Cytokinetics

Sarcomere Directed Therapies

EMPOWERING MUSCLE EMPOWERING LIVES

John, *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 to the potential impact of the COVID-19 pandemic on our research and development activities and business operations, including our anticipated cash expenditures during the 2020 calendar year, statements relating to Cytokinetics' and its partners' 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; Cytokinetics' commercial readiness for *omecamtiv mecarbil*; Cytokinetics' ability to earn and receive milestone payments; the timing and results of clinical trials of AMG 594 and CK-274; the timing of any potential commercial launch of our product candidates, if approved; commercial opportunities for our product candidates; Cytokinetics' cash runway and 2019 financial guidance; interactions with the FDA; the properties, potential benefits and commercial potential of CK-274, *omecamtiv mecarbil*, AMG 594, *reldesemtiv* and 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' or its partners' ability to conduct clinical trials, and Cytokinetics may be unable to obtain or maintain patent or trade secret protection for its intellectual property; Astellas' or Amgen's decisions with respect to the design, initiation, conduct, timing and continuation of development activities for *reldesemtiv* or *omecamtiv mecarbil*, respectively; 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; competitive products or alternative therapies may be developed by others for the treatment of indications Cytokinetics' drug candidates and potential drug candidates may target; and risks and uncertainties relating to the timing and receipt of payments from its partners, including milestones and royalties on future potential product sales under Cytokinetics' collaboration agreements with such partners. For further information regarding these and other risks related to Cytokinetics' business, investors should consult Cytokinetics' filings with the Securities and Exchange Commission.

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.

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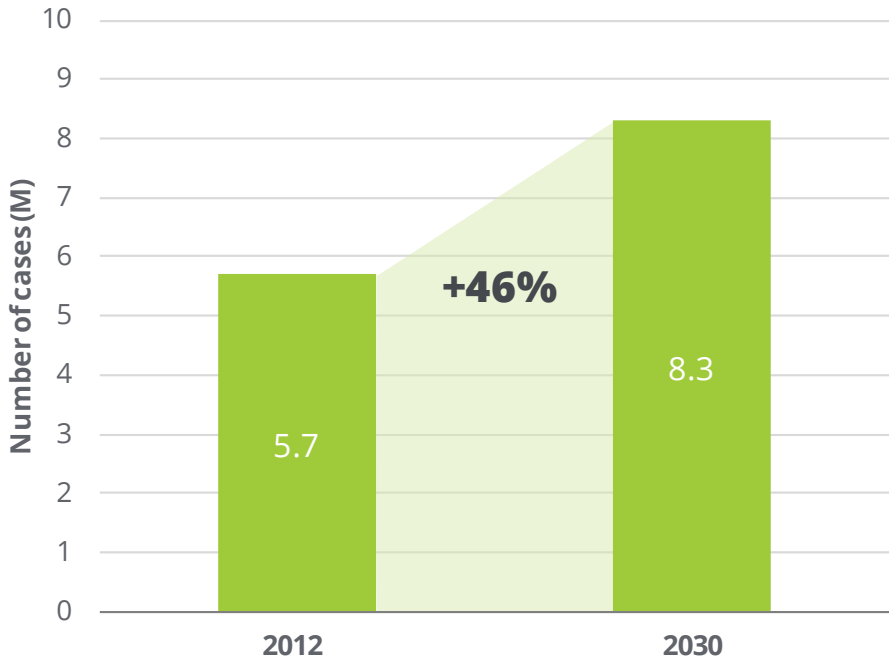
Heart Failure: Growing Prevalence and Low Survival Rates

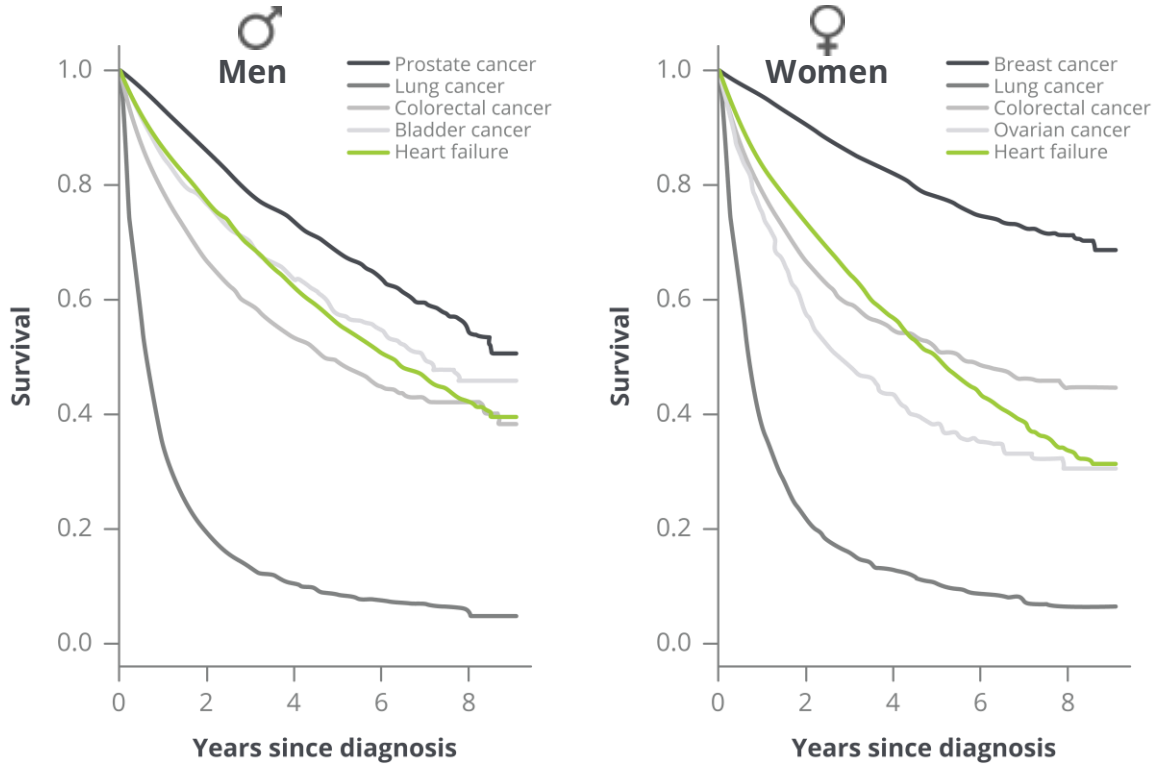
6 million people have heart failure in the United States

Prevalence Expected to Increase by 46% from 2012 – 2030



Mozzafarian, et al. *Circulation* 2016; 133: e38-360

HF Survival Rates Worse than Some Prevalent Cancers



Mamas et al. *Eur J Heart Fail.* 2017 Sep;19(9):1095-104

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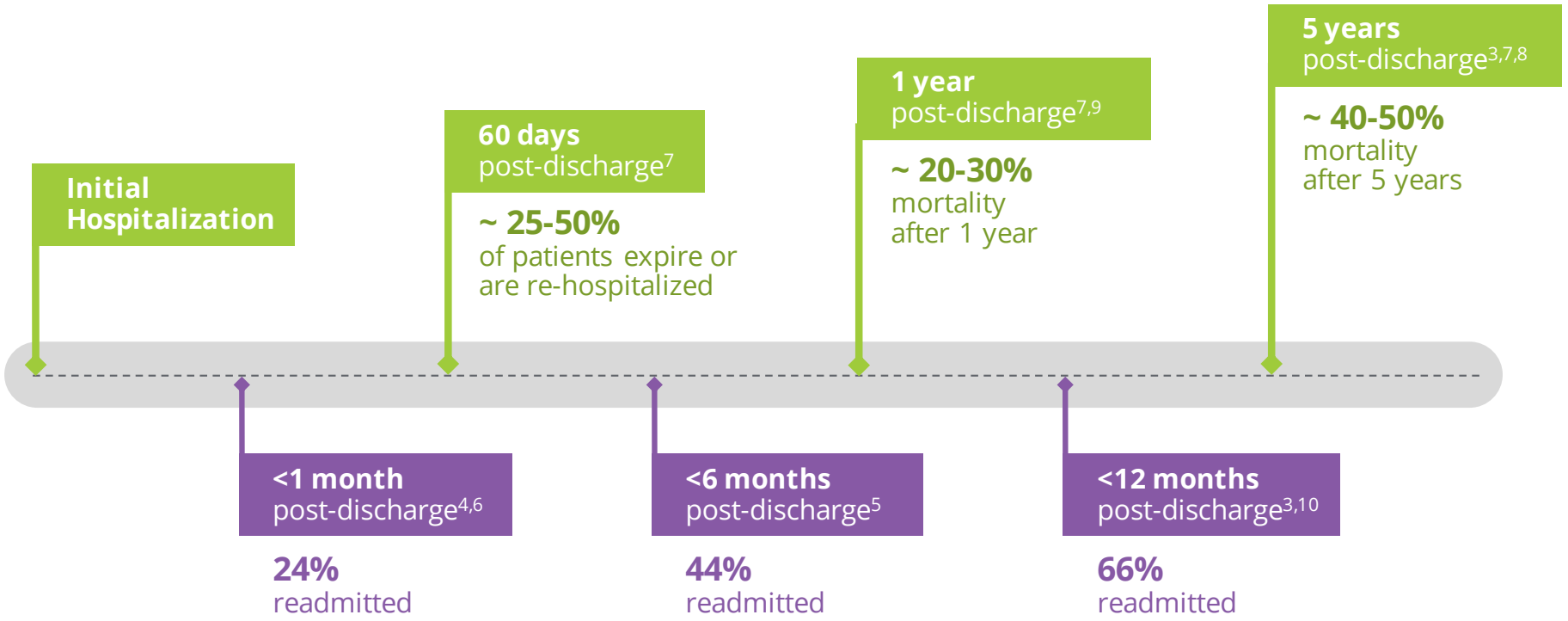
High Mortality and Hospital Readmission Rates

Acute heart failure is the most frequent cause of hospitalization in people > 65[1,2]

1 of 2 hospitalized HF patients are readmitted within 6 months[5]



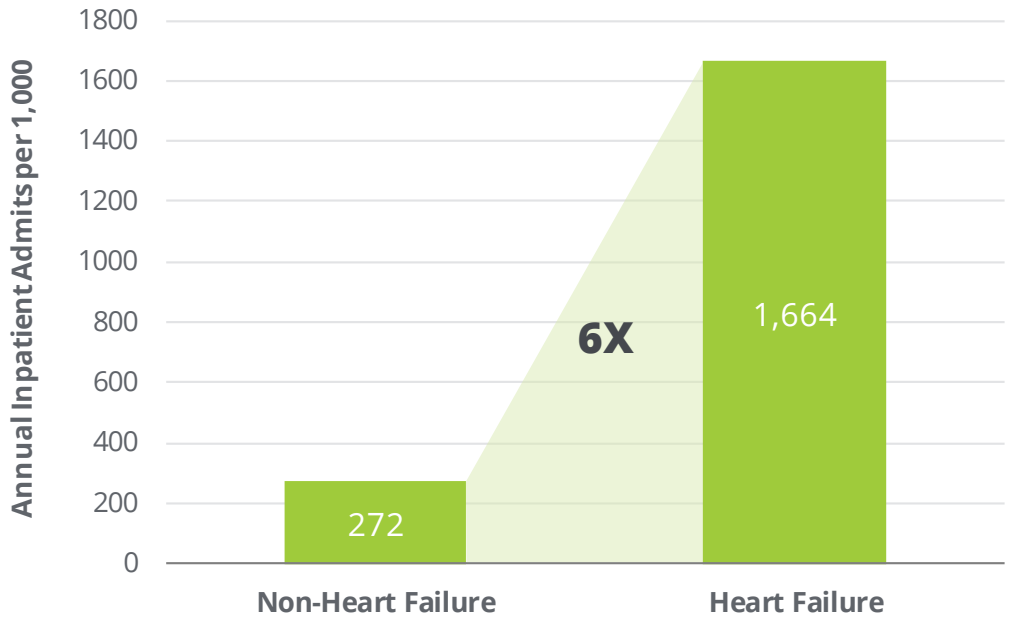
1, Adams et al. *Am Heart J* 2006; 149:209-16
2. Chen et al. *JAMA* 2011;306:1669-78
3. Dickstein et al. *Eur Heart J* 2008;29:2388-442
4. Korda,, et al. *BMC Health Serv Res*. 2017;21;17(1):220.
5. Krumholz et al. *Arch Intern Med* 1997;15799 – 105
6. Krumholz et al. *Circ Cardiovasc Qual Outcomes* 2009;2(5):407-13
7. Loehr et al. *Am J Cardiol* 2008;101:1016-22
8. Roger et al. *Circulation* 2012;125:32-220
9. Shahar, et al. *J Card Fail* 2004; 10(5):374-9
10. Whellan et al. *Circulation* 2010 Jan;3(1):33-40

High Economic Burden of Heart Failure

Heart failure costs ~$123 billion annually, representing 33% of total Medicare budget[1,2]

Heart failure is the most frequent diagnosis for hospitalized Medicare patients in the US[1,2]

Inpatient Admission Rates for HF Patients 6X Higher than Non-HF Patients[1]



1. Milliman Analysis of Medicare 5% Sample 2011-2012 (2012 index year, 2011 look back year)
2. Milliman Analysis of Medicare 5% Sample (2014 index year, 2013 look back year) and Office of the Actuary 2016 Board of Trustees Report. The costs only include Part A & B costs

