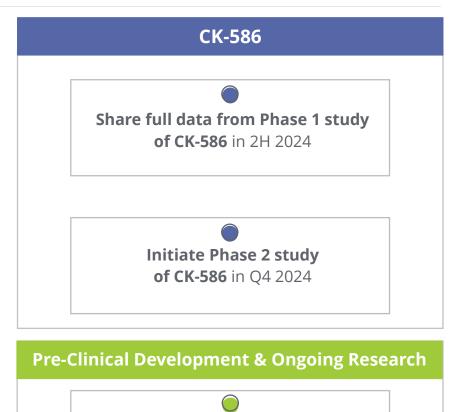
Cash Revenue Operating Expenses	\$3-5 \$420-450
Net	~ \$390-420

<sup>\*</sup>Including capital we expect to be available to us under our deal with Royalty Pharma, upon satisfaction of conditions



# Expected 2024 Milestones

## Aficamten **Present primary results from** Continue enrollment of ACACIA-HCM SEQUOIA-HCM at HFA in Q2 2024 in 2024 Continue enrollment of CEDAR-HCM Submit NDA to FDA in Q3 2024 and in 2024 **MAA to EMA** in Q4 2024 Begin Phase 1 study of *aficamten* in Complete enrollment in MAPLE-HCM healthy Japanese volunteers in O3 2024 in Q2 2024



Initiate clinical development with

another muscle-directed

compound in 2024

Aficamten and CK-586 are investigational drugs and have not been approved. Their safety and efficacy have not been established.





# thank you

