

# EMPOWERING EMPOWERING IVES

Vi, diagnosed with HCM Avonne, diagnosed with HCM ohn, diagnosed with heart failure

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# **Our Mission**

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



Achieve regulatory approvals for drugs arising from our pipeline

Our vision is to be the

leading muscle biology

biopharma company that meaningfully improves the lives of patients with diseases of impaired muscle function through access to our

pioneering medicines

Build commercial capabilities to market and sell our medicines reflective of their innovation and value

Generate sustainable and growing revenues from product sales

-• Expand our development programs

• Expand our discovery platform to muscle energetics, growth and metabolism

Be the science-driven company people want to join and partner with



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 Commitment to Muscle-Directed Cardiac Medicines

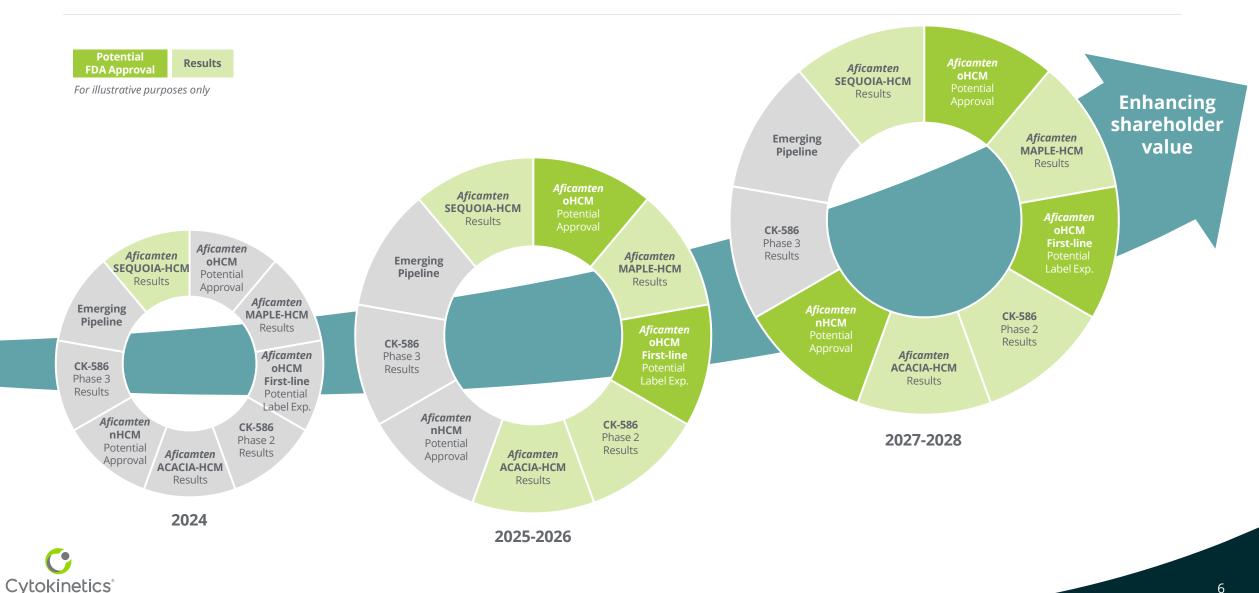
Building a specialty cardiology franchise anchored by *aficamten* 

	Protein Target	Therapeutic Area	Drug Candidate	Research	Pre-Clinical	Phase 1	Phase 2	Phase 3	Approval
My	usin	оНСМ	Aficamten						Expect regulatory submissions in 2H 2024
		oHCM (First-line*)	Aficamten						
	Myosin-Targeted	Pediatric oHCM	Aficamten						
	Therapy	nHCM	Aficamten						
		HFpEF	СК-586						
		HFrEF	Omecamtiv Mecarbil						
	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.



## Myosin Platform Fuels Multiple Milestones and Increased Value



## Strong Financial Position

Strengthened balance sheet & access to capital to execute launch & advance R&D pipeline

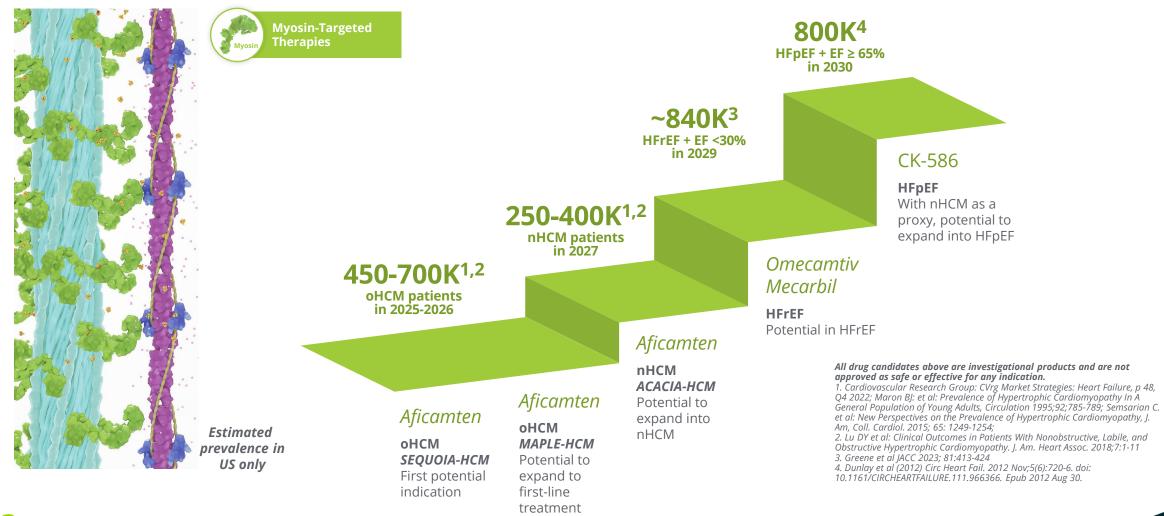
June 30, 2024	<b>~\$1.4B</b> in cash, cash equivalents and investments	
Further access to capital through term loans with RP	Secured access to additional \$175M* in term loan on top of \$175M** already secured with Royalty Pharma (RP); total available term loans <b>\$350M</b>	Add'l \$500M
Potential further funding through RP opt-in	RP, at its option, can invest up to <b>\$150M</b> in a Phase 3 trial of CK-586	

\*Tranche 7 Loan: Cytokinetics, at its option, is eligible to draw up to \$175m during the 1-year period following the FDA approval of aficamten for oHCM provided that the NDA is accepted on or prior to December 31, 2025. \*\*Tranche 4 & 5 Loans: Cytokinetics is eligible to draw up to \$75m by April 30, 2025 from tranche 4. The minimum draw for tranche 4 is \$50m. Cytokinetics, at its option, is eligible to draw up to \$100m during the 1-year period following the acceptance of the NDA filing for aficamten provided that the NDA filing is accepted on or prior to March 31, 2025.



## Building a Specialty Cardiology Franchise Anchored by Aficamten

Potential patient market for specialty cardiology franchise strategy



Cytokinetics<sup>®</sup>

## Cytokinetics Poised to Compete in the Specialty Cardiology Business

### Potential for high return on investment

	Broad Cardiology	Specialty Cardiology
<b>Example Therapies</b>	Heart failure, cholesterol, blood thinner	HCM, TTR amyloidosis
Prescribers	Broad: Cardiologists, PCPs (50K+)	Concentrated: Subset of cardiologists (~10K)
ROI / Prescriber	Limited	High
Distribution	Retail	Limited, specialty distributor
<b>Customer-Facing Reps</b>	Entry level	Highly experienced
Support Services	Standard: Affordability / copay	High-touch: Financial, education, journey
Managed Care	Competitive/high rebates	Managed to label
Diagnosis	High awareness and diagnosis rate	Limited awareness with high % undiagnosed
HCP – Rep Interactions	Brief features/benefits	Comprehensive broad-based discussion

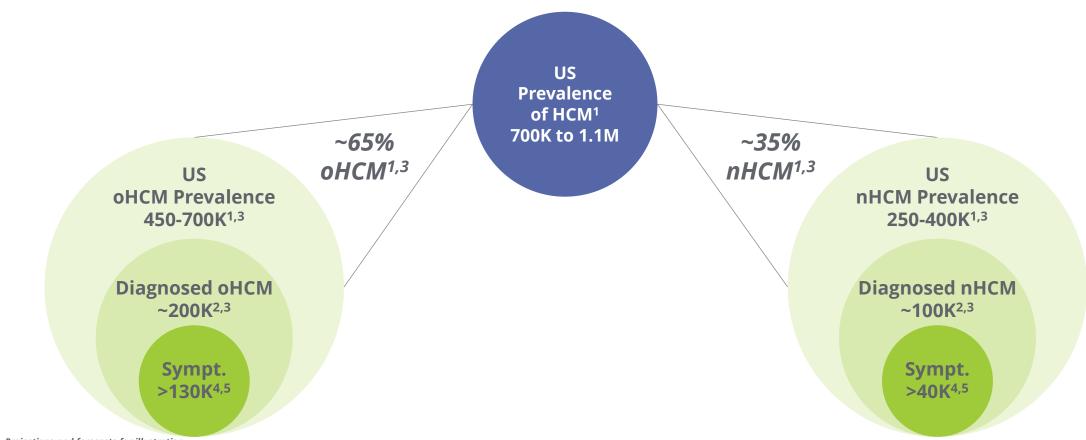


## Aficamten



Aficamten is an investigational agent and has not been approved for use by the U.S. Food & Drug Administration (FDA) or any regulatory agency. The safety and effectiveness of this product has not been established.