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**

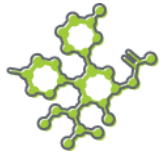
Drugs that do not affect renal function

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

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

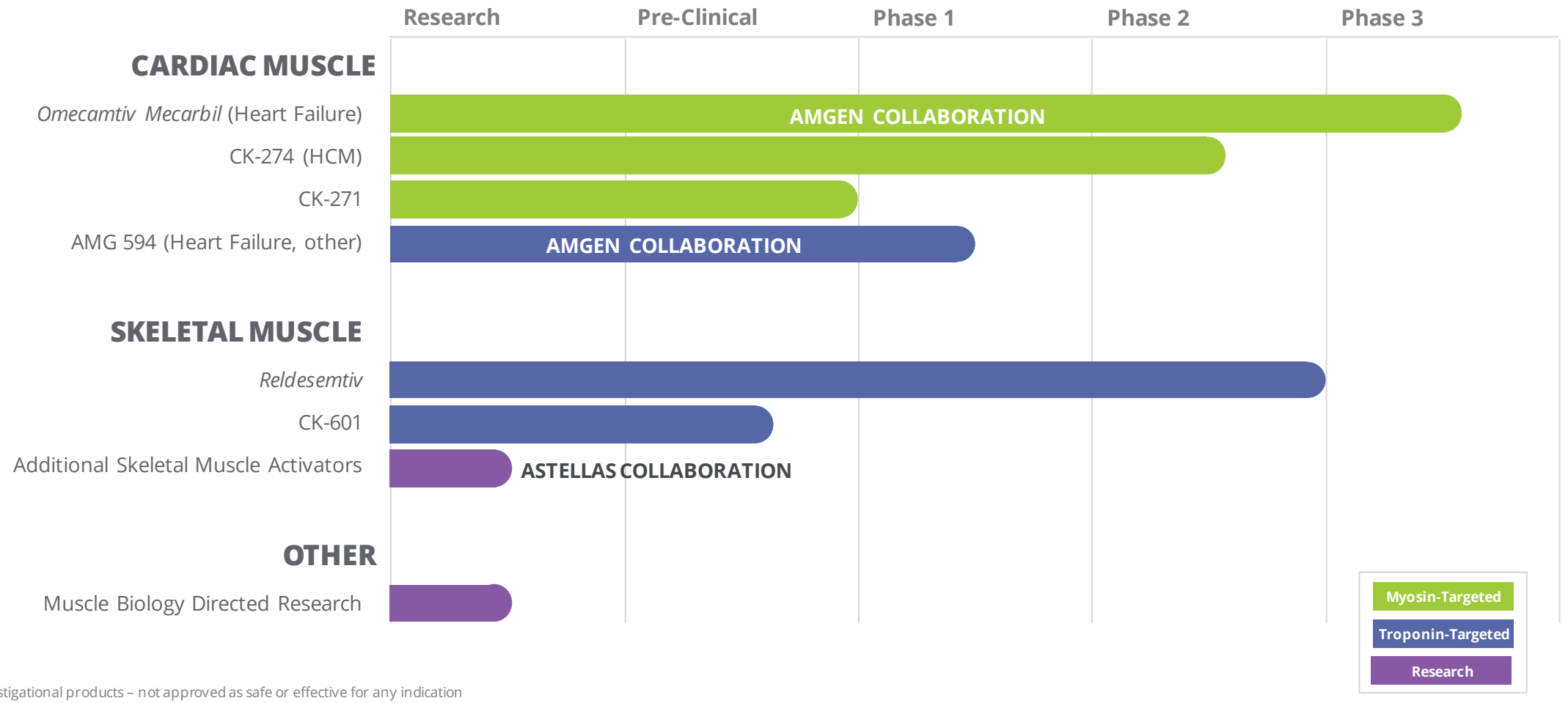
Surgical myectomy or percutaneous ablation

Current medical therapy does not target underlying disease

Indirect mechanisms of action with systemic side effects

Variable efficacy, often inadequate

Pipeline of Novel Muscle-Directed Drug Candidates



Investigational products – not approved as safe or effective for any indication

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Sarcomere Directed Drug Development

CARDIAC MUSCLE

Omecamtiv Mecarbil

AMG 594

CK-274, CK-271

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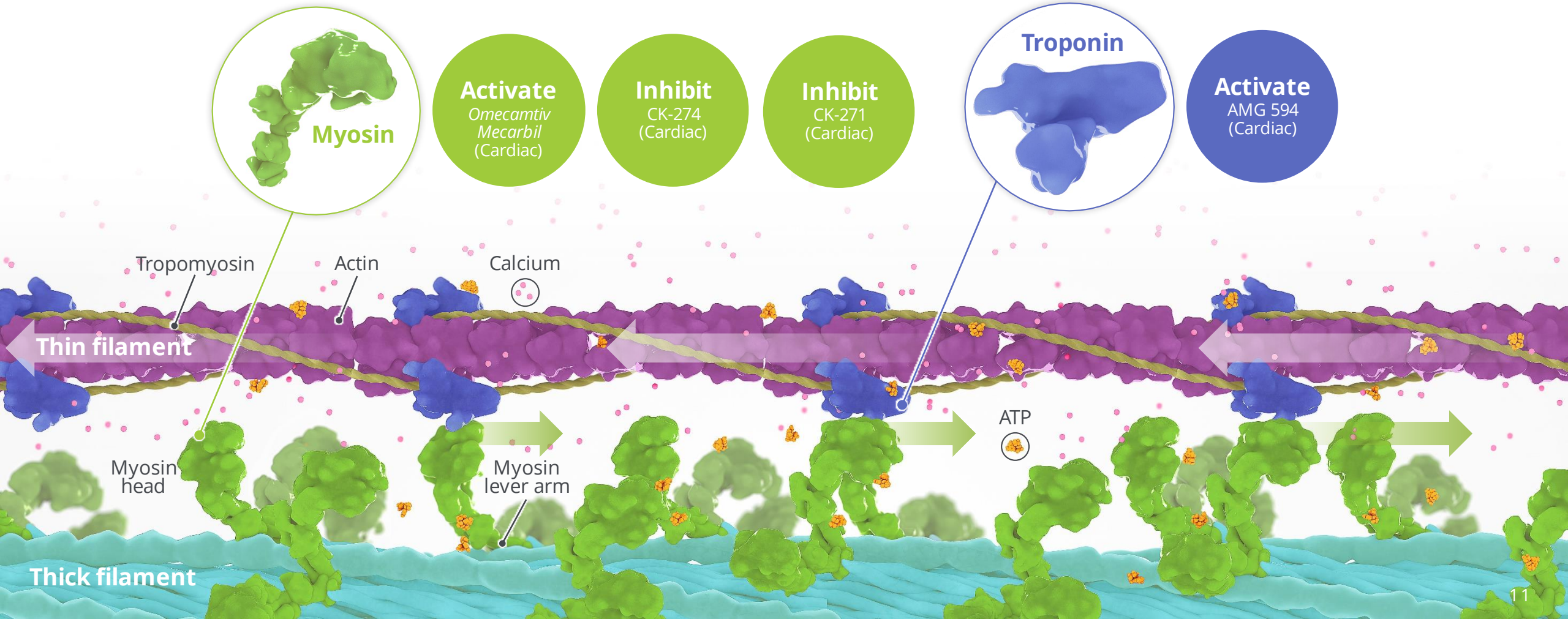
Sarcomere Directed Drug Development

Cardiac muscle

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



Omecamtiv Mecarbil: Novel Mechanism Approach

Current Treatments

Myocardial Injury

Left ventricular systolic dysfunction

Systemic vasoconstriction, renal sodium, and water retention

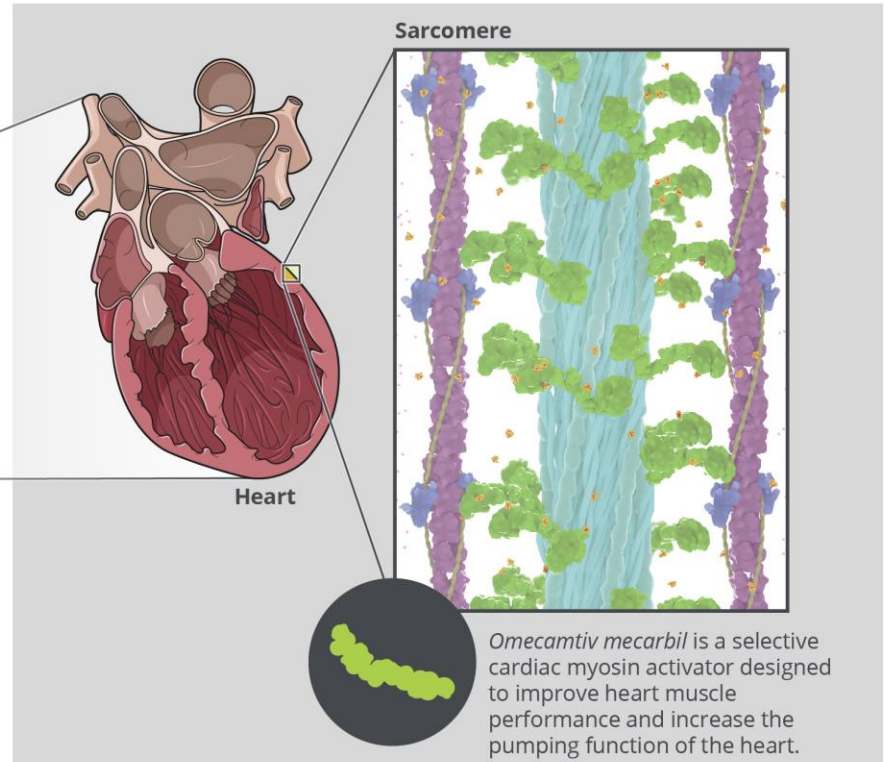
Current Treatments Block SNS and RAAS*
ACE inhibitor (ACEI)
Angiotensin-receptor blocker (ARB)
Aldosterone antagonist
Beta blocker

Perceived reduction in circulating volume and pressure

Neurohumoral Activation of SNS and RAAS*

*SNS = Sympathetic Nervous System
RAAS = Renin-Angiotensin-Aldosterone System

Omecamtiv mecarbil



Omecamtiv mecarbil is a selective cardiac myosin activator designed to improve heart muscle performance and increase the pumping function of the heart.

Omecamtiv Mecarbil: Robust Clinical Trials Program

Over 10,000 patient-years of exposure to *omecamtiv mecarbil*

11

Phase 1 Studies

7

Phase 2 Studies

324

Subjects Enrolled

Well characterized safety, tolerability and PK/PD data

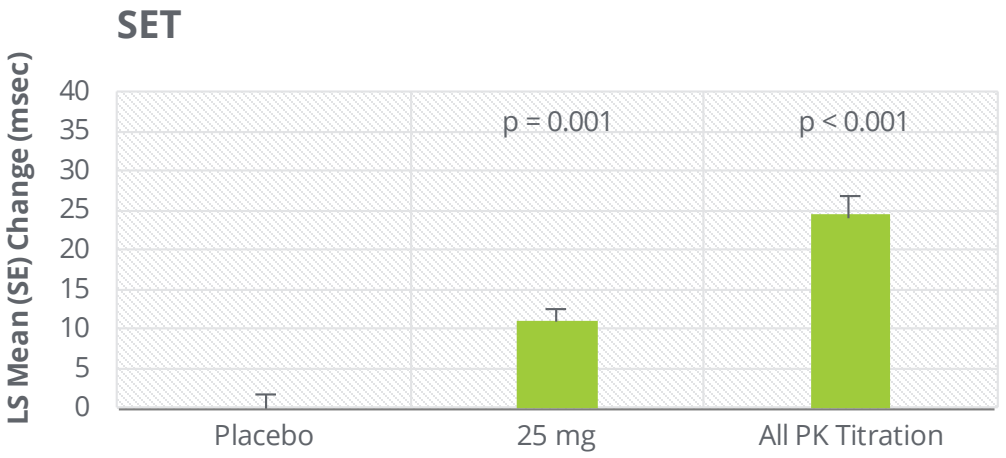
1,414

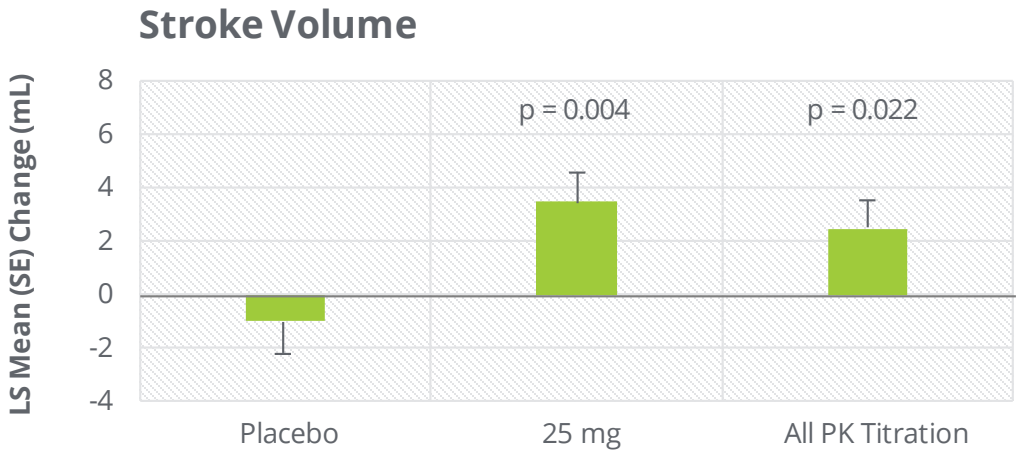
Subjects Enrolled

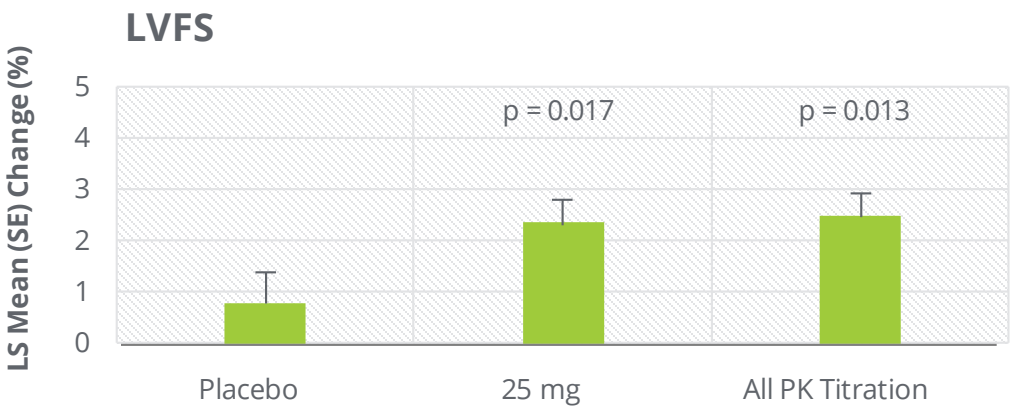
COSMIC-HF showed statistically significant improvements in measures of cardiac function

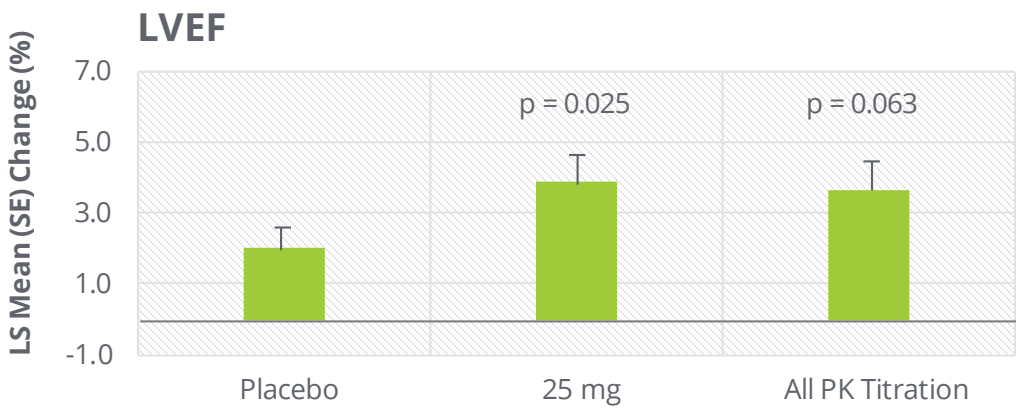
Dose-Dependent Increases in Cardiac Performance

Pharmacodynamic results from COSMIC-HF







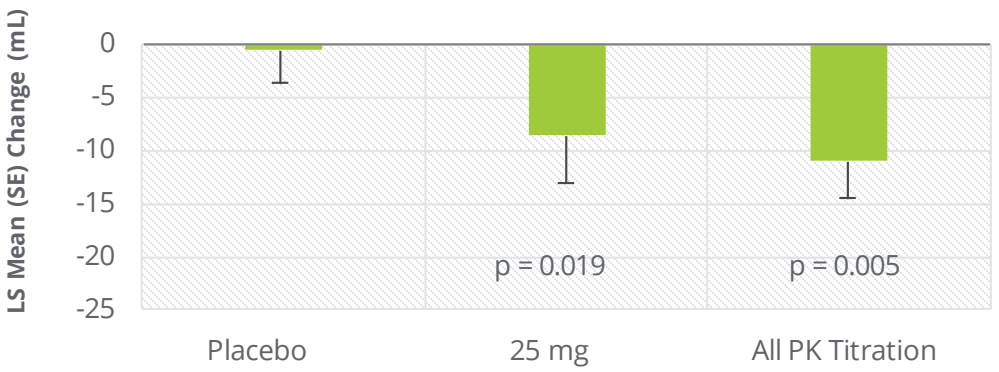


LVEF, left ventricular ejection fraction; LVFS, left ventricular fractional shortening;
SE, standard error; SET, systolic ejection time ; all p values are nominal without multiplicity adjustment.

