



EMPOWERING  
**MUSCLE**  
EMPOWERING  
**LIVES**

*Sarcomere Directed Therapies*



*Nefertari, diagnosed with heart failure*



*Jillian, diagnosed with HCM*



*Chuck, diagnosed with ALS*

# 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 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 amyotrophic lateral sclerosis (ALS); projections regarding the size of the addressable patient population for *omecamtiv mecarbil*, *aficamten* or *reldesemtiv*; Cytokinetics’ commercial readiness for *omecamtiv mecarbil*; the likelihood of approval and timing for regulatory approval of *omecamtiv mecarbil* or any of our other drug candidates; the submission or acceptance of filing of a new drug application (NDA) to or by the FDA for *omecamtiv mecarbil* in 2021; the timing of an interim analysis of COURAGE-ALS, a phase 3 clinical trial of *reldesemtiv* or the timing of commencement of SEQUOIA-HCM, a phase 3 clinical trial of *aficamten*; our ability to fully enroll COURAGE-ALS or SEQUOIA-HCM; Cytokinetics’ cash expenditures or runway; the timing or availability of additional sale proceeds or loan disbursements from Royalty Pharma; interactions with the FDA; the properties, potential benefits and commercial potential of *aficamten*, *omecamtiv mecarbil*, *reldesemtiv* and Cytokinetics’ other drug candidates; the activities of Ji Xing under our collaboration agreements therewith or our ability to earn any additional milestone payments or royalties pursuant thereto. 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”).

*Sarcomere Directed Therapies*

## **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.

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

Achieve regulatory approvals for at least two drugs arising from our pipeline

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

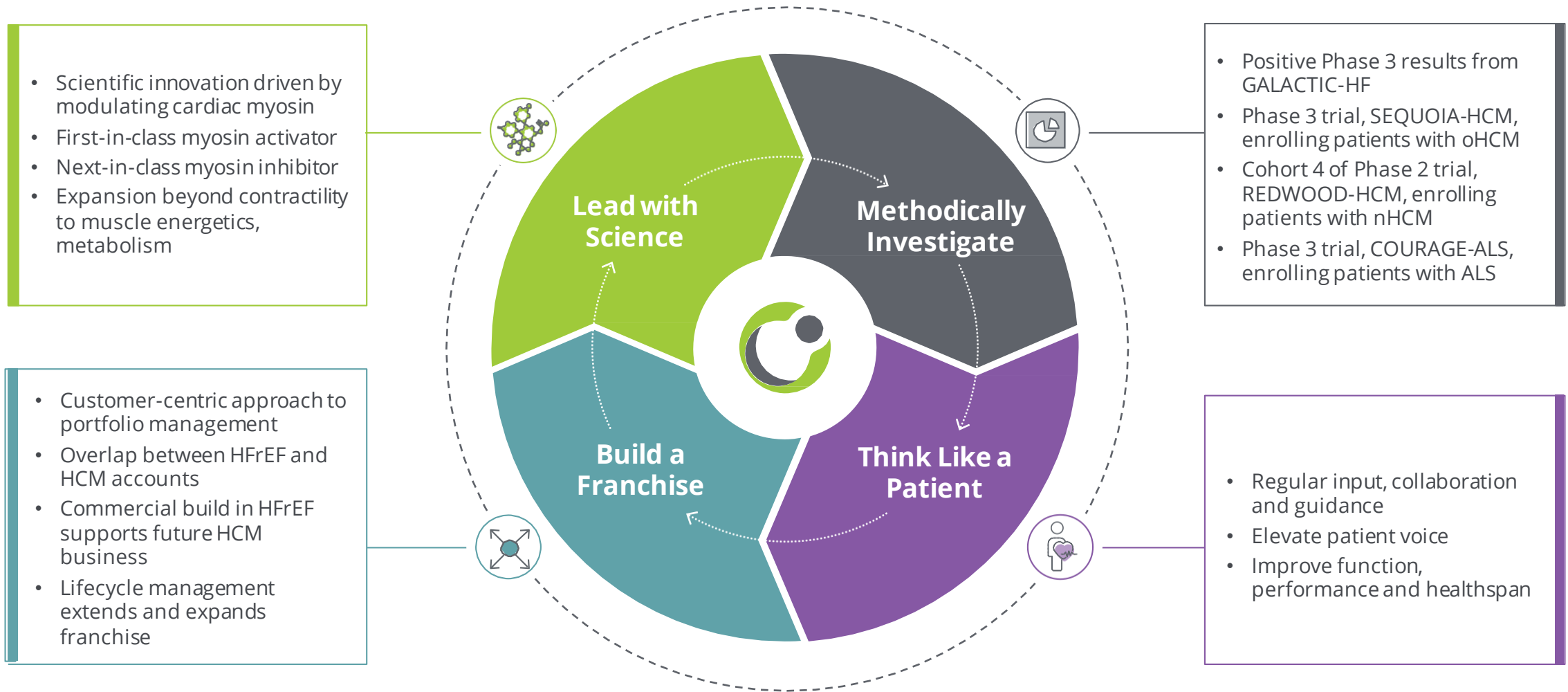
Generate sustainable and growing revenues from product sales

Double our development pipeline to include ten therapeutic programs

Expand our discovery platform to muscle energetics, growth and metabolism

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

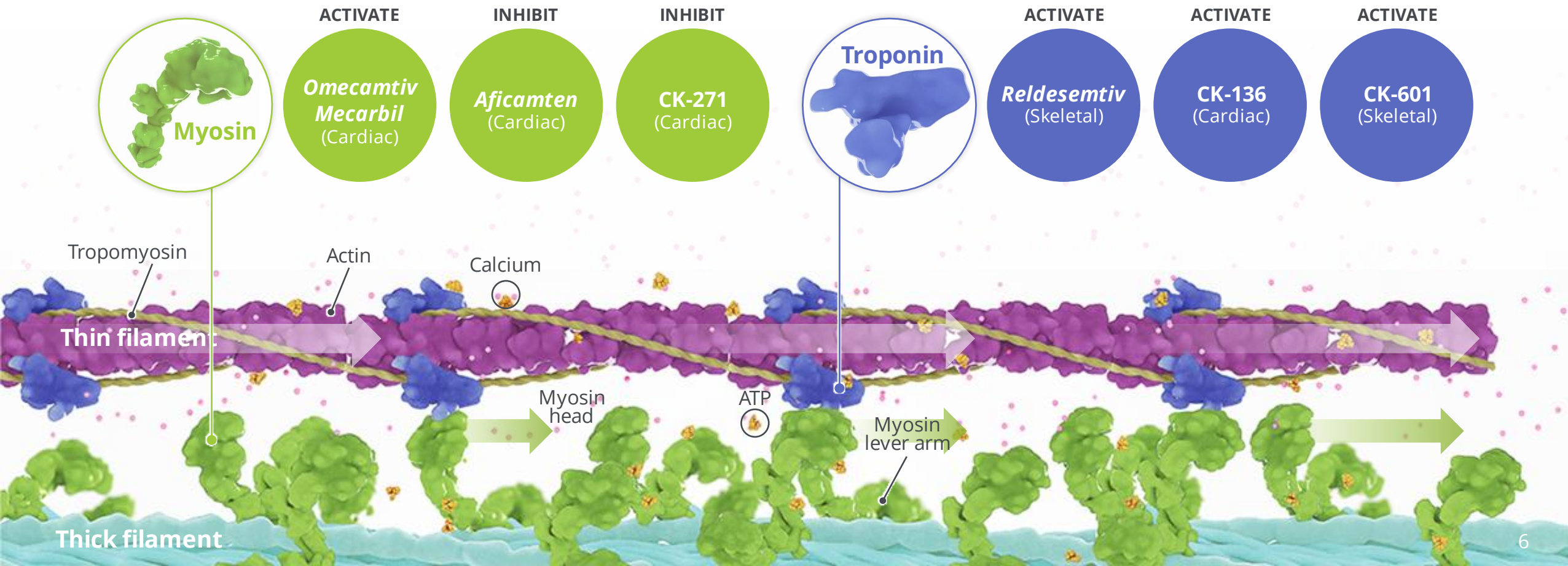
# Executing On Our Vision



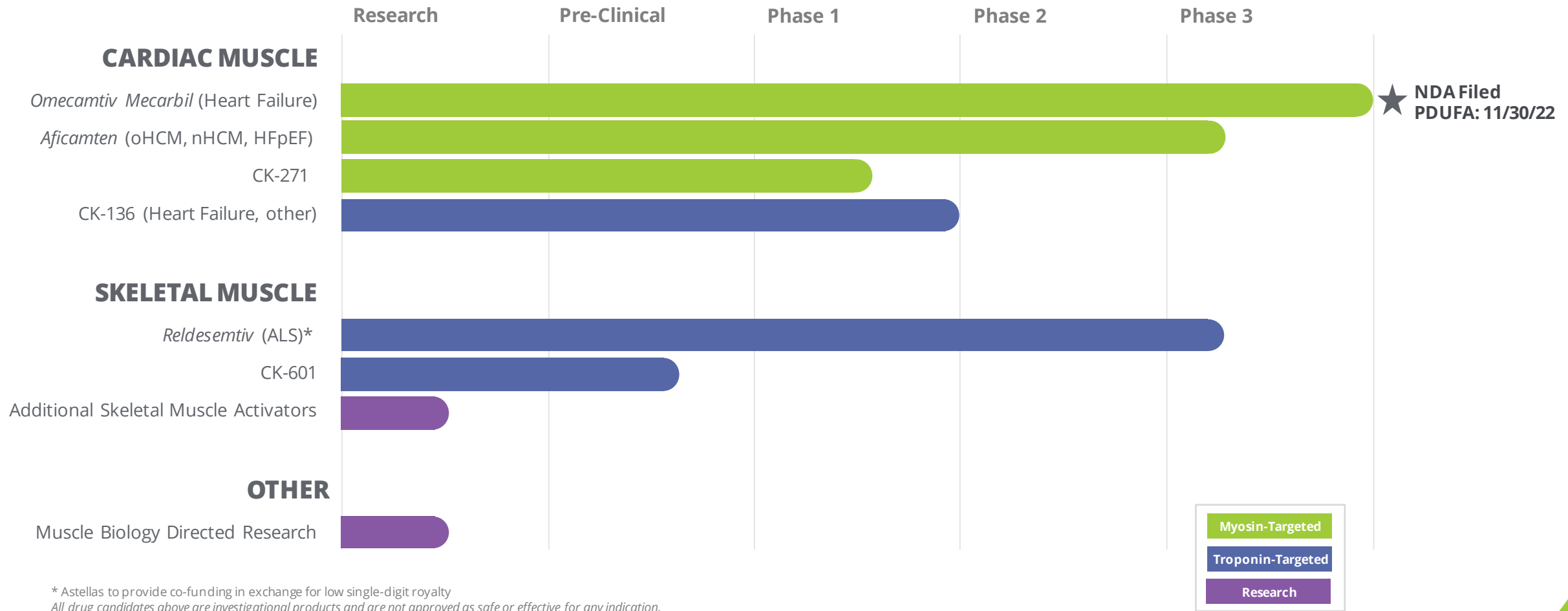


# Sarcomere Directed Drug Development

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



# Pipeline of Novel Muscle-Directed Drug Candidates



*Sarcomere Directed Drug Development*

# CARDIAC MUSCLE

*Omecamtiv Mecarbil*

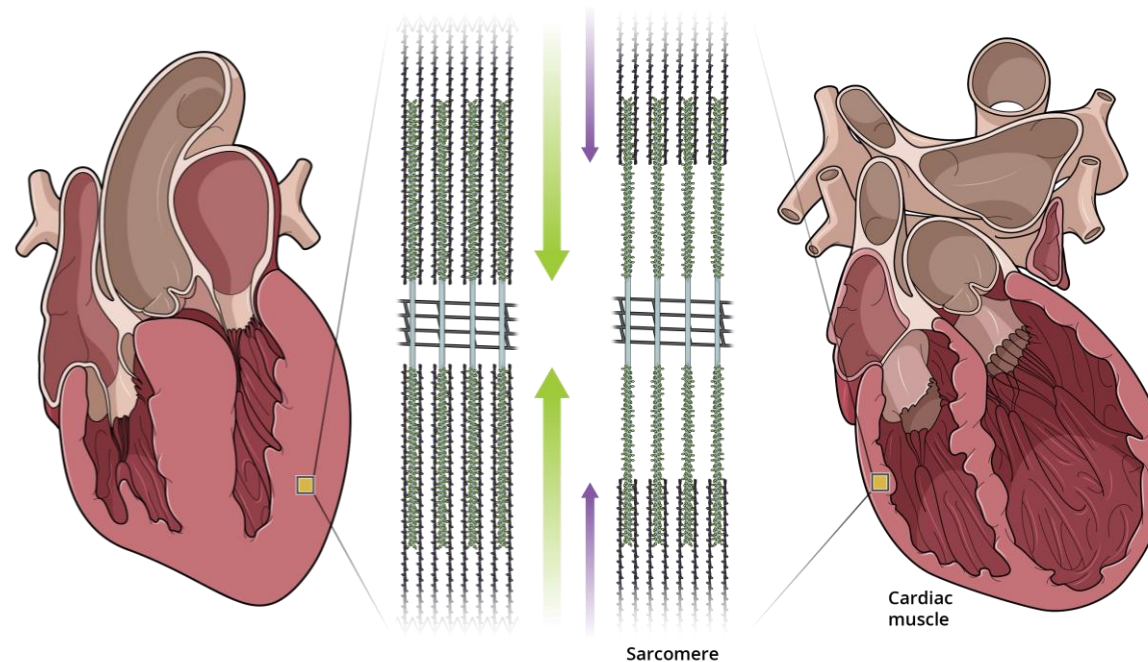
*Aficamten*



# Contractile Dysfunction Underlies Cardiac Diseases

## Increased / Preserved Cardiac Contractility

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



## Decreased Cardiac Contractility

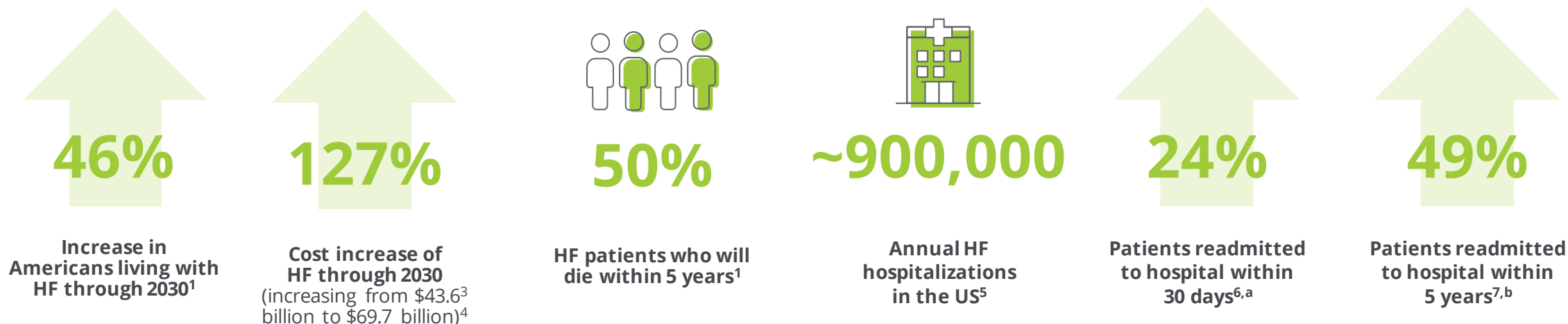
- **Heart Failure with Reduced Ejection Fraction (HFrEF)**
- Genetic Dilated Cardiomyopathy
- Pulmonary Hypertension with Right Ventricular Heart Failure

# ***Omecamtiv Mecarbil***

# Heart Failure Is a Public Health Epidemic

~6.5M Americans ≥20 years of age have HF; 1M new HF cases occur annually<sup>1</sup>

High cost burden driven by hospitalizations; mean cost for each hospital stay ~\$17K<sup>2</sup>



HF: heart failure

1. Benjamin EJ, et al. *Circulation*. 2018;137:e67-e492;

2. Gaziano et al, *AMA Cardiol*. 2016;1(6):666-672. doi:10.1001/jamacardio.2016.1747

3. Urbich, M., Globe, G., Pantii, K. et al. A Systematic Review of Medical Costs Associated with Heart Failure in the USA (2014–2020). *Pharmacoeconomics* 38, 1219–1236 (2020). <https://doi.org/10.1007/s40273-020-00952-0>

3. Heidenreich PA, Albert NM, Allen LA, Bluemke DA, Butler J, Fonarow GC, et al. Forecasting the impact of heart failure in the United States: a policy statement from the American Heart Association. *Circ Heart Fail*. 2013;6(3):606–19. <https://doi.org/10.1161/HHF.0b013e318291329a>.

4. Benjamin EJ, et al. *Circulation*. 2019;139:e56-e528;

5. Davis JD, et al. *Am J Med*. 2017;130:93.e9-93.e28. (a) In an investigational study of patients with an index hospitalization for HF from California, New York, and Florida from 2007–2011 (N=547,088).