## Opportunity for CMIs in Diagnosed, Symptomatic HCM Patients



#### 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: angle and years: angle angle and years: angle angle and years: angle angle angle and years: angle ang



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



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



## SEQUOIA-HCM: Phase 3 Trial



#### 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  $\geq$  55%, post-Valsalva LVOT-G ≥30 mmHg

Patients with oHCM treated with SOC with post-Valsalva peak LVOT-G ≥50 mmHg & NYHA class II/III	Screening	Randomization					<i>Aficamte</i> Placebo	-			End of Study
<b>Study Visits</b>	creen	D1	W2	W4	W6	W8	W12	W16	W20	W24	W28
Echocardiogram CPET			▲*	▲*	▲*	▲*					
KCCQ											
NYHA											
Dose Titration											
	Dose	Opti	ons	(Dos	se o	ptim	ization cor	npleted	l by Week	8)	
	5 mg	g QD		10	mg (	QD	15 mg	QD	20 mg (	QD	

SOC: standard of care \* Focused echocardiogram

## **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 pVO<sub>2</sub> reflects patient population with reduced exercise capacity

	<i>Aficamten</i> n=142	Placebo n=140		<i>Aficamten</i> n=142	Placebo n=140
Age, y	59.2 ± 12.6	59.0 ± 13.4	Background HCM therapy, n (%)		
Female sex, n (%)	56 (39.4)	59 (42.1)	Beta-blocker	86 (60.6)	87 (62.1)
Race, n (%)			Calcium channel blocker	45 (31.7)	36 (25.7)
White	108 (76.1)	115 (82.1)	Disopyramide	16 (11.3)	20 (14.3)
Geographic region, n (%)	, , , , , , , , , , , , , , , , , , ,	, , , , , , , , , , , , , , , , , , ,	None	19 (13.4)	22 (15.7)
		45 (22.4)	KCCQ-CSS	76 ± 18	74 ± 18
North America	49 (34.5)	45 (32.1)	NYHA FC, n (%)		
China	24 (16.9)	22 (15.7)	II	108 (76.1)	106 (75.7)
Europe and Israel	69 (48.6)	73 (52.1)	III/IV	34 (23.9)	34 (24.3)
Medical history, n (%)			Median NT-proBNP (IQR), pg/mL	818 (377–1630)	692 (335–1795)
Hypertension	75 (52.8)	70 (50.0)	Median hs-cTnl (IQR), ng/L	12.9 (7.6–33.6)	11.5 (7.7–25.0)
Paroxysmal atrial fibrillation	21 (14.8)	20 (14.3)	Echocardiographic parameters		
Permanent atrial fibrillation	2 (1.4)	1 (0.7)	Valsalva LVOT-G, mmHg	82.9 ± 32	83.3 ± 33
CPET			Resting LVOT-G, mmHg	54.8 ± 27	55.3 ± 32
pVO <sub>2</sub> (mL/kg/min)	18.5 (4.5)	18.6 (4.5)	LVEF, %	74.8 ± 5.5	74.8 ± 6.3
Percent of predicted pVO <sub>2</sub> (%)	58 (13)	57 (12)	Maximal LV wall thickness, mm	20.7 ± 3.0	21.0 ± 3.0

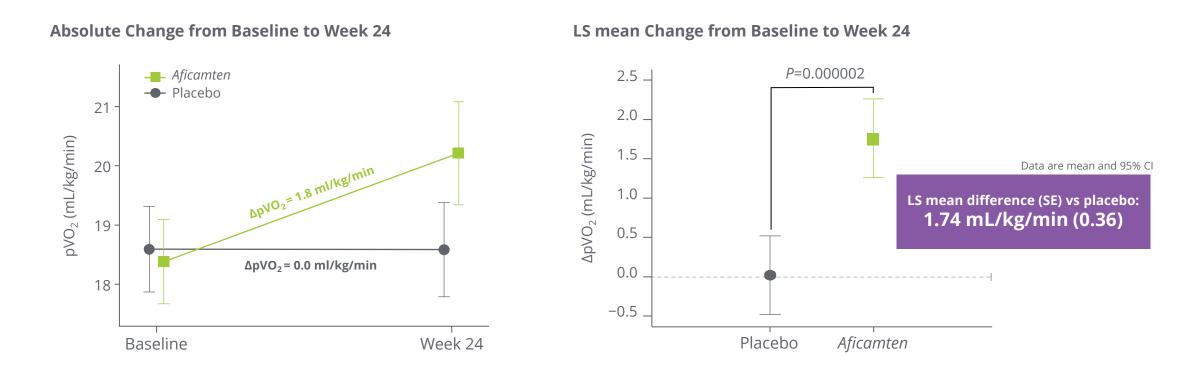
Values are the mean ± SD unless otherwise indicated.



## SEQUOIA-HCM: Primary Endpoint Significant improvement in exercise capacity compared to placebo



#### Results presented at Heart Failure 2024 and published in NEJM







#### Results consistent across all prespecified subgroups including patients receiving or not receiving background beta-blockers

	<b>n</b> (Afi/Plb)	<b>Aficamter</b> LS mean	Placebo LS mean	Me	ean difference (95% Cl)		<b>n</b> (Afi/Plb)	<b>Aficamten</b> LS mean	<b>Placebo</b> LS mean	Me	an difference (95% Cl)
Age						Baseline NT-proBNP (median)					
<65 y	85/84	2.4	0.4	┝╼═╾┥	2.0 (1.1, 2.8)	≤ 788 pg/mL	66/73	2.2	0.6	┝╼═╌┥	1.7 (0.7, 2.7)
≥65 y	57/56	0.9	-0.5	┝╼╾┥	1.4 (0.3, 2.5)	> 788 pg/mL	73/65	1.4	-0.6	┝╼╾┥	2.0 (1.0, 2.9)
Sex						CPET Modality					
Male	86/81	2.5	0.7	┝╼┓┥	1.8 (0.9, 2.7)	Treadmill	78/77	2.5	0.2	┝╼┓┥	2.3 (1.4, 3.2)
Female	56/59	0.6	-0.8	<b>⊢</b> ∎1	1.4 (0.4, 2.5)	Bicycle	64/63	0.9	-0.1	┝──╋──┤	1.0 (-0.0, 2.1)
Baseline BMI						Baseline Median pVO <sub>2</sub>					
<30 kg/m <sup>2</sup>	97/94	1.9	0.1	⊢∎⊣	1.8 (1.0, 2.7)	≤18.4 mL/kg/min	74/67	1.5	-0.1	<b>⊢</b> ∎1	1.6 (0.6, 2.5)
≥30 kg/m²	45/46	1.4	-0.2	⊢-■1	1.6 (0.3, 2.8)	>18.4 mL/kg/min	68/73	2.0	0.1	⊢∎⊣	1.9 (1.0, 2.9)
Baseline Median LVEF					Baseline Beta-Blocker Use						
≤75.6%	73/68	1.9	0.0	⊢∎⊣	1.8 (0.8, 2.8)	Yes	86/87	1.4	-0.2	⊢■⊣	1.6 (0.7, 2.5)
>75.6%	69/72	1.7	0.0	<b>⊢</b> ∎1	1.6 (0.6, 2.6)	No	56/53	2.2	0.2	⊢∎→	1.9 (0.8, 3.1)
Baseline NYHA FC						Baseline Resting LVOT (mediar	ı)				
Class II	108/106	2.0	0.3	⊢∎⊣	1.7 (0.9, 2.5)	≤51.1 mmHg	72/69	1.8	0.5	⊢■→	1.3 (0.3, 2.3)
Class III /IV	34/34	1.0	-0.9	⊢-■1	1.9 (0.5, 3.3)	>51.1 mmHg	70/71	1.7	-0.4	⊢∎⊣	2.1 (1.2, 3.1)
Baseline Median KCCQ-C	SS					Genotype					
≤78.1	67/75	1.7	-0.1	⊢∎⊣	1.8 (0.8, 2.8)	Positive	20/22	1.6	-1.0	<b>⊢</b> ∎1	2.6 (0.9, 4.2)
>78.1	75/65	1.8	0.1	⊢-■	1.7 (0.7, 2.6)	Negative	71/70	1.4	-0.1	⊢■→	1.4 (0.5, 2.3)
Interaction <i>P</i> values were >0.05 fo	r all prespecified su	Ibgroups	Favors Placebo	Favors	Treatment			-	Favors Placebo	Favors T	reatment