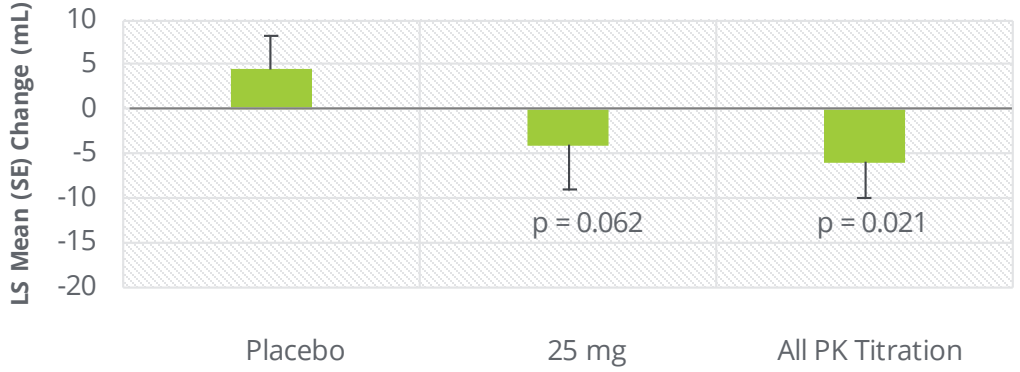
Decreases in Physiology & Cardiac Risk

Reductions in heart volume, oxygen demand & wall stress in COSMIC-HF

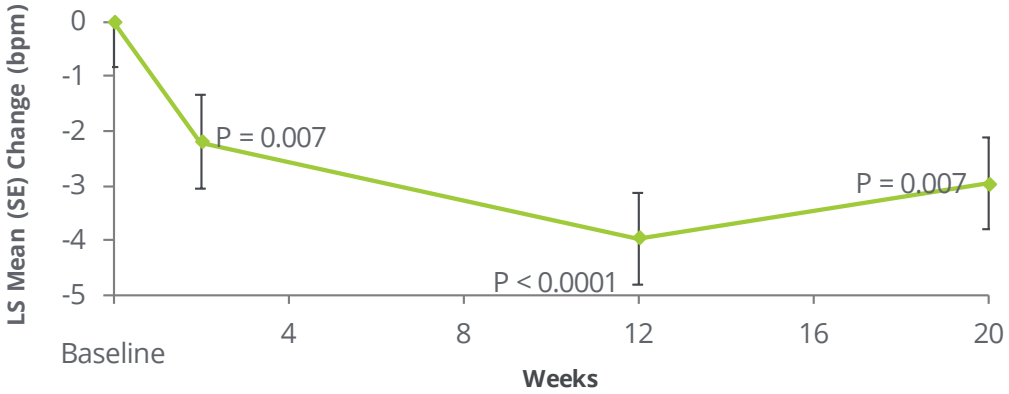
LVESV



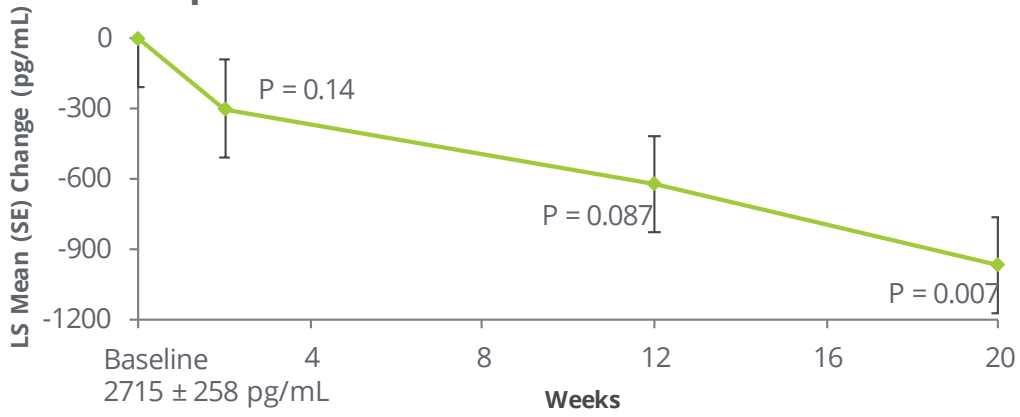
LVEDV



Heart Rate



NT-proBNP

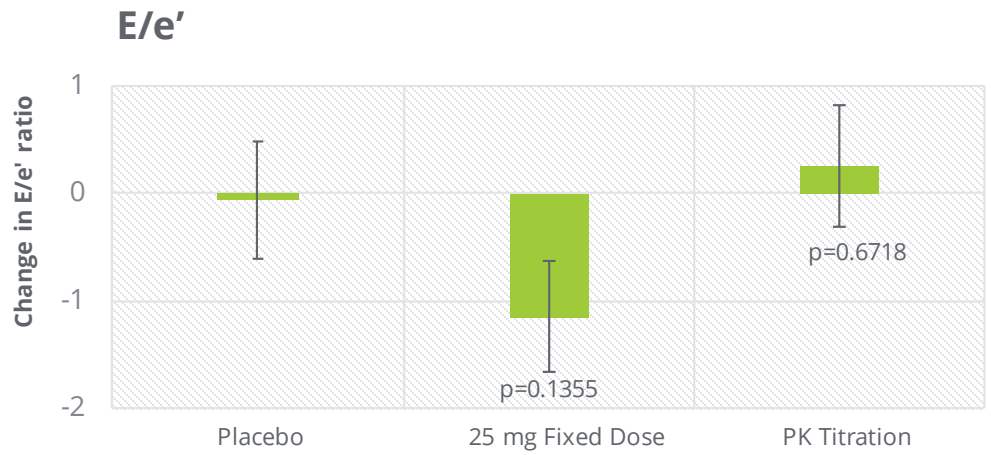


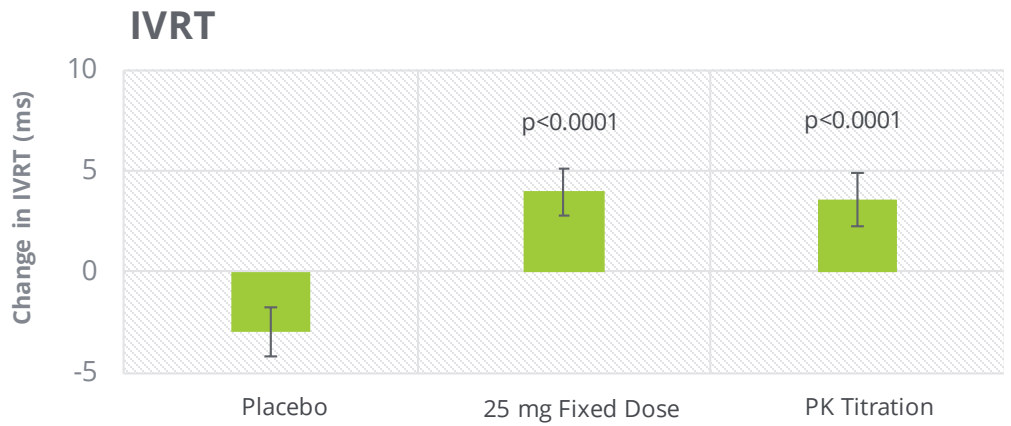
LVESV left ventricular end systolic volume; LVEDV left ventricular end diastolic volume
All p values are nominal without multiplicity adjustment

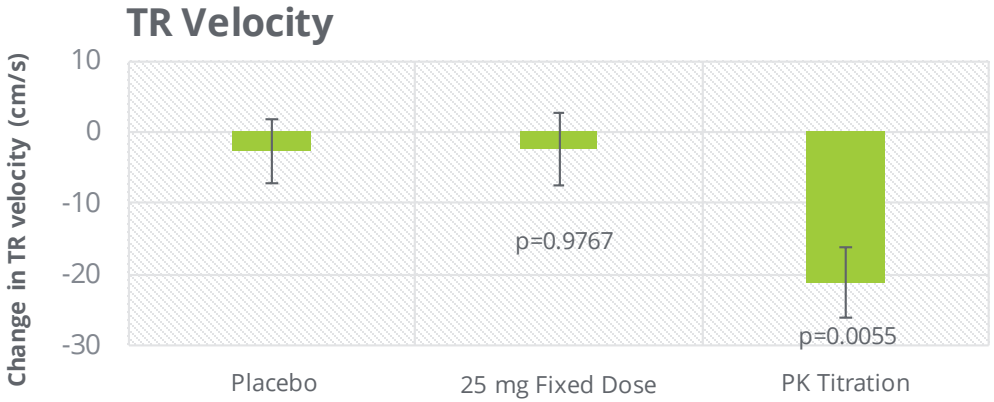
Neutral or Improved Measures of Diastolic Function

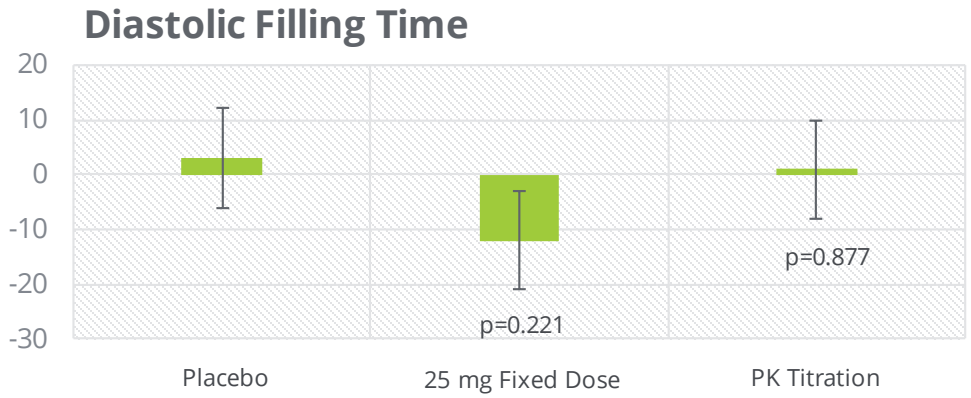
Improved systolic function with no negative impact on diastolic function

COSMIC-HF









IVRT=isovolumic relaxation time
TR=tricuspid regurgitation

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Prognostic Implications: NT-proBNP and Remodeling

Studies demonstrate correlation with cardiovascular outcomes

Patients in PARADIGM-HF who had significant reductions in NT-proBNP had lower rates of CV death or heart failure hospitalization[1]

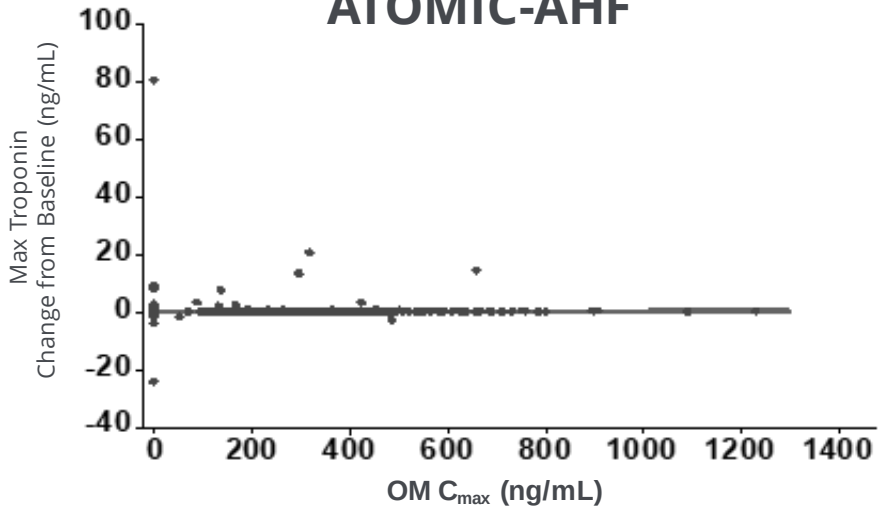
Meta-analysis of drug/device therapies demonstrated association between LV remodeling and longer-term effects on mortality in patients with LVD[2]

1. Zile et al. JACC 2016; 68(22); 2425-2436
2. Kramer et al. JACC 2010;56(5):392-406

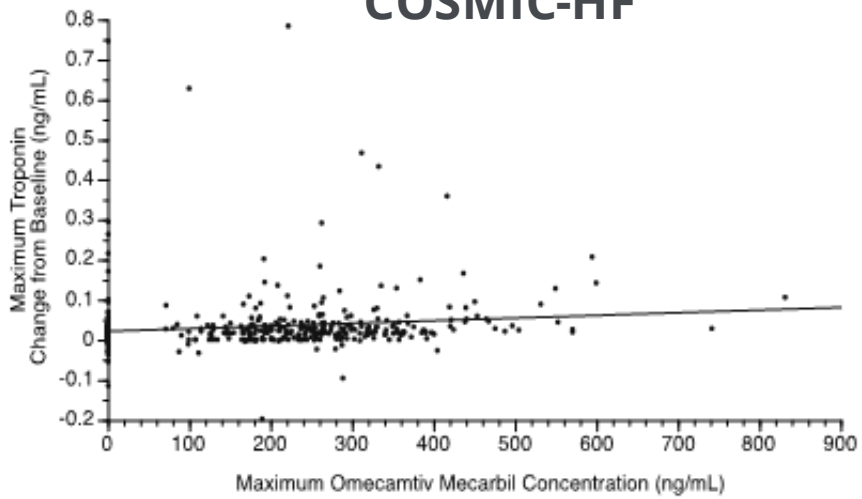
Troponins: Small Increases, Unrelated to Exposures of *Omecamtiv Mecarbil*