6. Shah KS, et al. *J Am Coll Cardiol*. 2017;70:2476-2486. (b) Among HFREF patients (n=18,398), HFbEF patients (n=3285), and HFpEF patients (n=18,299) in the GWTG-HF registry, a study of patients on Medicare and Medicaid services (N=39,982). GWTG-HF, Get With the Guidelines®-Heart Failure

# Significant Unmet Need in HFrEF

## Proprietary market research suggests need for novel therapy



### Market research suggests need for novel therapy

Physicians say newly approved therapies have prolonged survival, decreased hospital visits, but still **see need for other therapies that reduce mortality**



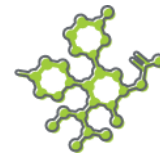
### Drugs that do not affect renal function

Most physicians recognize negative effect therapies such as aldosterone antagonists have **on renal function**



### Drugs that do not affect BP

BP often limiting factor for up titration and therapy initiation  
Need efficacious drugs **that do not result in hypotension**



### Drugs that enhance cardiac performance

Need drugs that target **novel/more specific molecular targets**  
Need targets other than the neurohormonal pathway



### Disease modifying therapies

Need drugs that safely enhance contractility  
Increased EF most frequently mentioned desired measure



### Drugs that increase QoL

Patient management will improve **with drugs that increase QoL**  
Patient QoL decreases as they lose the ability to perform daily tasks

# Pivotal Phase 3 Trial Design

Second largest clinical trial ever conducted in heart failure

## Overview

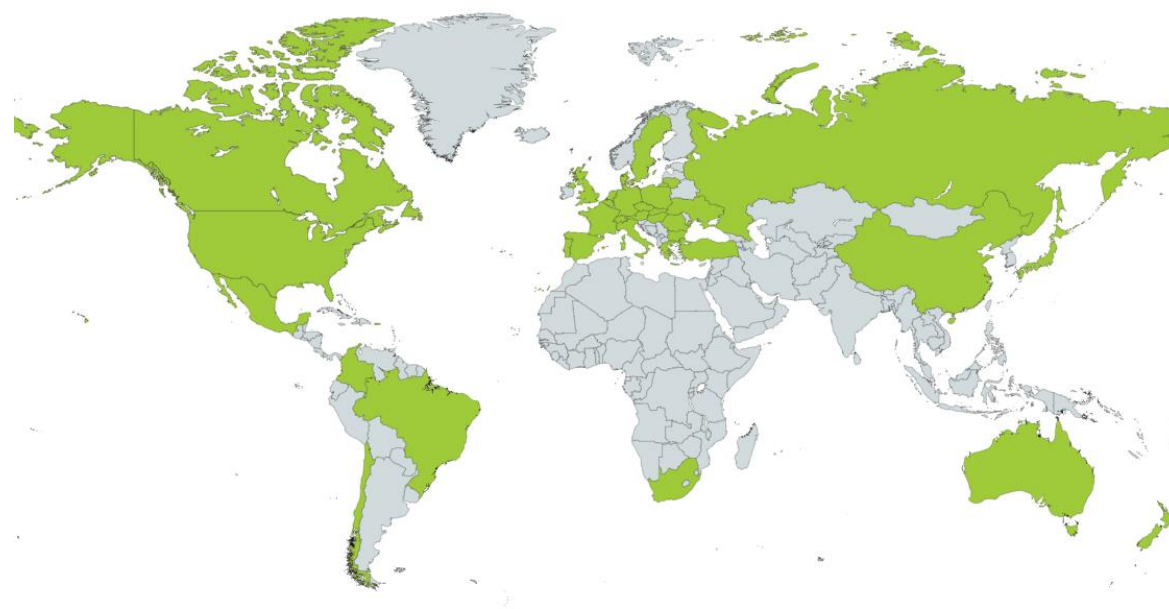
Enrolled 8,256 patients at ~1,000 sites in 35 countries

## Primary Endpoint

Composite of time to cardiovascular (CV) death or first HF event\*, whichever occurs first

## Secondary Endpoints

- Time to CV death
- Change in Kansas City Cardiomyopathy Questionnaire Total Symptoms Score (KCCQ TSS) from baseline to Week 24
- Time to first HF hospitalization
- Time to all-cause death



\*An HF event defined as the presentation of the subject for an urgent, unscheduled clinic/office/ED visit, or hospital admission, with a primary diagnosis of HF, where the patient exhibits new or worsening symptoms of HF on presentation, has objective evidence of new or worsening HF, and receives initiation or intensification of treatment specifically for HF (Hicks et al, 2015). Changes to oral diuretic therapy do not qualify as initiation or intensification of treatment.

# Baseline Characteristics



Characteristic	OM (N=4120)	Placebo (N=4112)
<i>Demographics</i>		
<b>Age (years), median (Q1, Q3)</b>	66 (58, 73)	66 (58, 73)
<b>Sex, female, n (%)</b>	875 (21.2)	874 (21.3)
<b>White/Asian/Black/other, %</b>	78/9/7/7	78/9/7/7
<i>Heart Failure History and Medical Conditions</i>		
<b>LVEF (%), mean (SD)</b>	26.6 (6.3)	26.5 (6.3)
<b>NYHA class, II/III/IV, %</b>	53/44/3	53/44/3
<b>Ischemic etiology, %</b>	53.2	54.0
<b>Atrial fib/flutter at screening, %</b>	27.8	26.7
<b>Type 2 diabetes, %</b>	40.1	40.3

Characteristic	OM (N=4120)	Placebo (N=4112)
<i>Vitals and Laboratory Parameters</i>		
<b>NT-proBNP (pg/mL), median (Q1, Q3)</b>	1977 (980, 4061)	2025 (1000, 4105)
<b>SBP (mmHg), mean (SD)</b>	116 (15)	117 (15)
<b>Heart rate, mean (SD)</b>	72 (12)	72 (12)
<b>eGFR (mL/min/1.73m<sup>2</sup>), median (Q1, Q3)</b>	59 (44, 74)	59 (44, 74)
<b>Cardiac TnI (ng/mL), median (Q3)</b>	0.027 (0.052)	0.027 (0.052)
<i>Medications and Cardiac Devices</i>		
ACEI/ARB/ARNi, %	87	87
ARNi, %	20	19
BB, %	94	94
MRA, %	78	78
SGLT2i, %	2.5	2.8
CRT, %	14	14
ICD, %	32	31

ACEi, angiotensin-converting enzyme inhibitor; ARB, angiotensin receptor blocker; ARNi, angiotensin receptor-neprilysin inhibitor; BB, beta blocker; CRT, cardiac resynchronization therapy; eGFR, estimated glomerular filtration rate; fib, fibrillation; hsTnI, high-sensitivity troponin I; ICD, implantable cardioverter-defibrillator; LVEF, left ventricular ejection fraction; MRA, mineralocorticoid receptor antagonist; NT-proBNP, N-terminal pro-B-type natriuretic peptide; NYHA, New York Heart Association; Q, quartile; SBP, systolic blood pressure; SGLT2i, sodium-glucose co-transporter 2 inhibitor.

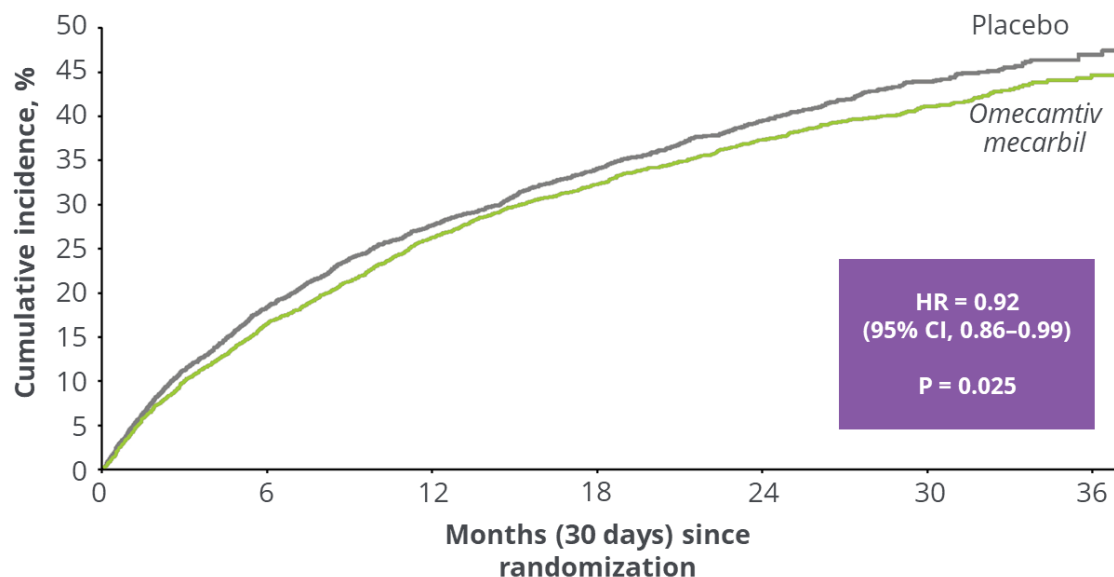


# Positive Primary Composite Endpoint

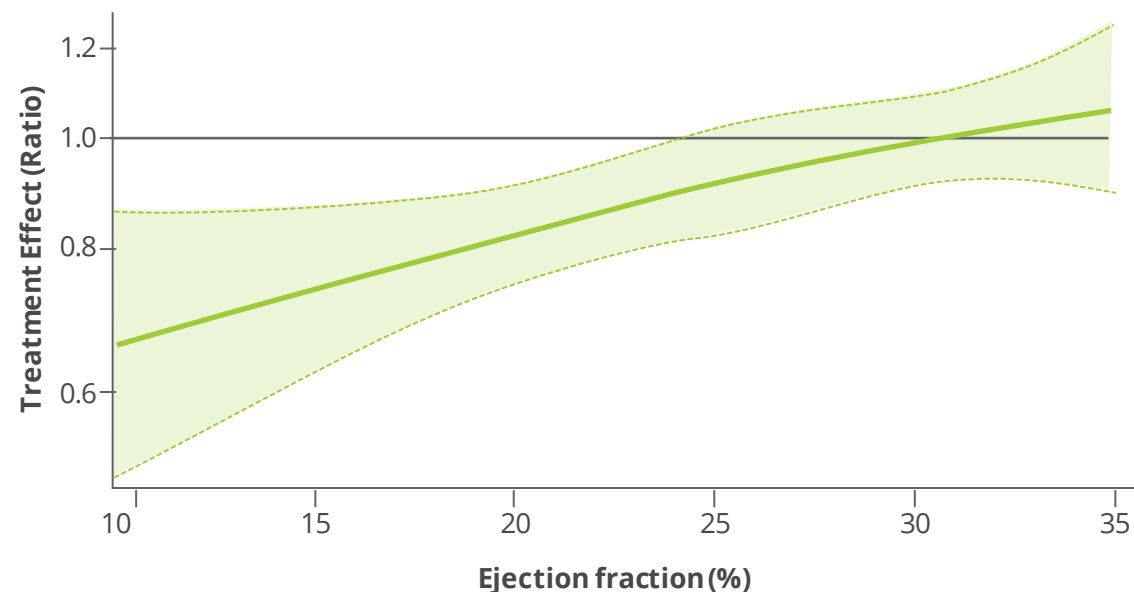
Treatment effect increased in more advanced patients



## 8% Relative Risk Reduction in Primary Composite Endpoint (Time to First Heart Failure Event or CV Death)<sup>1</sup>



## Treatment Effect Increased Progressively As Baseline LVEF Decreased<sup>2</sup>



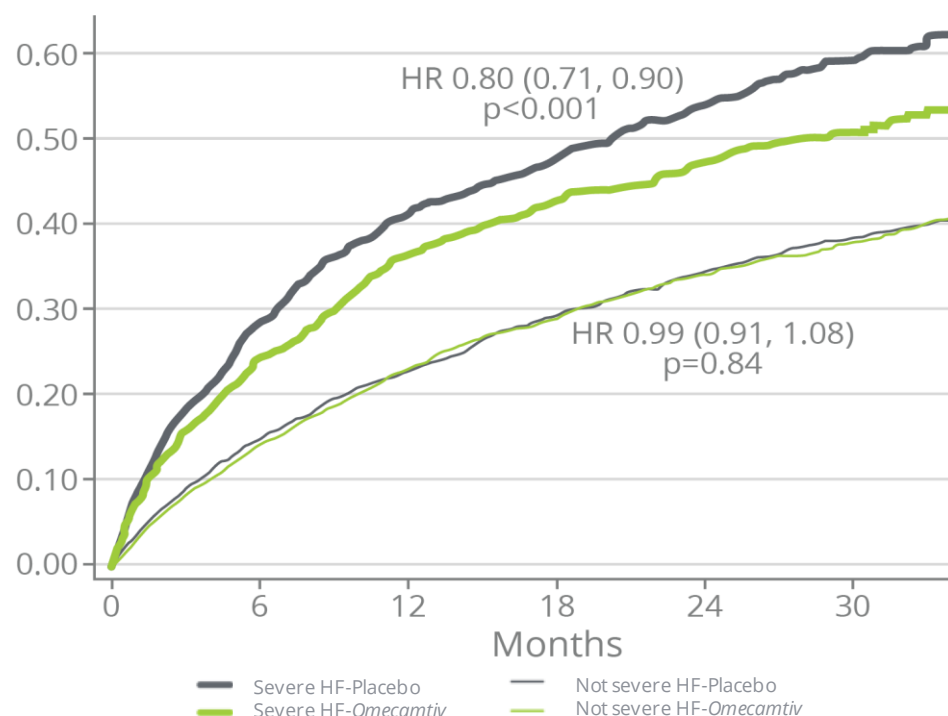
## AEs and treatment discontinuation balanced between treatment arms

1. Teerlink JR et al., Cardiac Myosin Activation with Omecamtiv Mecarbil in Systolic Heart Failure; N Eng J Med 2020, 384:105-116.
2. 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

# Greater Treatment Effect in Worsening HF

## Primary Outcome in Severe HF: HR = 0.80 (0.71, 0.90)

(Severe HF defined as NYHA III-IV, EF ≤30%, HF hosp <6 mos)<sup>1,2</sup>



## Primary Outcome in Patients with LVEF ≤28%:

HR 0.84; 95% CI 0.77, 0.92

Subgroup	No. of Events/ No. of Patients		Hazard Ratio (95% CI)	Norm p-value	ARR
All Patients	3103/8232		0.92 (0.86, 0.99)	0.025	2.1%
<b>LVEF ≤28%</b>	<b>1821/4456</b>		<b>0.84 (0.77, 0.92)</b>	<b>&lt;0.001</b>	<b>4.9%</b>
Outpatients	1255/3304		0.83 (0.75, 0.93)	0.001	5.0%
Inpatients	566/1152		0.86 (0.73, 1.02)	0.084	3.9%
<b>Hosp &lt;3 mos</b>	<b>1200/2688</b>		<b>0.83 (0.74, 0.93)</b>	<b>0.001</b>	<b>5.2%</b>
<b>Class III/IV</b>	<b>1055/2132</b>		<b>0.80 (0.71, 0.90)</b>	<b>&lt;0.001</b>	<b>7.0%</b>
NT-proBNP >2000	1249/2431		0.77 (0.69, 0.87)	<0.001	8.1%
SBP <110	843/1820		0.81 (0.70, 0.92)	0.002	7.4%

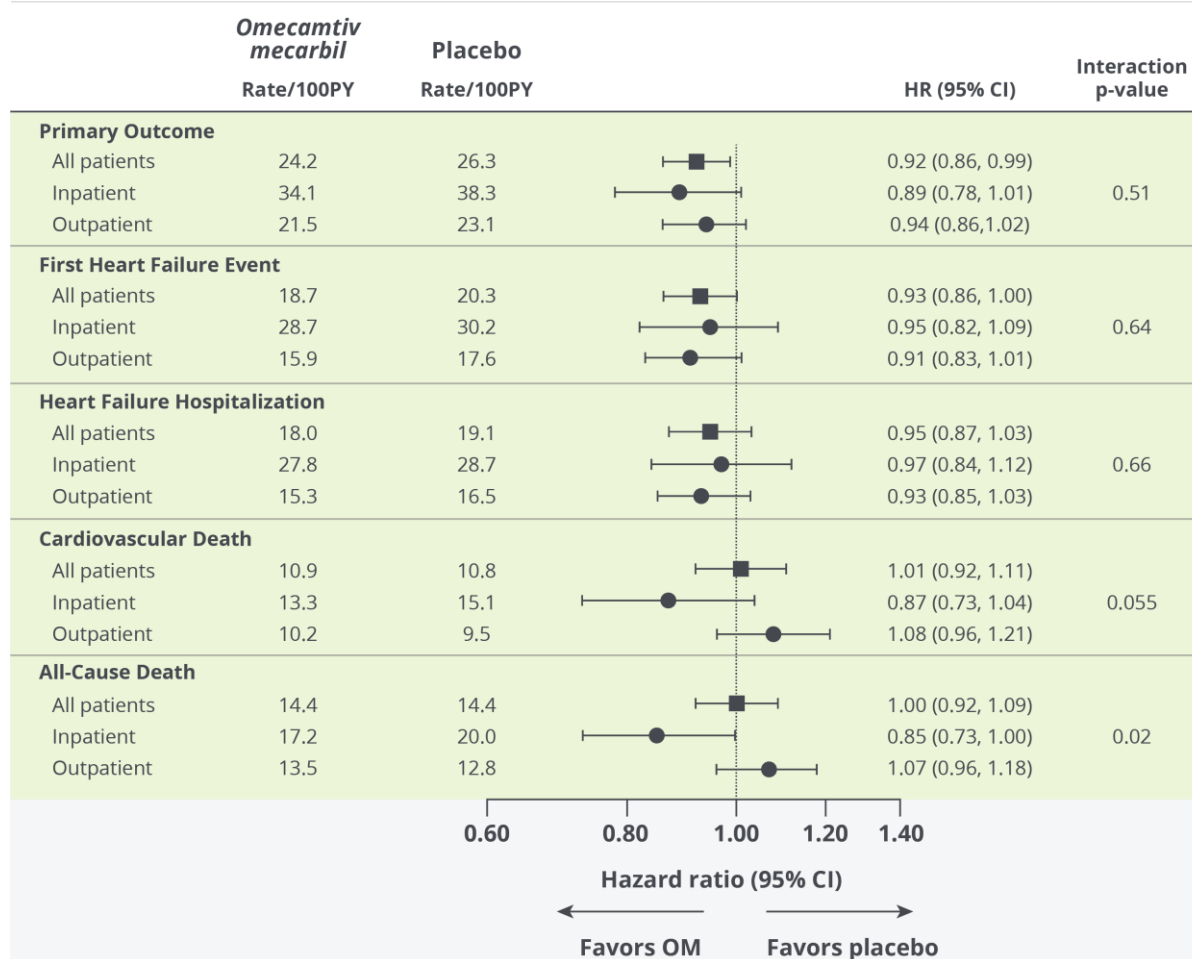
0.5 0.8 1.0 1.2  
OM Better ← Placebo Better

1. Felker GM, Omecamtiv Mecarbil in Patients with Severe Heart Failure: An Analysis from GALACTIC-HF, ESC Heart Failure 2021, June 2021

2. Felker GM, et al. Assessment of Omecamtiv Mecarbil for the Treatment of Patients With Severe Heart Failure. JAMA Cardiology, October 2021.