## SEQUOIA-HCM: Secondary Endpoints



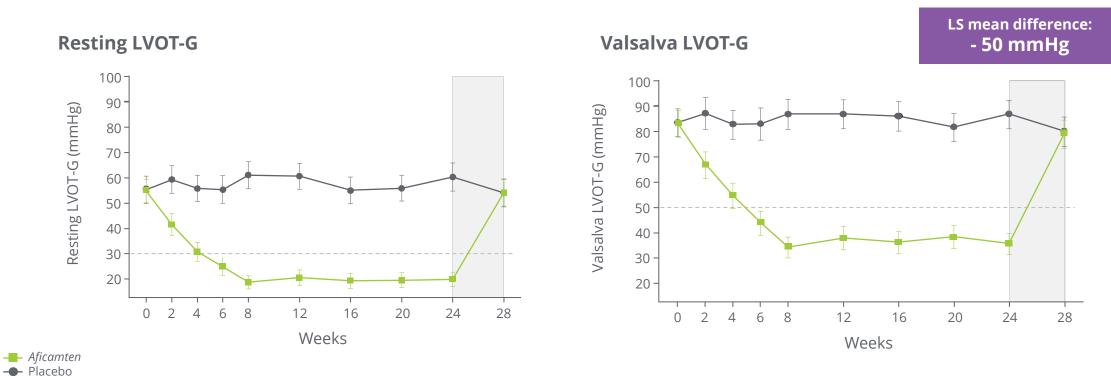
### Statistically significant improvements in all 10 pre-specified secondary endpoints

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





Significant improvement in post-Valsalva left ventricular outflow tract gradient (LVOT-G)

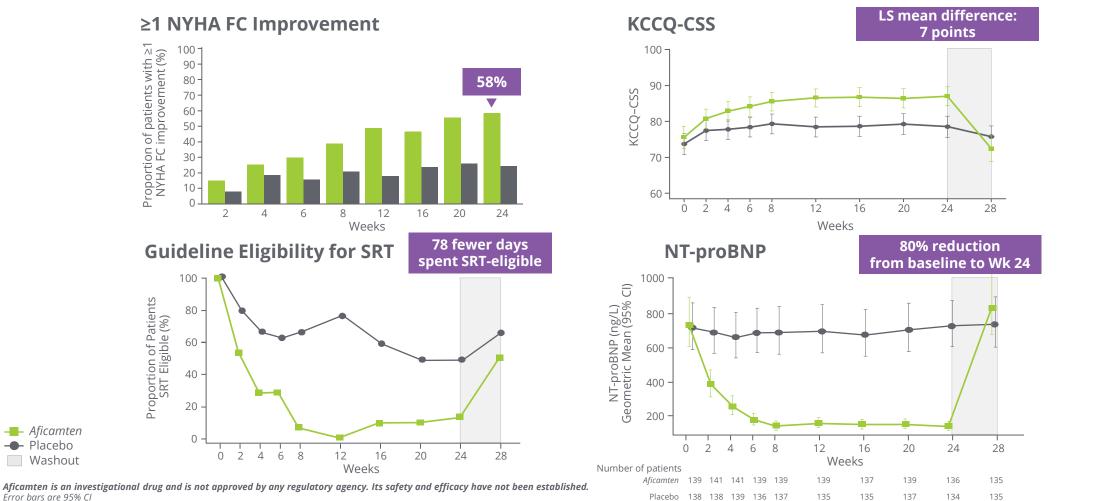


Washout

Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established. Error bars are 95% CI

Maron M. "Aficamten for the Treatment of Symptomatic Obstructive Hypertrophic Cardiomyopathy". ESC Heart Failure 2024.

# SEQUOIA-HCM: Secondary & Exploratory Endpoints



Maron M. "Aficamten for the Treatment of Symptomatic Obstructive Hypertrophic Cardiomyopathy". ESC Heart Failure 2024.

## **SEQUOIA-HCM:** Responder Analysis



#### Significant improvement in exercise capacity and symptoms in composite responder endpoint

	<i>Aficamten</i> n=142	Placebo n=140
<ul> <li>≥1.5 mL/kg/min increase in pVO<sub>2</sub> and ≥1 NYHA FC improvement or</li> <li>≥3.0 mL/kg/min increase in pVO<sub>2</sub> and no worsening of NYHA FC, n (%)</li> </ul>	60 (42)	19 (14)
$\geq$ 1.5 mL/kg/min increase in pVO <sub>2</sub> and $\geq$ 1 NYHA class improvement	44 (31)	9 (6)
≥3.0 mL/kg/min increase in pVO <sub>2</sub> and no worsening of NYHA class	37 (26)	13 (9)
Both $\geq$ 3.0 mL/kg/min increase in pVO <sub>2</sub> and $\geq$ 1 NYHA class improvement	21 (15)	3 (2)
Common rate difference vs placebo (95% Cl) <i>P</i> value	<b>28</b> (18.8, <0.0	38.6)



## SEQUOIA-HCM: Safety Data

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AEs with ≥5% incidence

There were no serious adverse cardiovascular events associated with *aficamten* treatment in SEQUOIA-HCM

Event, n (%)	Placebo (n=140)	<i>Aficamten</i> (n=142)
Overall AEs	99 (70.7)	105 (73.9)
Headache	10 (7.1)	11 (7.7)
Hypertension	3 (2.1)	11 (7.7)
Palpitations	4 (2.9)	10 (7.0)
Upper respiratory infection	12 (8.6)	9 (6.3)
COVID-19	9 (6.4)	8 (5.6)
Dyspnea	8 (5.7)	8 (5.6)
SAEs	13 (9.3)	8 (5.6)
Cardiac AEs	21 (15.0)	24 (16.9)
Discontinuations	4 (2.9)	5 (3.5)
New-onset AF	1 (0.7)	1 (0.7)
Appropriate ICD shock	1 (0.7)	0
LVEF <50% by core laboratory <sup>a</sup>	1 (0.7)	5 (3.5)
Dose reduction based on site-read LVEF <50%	1 (0.7)	7 (4.9)

<sup>a</sup> 1 placebo- and 1 aficamten-treated patient overlap with dose reduction based on site-read LVEF <50%.

Journal of the American Heart Association American Heart Association **ORIGINAL RESEARCH** Dosing and Safety Profile of Aficamten in Symptomatic Obstructive Hypertrophic Cardiomyopathy: Results From SEQUOIA-HCM Caroline J. Coats 0; Ahmad Masri 0, MD, MS; Michael E. Nassif, MD, MS; Latorie L. Joalis Y. Armad Weint Y. MU, McS, Michael E. Nasali, MU, MS; Roberb Barraise-Valla, @ MD, PhD; McHael Anado, @ MD, Nano Cadmill ®, MD, PhD; Labna Chouchury Ø, MD, MPCR: March Laighiggi @ MD; Misme L. Junizz@ MD, PhD; Pablo Garaio-Pawle & MD; PhD; Alseri A. Hajaglogi @ MD; Ximme L. Junizz@ MD, MD; Martin S. Maroll @, MD; Matthew M. Y. Lae Ø, PhD, MBCHB; Gregory D. Lews @ MD; Chang Shang Ma @, MD; Martin S. Maroll @, MD; Z. McHael Maileo, MS; Michael Michael & MD; PhD; Lews @ MD; Chang Shang Ma @, MD; Martin S. Maroll @, MD; Z. McHael Maileo, MS; Michael Michael & MD; PhD; Lews @ MD; Chang Shang Ma @, MD; Martin S. Maroll @, MD;

Pablo Garcia-Pavia Φ, MD, PhD, Abort A. Haghge Φ, MD, James L. Januzzi Φ, MD; Matthew M, Y. Lee, PhD, MEDRE, Gregory D, Laws Φ, MD, Chang Sheng Me Φ, MD; Martin S, Maron Φ, MD; Zi Michael Maio Φ, MS; Michele Michele Φ, MD, PhD; Iacopo Olivetto Φ, MD, Artur Orazia Φ, MD, PhD; Angli T, Overs Φ, MD, John A, Spents M, MD, PHS Cott D, Solorno Ψ, MD, Lacob Teir-Harense M, MD, DMS; Marior van Sinthruija, MA, Joader Vesalka, MD, PH2, Charly Hutlers Φ, MD, Ph2; Anaira G, Marense M, MD, Henrier Φ, MD; Sharta Katef Φ, MD, Jacob Teir-Harense M, DD, MD; Phira German, Pharmo: Stephene B, Holmer Φ, MD; Sharta Katef Φ, MD, Jacob Lutz, Phermior, PhD; Faidy L Maik Φ, MD, PhD; Las Meng, PhD; Any Wolftman, ME; Theodore P, Abraham, MD; on behalf of the SEOUGH+CH0 metaglators;

BACKGROUND: Alcantea, a novel cardia myosin inhibitor, revently reduces cardia hypercontractility in obstructive hypertrophic cardenopathy. We present a prespectide analysis of the pharmocivinedica, phymmocytramoca, and safety of alcantea in SEQUOIA-HOM Safety, Efficacy, and Quantitative Understanding of Obstruction Impact of Alicantea in HOM.