Baseline troponin levels were above the diagnostic limit for myocardial infarction (0.04 ng/mL) for >50% of patients in ATOMIC-AHF and ~25% in COSMIC-HF

ATOMIC-AHF



COSMIC-HF



Events of increased troponin (n=278 across all treatment groups) were independently adjudicated and none were determined to be myocardial ischemia or infarction.[1]

Baseline Troponin Levels (ng/mL)	ATOMIC-AHF	Pooled Placebo	OM Cohort 1	OM Cohort 2	OM Cohort 3
	Median	0.044	0.060	0.044	0.056
	COSMIC-HF	Placebo	25 mg BID	All PK Titration	All OM
	Q1, Q3	0.016, 0.041	0.016, 0.039	0.016, 0.042	0.016, 0.040

1. Teerlink, et al. The Lancet 2016; 2895-2903

Pivotal Phase 3 Trial Completed Enrollment

GALACTIC-HF continuing following second, final planned interim analysis

GALACTIC-HF

Topline results expected in Q4 2020

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

Key Design Points

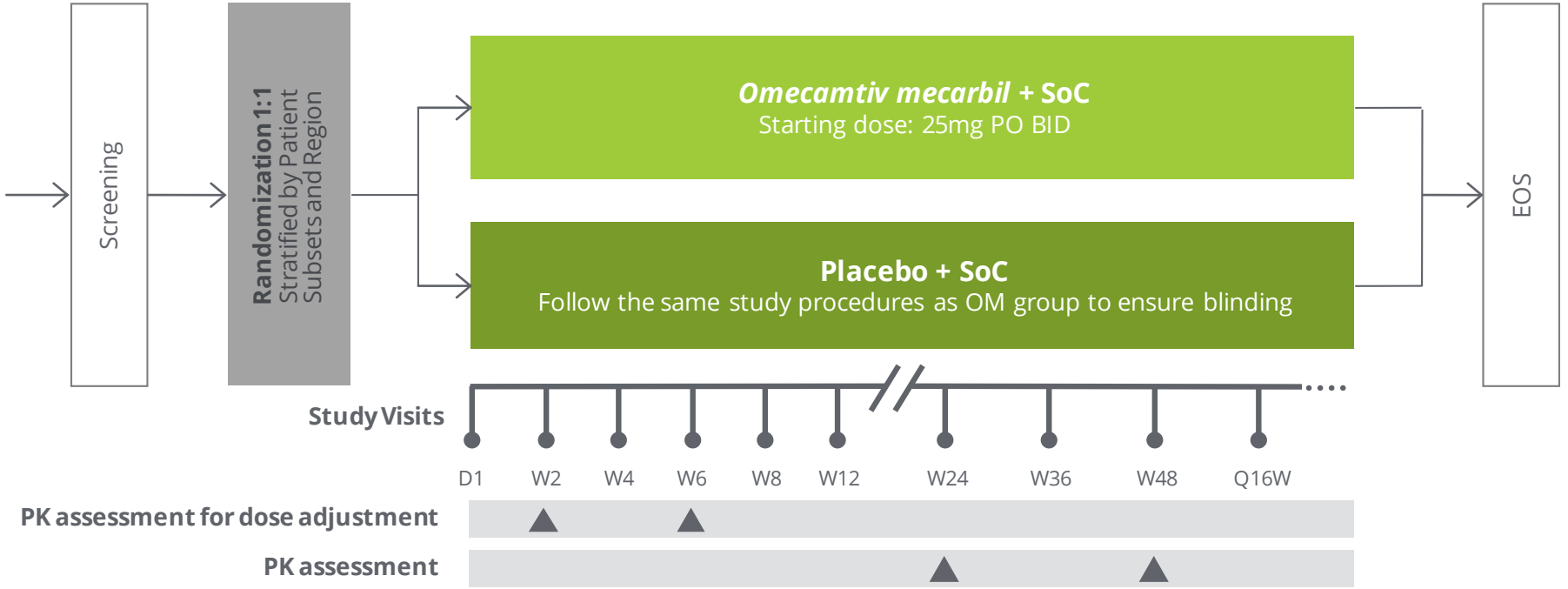
- Dose optimization based on trough concentration of *omecamtiv mecarbil* at 2 weeks and 6 weeks
  - Starting Dose = 25 mg BID
  - Escalation (or not) at Week 4 to 37.5 mg or 50 mg BID based on plasma concentration of *omecamtiv mecarbil* at Week 2
  - Recheck at Week 6, adjust dose downward if necessary
- High risk patients enrolled from inpatient and outpatient settings
  - Patients enrolled from time of hospitalization to within 1 year of discharge
  - Approximately 25% of patients were hospitalized at randomization
- Designed to provide 90% statistical power to assess risk of CV death
  - Accrual of 1,590 CV deaths provides 90% power to detect hazard ratio of 0.8 for CV death
  - Primary composite endpoint expected to have >99% statistical power

*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.

Clinical Trial Overview

GALACTIC-HF

Chronic HFrEF patients currently hospitalized for a primary reason of HF or with history of hospitalization or ER/ED admission for a primary reason of HF within 1 year



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GALACTIC-HF: Design Paper & Interim Analyses

- **Passed first interim analysis: Q1 2019**
  - Assessed futility only (HR>1.0)
  - Triggered at 1/3 of target 1,590 deaths
- **Passed second interim analysis: Q1 2020**
  - Assessed futility & superiority
  - Triggered at 2/3 of target 1,590 deaths
  - Superiority: p-value for efficacy <0.0005 (one-sided alpha)

JACC Heart Failure


FEATURED STATE-OF-THE-ART REVIEW

Omecamtiv Mecarbil in Chronic Heart Failure With Reduced Ejection Fraction

Rationale and Design of GALACTIC-HF

HIGHLIGHTS

ABSTRACT

Baseline Characteristics: High Risk Population

GALACTIC-HF

- 8,256 patients enrolled in 35 countries
- Population at high risk for cardiovascular events despite being well-treated on standard of care
  - Inpatient population: **25%**
  - Time from most recent HF hospitalization/ED visit (months), median (Q1-Q3): **2 (1-5)**
  - NT-proBNP, median (Q1–Q3): **1,998 pg/mL (990-4,078)**
  - LVEF, mean: **27%**
  - ENTRESTO® use: **19%**

	Overall (N=8,256)	Inpatient (N=2,083)	Outpatient (N=6,173)
Time from most recent HF hospitalization/ ED visit (months), median (Q1-Q3)	2 (1-5)	-	3 (2-6)
Age (years), mean (SD)	65 (11)	65 (11)	64 (11)
Male, %	79	80	78
White, %	78	82	76
LVEF (%), mean (SD)	27 (6)	27 (6)	27 (6)
NYHA Class II/III/IV, %	53/ 44/ 3	37/ 57/ 6	59/ 39/ 2
NT-proBNP (pg/mL), median (Q1-Q3)	1998 (990-4078)	2509 (1240-5133)	1884 (923-3772)
Ischemic Heart Disease Etiology, %	55	56	54
KCCQ Total Symptom Score, mean (SD)	66 (25)	53 (25)	71 (23)
Atrial Fibrillation or Flutter History, %	42	48	40
Chronic Kidney Disease, %	36	39	35
eGFR (mL/min/1.73m^2), median (Q1-Q3)	59 (44-74)	54 (41-70)	60 (45-75)
SBP (mmHg), mean (SD)	117 (15)	114 (14)	117 (16)
ACEi, ARB or ARNi, %	87	83	88
ARNi (ENTRESTO®) %	19	14	19
Beta Blocker, %	94	93	95
MRA, %	77	81	76
Diuretics other than MRAs, %	90	92	89
Digitalis Glycosides, %	17	17	17
SGLT2 Inhibitors, %	3	3	3

Comparing Patients in Large Heart Failure Trials

GALACTIC-HF

Patients in GALACTIC-HF are at higher risk for HF-related events than patients in PARADIGM-HF and DAPA-HF, but are not as high risk as those in VICTORIA

	GALACTIC-HF (N=8,256)	VICTORIA (N=5,050)	PARADIGM-HF (N=8,339)	DAPA-HF (N=4,744)
Age (y, mean (SD))	65 (11)	67.3 (12.2)	63.8 (11.4)	66 (11)
Male	6,522 (78.9%)	3,842 (76.1%)	6,565 (78.0%)	3,635 (76.6%)
Race				
White	*6,358 (77.0%)*	*3,239 (64.1%)*	*5,544 (65.7%)*	*3,333 (70.2%)*
Black or African American	*561 (6.7%)*	*249 (4.9%)*	*428 (5.1%)*	*226 (4.7%)*
Asian	*710 (8.6%)*	*1,132 (22.4%)*	*1,509 (17.9%)*	*1,109 (23.3%)*
Other	*627 (7.6%)*	*430 (8.5%)*	*918 (11.0%)*	*76 (1.6%)*
Geographic Region				
Eastern Europe	*2,705 (32.7%)*	*1,694 (33.5%)*	*2,826 (33.5%)*	*1,604 (33.8%)*
Western Europe	*1,921 (23.3%)*	*889 (17.6%)*	*2,051 (24.3%)*	*550 (11.6%)*
Asia Pacific	*670 (8.1%)*	*1,183 (23.4%)*	*1,487 (17.6%)*	*1,096 (23.1%)*
Latin and South America	*1,575 (19.1%)*	*724 (14.3%)*	*1,433 (17.0%)*	*816 (17.2%)*
North America	*1,386 (16.8%)*	*560 (11.1%)*	*602 (7.1%)*	*678 (14.3%)*
BMI (kg/m^3 mean (SD))	*28.5 (6.0)*	*27.8 (5.9)*	*28.2 (5.5)*	*28.1 (6.0)*
Ejection fraction at screening (% mean (SD))	26.6 (6.3)	28.9 (8.3)	29.5 (6.2)	31.1 (6.8)
Systolic blood pressure (mmHg, mean (SD))	116.5 (15.3)	121.3 (15.7)	121.0 (15.0)	121.9 (16.3)
Diastolic blood pressure (mmHG, mean (SD))	71.6 (12.1)	72.8 (11.1)	74.0 (N/A)	74 (N/A)
Concomitant Medications				
ACE-I or ARB	*5,803 (70.3%)*	*3,700 (73.4%)*	*8,339 (100%)*	*3,986 (83.6%)*
Beta blocker	*7,763 (94.0%)*	*4,691 (93.1%)*	*7,811 (93.6%)*	*4,558 (96.0%)*
MRA	*6,363 (77.1%)*	*3,545 (70.3%)*	*4,671 (55.3%)*	*3,370 (71.0%)*
ARNI sacubitril/valsartan	*1.595 (19.3%)*	*731 (14.5%)*	-	*508 (10.7%)*
ICD	2,611 (31.6%)	1,399 (27.8%)	1,243 (14.9%)	1,242 (26.1%)
Biventricular pacemaker / Cardiac Resynchronization	1,153 (14.0%)	739 (14.7%)	574 (6.8%)	354 (7.4%)
eGFR at Rand'n (mL/min/1.73m^1, median (25^{th}, 75^{th}))	58.8 (44.1-74.1)	58.4 (31.2-77/1)	68.0 (N/A)	65.7 (N/A)
NT-proBNP at Screening (pg/ml, median (25^{th}, 75^{th}))	1998 (990-4078)	2816 (1556-5314)	1,608 (886-3,221)	1,428 (857-2,649)
MAGGIC Risk Score (median (25^{th}, 75^{th}))	23.0 (19.0-28.0)	23.0 (19.0-28.0)	20.0 (16.0-24.0)	N/A
NYHA Class at Baseline				
Class II	*4,376 (53.0%)*	*2975 (59.0%)*	*5,919 (70.1%)*	*3,203 (67.5%)*
Class III	*3,633 (44.0%)*	*2003 (39.7%)*	*2,018 (23.9%)*	*1,498 (31.6%)*
Class IV	*248 (3.0%)*	*66 (1.3%)*	*60 (0.7%)*	*43 (0.9%)*

Second Phase 3 Clinical Trial Underway

Investigating effect of *omecamtiv mecarbil* on exercise tolerance

METEORIC-HF

Trial will enroll patients in 9 countries in North America and Europe

Primary Endpoint

Change in peak VO2 on CPET from baseline to Week 20

Second Endpoints

- Change in total workload during CPET from baseline to Week 20
- Change in ventilatory efficiency (VE/VCO2 slope) during CPET from baseline to Week 20
- Change in average daily activity units measured over 2 weeks from baseline to Week 18-20

Exploratory Endpoints

- Change from baseline to Week 20 in oxygen uptake efficiency slope (VO2/logVE slope), ventilatory threshold (by the V-slope method), VO2 recovery kinetics, percent predicted pVO2, and exercise duration
- Change from baseline in average daily activity units at Week 6-8 and Week 12-14
- Change from baseline in KCCQ Total Symptom Score and sub-domains from baseline to Week 20

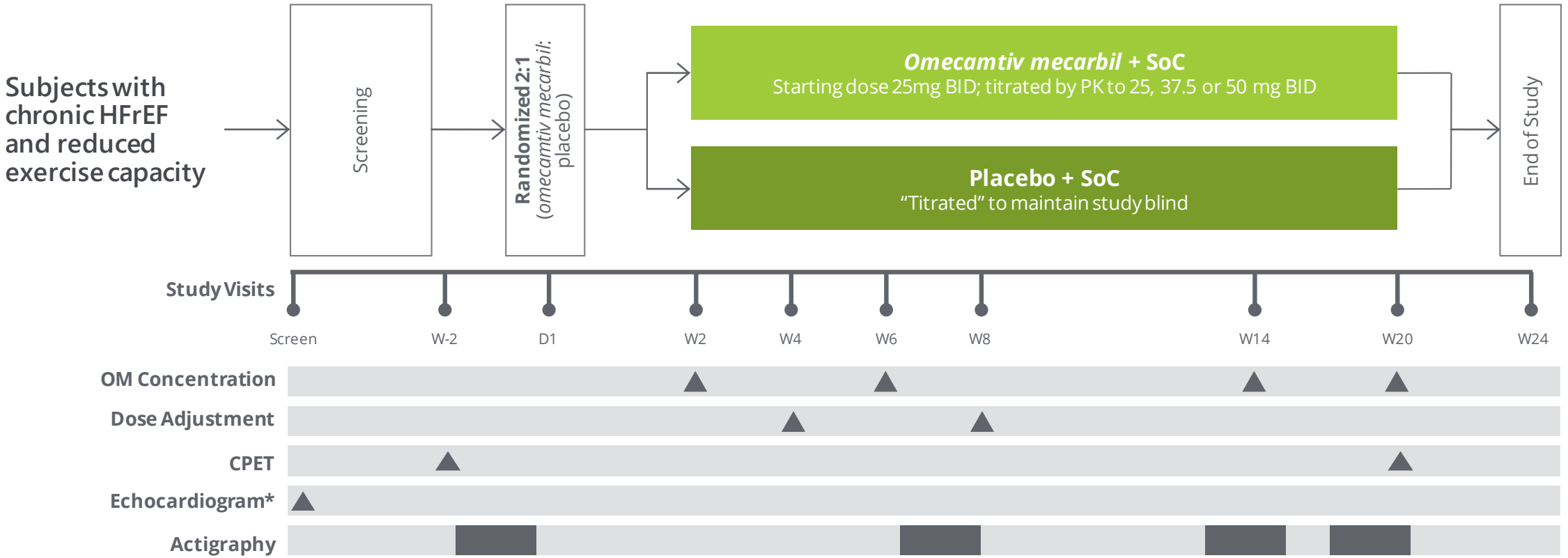
Key Design Points

- Designed to enroll approximately 270 patients
- 20 weeks of treatment
- 90% power
- Patients must:
  - Have LVEF ≤35 percent
  - Be New York Heart Association (NYHA) heart failure class II or III
  - Have reduced exercise capacity compared to age matched controls
- Patients randomized 2:1 to *omecamtiv mecarbil*
- Starting dose at 25 mg twice daily, titrated to 25, 37.5 or 50 mg twice daily based on the same PK-guided dosing regimen used in GALACTIC-HF