# Similar Risk Reduction in Hospitalized Patients vs. Outpatients

Initiating *omecamtiv mecarbil* in hospitalized patients safe, well-tolerated

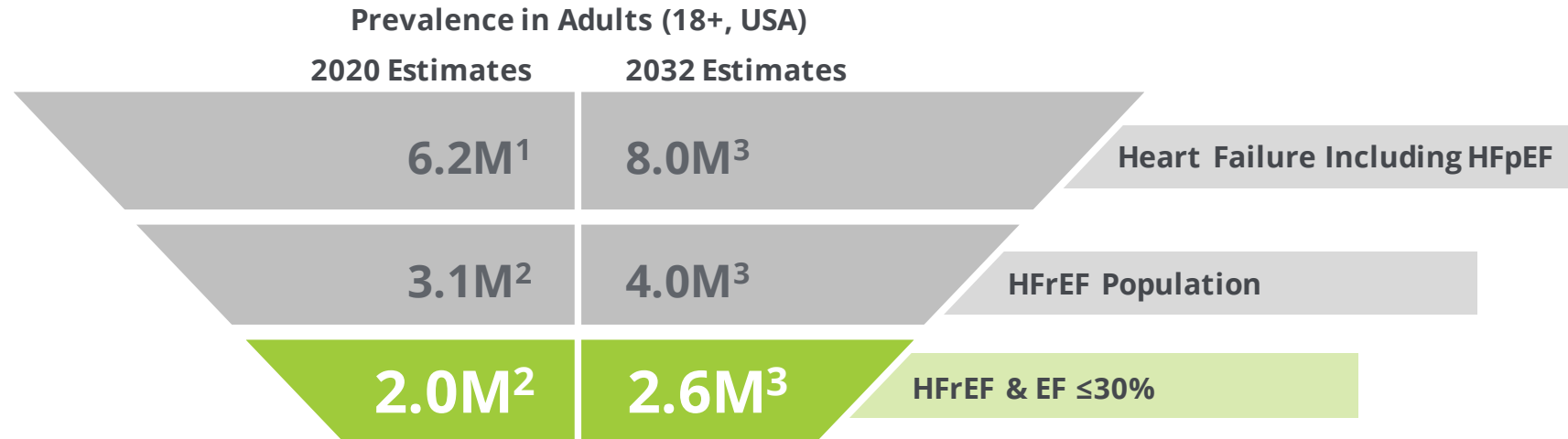


- Rate of primary outcome **higher in hospitalized patients** in the placebo group than in outpatients
- Effect of *omecamtiv mecarbil* versus placebo on the primary outcome **similar in hospitalized patients & outpatients**
- *Omeclamtiv mecarbil* similarly reduced the risk of primary outcome both **when initiated in hospitalized patients and in outpatients**
- **Safe to initiate** treatment with *omeclamtiv mecarbil* in hospitalized patients

# Laboratory and Safety Events

Variable	<i>Omecamtiv Mecarbil</i> (N=4110)	Placebo (N=4101)	Relative Risk or Difference (95% CI)
<i>Laboratory value change from baseline to Week 24</i>			
<b>Systolic blood pressure – mmHg, mean (SD)</b>	<b>1.4 (15.3)</b>	<b>1.5 (15.6)</b>	-0.1 (-0.9, 0.6)
<b>Heart rate, bpm, mean (SD)</b>	<b>-2.1 (12.6)</b>	-0.5 (12.8)	-1.6 (-2.2, -1.0)
<b>Cardiac Troponin I, ng/L, median (Q1, Q3)</b>	0.004 (-0.002, 0.021)	0.000 (-0.009, 0.008)	0.004 (0.003, 0.005)
<b>NT-proBNP, pg/mL, median (Q1, Q3)</b>	<b>-251 (-1180, 295)</b>	-180 (-915, 441)	0.90 (0.86, 0.94)
<i>Adverse events (AEs)</i>			
<b>Any serious AE, n (%)</b>	2373 (57.7)	2435 (59.4)	0.97 (0.94, 1.01)
<b>Drug discontinuation due to AE, n (%)</b>	371 (9.0)	382 (9.3)	0.97 (0.85, 1.11)
<b>Adverse events of interest</b>			
<b>Ventricular tachyarrhythmias</b>	290 (7.1)	304 (7.4)	0.95 (0.82, 1.11)
<b>Torsade de pointes/QT prolongation</b>	176 (4.3)	195 (4.8)	0.90 (0.74, 1.10)
<b>SAE of ventricular arrhythmia requiring treatment</b>	119 (2.9)	127 (3.1)	0.93 (0.73, 1.20)
<b>Adjudicated major cardiac ischemic events, n (%)</b>	200 (4.9)	188 (4.6)	1.06 (0.87, 1.29)
<b>Myocardial infarction</b>	122 (3.0)	118 (2.9)	
<b>Hospitalized for unstable angina</b>	25 (0.6)	12 (0.3)	
<b>Coronary revascularization</b>	115 (2.8)	117 (2.9)	
<b>Adjudicated Strokes</b>	76 (1.8)	112 (2.7)	0.68 (0.51, 0.91)

# Large and Growing Heart Failure Patient Population



## Proposed Omecamtiv Mecarbil Target Patient

Worsening signs and symptoms of heart failure requiring intensification of treatment despite periods of stabilization on GDMT

### Cardiac Function



LVEF ≤ 30%

+

### Recent Event



HF Event\*  
≤ 12 months

+ / -

### GDMT Limitations



Co-morbidities  
and/or tolerability\*\*

\* HF Event: Urgent, unscheduled outpatient visit or hospitalization \*\* Due to renal impairment, low BP and/or hyperkalemia

1. National Center for Health Statistics. National Health and Nutrition Examination Survey (NHANES) as accessed 4/1/2019 at website. <https://www.cdc.gov/nchs/nhanes/>. – data from 2013-2016 as quotes in Benjamin 2019 Circulation. 2019;139:e56–e528. DOI: 10.1161/

2. EF based on distribution as presented in Dunlay et al Circ Heart Fail. 2012;5:720-726,

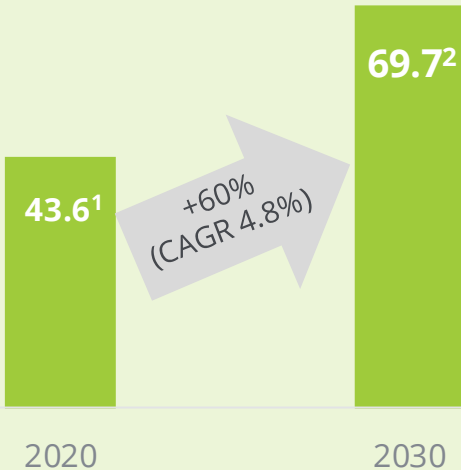
3. 2.1% annual growth rate:1.9% annual growth rate of patient population 65+ (UN World Populations Prospects Nov 2019) and a 0.2% mortality impact of HF treatment (doi: 10.1136/bmj.l223 | BMJ 2019;364:l223)

# High Cost Burden Primarily Due to Hospitalizations

*Omecamtiv mecarbil* reduced clinical events, resource utilization & costs related to HF events

Over next decade, HF cost burden is expected to **increase over half**

## US HF Burden (\$B)



Mostly due to cycle of **hospitalizations** and re-admissions

Mean cost for **each** hospital stay of ~\$17K<sup>3</sup>

HF-associated costs of initial hospitalization and 12 months following discharge ~\$35K<sup>4</sup>

Of total lifetime HF cost burden, ~**80% due to hospital stays**<sup>5</sup>

Outpatient HF-related **drug costs only ~2-3%** of the total HF-related costs<sup>4</sup>

*Omecamtiv mecarbil* **reduced costs** related to HF events in patient subgroup\*

Treatment with *omecamtiv mecarbil* associated with significant reductions in risk of first HF event, **total HF events** and cumulative HF events

Estimated cost reductions related to HF events were **\$3,085, a 19% reduction per patient**

Of the cost reductions, 99% due to HF **hospitalizations avoided**

\* Subgroup of 5,369 patients (65%) of the 8,256 patients enrolled in GALACTIC-HF excluding those with digoxin & atrial fibrillation or with EF >30%

1. Urbich, M., Globe, G., Pantiri, K. et al. A Systematic Review of Medical Costs Associated with Heart Failure in the USA (2014–2020). *PharmacoEconomics* 38, 1219–1236 (2020). <https://doi.org/10.1007/s40273-020-00952-0>

2. Heidenreich PA, Albert NM, Allen LA, Bluemke DA, Butler J, Fonarow GC, et al. Forecasting the impact of heart failure in the United States: a policy statement from the American Heart Association. *Circ Heart Fail*. 2013;6(3):606-19. <https://doi.org/10.1161/HHF.0b013e318291329a>

3. Gaziano et al. *AMA Cardiol*. 2016;1(6):666-672. doi:10.1001/jamacardio.2016.1747

4. Givertz, M. M., Yang, M., Hess, G. P., Zhao, B., Rai, A., and Butler, J. (2021) Resource utilization and costs among patients with heart failure with reduced ejection fraction following a worsening heart failure event. *ESC Heart Failure*, 8: 1915–1923. <https://doi.org/10.1002/ehf2.13155>

5. Dunlay SM, Shah ND, Shi Q, Morlan B, VanHouten H, Long KH, Roger VL. Lifetime costs of medical care after heart failure diagnosis. *Circ Cardiovasc Qual Outcomes*. 2011 Jan 1;4(1):68-75. doi: 10.1161/CIRCOUTCOMES.110.957225. Epub 2010 Dec 7



# Omecamtiv Mecarbil: Value Proposition

**In HFrEF, patients with lower ejection fractions are hospitalized more often**

In HFrEF, every 10 points lower EF, is proven to drive higher events and risk of increased hospitalizations<sup>1</sup>

**Hospitalization reductions seen in clinical trial of *omecamtiv mecarbil***

Clinically meaningful and statistically significant hospitalization reductions seen among worsening HF patients with EF ≤ 30<sup>2</sup>



**Our access activities may demonstrate economic value of *omecamtiv mecarbil***

Partnering with key institutions to generate **real world evidence** of unmet needs in patients with lower ejection fractions

Using **HEOR** and clinical results to demonstrate the economic impact and value

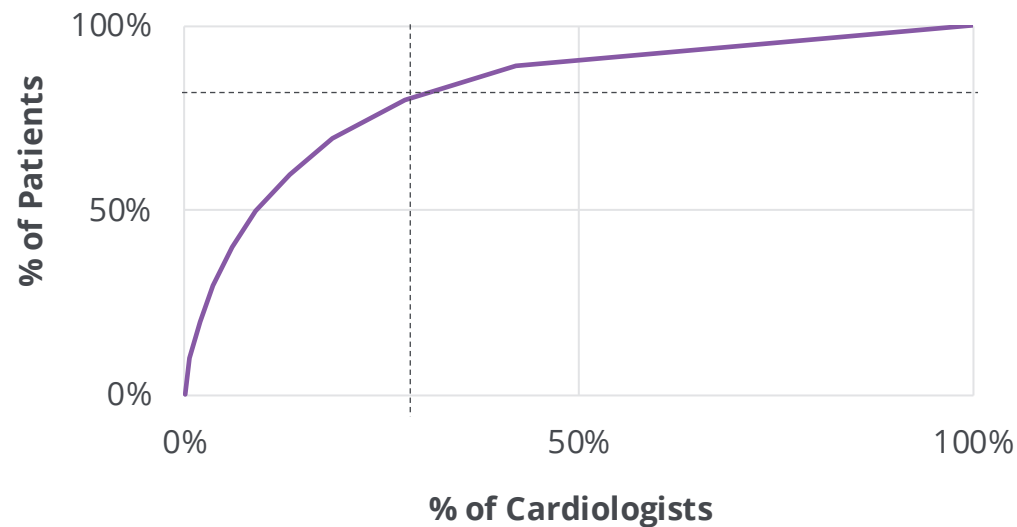
Building Market Access team holding early discussions with **payers**

1. Based on Solomon S, Influence of Ejection Fraction on Cardiovascular Outcomes in a Broad Spectrum of Heart Failure Patients, Circulation 2005

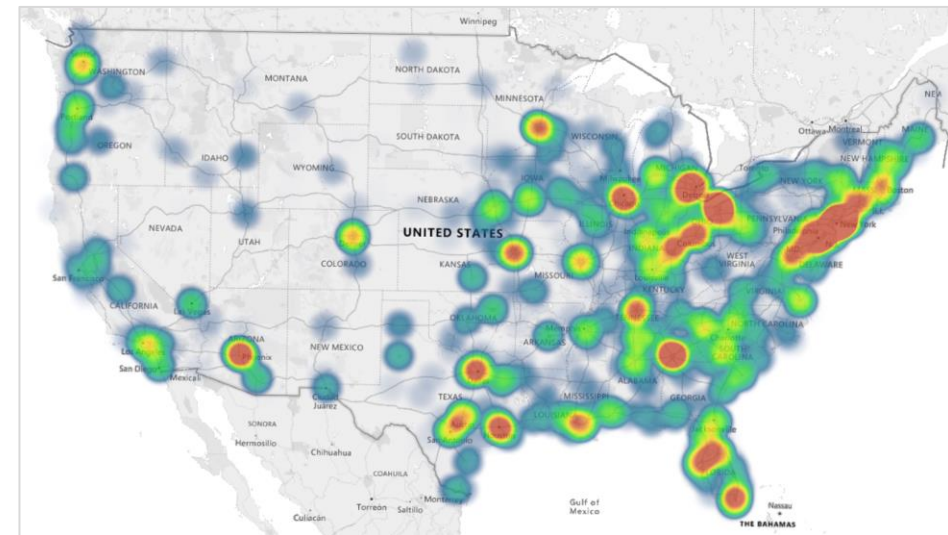
2. Felker GM. ESC Heart Fail 2021 Oral Presentation. Data based on post hoc analyses.

# Small Subset of Cardiologists Manage Majority of Patients

## HFrEF Patient Concentration in Cardiologists



## Distribution of High-Volume Cardiologists



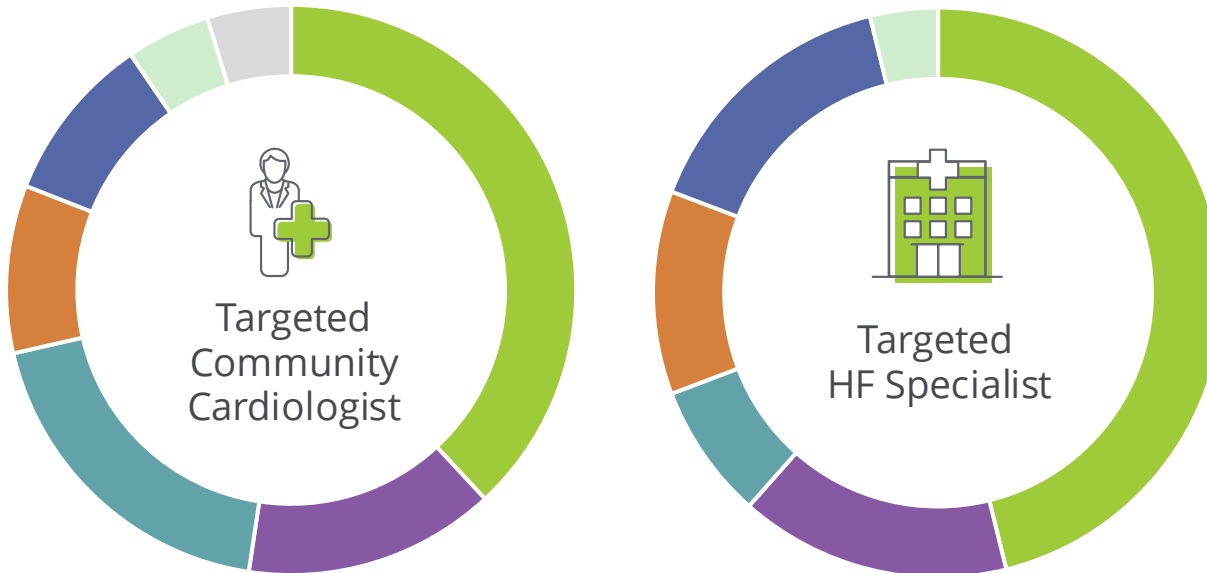
**Allows for more targeted field team approach, focusing on <10,000 HCPs**

Symphony APLD (1/1/2019 – 12/31/2020); Physician Interviews; Analysis includes **n = 25,510 cardiologists** and **n = 110,114 PCPs** who see **at least 1 HFrEF patient** during the two-year market map period