METHODS AND RESULTS. A total of 282 patients with obstructive hypertrophic cardiomopolity wave randomized 11 to daily alcontret 6–3-000 grip placebo between Fohumy 1, 2022, and Well 55, 2023. Alcontre doining targetime following the characteristic of the structure of th

CONCLUSIONS: A site-based dosing algorithm targeting the lowest effective aficamten dose reduced left ventricular outflow tract gradient with a favorable safety profile throughout SEQUOIA-HCM.

REGISTRATION: URL: https://www.clinicaltrials.gov; Unique Identifier: NCT05186818

Correspondence to: Caroline J.: Coste, MD, PHD, School of Cardiovascular and Metabolic Health, College of Medical, Weternary and Life Sciences, Giasgow Cardiovascular Research Centrel, Ber-Centre of Research Excellence, 105 University Place, University of Giasgow, Giasgow,

complete ist of the SEQUUK-HUM investigators can be found in the appendix at the end of the article. Is manuscript was sent to Sakima A. Smith, MD, MPH, Associate Editor, for review by expert referees, editorial decision, an

Supplemental Material is available at https://www.ahajournals.org/doi/suppl/10.11 For Sources of Funding and Disclosures, see page 12.

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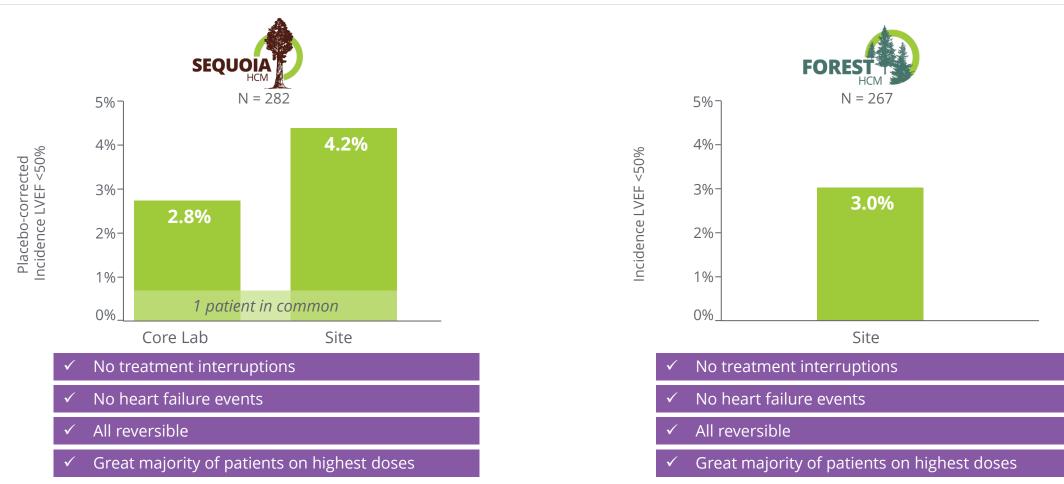
Am Heart Assoc. 2024;13:e035993. DOI: 10.1161/JAHA.124.035993

Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established. AE, adverse event; SAE, serious adverse event.

Coats CJ. Dosing and Safety Profile of Aficamten in Symptomatic Obstructive Hypertrophic Cardiomyopathy. ESC Heart Failure 2024.



### Implementation of Dosing in Real-World Setting (FOREST-HCM) Low incidence of LVEF <50% in patients with oHCM treated with *aficamten*



*Aficamten is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.* SEQUOIA-HCM Source: Coats CJ. Dosing and Safety Profile of Aficamten in Symptomatic Obstructive Hypertrophic Cardiomyopathy. ESC Heart Failure 2024. FOREST-HCM Source: Data on file – data cut 15 Apr 24

**C**ytokinetics

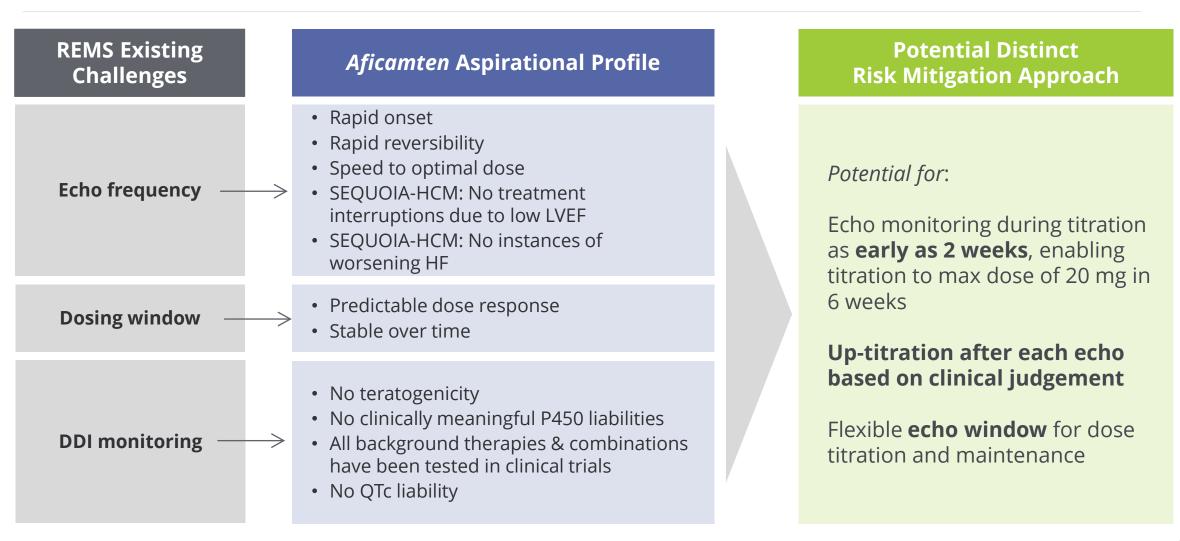
## Preparing for Regulatory Submissions to FDA, EMA



- Participated in
  - **Two meetings with FDA** in Q1 2024
  - Type B meeting with FDA in Q2 2024
  - Meetings with EMA in Q2 2024
- Expect to submit NDA to FDA in Q3 2024, MAA to EMA in Q4 2024 and coordinate with Ji Xing to submit the NDA to the CDE of the NMPA in 2H 2024



#### Aspirational Profile of Aficamten & Results from SEQUOIA-HCM Inform Potential Distinct Risk Mitigation





## Ongoing Clinical Trials of Aficamten



Pivotal Phase 3 clinical trial of *aficamten* as monotherapy vs. metoprolol in oHCM



Pivotal Phase 3 clinical trial in nHCM

Clinical trial in a pediatric population with oHCM

HC

CED

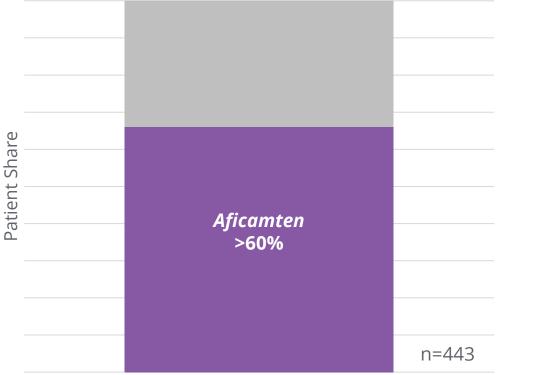


Open-label extension clinical study in HCM



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

Cvtokinetics

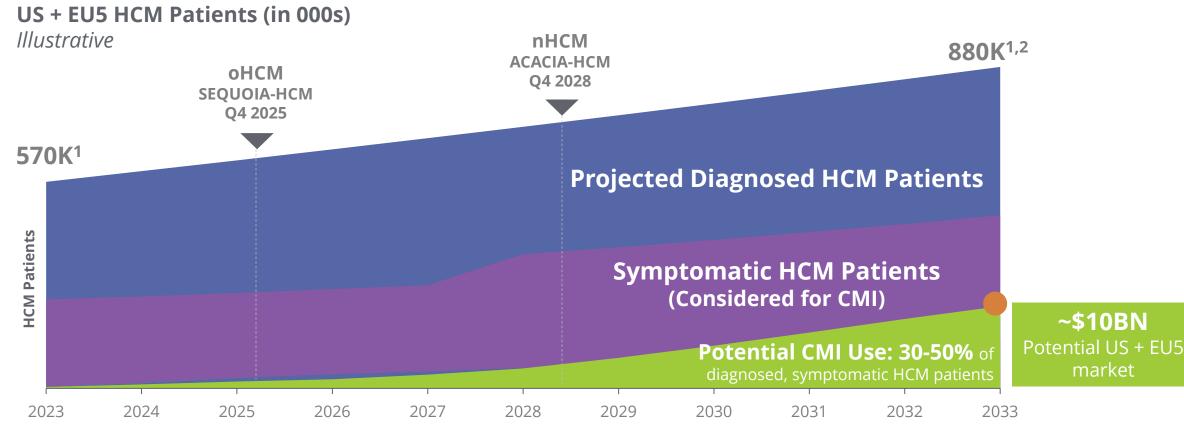


Survey results are based on the aspirational profile of aficamten and if approved, the actual profile could vary materially.