VO2 = Oxygen Uptake; CPET = Cardio-Pulmonary Exercise Testing; VE = Ventilatory Efficiency

Clinical Trial Overview

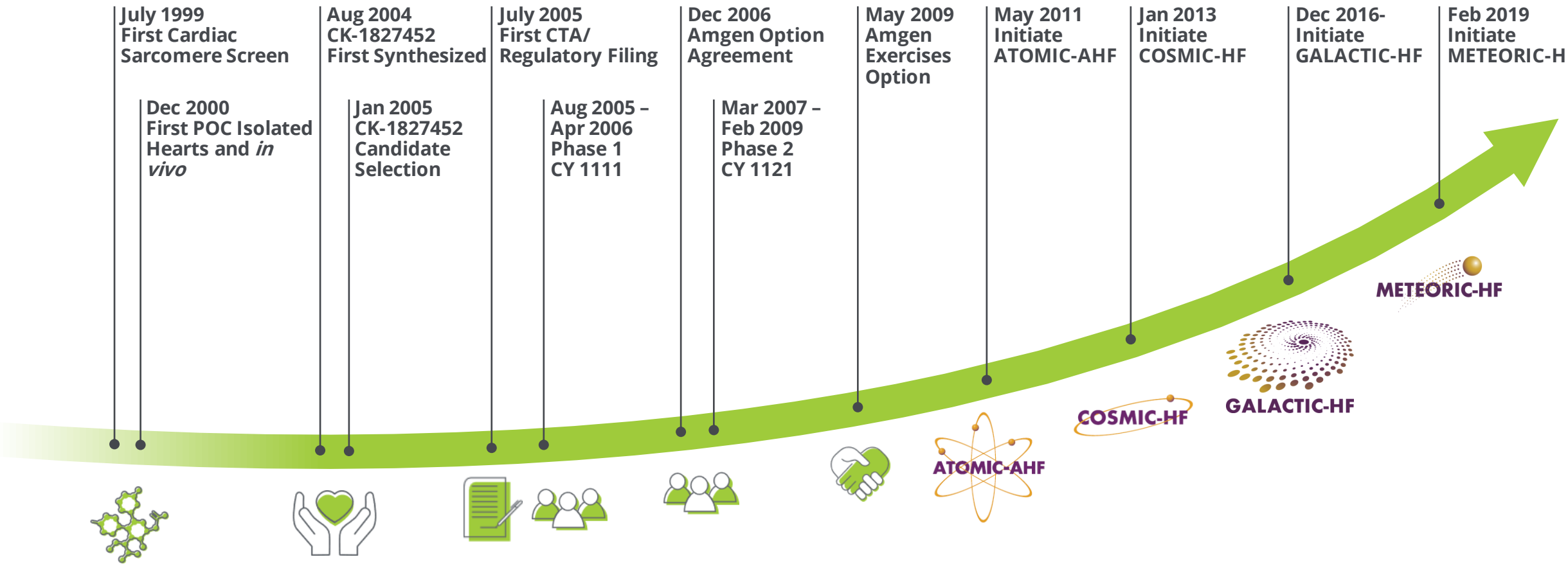
METEORIC-HF



*Screening echocardiogram is not required if an appropriate LVEF assessment has been performed within one year

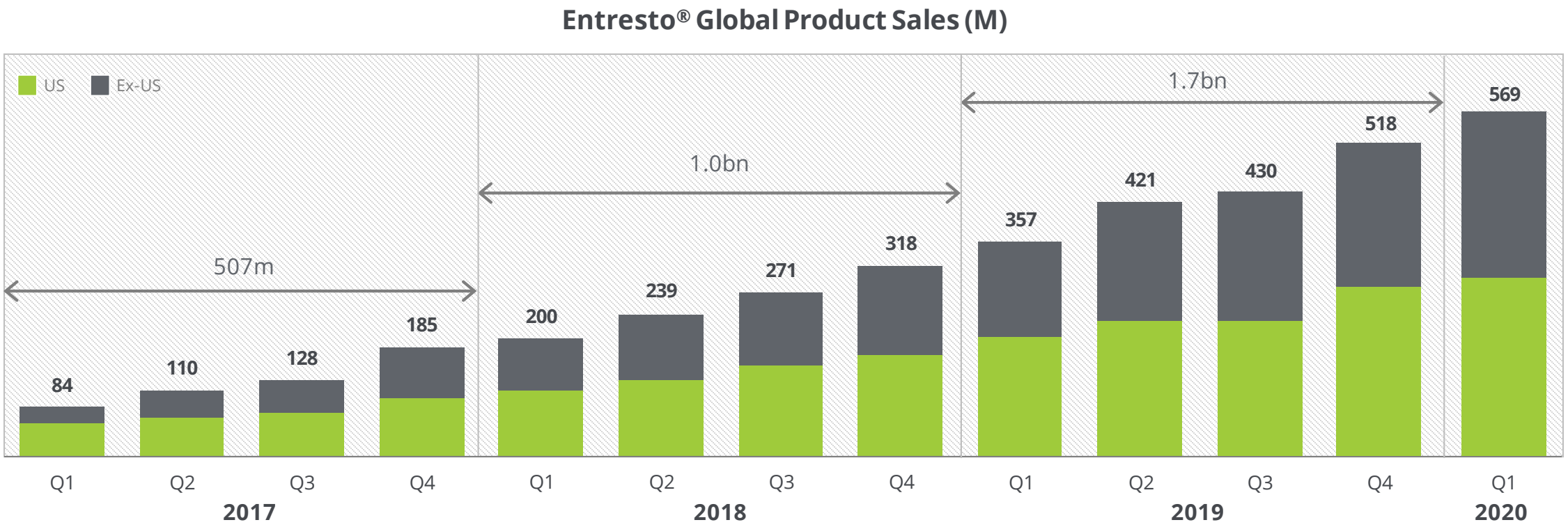
Cytokinetics

Omecamtiv Mecarbil: Pivotal Phase 3 Results Q4 2020



Commercial Opportunity for New Heart Failure Therapy

Q1 2020 sales increased 62% year over year; on track to reach $2-3 billion in 2020



*As with all products in Phase 3, the product profile achieved by *omecamtiv mecarbil* in GALACTIC-HF is required to provide a better understanding of the expected revenue.
Source: Novartis public quarterly results presentations

Commercial Readiness for *Omecamtiv Mecarbil*

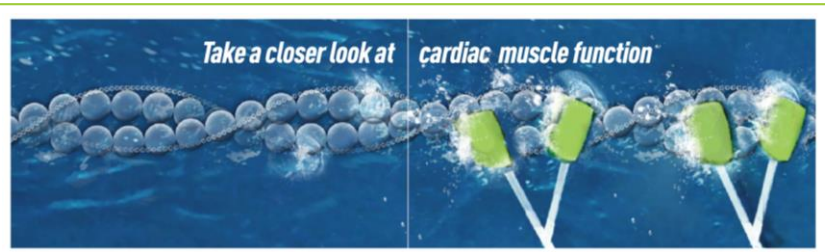
Multiple workstreams in progress to prepare for successful commercial launch

Educate heart failure market

Assess impact for value proposition

Determine areas of differentiation for HCPs

Cultivate advocacy for heart failure patients



Collaborations & Agreements

Amgen Collaboration

Purchase Option: 2006
Exercise Option Ex-Japan: 2009
Expanded to Include Japan/Purchase Equity: 2013
Received >$220M over 13 Years

Amgen responsible for development and commercialization subject to Cytokinetics' participation rights*

Cytokinetics could earn over $600 mm in milestone payments

Commercialization:

- Cytokinetics may receive escalating double-digit royalties
- Cytokinetics to co-fund Phase 3 development program
- Co-fund enables co-promote NA
- Cytokinetics reimbursed for certain sales force activities

Royalty Monetization

Royalty Pharma paid $100M for 4.5% royalty on worldwide sales of *omecamtiv mecarbil*: 2017

Cytokinetics gains right to co-promote *omecamtiv mecarbil*, if approved, in institutional care settings in North America, with reimbursement from Amgen for certain sales force activities

Joint commercial operating team responsible for commercialization program

- Royalty rate may increase up to additional 1% associated with timing of US approval
- Cytokinetics agreed to exercise option to co-invest $40M in Ph 3 development program in exchange for up to incremental 4% royalty on increasing worldwide sales outside of Japan
- Cytokinetics retains right to receive >$600M in additional potential milestone payments and escalating double-digit royalties that may exceed 20% on tiered worldwide sales outside Japan; lower royalty rate in Japan

*Servier has a sub-license from Amgen to commercialize *omecamtiv mecarbil* in Europe and certain other countries.

AMG 594: Cardiac Troponin Activator

Advancing through Phase 1: Potential for HFrEF and other indications

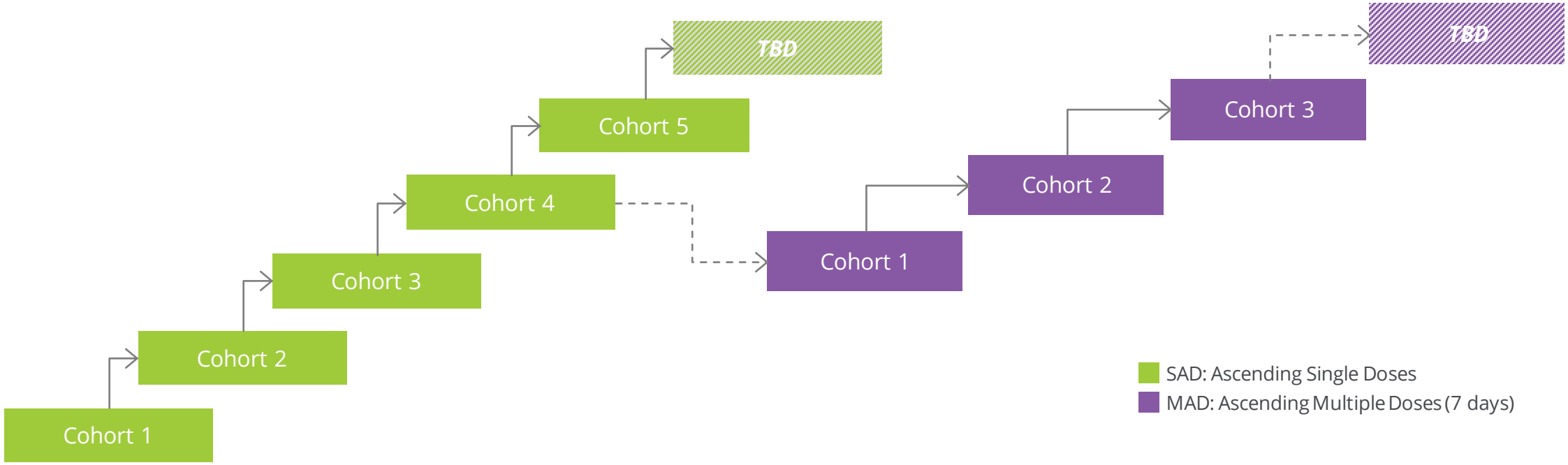
- Intended to improve ventricular systolic function in patients with heart failure
- Preclinical results support the potential for best-in-class safety and efficacy
- Projected once daily dosing
- Potential application for patients with distinct types of ventricular dysfunction and heart failure:
  - Heart failure with reduced ejection fraction (HFrEF)
  - Genetic dilated cardiomyopathy
  - Pulmonary hypertension with right ventricular heart failure

AMG 594: Nested SAD and MAD in Healthy Subjects

Randomized, placebo-controlled, double-blind, multi-part, single center study

- Part 1: 5 ascending single oral doses (SAD)
- Part 2: 3 ascending multiple oral doses (MAD)
- ~64 healthy subjects overall

Objectives	Endpoints
Safety and tolerability	AEs, laboratories, cardiac markers, ECGs
Pharmacokinetics	C_{max}, T_{max}, AUC
Pharmacodynamics	LVEF, LVFS, LVOT-VTI, SET



CK-274: Next-In-Class Cardiac Myosin Inhibitor

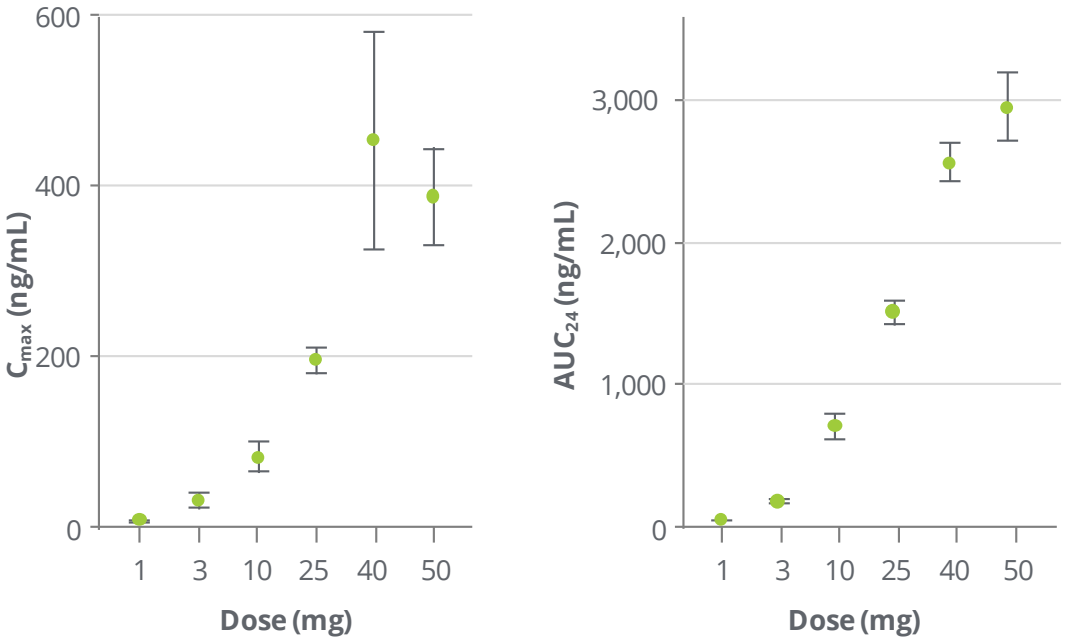
Potential treatments for patients with HCM