# Engagement Approach Allows Customizing and Broadening

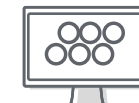
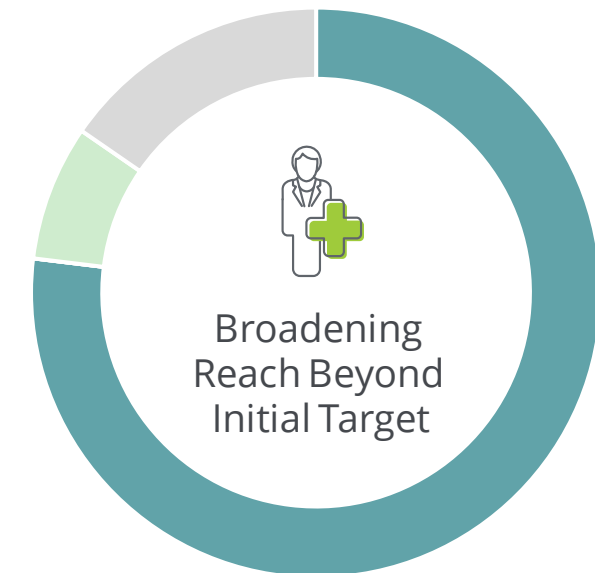
## Customizing engagement by different types of customers

~~ illustrative ~~



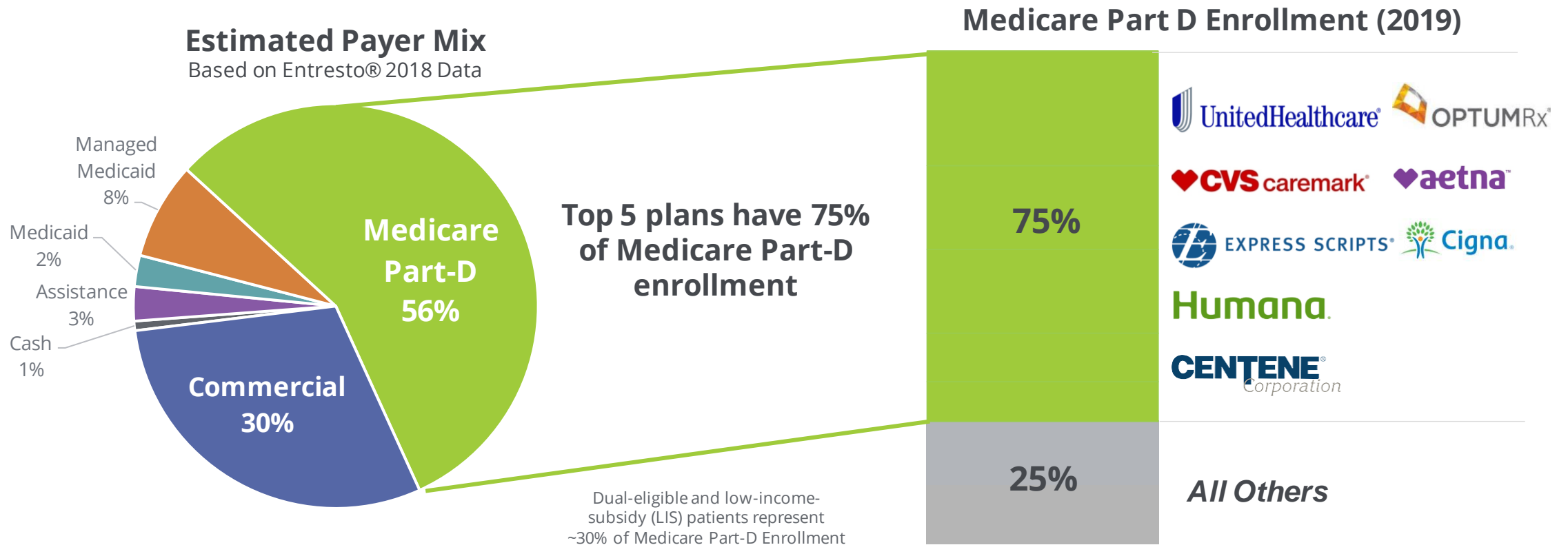
## Digital allows broader reach

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# Medicare Is Major Payer with Select Key Players

Medicare is largest payer; enrollment highly concentrated with nearly 3 of 4 patients in only 5 plans

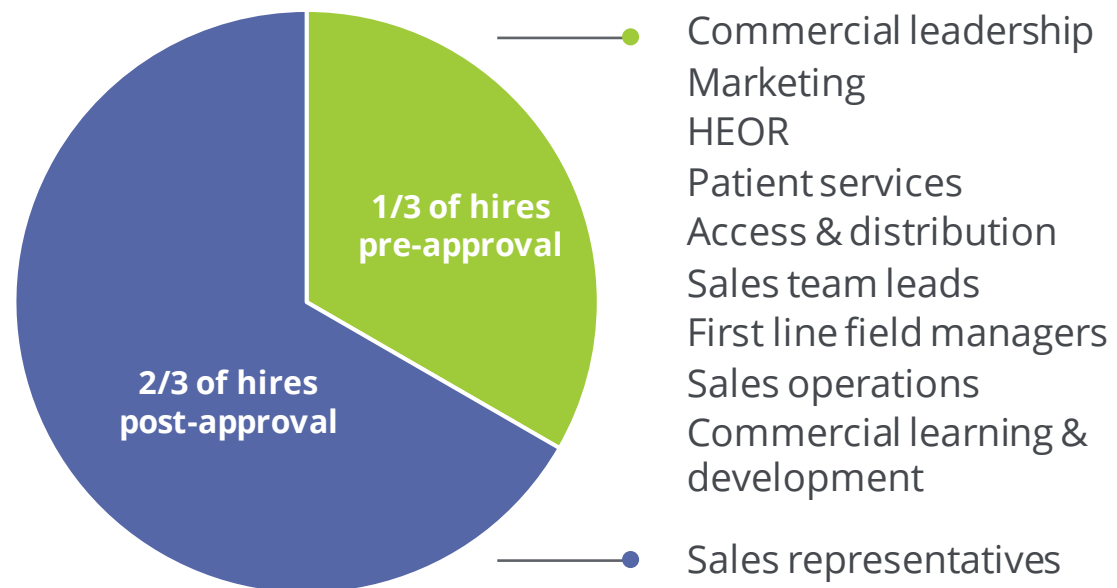


Sources: National Trends in Heart Failure Hospitalizations and Readmissions From 2010 to 2017; Agarwal, Fanarow, and Ziaeian; JAMA Cardiol, Feb 10, 2021 (Table 2 Payer Status); <https://www.kff.org/medicare/issue-brief/10-things-to-know-about-medicare-part-d-coverage-and-costs-in-2019/>; IQVIA LAAD data. SGLT-2 US Market Access Assessment, IQVIA. 1/7/2020

# Gated Build of Commercial Infrastructure

Majority of spending to occur post-approval

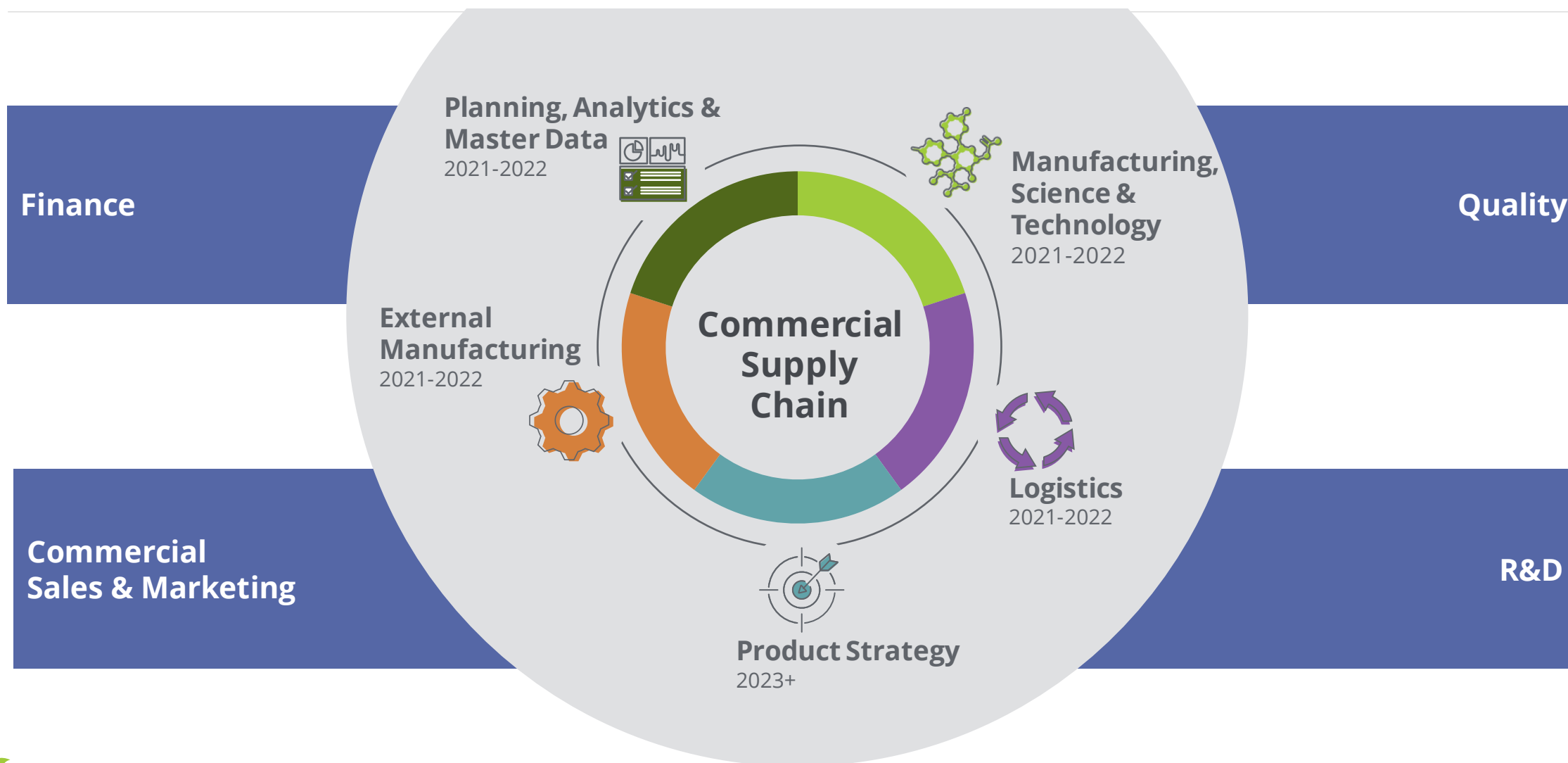
## 2/3 of hiring to occur post-approval



## Activities initiated upon key de-risking events



# Commercial Supply Chain Operating Model





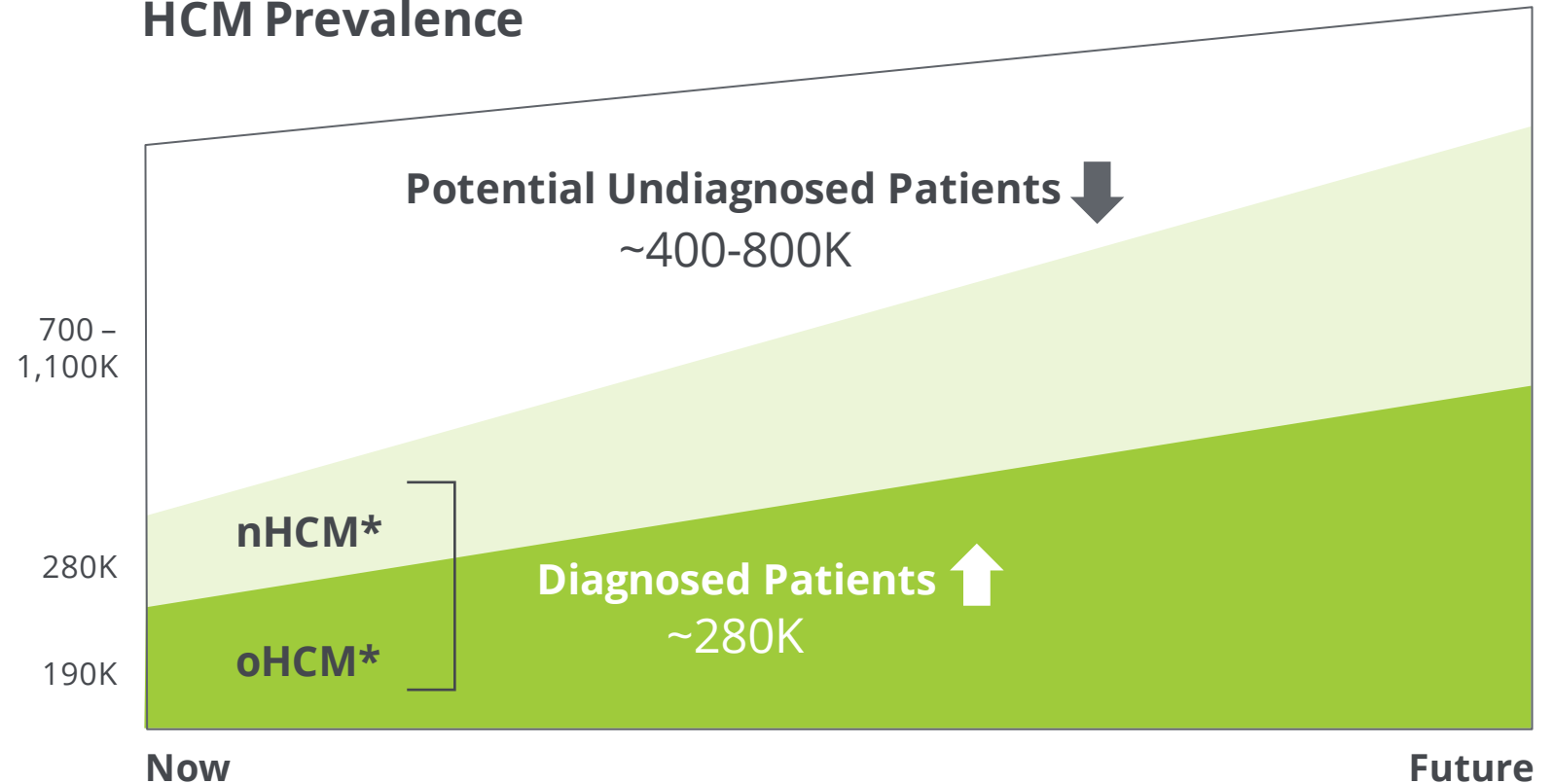
# ***Aficamten***

# In US, Large HCM Population With Many Undiagnosed

Currently  
~280K diagnosed,  
~190K oHCM  
symptomatic patients

Estimated ~400-800K  
un-diagnosed patients

## HCM Prevalence



nHCM: non-obstructive HCM; oHCM: obstructive HCM  
CVRG market strategies heart failure 2Q 2021 and other sources on file

# Significant Unmet Need in HCM

## Current therapies do not target underlying disease



### HCM is an inherited cardiovascular disease

1 in 500 have genetic mutation  
1 in 3200 have HCM  
Subset of patients have progressive symptoms, atrial fibrillation, stroke, sudden death



### Surgical intervention not permanent solution

Invasive therapy to reduce septal thickness is effective  
Surgical myectomy or percutaneous ablation



### Current medical therapy does not target underlying disease

Indirect mechanisms of action with systemic side effects  
Variable efficacy, often inadequate

# Aficamten: Aspirational Target Profile

Potential next-in-class cardiac myosin inhibitor



## Efficacy

**Functional Improvement:** Improved exercise capacity

**Symptom Improvement:** One or two class improvement in **NYHA class**

**Quality of Life:** KCCQ improvement



## Safety and Tolerability

**Minimal drug-drug interactions**

**Maintain LVEF:** >50% on vast majority of patients

**Reversibility:** Quickly reversible with titration down



## Dosing

**Titration:** Time to optimal dose, ~2-week titration intervals using echocardiography

**No monitoring** of plasma concentrations

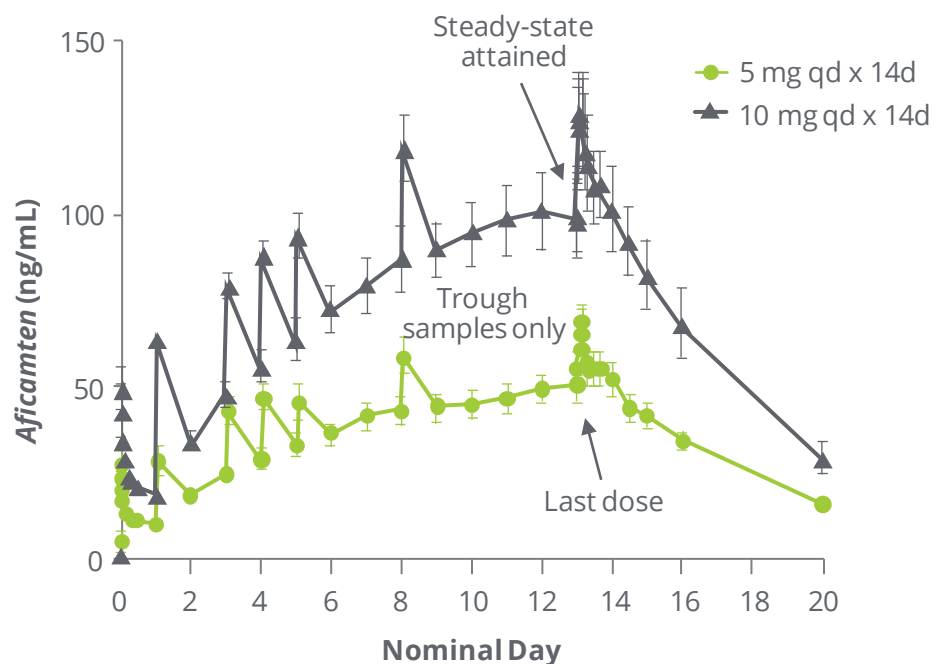
Product not FDA approved, aspirational profile dependent on phase 3 data

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.