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

- Potential target product profile for *aficamten* interest creates **share opportunity** in newly treated CMI patients
- Aficamten could also be 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

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 U.S. population** 



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

1. DoF internal projections based on Maron B., Ethan J. R., Maron M.: Global Burden of Hypertrophic Cardiomyopathy, JACC: Heart Failure, Volume 6, Issue 5, 2018, Pages 376-378,

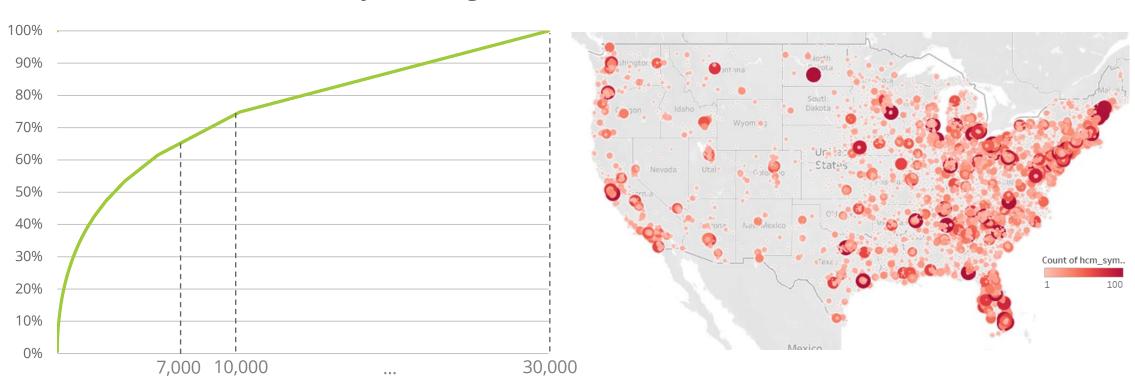
https://doi.org/10.1016/j.jchf.2018.03.004.; SHA; Symphony PTD (Patient Transaction Data): Includes patients diagnosed since 2016 and having any HC transaction in the claims data universe in the last year June 2022-May 2023);

2. DoD; Butzner et al 2021 estimates a 8% growth rate in diagnosed HCM patients between 2013-2019 in the US <u>https://www.ajconline.org/article/S0002-9149(21)00783-9/fulltext</u>; CYTK is forecasting a 5 % diagnosis rate increase in the US and a more conservative 4% growth rate in Europe due to a lack of growth of the overall populations in EU5 countries;

3. 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

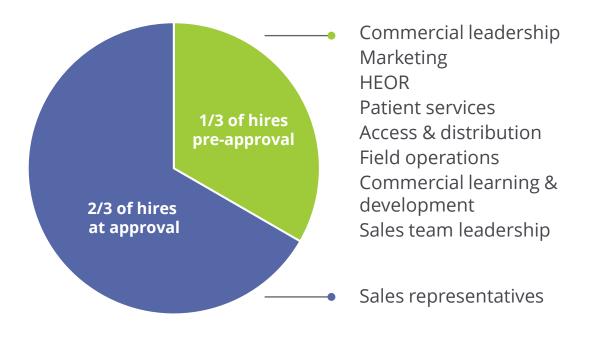
**Geographic Distribution of HCM Patients** 

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 potential approval in 2025

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



Key activities after SEQUOIA-HCM readout

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

## **Omecamtiv Mecarbil**



Omecamtiv mecarbil is an investigational agent and has not been approved for use by the U.S. Food & Drug Administration (FDA) or any regulatory agency. The safety and effectiveness of this product has not been established.

### Omecamtiv Mecarbil: Potential for High-Risk Severe HF Patients Despite GDMT

#### Advancing efficient, pragmatic Phase 3 clinical trial

#### **High Unmet Need**

The large and growing heart failure population faces frequent hospitalizations, high mortality rates, comorbidities, and challenges staying on GDMT. Despite SGLT2 inhibitors, patients remain at significant risk.

#### **Market Opportunity**

18% of 7.1M patients with HFrEF have worsening heart failure (LVEF <30%)

Estimated 8+ years of market exclusivity



IANUARY 14, 202

#### Cardiac Myosin Activation with Omecamtiv Mecarbil in Systolic Heart Failure

J.R. Teerlink, R. Diaz, G.M. Felker, J.J.V. McMurray, M. Metra, S.D. Solomon, K.F. Adams, I. Anand, A. Arias-Mendoza, T. Biering-Sarensen, M. Böhm, D. Bonderman, J.G.F. Cleland, R. Corbalan, M.G. Crespo-Leiro, U. Dahlström, L.E. Lehrverrai, J.C. Fang, G. Filippato, C. Conscez, E. Goncalvesova, A.R. Goudev, J.G. Howlett, E. Lanfear, J. Li, M. Lund, P. Macdonald, V. Mareev, S. Momomura, E. O'Meara, A. Parkhomenko, P. Ponikowski, F.J.A. Ramiers, P. Serpisi, K. Shwa, J. Spinar, T.M. Suter, J. Tomcasmiy, H. Vandekerchove, D. Vinereanu, A.A. Voors, M.B. Yilmaz, F. Zannad, L. Sharpsten, J.C. Legg, C. Varin, N. Honarpour, S.A. Abbasi, F.J. Malik, and C. Kutz, for the GALACHT.H.F Investigators\*

#### ABSTRACT

#### GROUND

The selective cardiac myosin activator omecamtiv mecarbil has been shown to improve cardiac function in patients with heart failure with a reduced ejection fraction. grees, and affilia endix. Address reprint requests to D Its effect on cardiovascular outcomes is unknown perlink at San Fra 101 Res 24 49 4150 CI We randomly assigned 8256 patients (inpatients and outpatients) with symptomatic chronic heart failure and an ejection fraction of 35% or less to receive mecamtiv mecarbil (using pharmacokinetic-guided doses of 25 mg, 37.5 mg, or 50 mg twice daily) or placebo, in addition to standard heart-failure therapy. The primary outcome was a composite of a first heart-failure event (hospitalization or ided in the Supple wailable at NEIM.org urgent visit for heart failure) or death from cardiovascular causes. 13, 2020, at NEJM.org. During a median of 21.8 months, a primary-outcome event occurred in 1523 of N Engl J Med 2021;384:105-16 4120 patients (37.0%) in the omecamtiv mecarbil group and in 1607 of 4112 pa- DOI: 10.1056/NEIM002022 tients (39.1%) in the placebo group (hazard ratio, 0.92; 95% confidence interval [CI], 0.86 to 0.99; P=0.03). A total of 808 patients (19.6%) and 798 patients (19.4%), respectively, died from cardiovascular causes (hazard ratio, 1.01; 95% CI, 0.92 to 1.11). There was no significant difference between groups in the change from baseline on the Kansas City Cardiomyopathy Ouestionnaire total symptom score. At week 24, the change from baseline for the median N-terminal pro-B-type natriuretic peptide level was 10% lower in the omecamtiv mecarbil group than in the placebo group; the median cardiac troponin I level was 4 ng per liter higher. The frequency of cardiac ischemic and ventricular arrhythmia events was similar in the two groups.

#### Among patients with heart failure and a reduced ejection, those who received one-cantive meacrabil had a lower insidence of a composite of a heart-failure event or death from cardiovascular causes than those who received placebo. (Funded by Angen and others; GALACITC-HF ClinicalTrials.gov number, NCT02929329; EudraCT number, 2016-02299-28.)