- Discovered by company scientists independent of collaborations
- Selective allosteric inhibitor of cardiac myosin
- Potential *in vivo* pharmacodynamic advantages related to distinctive binding site
- No inhibition of smooth muscle myosin observed
- Clear pharmacokinetic/pharmacodynamic (PK/PD) relationship observed
- Projected once daily dosing to reach steady state rapidly in patients
- Shallow dose response curve translated to favorable therapeutic window in healthy volunteers

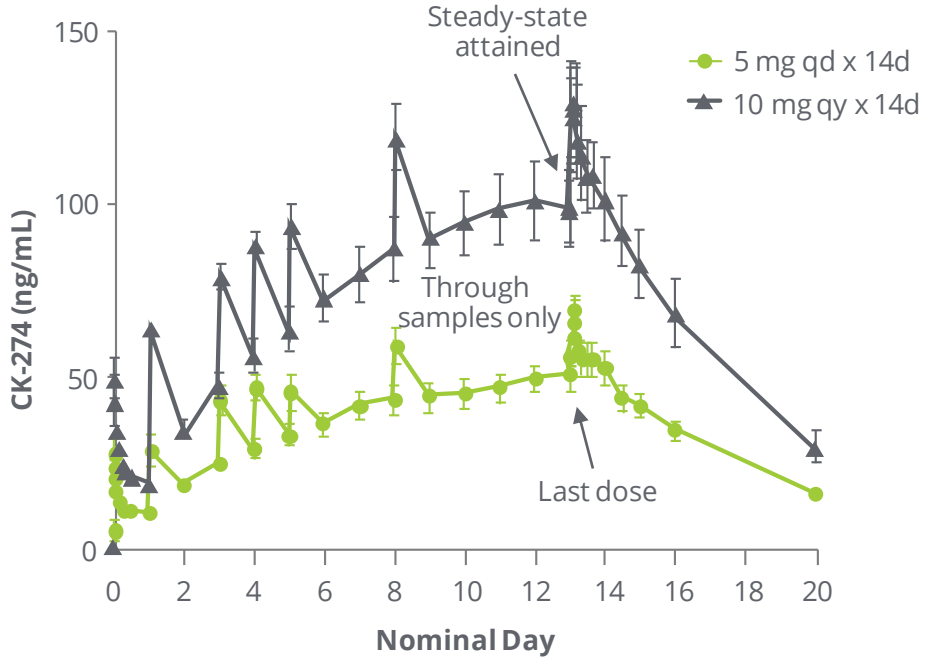
SAD & MAD Results Support Progression to Phase 2

CK-274 was well tolerated in healthy participants: no SAEs*

SAD Pharmacokinetics Appeared Generally Dose Proportional



Steady-State Appeared Evident After 14 Days of Dosing



*No SAEs and no clinically meaningful changes in vital signs, ECGs, or laboratory tests
Data points represent mean ± standard error of the mean
Cmax = maximum drug plasma concentration; AUC = area under the plasma concentration curve; SAD = single ascending dose; d = day; qd = once daily

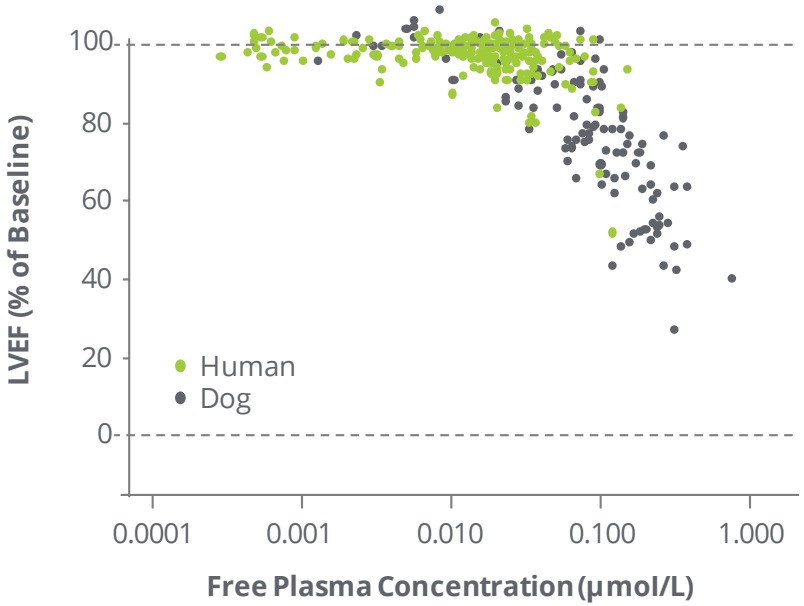
CY 6011: MAD Pharmacokinetic Parameters

Half-Life of CK-274 at Steady-State was ~81 hours (3.4 days) On Average

PK Parameter, Geometric Mean (%CV)*			
Dose (n)	5 mg (6)	7.5 mg (6)	10 mg (6)
C_{max} (ng/mL)	69 (23.2%)	148 (39.5%	141 (19.7%)
t_{max} (h)	2.75 (1.5–4)	1.0 (0.5–5)	2.5 (0.5–3)
AUC_{24} (ng•h/mL)	1,321 (23.0%)	2,518 (25.8%)	2,631 (22.8%)
$t_{1/2}$ (h)	86.3 (11.9)	76.9 (14.5)	79.7 (14.1)
AR	4.71	4.5	4.79

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

PK/PD Relationship of CK-274 for Ejection Fraction (LVEF)



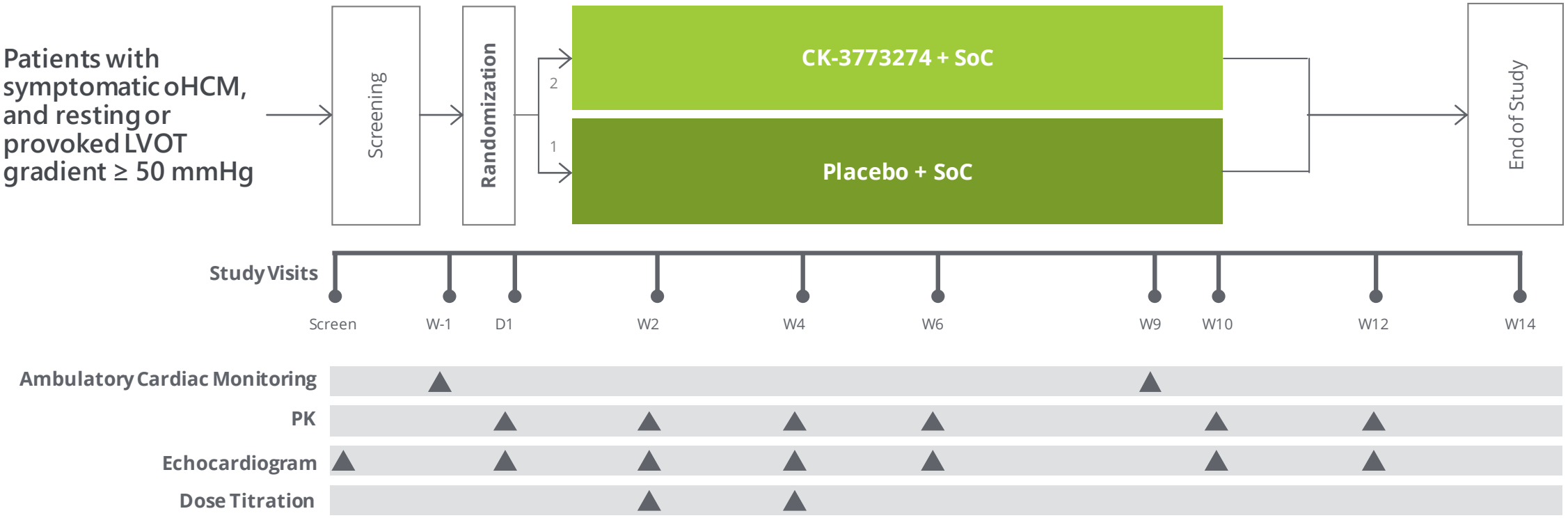
Graphs show LVEF as a function of exposure; data points represent observed values in dogs and humans.

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

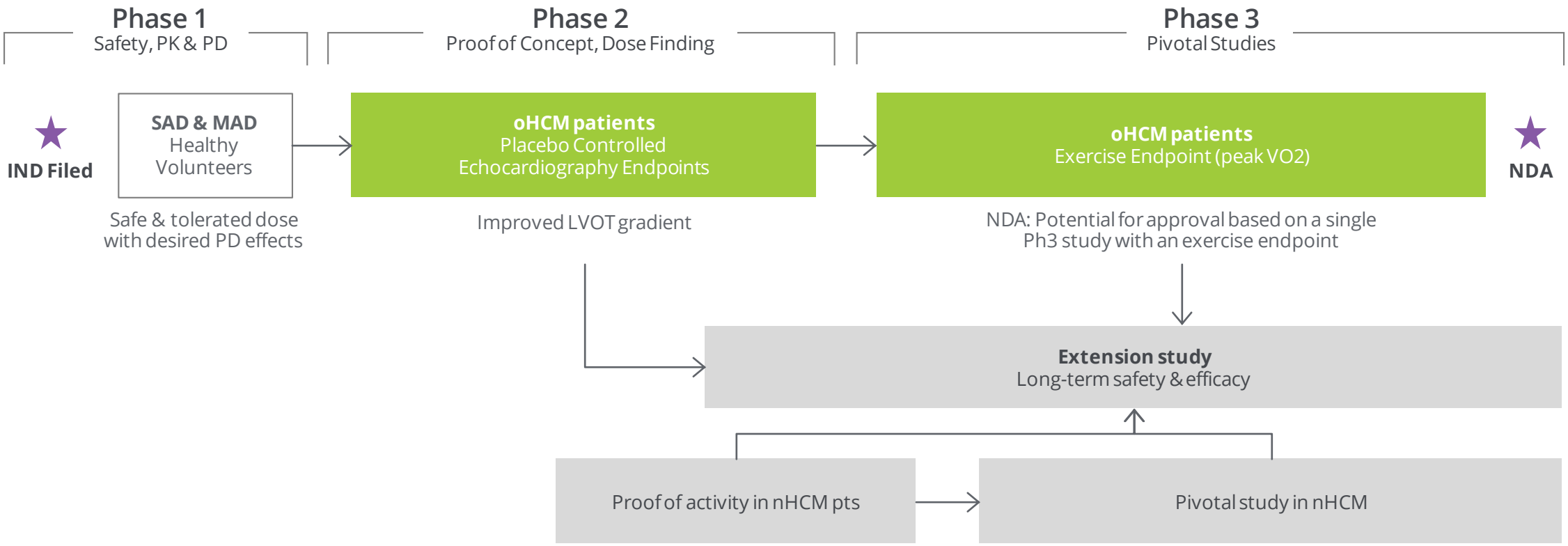
*Except data for tmax shown as median (minimum-maximum), and t½ shown as the arithmetic mean (standard deviation).
AR (accumulation ratio) calculated as (AUC24 on Day 14 or 17)/(AUC24 on Day 1).
%CV = percent coefficient of variation; Cmax = maximum plasma concentration; AUC24 = area under the plasma concentration curve;
MAD = multiple ascending dose; t½ = apparent plasma terminal elimination half-life; tmax = time to maximum observed plasma concentration.

Phase 2 Clinical Trial Design

Phase 2 clinical trial of CK-274



CK-274: Clinical Development Plan for HCM



Opportunity to Tap Intersection of HF & HCM Centers

Situation

- 49% account overlap between HF & HCM treatment centers represents:
- 94% of total claim volume (923K of 980K claims)[1]

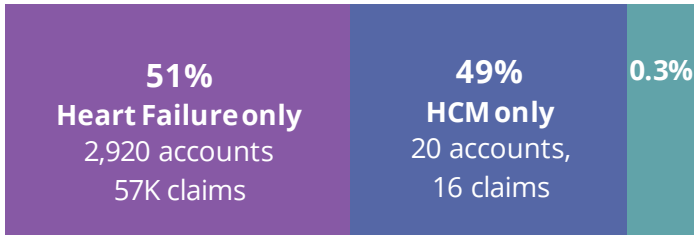
Opportunity

- Total of 2,000 treatment centers represent key targets for cross selling sales force
- ~50% of addressable target accounts for *omecamtiv mecarbil* include HCM claims

High HF Prevalence Aligns with HCM COEs

Total: 5,742 accounts, 980K claims

Overlap
Total: 2,802 accounts, 923K claims
Inpatient only: 1,823 accounts, 375K claims



1. Some accounts have listed Charges ($) and unlisted number of Claims or Primary Diagnoses (accounts with <11 "Total # of Claims" or "# Primary Diagnoses" are blank due to privacy). For these accounts with charges >$100K, number of Claims or Primary Diagnoses have been updated to an average of 5.