# SAD & MAD Results Support Progression to Phase 2

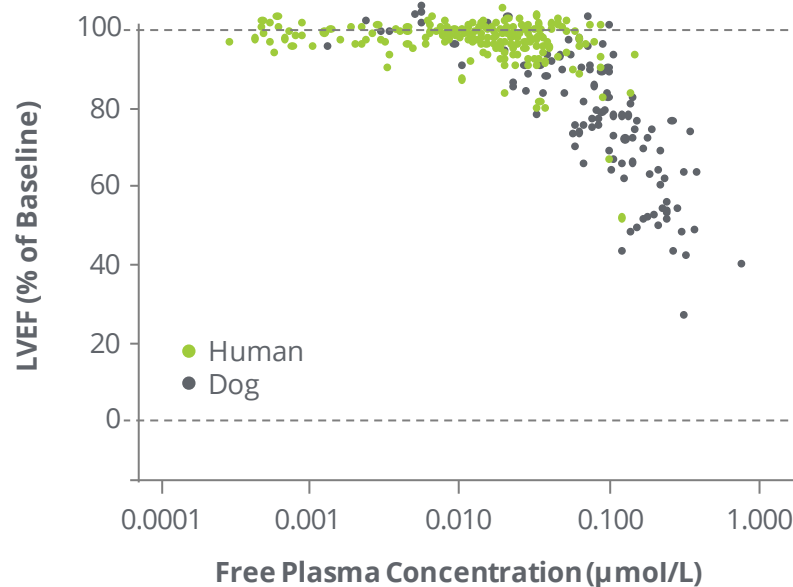
## Preclinical data translated to healthy participants

### MAD PK: Steady-State Achieved After 14 Days of Dosing



### Shallow Exposure-Response Relationship Observed Pre-clinically Appears to Have Translated to Humans, May Enable Flexible Dose Optimization in Humans

#### PK/PD Relationship of *Aficamten* for Ejection Fraction (LVEF)



Graphs show LVEF as a function of exposure; data points represent observed values in dogs and humans.

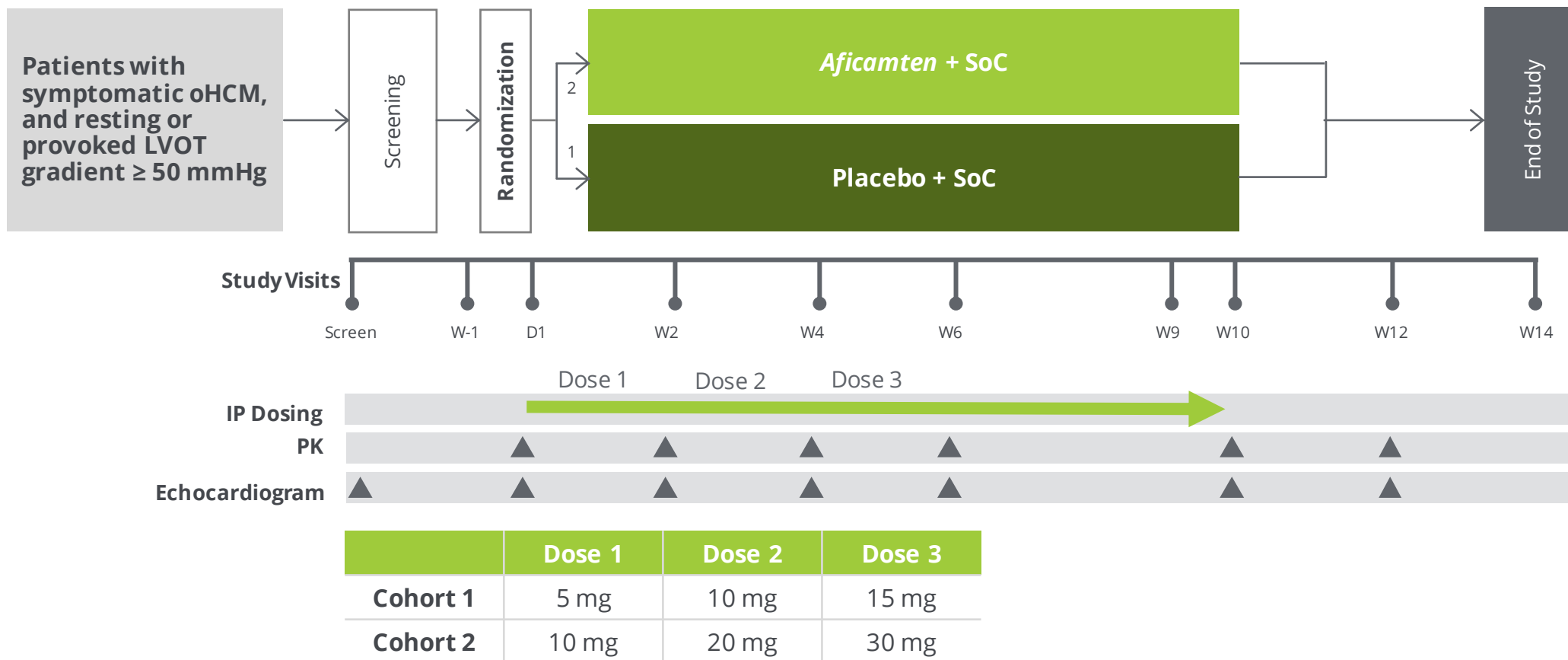
Decrease in LVEF as function of exposure is similar in humans and dogs.

# REDWOOD-HCM: Cohorts 1 & 2

Patients with symptomatic oHCM on background therapy excluding *disopyramide*



Two sequential dose-finding cohorts





# Patient Enrollment and Dosing

## Cohorts 1 & 2



41 Total Enrolled Patients

		Final Dose Achieved (N)				
		5 mg	10 mg	15 mg	20 mg	30 mg
N = 14	Cohort 1	4	5	5		
N = 14	Cohort 2		9		4	1

# Baseline Characteristics

## Cohorts 1 & 2



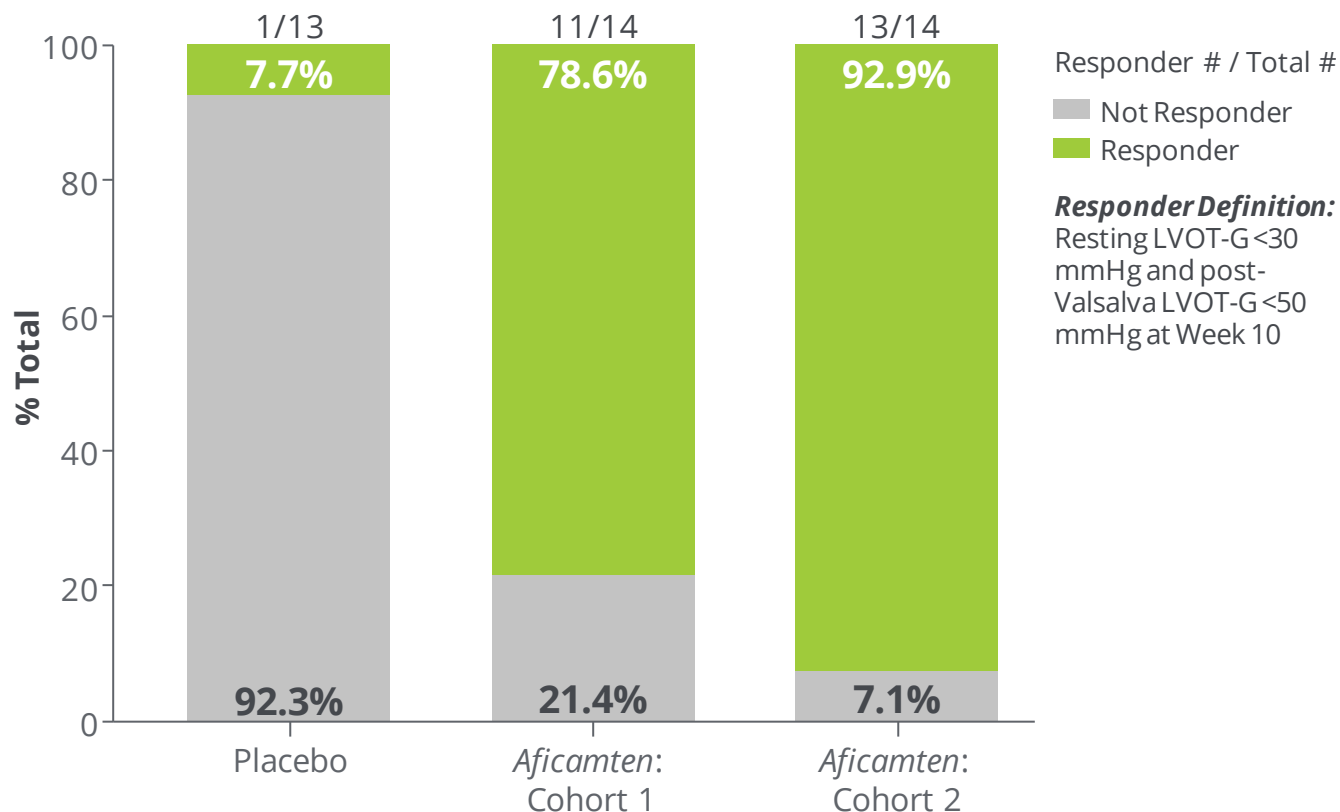
Characteristic	Placebo (n = 13)	<i>Aficamten</i> (n = 28)
<b>Age (Years)</b> , Mean (SD) [Range]	57.2 (9.6) [36,69]	56.6 (13.6) [33,78]
< 65 Years	10 (77%)	17 (61%)
<b>Sex</b> , n (%)		
Female	8 (62%)	15 (54%)
<b>Race = White</b> , n (%)	12 (92%)	28 (100%)
<b>NYHA Class</b> , n (%)		
Class II	11 (85%)	17 (61%)
Class III	2 (15%)	11 (39%)
<b>Maximal LV Wall Thickness</b> (mm) Mean (SD)	16 (3)	17 (3)
<b>LVEF* at Screening</b> (%), Mean (SD)	73.6 (5.9)	71.7 (8.0)
<b>LVOT-G*, Rest at Screening</b> (mmHg), Mean (SD)	70.0 (28.0)	61.1 (29.8)
<b>LVOT-G*, Valsalva at Screening</b> (mmHg), Mean (SD)	93.3 (27.2)	89.3 (31.5)

\* Site-read echocardiogram

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"

# Response Rates on Treatment with *Aficamten*

## Cohorts 1 & 2



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

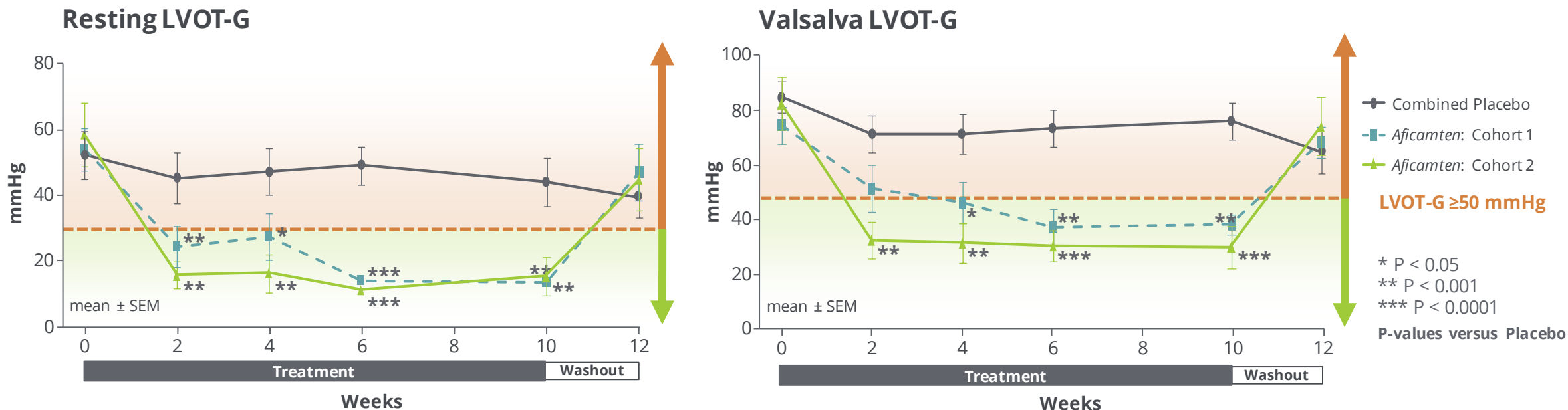
Maron M, Abraham T, Masri A, et al. "REDWOOD-HCM: A Randomized, Double-blind, Placebo-controlled, Dose-finding Trial of the Cardiac Myosin Inhibitor, *Aficamten*, In Obstructive Hypertrophic Cardiomyopathy" *Aficamten* is an investigational agent and has not been approved for use by the U.S. Food & Drug Administration (FDA) or any regulatory agency. The safety and effectiveness of this product has not been established.

# REDWOOD-HCM: Efficacy

## Cohorts 1 & 2



### Reductions in LVOT gradients



Dose finding study  
 Cohort 1 (n=21), Cohort 2 (n=20)

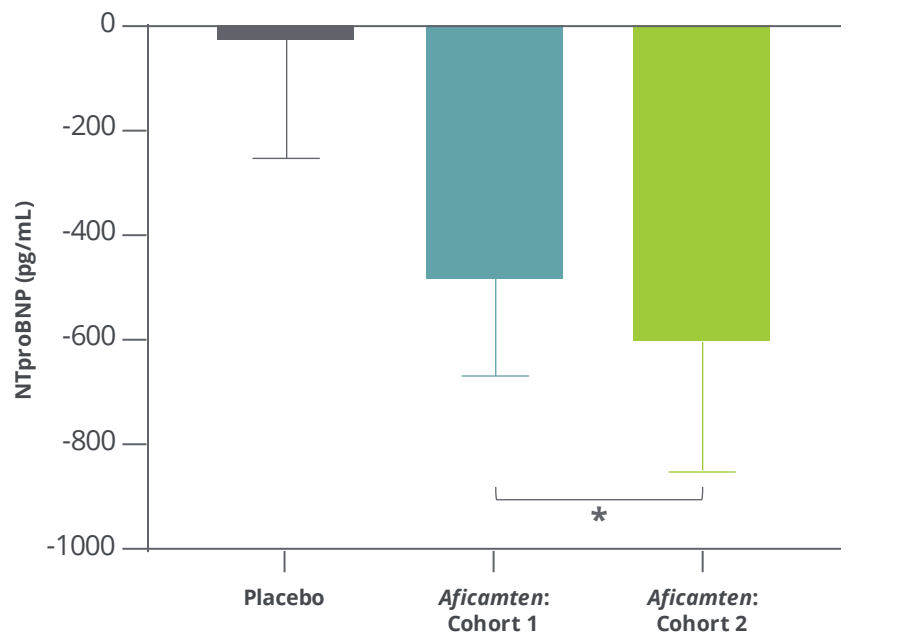
Maron M, Abraham T, Masri A, et al. "REDWOOD-HCM: A Randomized, Double-blind, Placebo-controlled, Dose-finding Trial of the Cardiac Myosin Inhibitor, Aficamten, In Obstructive Hypertrophic Cardiomyopathy"

# Change from Baseline in NT-proBNP & NYHA Class

## Cohorts 1 & 2



Change from Baseline NT-proBNP to Week 10

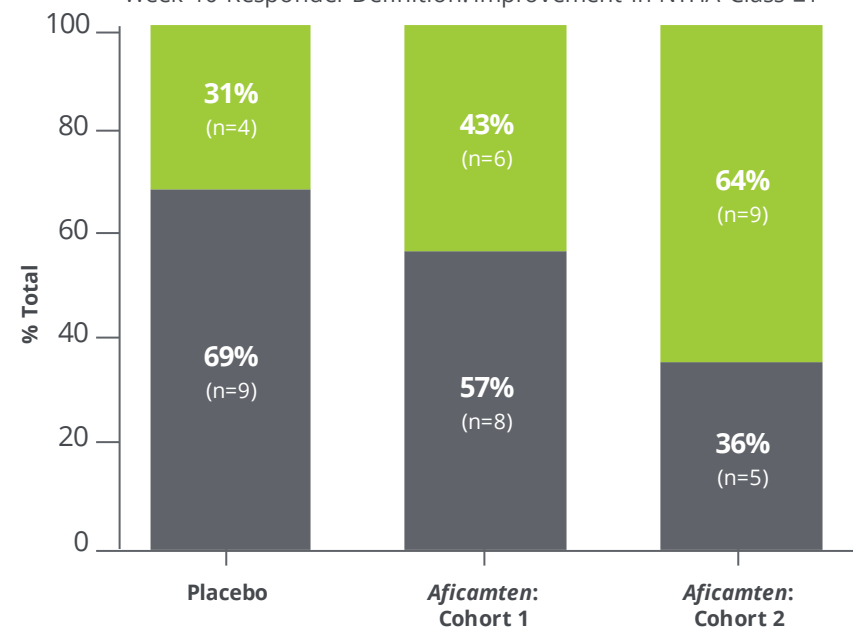


\*  $p = 0.003$  for Pooled Cohort 1 & 2 vs. Placebo

Combined Placebo (N=13)  
 Aficamten: Cohort 1 (N=14)  
 Aficamten: Cohort 2 (N=14)

Improvement in Heart Failure Symptoms (NYHA Class)