## Ph 3 clinical trial results in 8,000 patients point to important treatment benefit

Planning confirmatory Ph 3 trial, **n= ~2,000, ~3 years** to completion

**Primary endpoint**: time to CV death, HF events, transplant/LVAD, or stroke

Larger treatment benefit in patients with lower LVEF and other markers of advanced HF

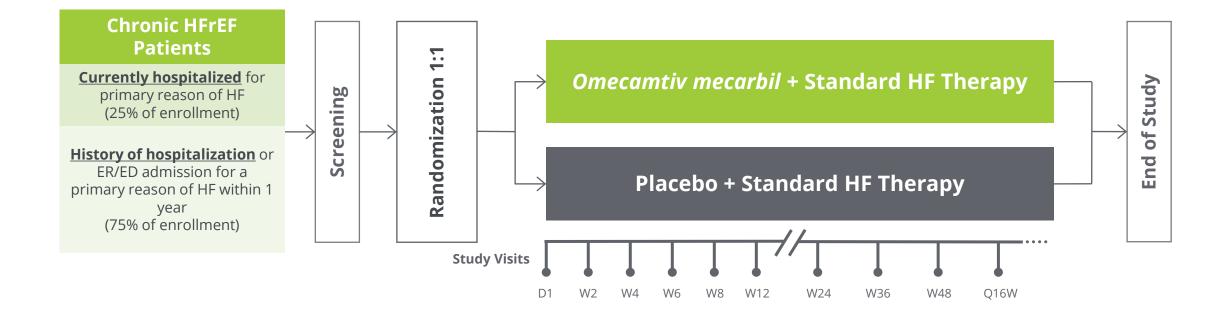
Pragmatic design elements including EHR screening, limited monitoring visits, remove visits, and limited safety labs & AE reporting



# GALACTIC-HF: Clinical Trial Overview Phase 3 clinical trial



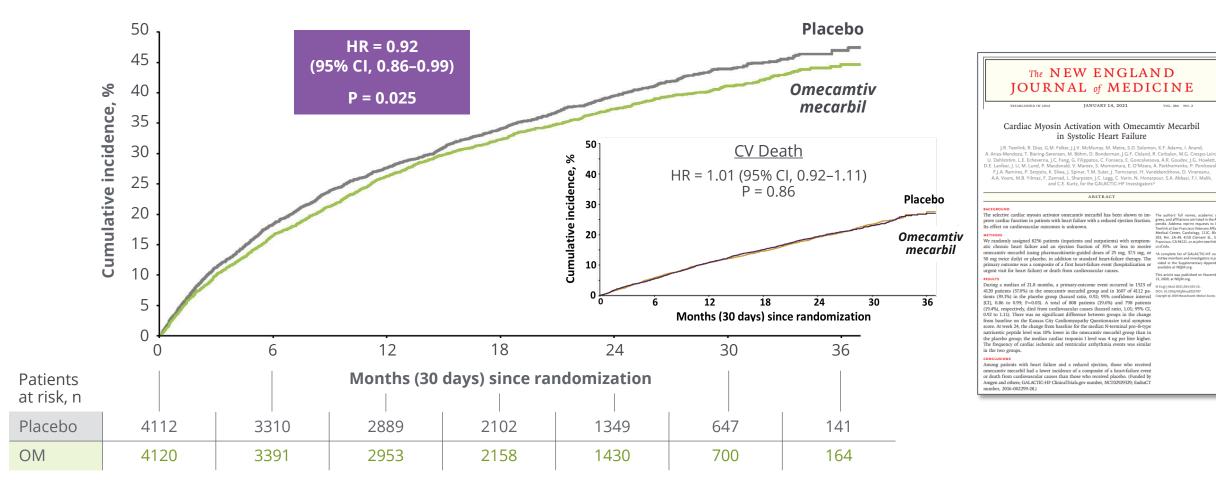
#### Event-driven clinical trial; 8,256 patients randomized in 35 countries at 944 clinical trial sites





## Primary Composite Endpoint

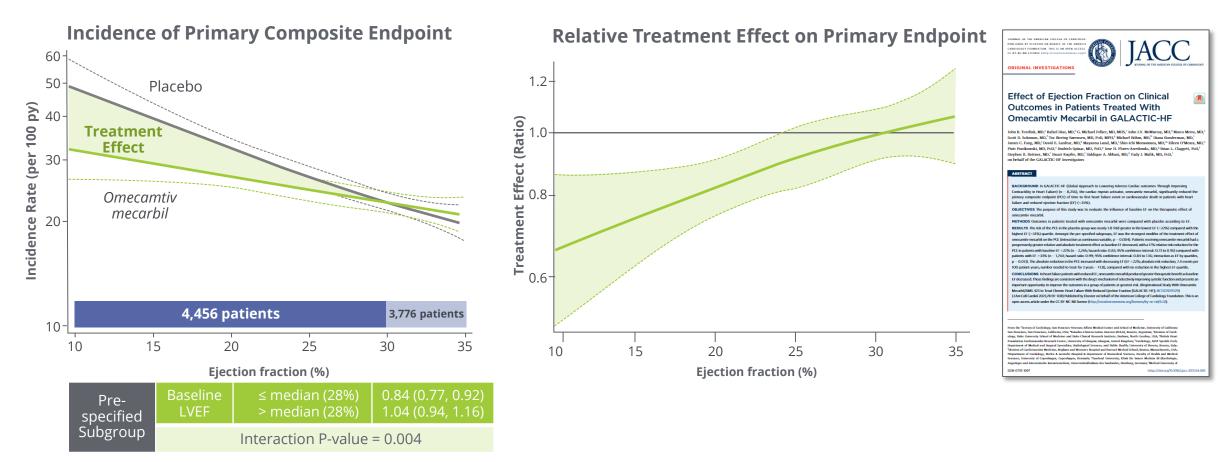




Time to first HF event or CV death



## Benefit Observed to Increase as Baseline LVEF Decreased



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

ARR = Absolute Risk Reduction. RRR = Relative Risk Reduction.

Teerlink JR., Diaz R., Felker GM., et al. Effect of Ejection Fraction on Clinical Outcomes in Patients treated with Omecamtiv Mecarbil in GALACTIC-HF. JACC. 2021





## Large Treatment Effect in Easily Defined HF Population

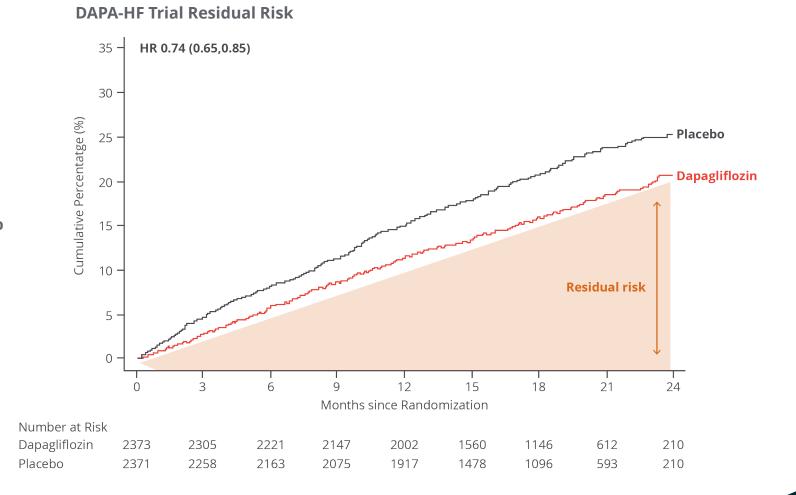
	Ν	Hazard Ratio (	95% CI)	Nom p-value	ARR
All Patients	8232	<b>⊢</b> I		0.025	2.1
LVEF <30%	4704	۱ــــــ		<0.001	4.9
+ Hosp <3 mos	2836	⊦i		<0.001	6.2
+ SBP <110	1881	F		0.004	7.2
+ Class III/IV	2249	۰ <b>۰۰۰</b>		<0.001	8.9
+ NT-proBNP ≥1000 pg/mL	2852	<b>⊢−−−−</b> 1		<0.001	8.8
cantiv mecarbil is an investigational drug and is not approved by app	0.6	Omecamtiv mecarbil	1 1.1 1.2 Placebo		



# Residual Risk is High Despite Best Therapy DAPA-HF Trial: Patients on GDMT including SGLT2-i

## **DAPA-HF trial** (dapagliflozin group)

- Primary endpoint: CV Death/HF hospitalization/urgent HF visit
- 4744 patients
- Renin-angiotensin system blocker **94%**
- Dapagliflozin **96%**
- Mineralocorticoid receptor (aldosterone) antagonist **71%**



McMurray J et al, N Engl J Med. 2019;381:1995-2008



## *Omecamtiv Mecarbil:* Regulatory Feedback

#### Received CRL from FDA Feb 28, 2023

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, in lieu of evidence from at least two adequate and well-controlled clinical investigations **Engagements with FDA** 2023 - 2024

Discussions with FDA about potential path forward Received positive feedback

regarding flexible Phase 3 clinical trial design **Preparing to Start Additional Phase 3 Trial** 2024