Sarcomere Directed Drug Development

SKELETAL MUSCLE

Reldesemtiv

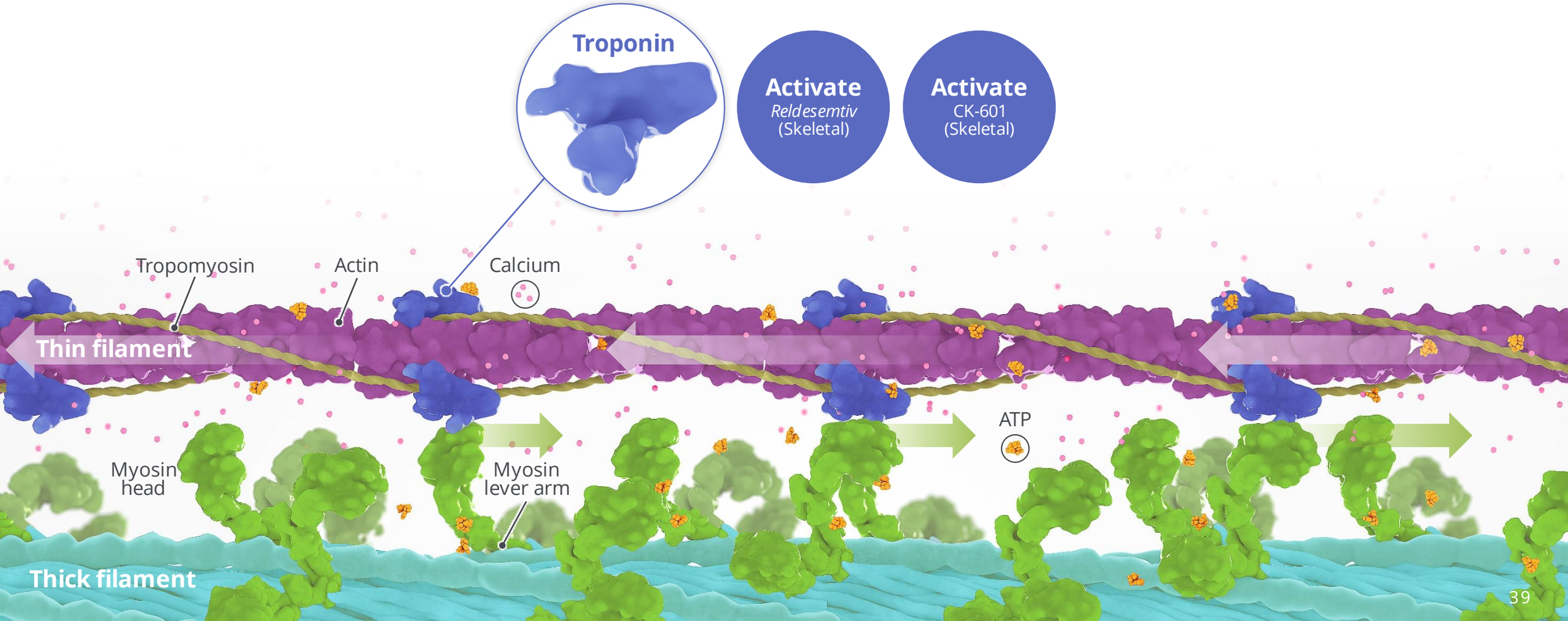
CK-601

Cytokinetics

Sarcomere Directed Drug Development

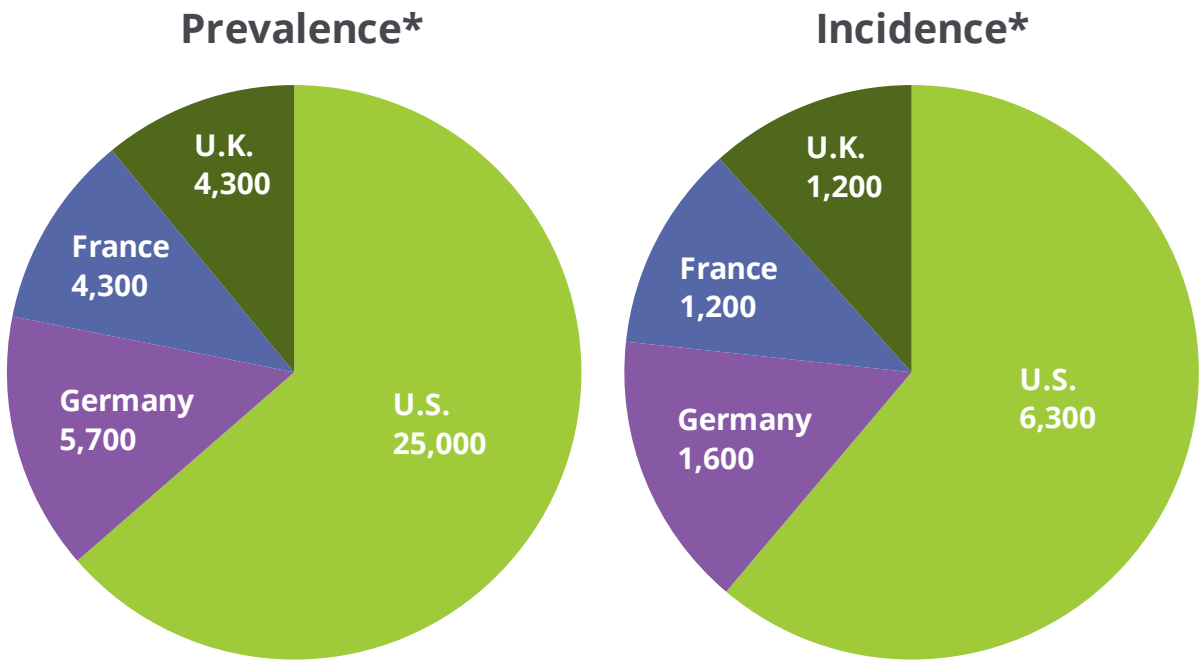
Skeletal muscle

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



Significant Unmet Need in ALS

No approved muscle directed therapies



- Average 3-5 year mortality
- Current therapies provide modest benefit
- Initial symptoms include: limb weakness, slurred speech, swallowing issues
- Average age at diagnosis is 55-65
- Death most commonly due to respiratory failure

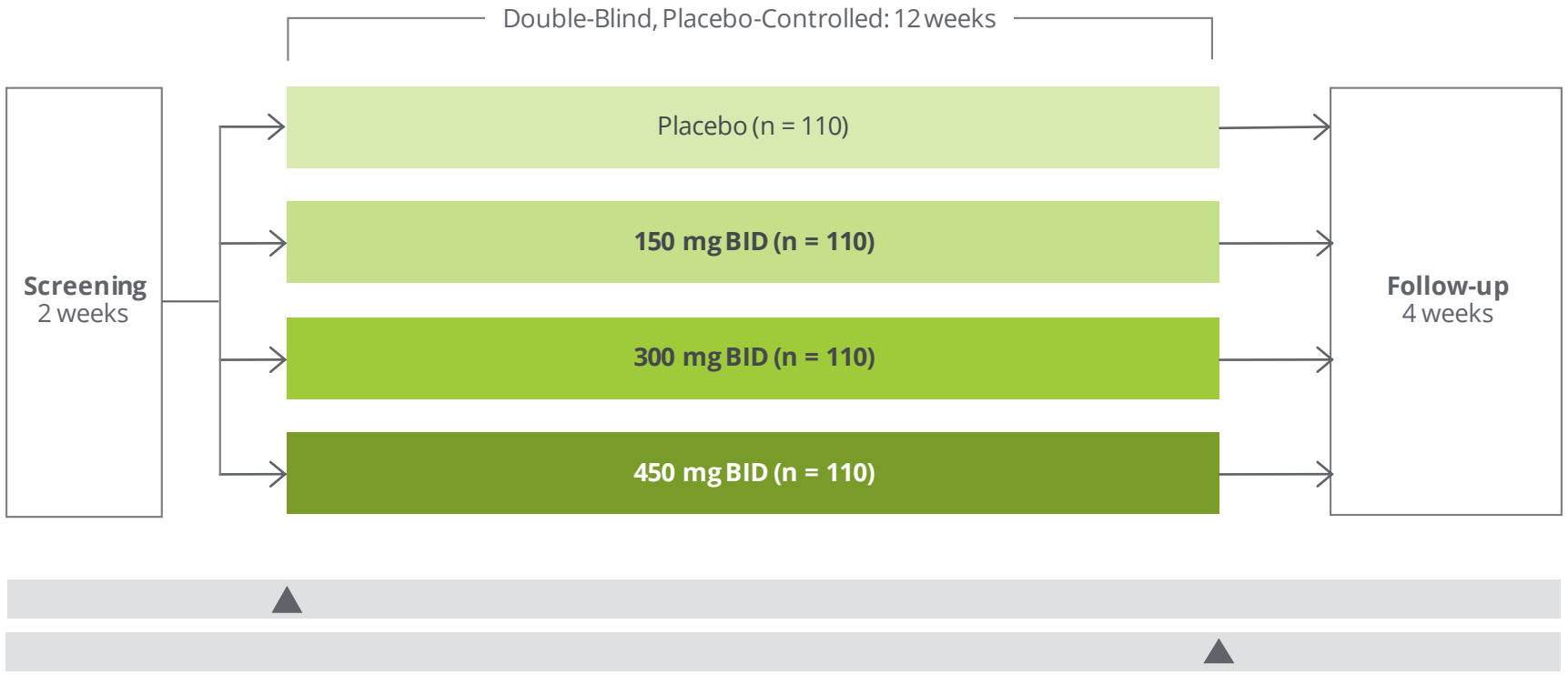
*Cytokinetics estimates based on proprietary market research
Source: NIH National Institute of Neurological Disorders and Stroke, ALS Fact Sheet

Phase 2 Clinical Trial in ALS

FORTITUDE ALS

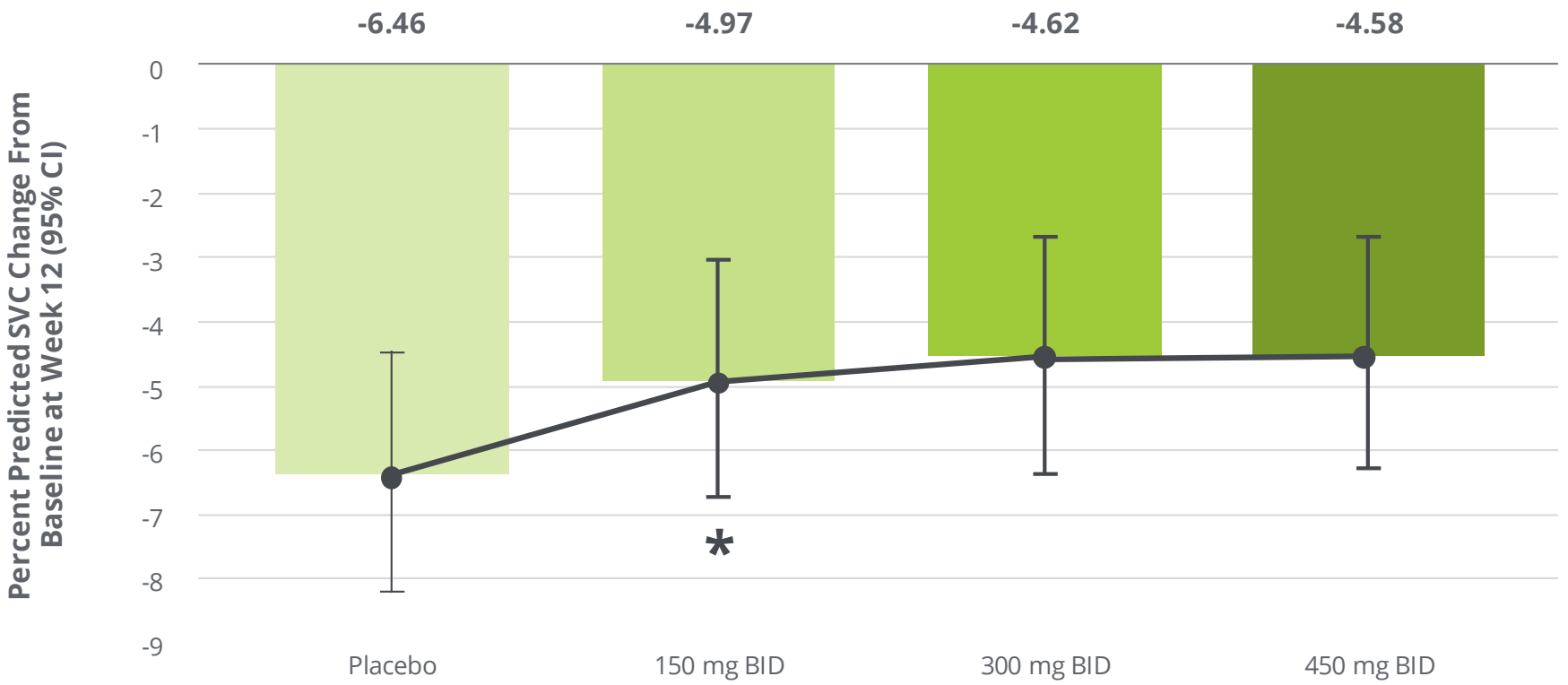
Results presented at American Academy of Neurology 2019

Parallel group, dose ranging study enrolled 458 patients with ALS in the US, Canada, Australia and Europe evaluating change from baseline in the percent predicted slow vital capacity (SVC) at 12 weeks of treatment with *reldesemtiv* or placebo



Primary Endpoint: SVC

Change from baseline in percent predicted SVC at week 12



Primary Analysis*

P = 0.11 for weighted dose-response relationship

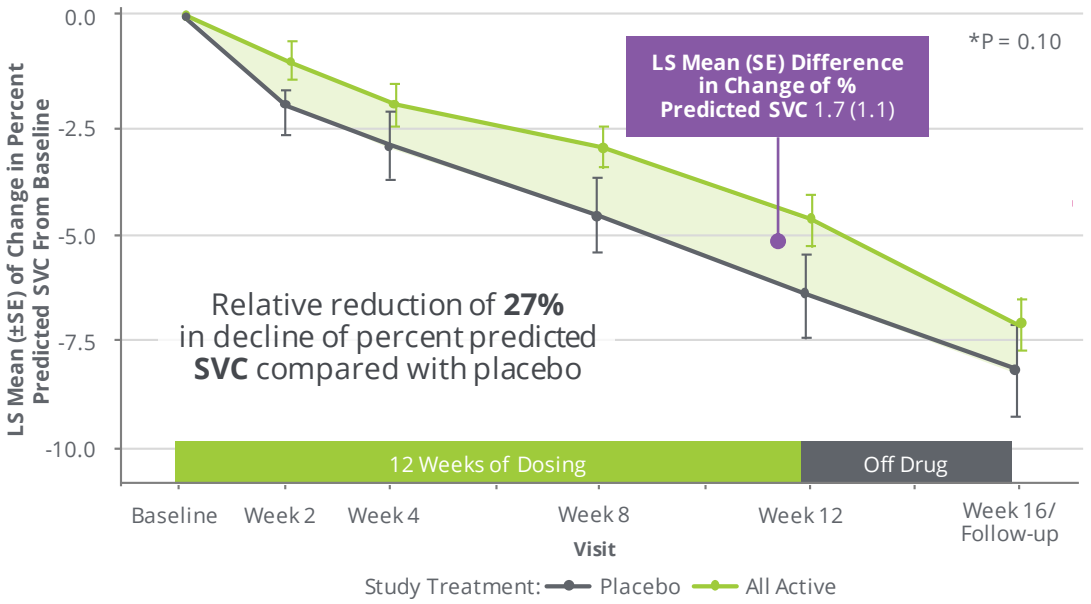
*Based on Mixed Model for Repeated Measures (MMRM) with the contrasts of (-5, -1, 3, 3) for placebo, *reldesemtiv* 150 mg, 300 mg and 450 mg BID, respectively