Week 10 Responder Definition: Improvement in NYHA Class  $\geq 1$



Cohort 1 vs Placebo:  $p > 0.1$   
 Cohort 2 vs Placebo:  $p = 0.08$

No Improvement in NYHA Class  
  $\geq 1$  NYHA Class Improvement

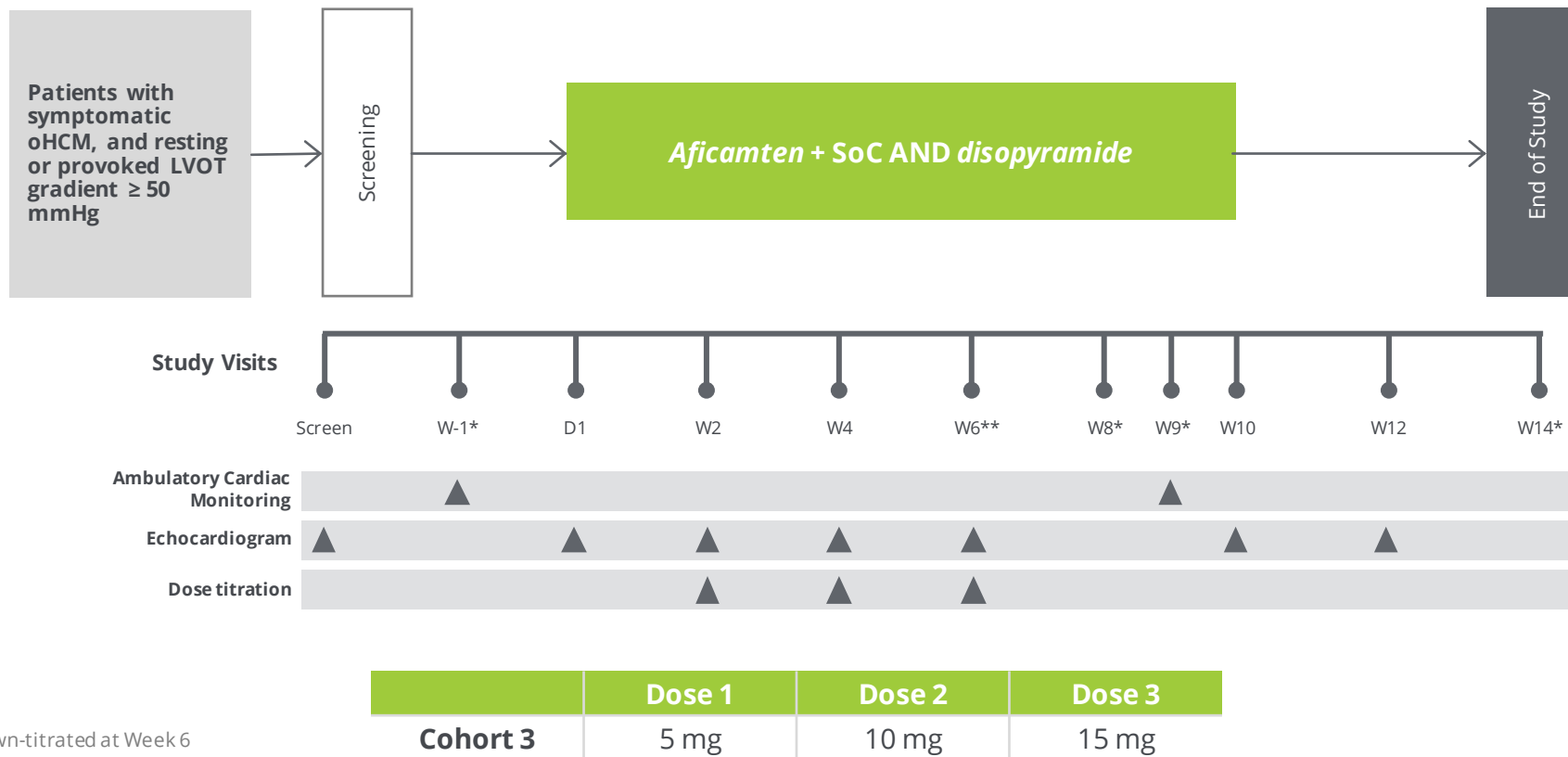
Maron M, Abraham T, Masri A, et al. "REDWOOD-HCM: A Randomized, Double-blind, Placebo-controlled, Dose-finding Trial of the Cardiac Myosin Inhibitor, Aficamten, In Obstructive Hypertrophic Cardiomyopathy"

# REDWOOD-HCM: Cohort 3

Patients with symptomatic oHCM on background therapy of *disopyramide*



Same doses used in Cohort 3 as in Cohort 1



\*Telephone visits

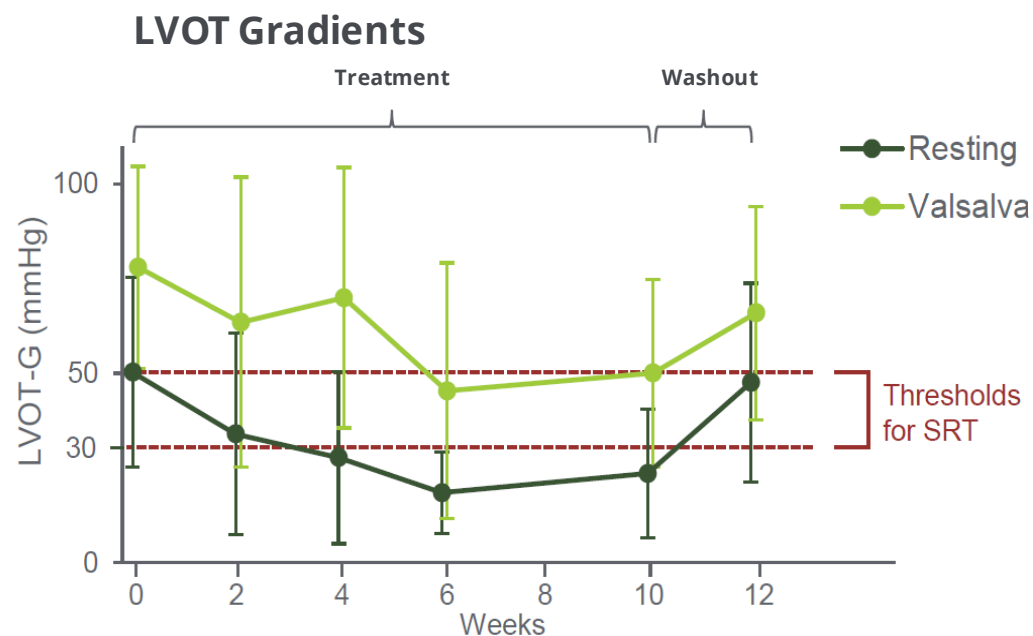
\*\*Patient can only be down-titrated at Week 6

# REDWOOD-HCM: Efficacy in Patients on *Disopyramide*

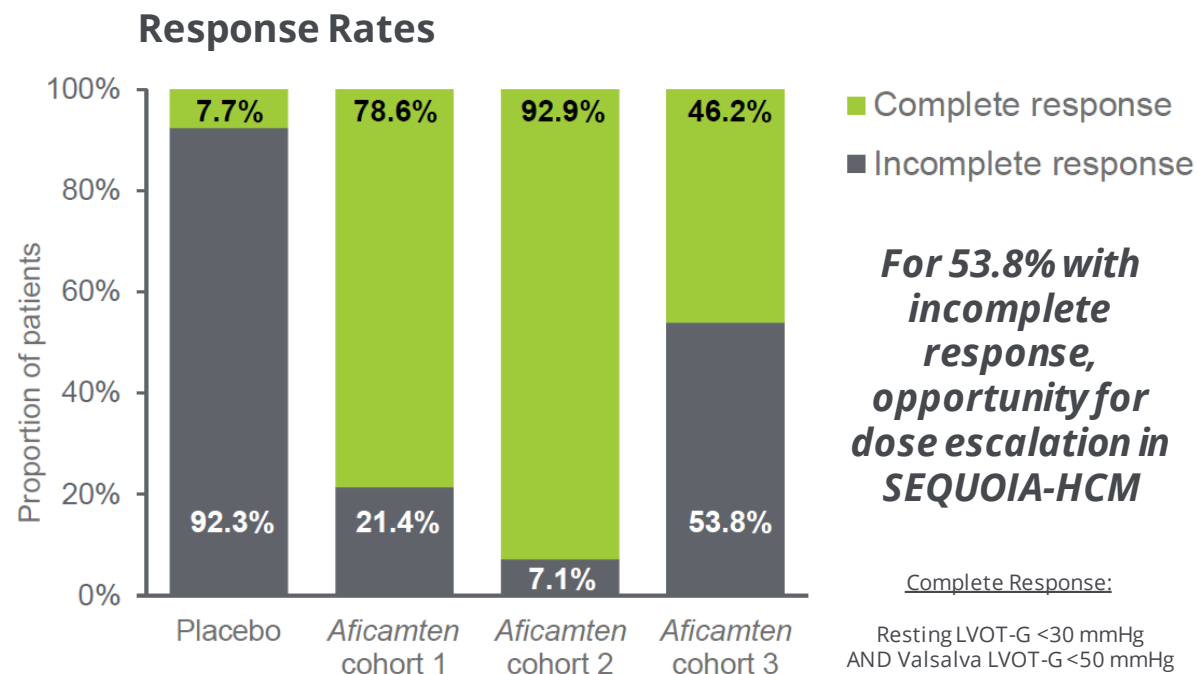
## Cohort 3



Reductions in LVOT gradients; no patients whose LVEF dropped below safety threshold



Values are mean  $\pm$  SD. Core-lab read echocardiograms. SRT, septal reduction therapy





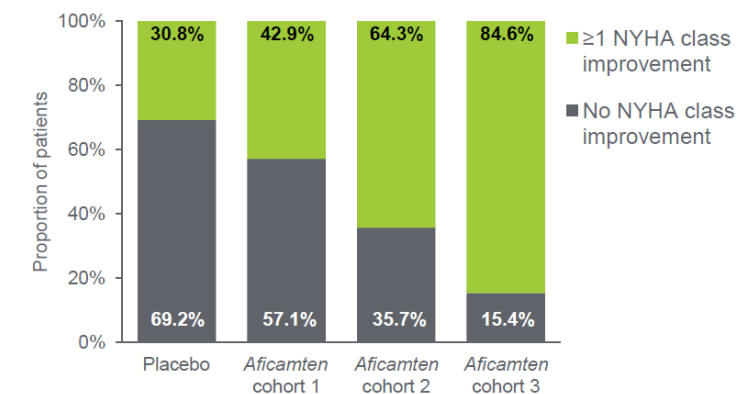
# REDWOOD-HCM: Efficacy in Patients on *Disopyramide*

## Cohort 3



Improvement in functional class and cardiac biomarkers

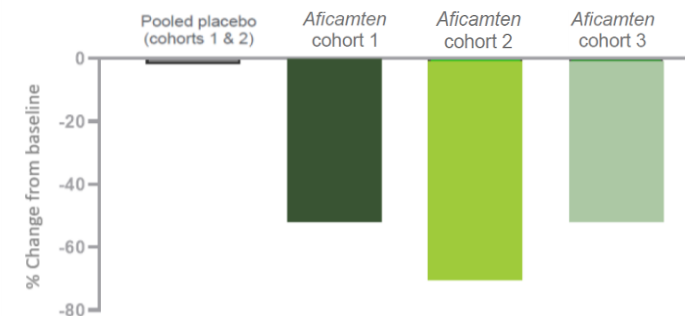
### NYHA Response



NYHA, New York Heart Association

### NT-proBNP

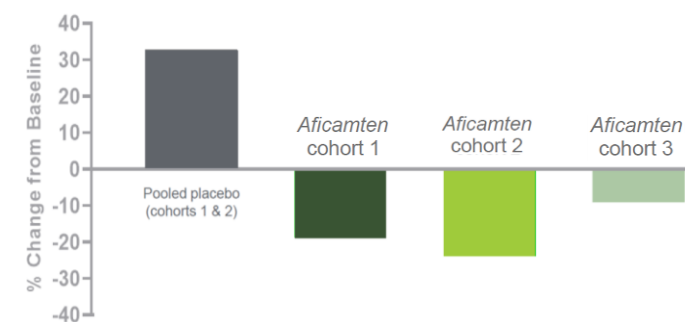
Geometric mean change from baseline to Week 10



NT-proBNP, N-terminal pro b-type natriuretic peptide

### Hs-Troponin I

Mean change from baseline to Week 10



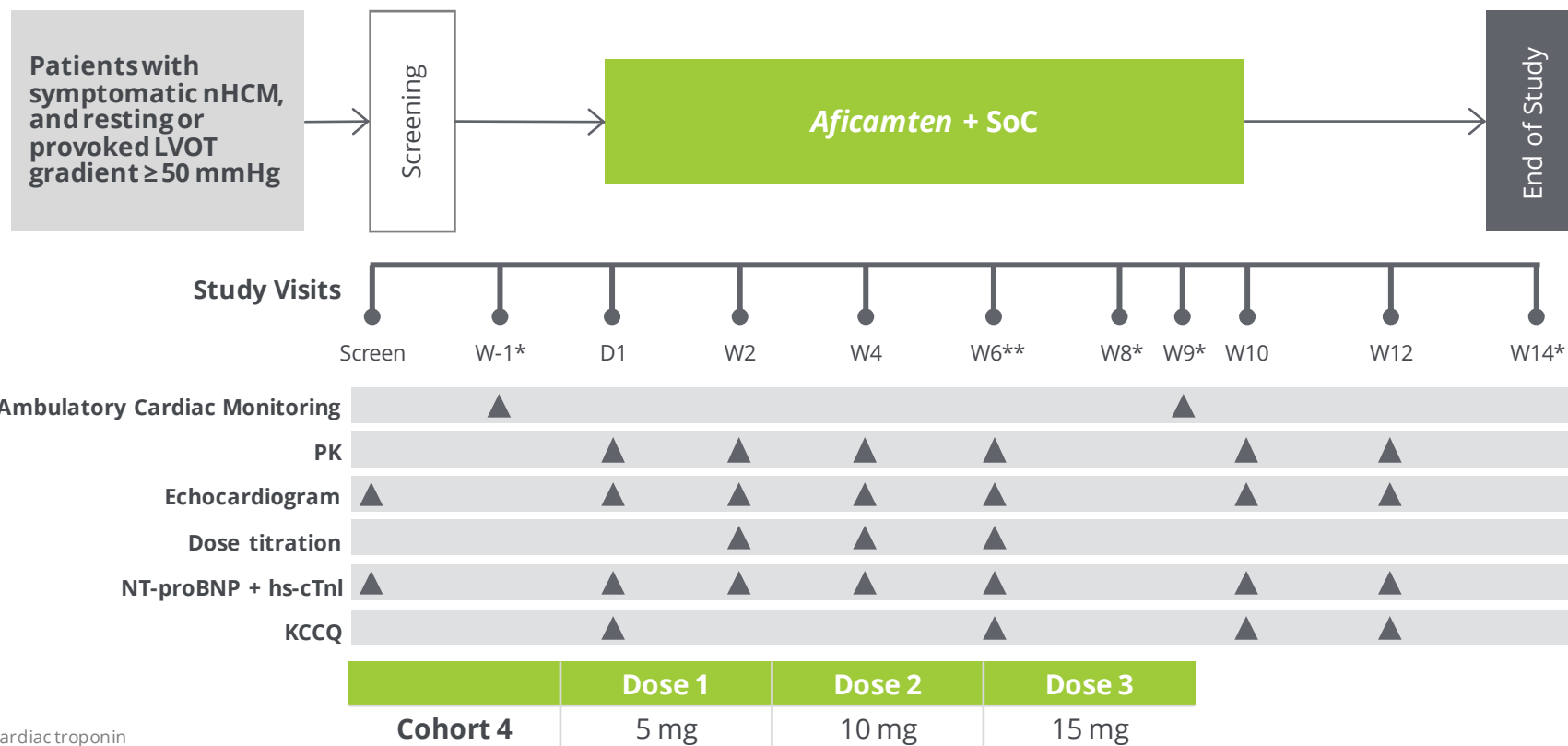
hs, high sensitivity

# REDWOOD-HCM: Cohort 4

Patients with symptomatic nHCM on background therapy



Opened to enrollment in Q1 2022



hs-cTnI: high-sensitivity cardiac troponin  
\*Telephone visits  
\*\*Patient can only be down-titrated at Week 6

# SEQUOIA-HCM: Phase 3 Trial

Plan to enroll at 115 sites in US, Europe and Asia\*\*

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**

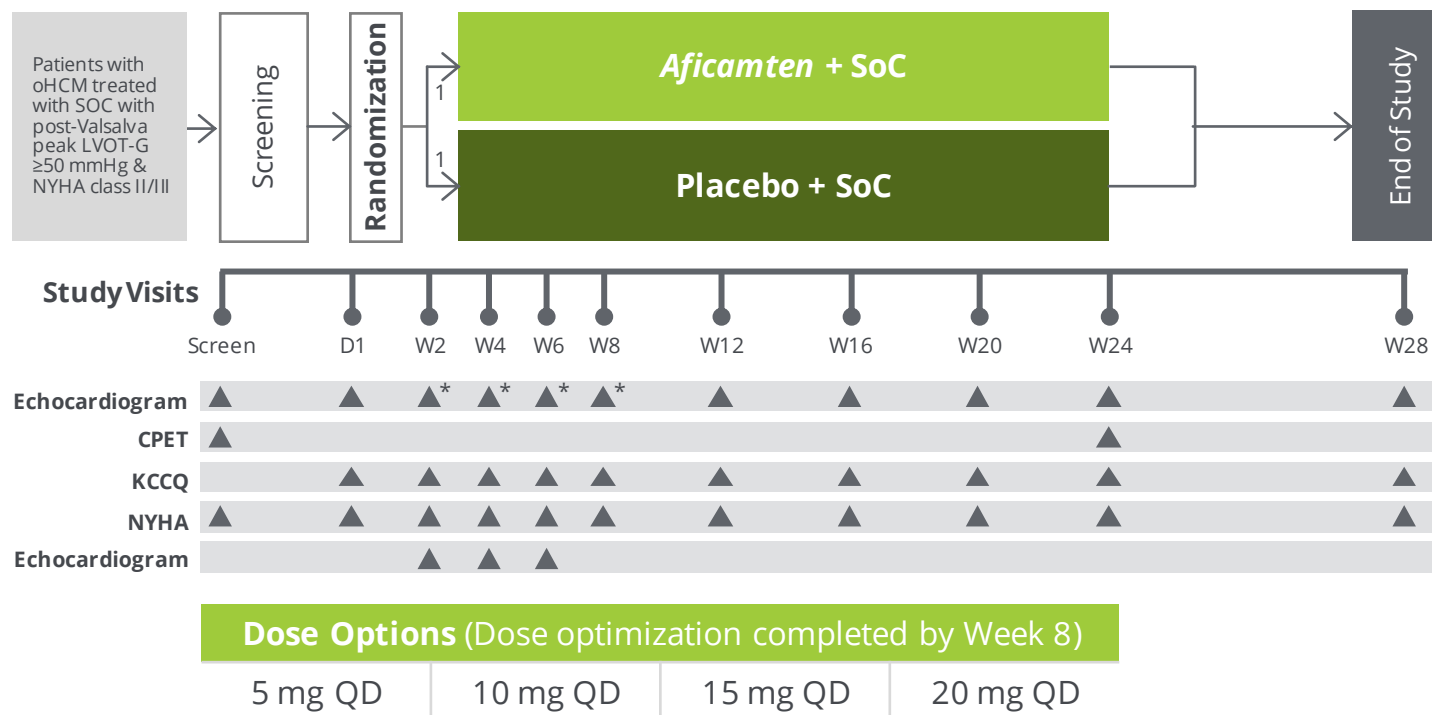
Enrolling 270 patients treated with standard of care with:

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

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

\* Focused echocardiogram

\*\* Plan to enroll in US, Italy, France, Germany, Czech Republic, Denmark, Hungary, Netherlands, Poland, Portugal, Spain, UK, Israel & China  
SOC: standard of care



# REDWOOD-HCM: Open Label Extension

Open for eligible patients who completed REDWOOD-HCM & SEQUOIA-HCM



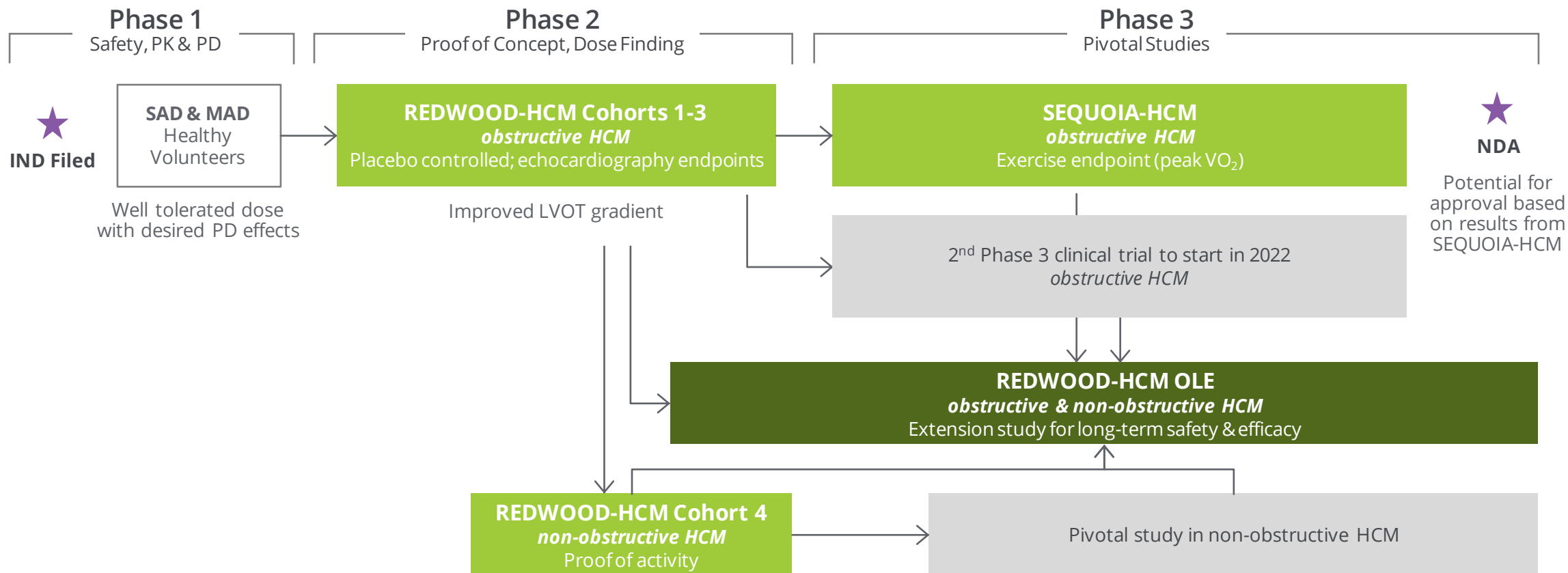
Expect to share data from REDWOOD-HCM OLE in 2022

- Primary endpoint: incidence of AEs & LVEF <50
- Secondary endpoints: measures of long-term effects of *aficamten* on LVOT-G; assessments of steady-state pharmacokinetics.
  - Cardiac MRI sub-study to assess changes in cardiac morphology, function and fibrosis
- Individually optimized dose starts at lowest dose in prespecified range with echo-guided dose titration

**OLE:** Escalating doses based on echo-guided dose titration

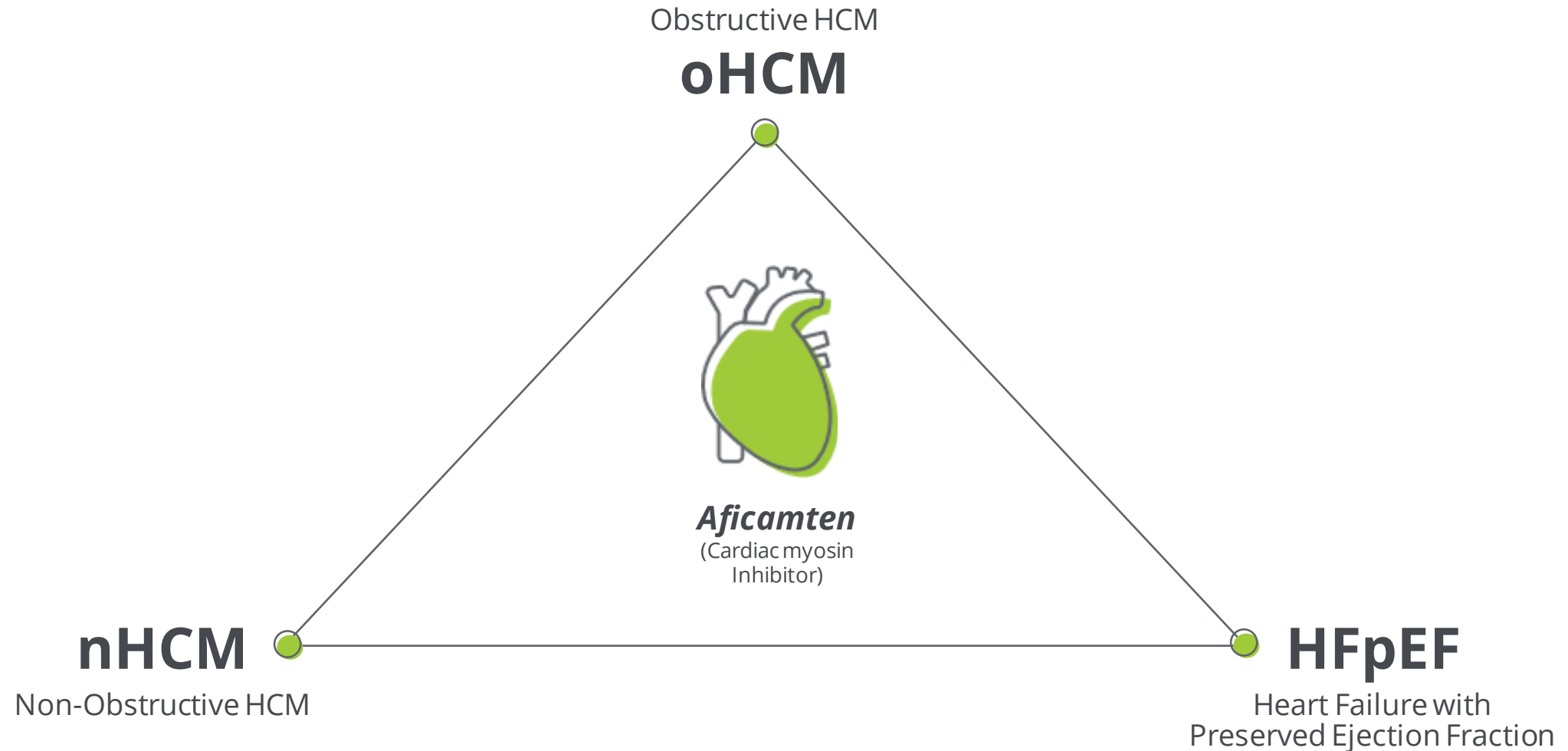
# Aficamten: Clinical Development Plan for HCM

SEQUOIA-HCM enrolling patients with oHCM; REDWOOD-HCM Cohort 4 enrolling patients with nHCM



# Novel Approach May Address Multiple Unmet Patient Needs

**No FDA-approved therapies**



*Sarcomere Directed Drug Commercialization*

# FRANCHISE STRATEGY

# Launch Guiding Principles Strengthen Franchise Build

## Patient and customer centric

Creating **broad value for cardiac patients** and build long-term, **deep relationships with cardiologists** with multiple CV medicines

## Cost-efficient

Leverage **Go-to-Market synergies** between multiple CV medicines, enabling **efficiencies** in both franchise functions and support functions

## Scalable

Build and **develop core functional capabilities** while strategically outsourcing capabilities and processes that are non-core

Design commercial organization to optimize U.S. launch of *omecamtiv mecarbil*, enable geographic expansion & partnerships, and launch of *aficamten*



# Limited Incremental Cost For Future U.S. CV Launches

## Building Today ...

To optimize value capture for potential launch of *omecamtiv mecarbil*

- Building deep, long-term relationships

## ... To Lead Tomorrow

To support future launches and establish Cytokinetics as a CV leader

- Significant overlap between HFrEF and HCM



<1,000

Hospitals  
& HF Clinics



<10,000

Cardiologists



~15%

Additional  
Targets



Coverage of  
vast majority  
of HCM

# Go-to-Market Synergies for *Omecamtiv Mecarbil* & *Aficamten*

<b>Sales Team</b>	<b>Given target overlap, leveraging same sales team</b>	→ <b>Synergy PV of ~ \$500M</b>
<b>Commercial Support Functions</b>	<b>Utilize resources across brands (e.g., access, analytics, ...)</b>	
<b>Medical Affairs</b>	<b>MSLs qualified to cover both HFrEF and HCM</b>	
<b>Corporate Support Functions</b>	<b>Avoid costs of duplication (IT, Finance, HR, ...)</b>	

*Sarcomere Directed Drug Development*

# **SKELETAL MUSCLE**

*Reldesemtiv*

# ***Reldesemtiv***

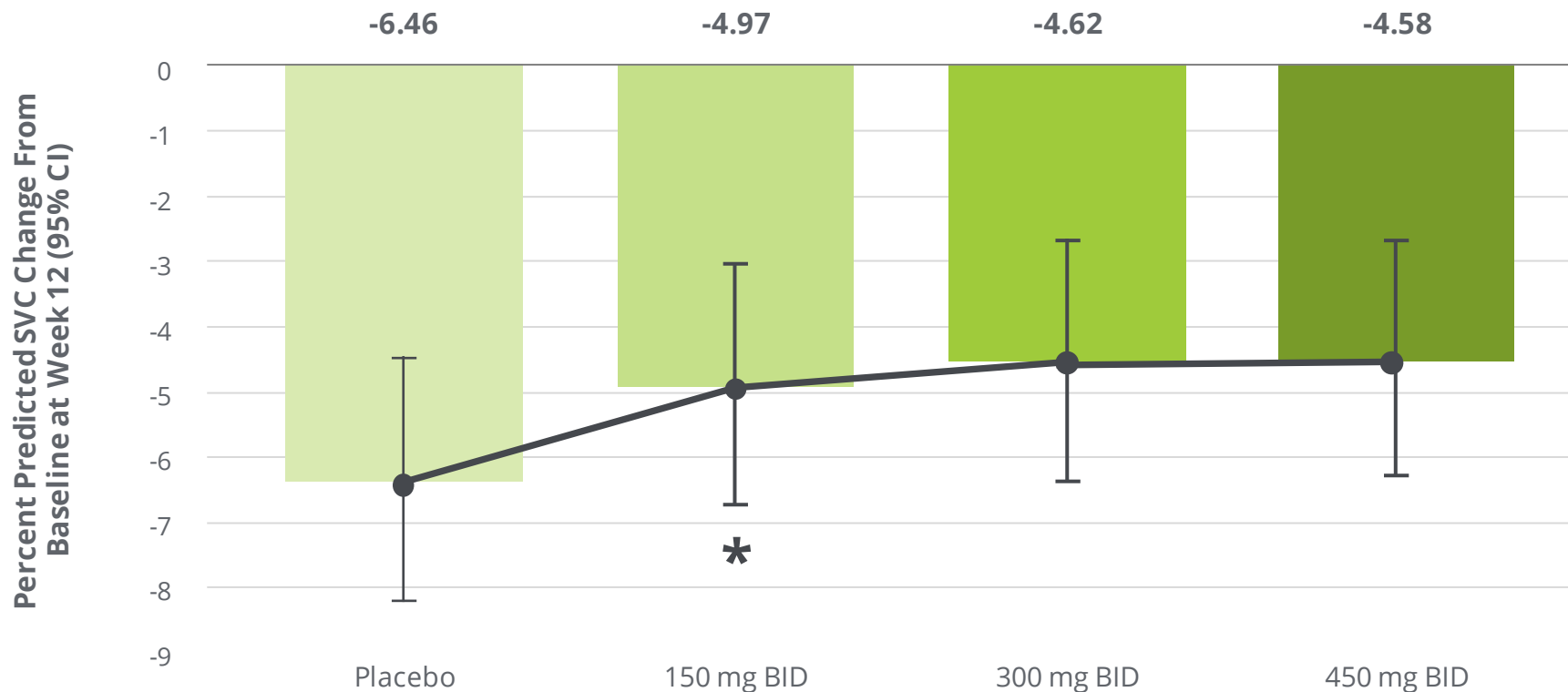
# Phase 2 Clinical Trial in ALS

Results presented at American Academy of Neurology 2019 Annual Meeting



# Primary Endpoint: SVC

Change from baseline in percent predicted SVC at week 12



## Primary Analysis\*

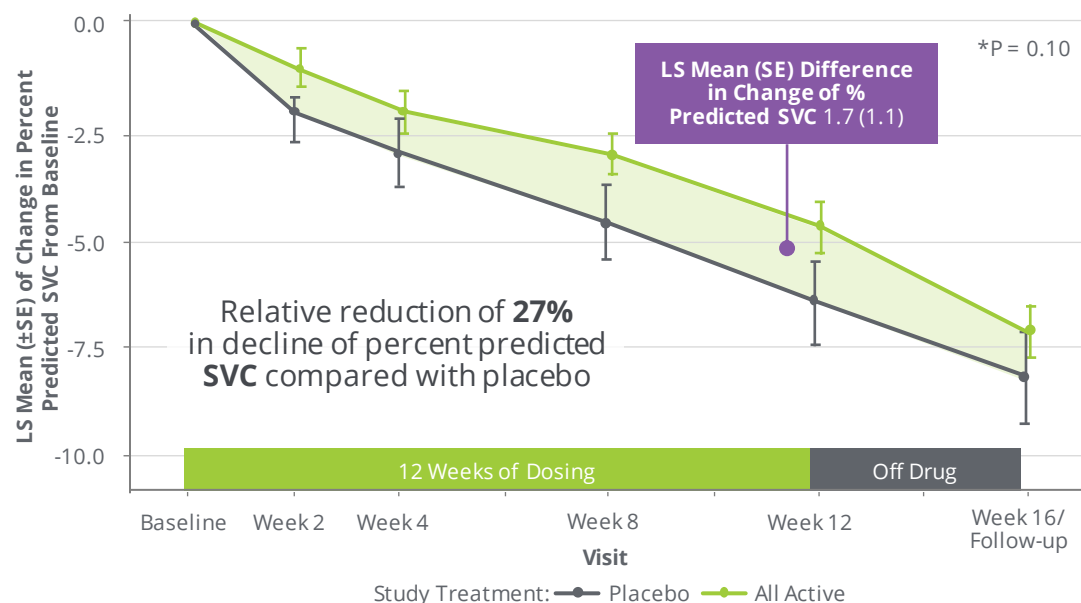
P = 0.11  
for weighted  
dose-response  
relationship

\*Based on Mixed Model for Repeated Measures (MMRM) with the contrasts of (-5, -1, 3, 3) for placebo, *reldesemtiv* 150 mg, 300 mg and 450 mg BID, respectively

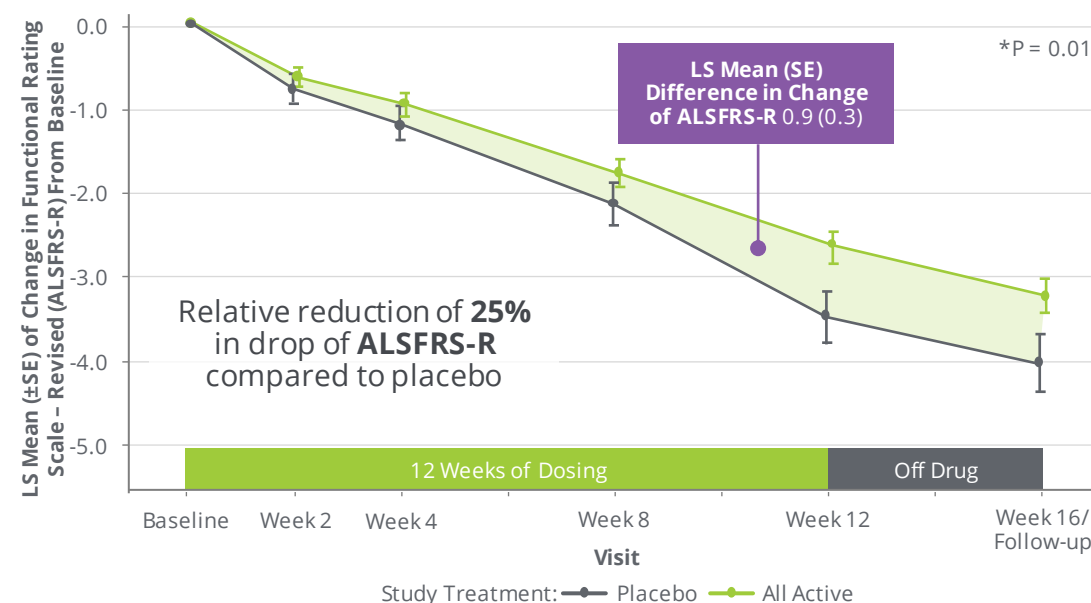
# Phase 2 Clinical Trial

Primary analysis not statistically significant; patients on all doses of *reldesemtiv* declined less than patients on placebo\*