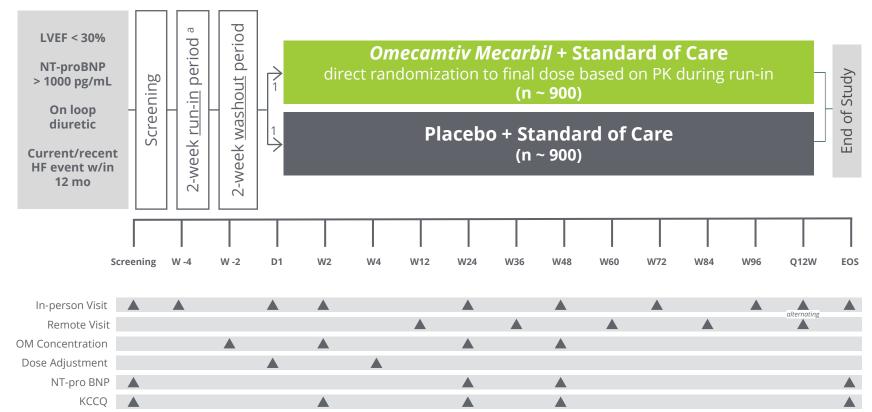
Preparing to begin additional confirmatory Phase 3 clinical trial in Q4 2024

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



#### Anticipated Phase 3 Confirmatory Clinical Trial Design Trial design to be finalized

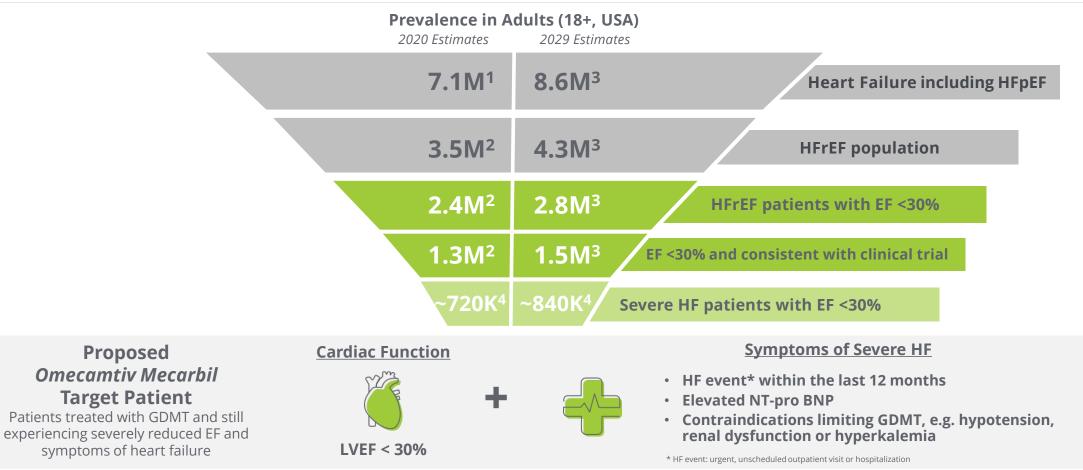
- Primary endpoint: time to CV death, HF events, transplant/LVAD, or stroke
- Enriched dosing for adherence, with OM run-in period. Plan to randomize only those expected to land in therapeutic range
- Pragmatic design elements:
  - EHR screening
  - Limit monitoring visits
  - Remote visits
  - Limited safety labs & AE reporting



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



# Large and Growing Target Patient Population in US



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

1. Tsao 2023, AHA. Racine 2022 CVrg. Bionest 2021.

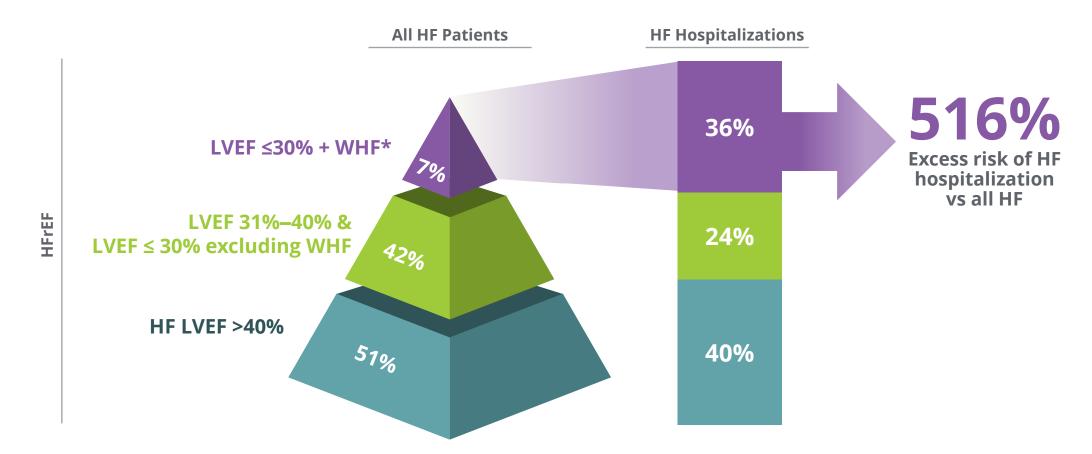
2. Dunlay SM, Roger VL, Weston SA, Jiang R, Redfield MM. Longitudinal changes in ejection fraction in heart failure patients with preserved and reduced ejection fraction. Circ Heart Fail. 2012 Nov;5(6):720-6. doi: 10.1161/CIRCHEARTFAILURE.111.966366. Epub 2012 Aug 30. PMID: 22936826; PMCID: PMC3661289.

3. 2.1% annual growth rate: 1.9% annual growth rate of patient population 65+ (UN World Populations Prospects Nov 2019) and a 0.2% mortality impact of HF treatment (doi: 10.1136/bmj.l223 | BMJ 2019;364:l223)

4. Greene et al JACC 2023; 81:413-424

## Patients with Severe HF at Excess Risk of Hospitalization

HF is #1 cause of 30-day readmission among Medicare beneficiaries<sup>1</sup>



\*Pyramid shows the proportion of patients with HF by subgroups with reduced LVEF. The purple section indicates the group with LVEF  $\leq$ 30 and WHF. In this study, these patients make up 7% of the population with HF, yet account for an estimated 36% of hospitalizations for HF. WHF = worsening heart failure

1. Desai NR, Butler J, Binder G, Greene SJ. Prevalence and Excess Risk of Hospitalization in Heart Failure with Reduced Ejection Fraction. Poster presented at: Heart Failure Society of America (HFSA) Annual Scientific Meeting; 2022 Sep 30-Oct 3; Washington, DC.



# Higher Price Potential in a Narrow, Sicker Patient Population

Significant clinical need and lack of treatments drives higher price potential

		"Original Potential Label" (GALACTIC-HF)	"Severely Reduced EF"
US Price Potential		Parity to market	Premium to market
Market Insights	Disease Severity	Worsening HF LVEF ≤35	Severe HF LVEF <30
	Payer Positioning	<b>2M+ patients</b> In addition to GDMT	<b>1M+ patients</b> Post tolerated GDMT
	Therapeutic Choices	Limited treatment options	Limited to no treatment options

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

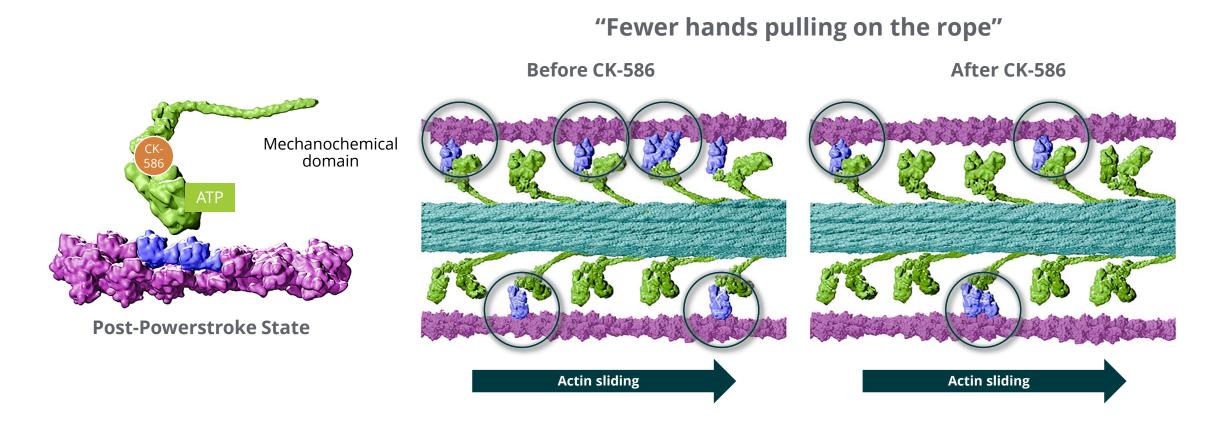






CK-586 is an investigational agent and has not been approved for use by the U.S. Food & Drug Administration (FDA) or any regulatory agency. The safety and effectiveness of this product has not been established.

# CK-586: Distinct Mechanism of Action from Aficamten

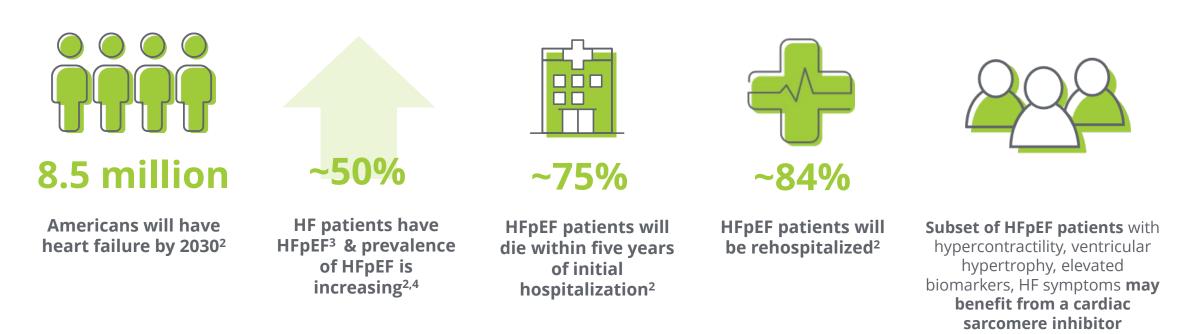


CK-586 is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.



# 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>



 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.
 Bozkurt B, Ahmad T, Alexander KM, Baker WL, Bosak K, Breathett K, Fonarow GC, Heidenreich P, Ho JE, Hsich E, Ibrahim 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.

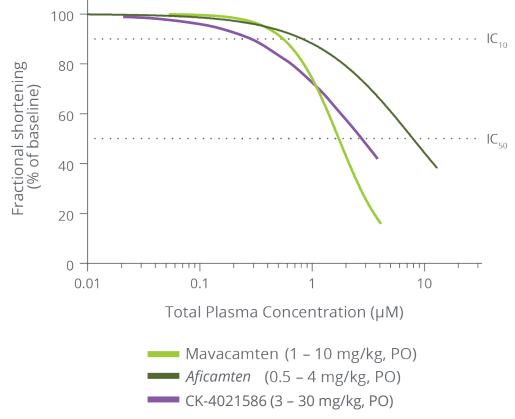
3. Dunlay SM, Roger VL, Weston SA, Jiang R, Redfield MM. Longitudinal changes in ejection fraction in heart failure patients with preserved and reduced ejection fraction. Circ Heart Fail. 2012 Nov;5(6):720-6. doi: 10.1161/CIRCHEARTFAILURE.111.966366. Epub 2012 Aug 30. PMID: 22936826; PMCID: PMC3661289

4. 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.



# CK-586: Shallow In Vivo Concentration-Response

#### CK-586 has a shorter half-life 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	~15 hours	15 hours	

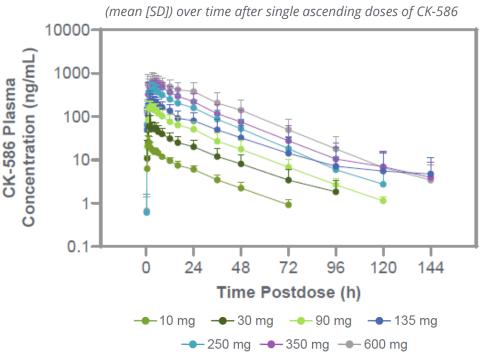
CK-586 is an investigational drug and is not approved by any regulatory agency. Its safety and efficacy have not been established.

### Phase 1 Data Support Advancement to Phase 2 Clinical Trial

#### Phase 2a dose-finding trial in HFpEF expected to start in Q4 2024

Phase 1 study design: 7 SAD cohorts (10 mg to 600 mg) & 2 MAD cohorts (100 & 200 mg once daily), 10 participants each

- Less than 24-hour half-life
- **Shallow and predictable** PK/PD relationship based on LVEF and LVFS
- Well-tolerated across all cohorts
- No serious adverse events were observed
- Stopping criteria were not met



#### **Plasma Concentration**

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

Cvtokinetics

PK/PD: pharmacokinetic/pharmacodynamic LVEF: left ventricular ejection fraction LVFS: left ventricular fractional shortening

# **Financials & Milestones**



## **Strong Financial Position**

Strengthened balance sheet & access to capital to execute launch & advance R&D pipeline

June 30, 2024	<b>~\$1.4B</b> in cash, cash equivalents and investments		
Further access to capital through term loans with RP	Secured access to additional \$175M* in term loan on top of \$175M** already secured with Royalty Pharma (RP); total available term loans <b>\$350M</b>	Add'l \$500M	
Potential further funding through RP opt-in	RP, at its option, can invest up to <b>\$150M</b> in a Phase 3 trial of CK-586		

\*Tranche 7 Loan: Cytokinetics, at its option, is eligible to draw up to \$175m during the 1-year period following the FDA approval of aficamten for oHCM provided that the NDA is accepted on or prior to December 31, 2025. \*\*Tranche 4 & 5 Loans: Cytokinetics is eligible to draw up to \$75m by April 30, 2025 from tranche 4. The minimum draw for tranche 4 is \$50m. Cytokinetics, at its option, is eligible to draw up to \$100m during the 1-year period following the acceptance of the NDA filing for aficamten provided that the NDA filing is accepted on or prior to March 31, 2025.



## 2024 Financial Guidance

	Current Guidance Issued on Aug. 8, 2024
GAAP Operating Expense <sup>[1]</sup>	\$555m to \$575m
Non-cash Expense <sup>[2]</sup> Included in GAAP Operating Expense	\$110m to \$105m
Non-GAAP Operating Expense <sup>[3]</sup>	\$445m to \$470m
Net Cash Utilization <sup>[4]</sup>	\$400m to \$420m

The financial guidance does not include the effect of GAAP adjustments caused by events that may occur subsequent to the publication of this guidance including but not limited to business development activities.

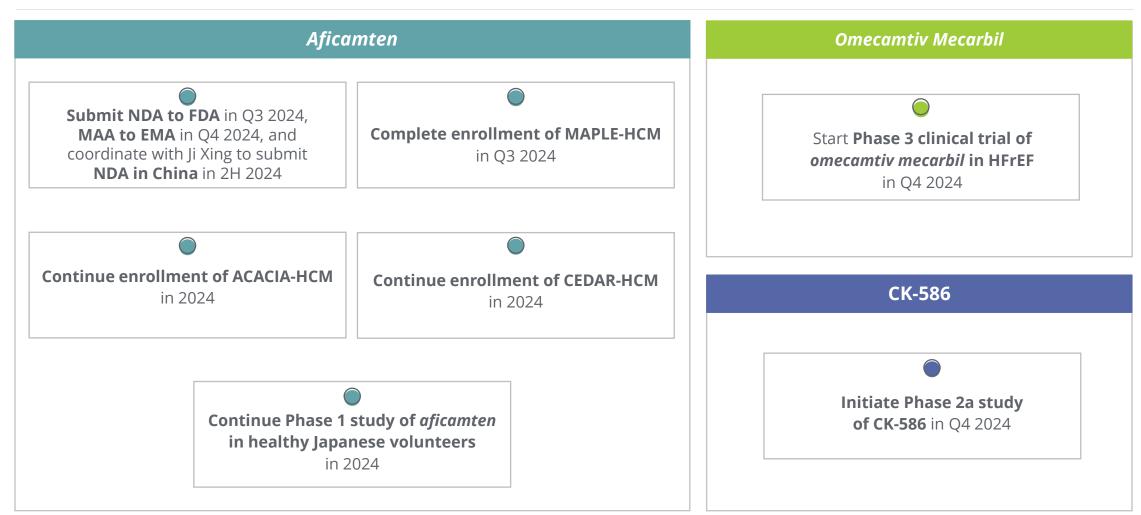
<sup>&</sup>lt;sup>[3]</sup> Non-GAAP operating expense comprised of R&D and G&A expenses but excludes non-cash operating expense. <sup>[4]</sup> Net cash utilization is a non-GAAP financial measure that we define as our ending 2023 cash, cash equivalents, and investments balance of \$655 million plus the net proceeds of \$707 million received from the sale of common stock (through the at-the-market facility, public offerings, and stock purchase agreement with Royalty Pharma) plus proceeds of \$200 million received from the structured financing agreement with Royalty Pharma announced on May 22, 2024 minus our projected ending 2024 cash, cash equivalents, and investments balance of between \$1.142 million and \$1.162 million.



<sup>[&</sup>lt;sup>[1]</sup> GAAP operating expense comprised of R&D and G&A expenses.

<sup>&</sup>lt;sup>[2]</sup> Non-cash operating expense comprised of stock-based compensation and depreciation.

## Planned 2024 Milestones



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





# thank you

Vi, diagnosed with HCM Avonne, diagnosed with HCM John, diagnosed with heart failure

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