## SVC Change From Baseline (All Active vs Placebo)



## ALSFRS-R Change From Baseline (All Active vs Placebo)



\*post hoc analysis  
FORTITUDE-ALS did not achieve statistical significance, but patients on all dose groups of *reldesemtiv* declined less than patients on placebo

# Subgroup Analyses\*

## Percent Predicted SVC

	No. of Patients (pbo/ <i>reldesemtiv</i> )	LSM Difference (95% CI)	Estimate	Pvalue
Percent predicted SVC at baseline				
<80	38/102		1.037	0.5935
≥80	52/187		2.135	0.0834
ALSFRS-R total score at baseline				
<Median (38.0)	43/118		2.886	0.141
≥Median (38.0)	47/171		0.451	0.7146
ALSAQ-5 total score at baseline				
<150	49/159		0.568	0.6689
≥150	41/130		3.489	0.0287
Anatomic site of disease onset				
Limb	73/234		2.309	0.0448
Bulbar	17/55		-0.027	0.9923
Time since ALS symptom onset				
<2 Years	50/188		0.530	0.7211
≥2 Years	40/101		3.640	0.0094
Time since ALS diagnosis				
<1 Year	65/210		0.819	0.5263
≥1 Year	25/79		4.237	0.0172
<6 Months	39/130		1.230	0.4538
≥6 Months	51/159		2.285	0.1024
Pre-study rate of disease progression (ALSFRS-R total score reduction per month)				
1 <sup>st</sup> tertile ≤(0.3667)	29/107		0.663	0.6361
2 <sup>nd</sup> tertile > (0.3667) - (0.6673)	35/94		2.960	0.0976
3 <sup>rd</sup> tertile (0.6673)	26/88		1.620	0.4597

-15 -10 -5 0 5 10 15  
Favors Placebo ← → Favors Treatment

## ALSFRS-R Total Score

	No. of Patients (pbo/ <i>reldesemtiv</i> )	LSM Difference (95% CI)	Estimate	Pvalue
Percent predicted SVC at baseline				
<80	43/109		1.588	0.0089
≥80	57/196		0.264	0.5296
ALSFRS-R total score at baseline				
<Median (38.0)	48/129		1.107	0.0585
≥Median (38.0)	52/176		0.685	0.0987
ALSAQ-5 total score at baseline				
<150	52/164		0.266	0.5025
≥150	48/141		1.598	0.0055
Anatomic site of disease onset				
Limb	80/245		0.872	0.0279
Bulbar	20/60		0.861	0.2194
Time since ALS symptom onset				
<2 Years	56/199		1.422	0.0025
≥2 Years	44/106		0.475	0.3439
Time since ALS diagnosis				
<1 Year	71/225		1.123	0.0101
≥1 Year	29/80		0.359	0.5350
<6 Months	42/137		1.359	0.0154
≥6 Months	58/168		0.566	0.1820
Pre-study rate of disease progression (ALSFRS-R total score reduction per month)				
1 <sup>st</sup> tertile ≤ (0.3667)	32/110		0.389	0.4298
2 <sup>nd</sup> tertile > (0.3667) - (0.6673)	38/99		0.987	0.0665
3 <sup>rd</sup> tertile (0.6673)	30/96		1.733	0.0177

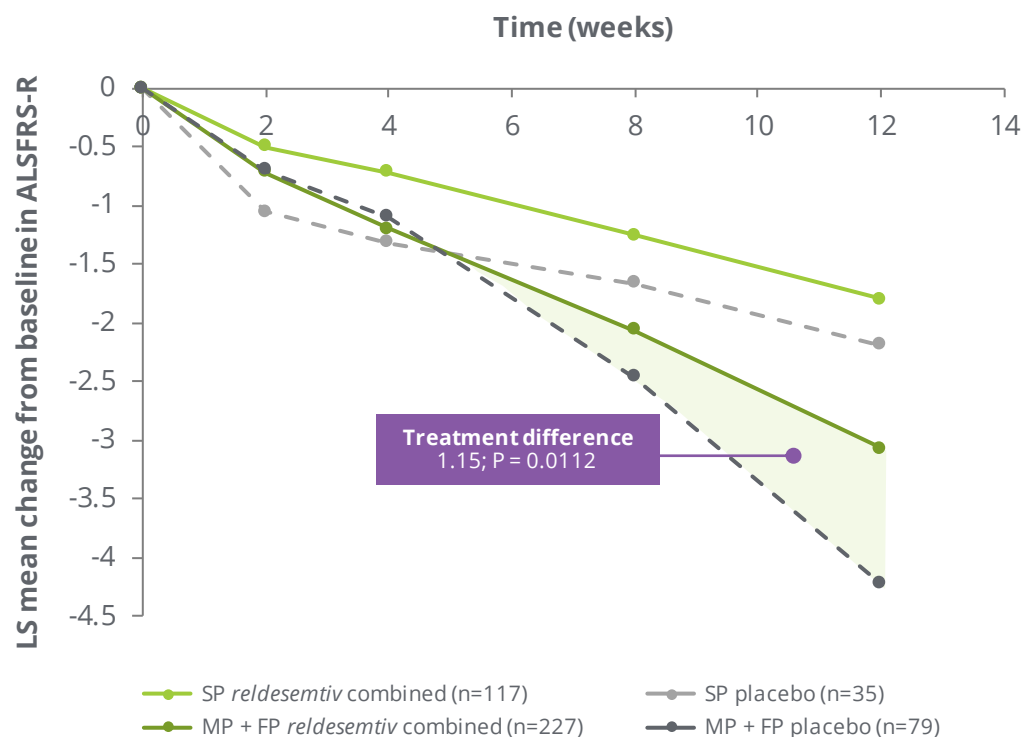
-5 -2.5 0 2.5 5  
Favors Placebo ← → Favors Treatment

\*FORTITUDE-ALS did not achieve statistical significance, but patients on all dose groups of *reldesemtiv* declined less than patients on placebo



# Post-Hoc Analyses Inform Potential Path Forward

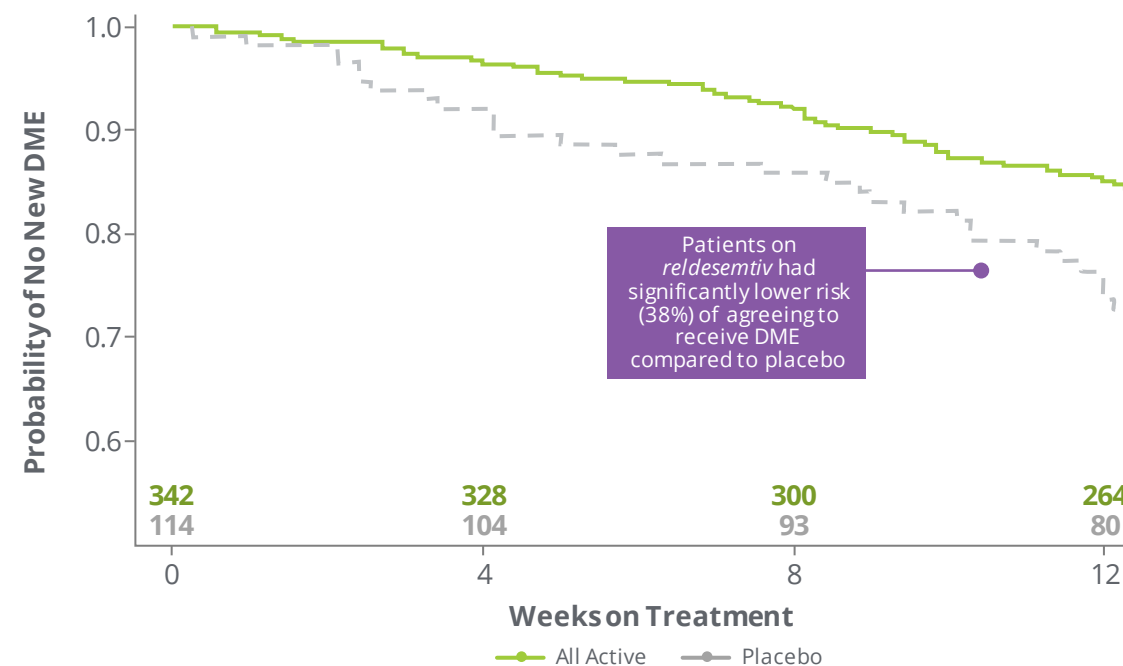
## Change From Baseline in ALSFRS-R by Progressor Tertiles



SP: slow progressor; MP: middle progressor; FP: fast progressor

## Probability of No New DME Over Time With Treatment With *Reldesemtiv*

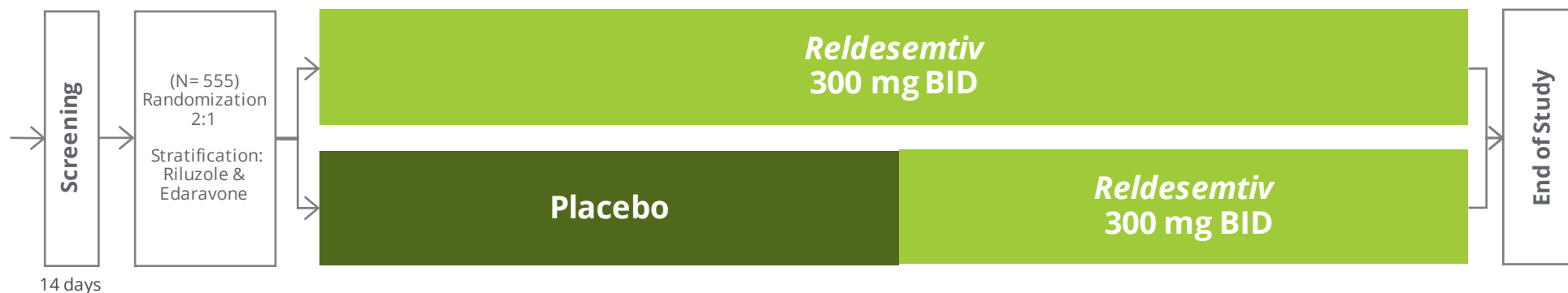
DME (Durable Medical Equipment): Manual wheelchair, power wheelchair, NIV, Augmentative Language Device, PEG



# Phase 3 Clinical Trial Design

Plan to enroll 555 patients; interim analysis for futility in 2H 2022

Enrolling patients with ALS in the US, Canada, Australia and Europe evaluating change from baseline ALSFRS-R at 24 weeks of treatment with *reldesemtiv* or placebo



Study Visits	Screen	D1	W2	W4	W8	W12	W16	W20	W24	W26	W28	W32	W36	W40	W44	W48	W52 FU
ALSFRS-R	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
FVC	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Lab	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑
Muscle Strength	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑	↑

↑ In-Clinic




↑ Remote

↑ Both In-Clinic & Remote

*Sarcomere Directed Therapies*

# **CORPORATE PROFILE**

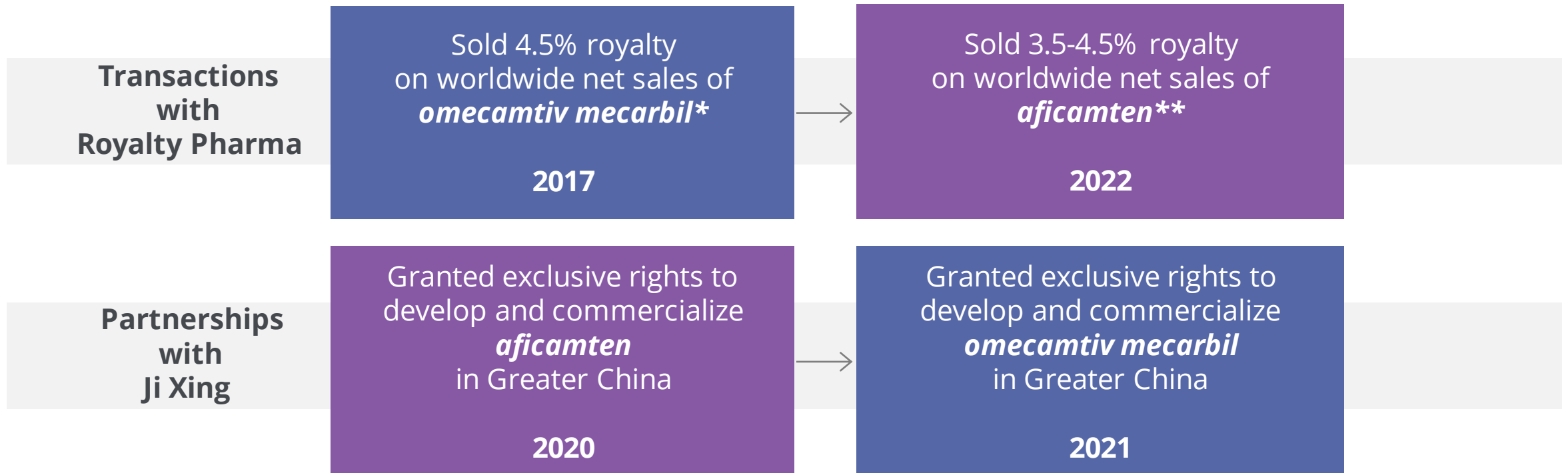
# Robust Pipeline, Solid Financial Position

Pipeline	1	Potential commercial launch in 2022	2	Programs in Phase 3 trials	3	Potential FDA approvals by 2025	5	Clinical stage programs	10	Development programs by 2025
Programs	Heart Failure <i>Omecamtiv mecarbil</i> <ul style="list-style-type: none"><li>Positive trial results from GALACTIC-HF</li><li>NDA filed; PDUFA 11/30/22</li></ul>		 CK-136 <ul style="list-style-type: none"><li>Phase 1</li></ul>	HCM <i>Aficamten</i> <ul style="list-style-type: none"><li>Phase 3 trial SEQUOIA-HCM, enrolling patients with oHCM</li><li>Cohort 4 of Phase 2 trial REDWOOD-HCM enrolling patients with nHCM</li></ul>		ALS <i>Reldesemtiv</i> <ul style="list-style-type: none"><li>Phase 3 trial, COURAGE-ALS ongoing</li></ul>		Ongoing R&D Additional research in muscle biology, energetics & metabolism 		
	 300 Full time employees				\$624M At Q4 2021 <i>Does not include \$150 million in proceeds received from transactions executed in late 2021 and early 2022</i>			>2 years Cash runway		
Timelines and milestones reflect Cytokinetics' current expectations and beliefs										

*Timelines and milestones reflect Cytokinetics' current expectations and beliefs*

# Monetizing Our Pipeline to Bolster Balance Sheet

Symmetry of deals for *omecamtiv mecarbil* and *aficamten* affords synergies for development and potential launches and supports franchise strategies



\* 4.5% on worldwide net sales of *omecamtiv mecarbil* (and potentially other compounds with same mechanism of action), subject to potential increase of up to an additional 1% under certain circumstances

\*\* 4.5% for annual worldwide net sales of *aficamten* up to \$1 billion and 3.5% for annual worldwide net sales of *aficamten* in excess of \$1 billion, subject to reduction in certain circumstances

# Balance Sheet & Financial Guidance

## 2021 Condensed Balance Sheet

As of 12/31/2021

*in millions*

	Total
Cash and investments	\$623.7*
Accounts receivable	\$51.8
PPE	\$73.3
Leased assets	\$73.1
Other assets	\$19.4
<b>Total Assets</b>	<b>\$841.3</b>
Debt	\$134.0
Liability related to sale of future royalties	\$179.1
Deferred Revenue	\$87.0
Lease liability	\$127.1
Other liabilities	\$70.2
<b>Total Liabilities</b>	<b>\$597.4</b>
Working capital	\$463.8
Accumulated deficit	(\$1,207.6)
Stockholders' equity	\$243.9
<b>Wtd Avg Basic Shares Outstanding</b>	<b>84.1</b>

## 2022 Financial Guidance

*in millions*

	Total
Cash Revenue	\$20 – 25
Cash Operating Expenses	\$380 – 400
<b>Net</b>	<b>~ \$365 - 385</b>

*\*Does not include \$150 million in proceeds received from transactions executed in late 2021 and early 2022*

# Expected Milestones in 2022

Launch *omecamtiv mecarbil* in the U.S. pending FDA approval in Q4 2022

Continue enrollment in  
**SEQUOIA-HCM**  
through 2022

Begin second Phase 3  
**trial of *aficamten* in  
oHCM** in 2H 2022

Expect to share data from  
**REDWOOD-HCM OLE**  
in 2022

Continue enrollment  
in **Cohort 4 of  
REDWOOD-HCM** in 2022

Expect **first interim analysis from COURAGE-ALS** in 2H 2022



# THANK YOU

*Sarcomere Directed Therapies*



*Nefertari, diagnosed with heart failure*



*Jillian, diagnosed with HCM*



*Chuck, diagnosed with ALS*