Change From Baseline: All Active vs Placebo*

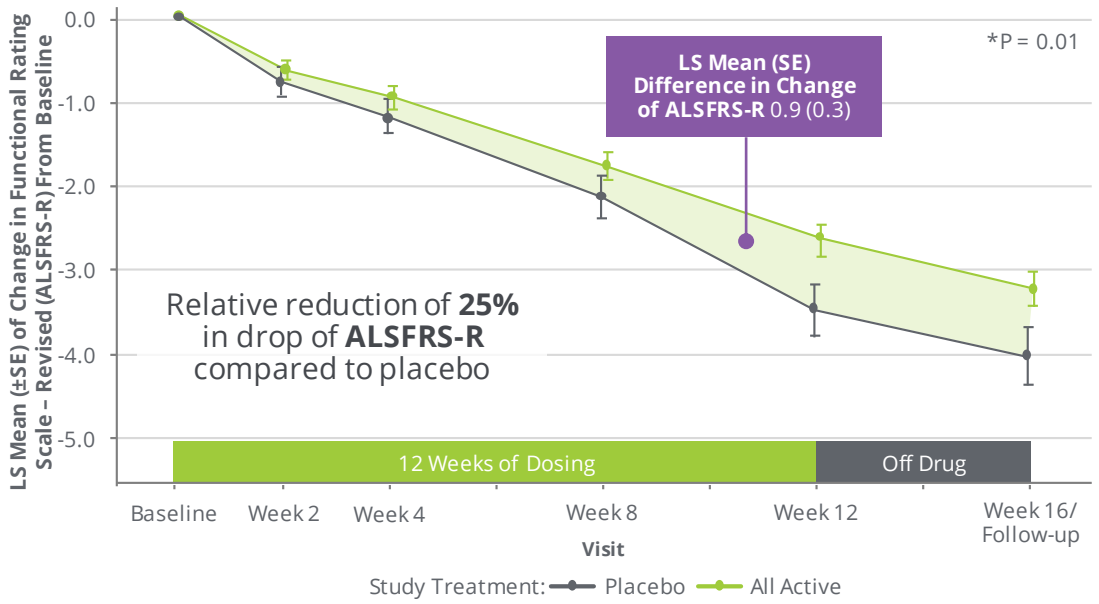
FORTITUDE ALS

Results support progression to potential Phase 3 clinical trial

SVC Change From Baseline
(All Active vs Placebo)



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



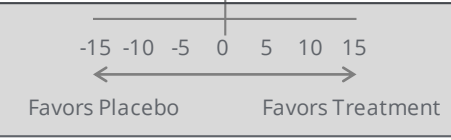
*post hoc analysis
FORTITUDE-ALS did not achieve statistical significance, but patients on all dose groups of *reldesemtiv* declined less than patients on placebo

Subgroup Analyses*

FORTITUDE ALS

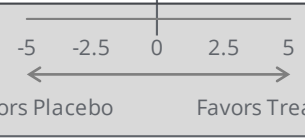
Percent Predicted SVC

	No. of Patients (pbo/ *reldesemtiv*)	LSM Difference (95% CI)	Estimate	*P* value
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	0.1.41
≥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)				
1st tertile ≤(0.3667)	29/107		0.663	0.6361
2nd tertile > (0.3667) – (0.6673)	35/94		2.960	0.0976
3rd tertile (0.6673)	26/88		1.620	0.4597



ALSFRS-R Total Score

	No. of Patients (pbo/ *reldesemtiv*)	LSM Difference (95% CI)	Estimate	*P* value
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)				
1st tertile ≤(0.3667)	32/110		0.389	0.4298
2nd tertile > (0.3667) – (0.6673)	38/99		0.987	0.0665
3rd tertile (0.6673)	30/96		1.733	0.0177

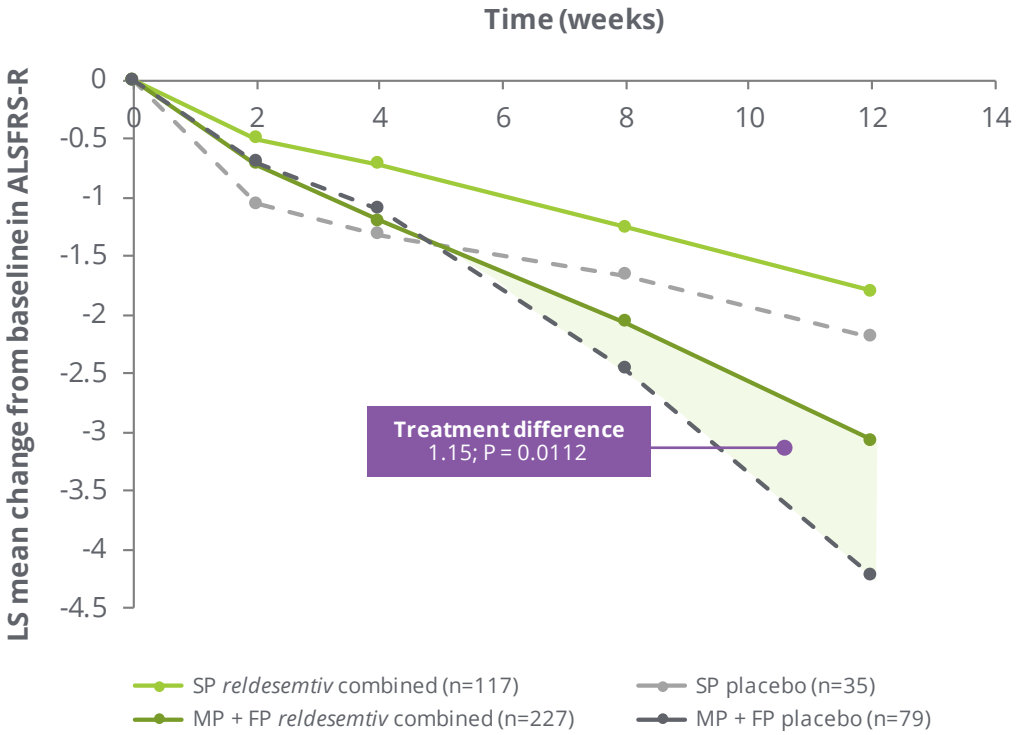


*FORTITUDE-ALS did not achieve statistical significance, but patients on all dose groups of *reldesemtiv* declined less than patients on placebo

Post-Hoc Analyses Inform Potential Path Forward

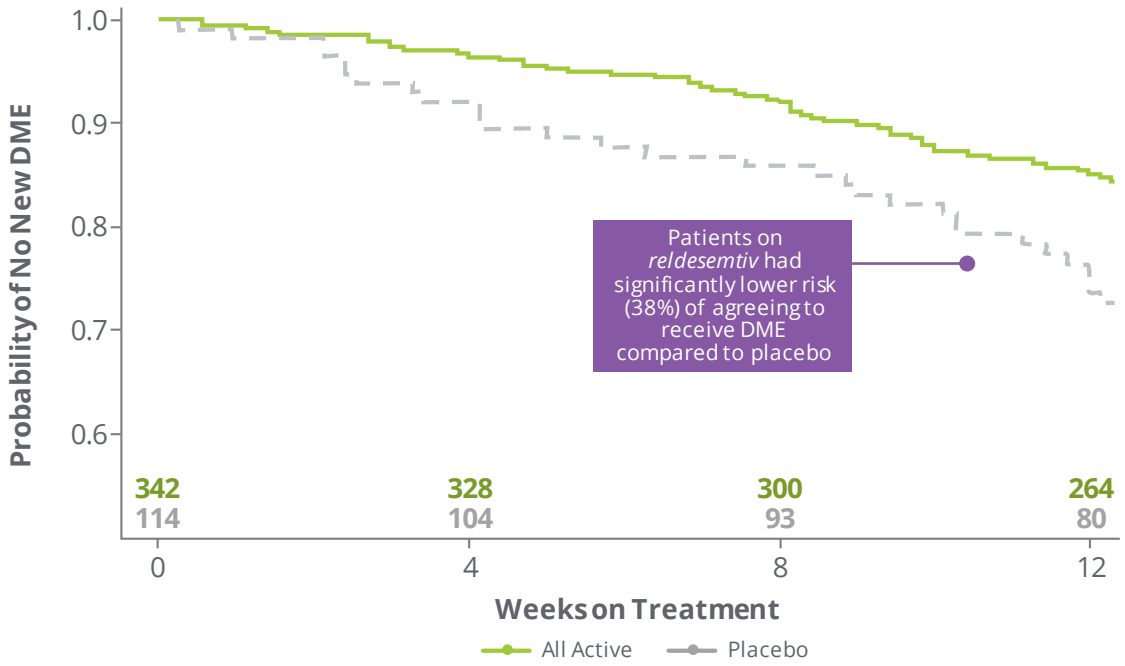
FORTITUDE ALS

Change From Baseline in ALSFRS-R by Progressor Tertiles



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

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



Cytokinetics

Collaborations & Agreements

Astellas Collaboration

Cytokinetics has exclusive control of *reldesemtiv*, CK-601 and other FSRAs

Cytokinetics has exclusive control and responsibility for development and commercialization of *reldesemtiv*, CK-601 and other fast skeletal regulatory activators

Astellas to pay certain costs up to $12M for potential Phase 3 clinical trial of *reldesemtiv* in ALS

Astellas funds **joint research program** with 15 Cytokinetics employees through 2020

Cytokinetics to pay Astellas low-to mid- single digit **royalty on sales** of *reldesemtiv* in certain countries

Sarcomere Directed Therapies

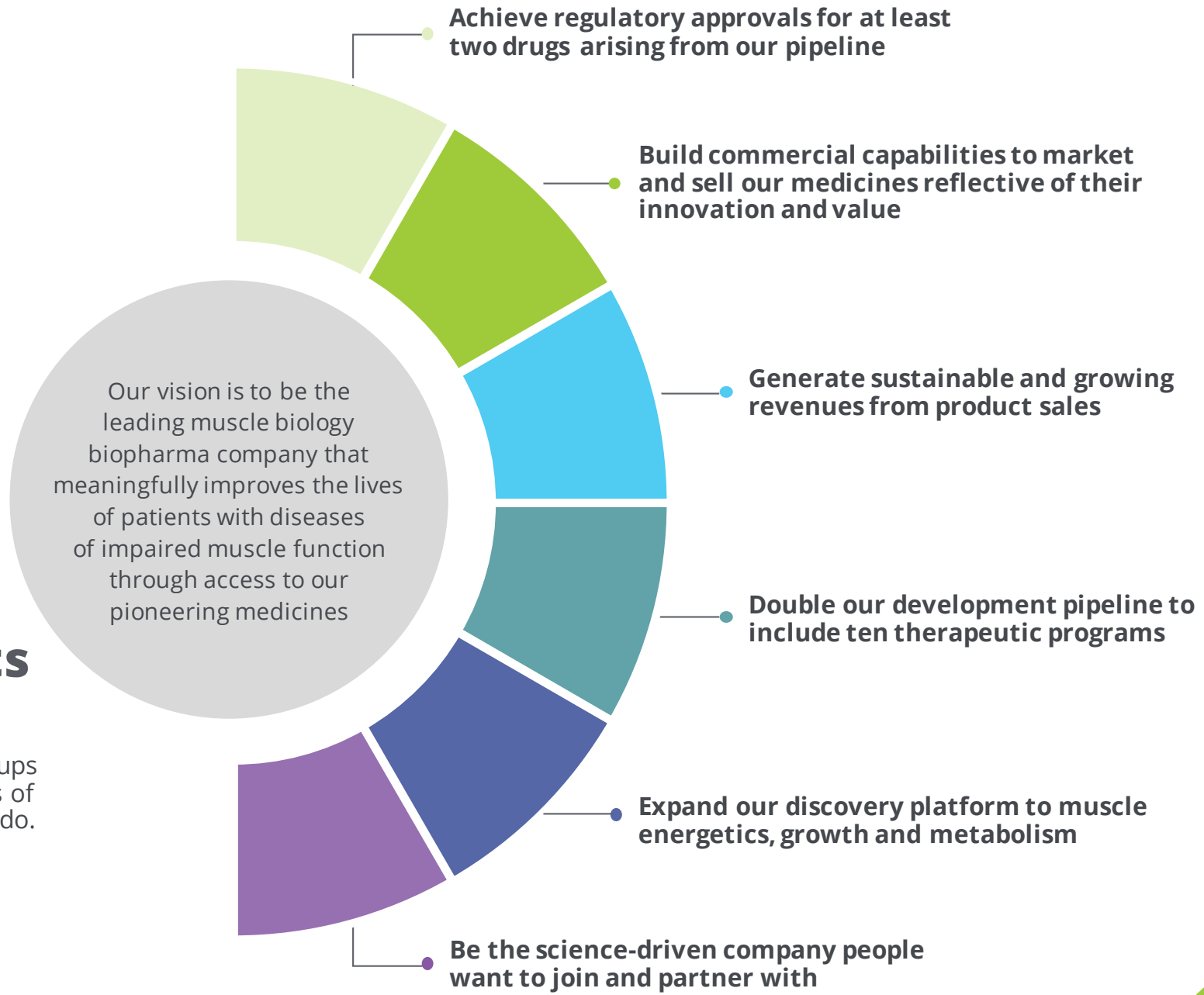
CORPORATE PROFILE

Cytokinetics

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.



Cytokinetics Financing History

in millions

	Financing	Equity	Upfront Cash, Option, & Milestones	R&D Reimbursement	Total
Investors					
Private Investors (VCs)		$116			$116
IPO		$94			$94
Public Post-IPO/Other		$420			$420
Term Loan	$45				$45
Convertible Debt (net)*	$120.5				$120.5
	$165.5	**$630**			**$795.5**
Strategic Partners & Grants					
Astellas		$10	$130	$96	$236
Amgen		$43	$145	$45	$233
Royalty Pharma		$10	$90	–	$100
GSK		$24	$22	$33	$79
AstraZeneca		–	–	$2	$2
MyoKardia		–	–	$2	$2
Global Blood		–	–	$2	$2
Grants (ALS Assoc/NINDS/other)		–	$6	–	$6
		$87	**$393**	**$180**	**$660**

**Net of fees and expenses*

Capital raised: combination of strategic partners and investors

Balance Sheet & Financial Guidance

Q1 2020 ended with more than 2 years of cash based on 2020 guidance

Q1 2020 Condensed Balance Sheet

As of 3/31/20

in millions

	Total
Cash and investments	$237.2
Other assets	$19.4
Total Assets	**$256.6**
Debt	$130.8
Liability related to sale of future royalties	$149.0
Other liabilities	$22.5
Total Liabilities	**$302.3**
Working capital	$205.2
Accumulated deficit	-$904.4
Stockholders' Equity (Deficit)	-$45.7
Basic Shares Outstanding	**59.3**

2020 Financial Guidance

in millions

	Total
Cash Revenue	$18 – 22
Cash Operating Expenses	$120 – 130
Net	**~ $105-115**

Upcoming 2020 Milestones

Expect Topline Results from **GALACTIC-HF** in Q4

Expect Data from Cohort 1 of **REDWOOD-HCM** in 2H

(If enrollment in Cohort 1 complete by mid-year)

Initiate Phase 1 Study of **CK-271** in 1H

Complete Enrollment in **METEORIC-HF**

(If enrollment reactivated by end of Q2)

Complete Phase 1 SAD/MAD Study of **AMG 594** in 2H

(Enrollment has been suspended)

Conduct Commercial Readiness & Develop Co-Promotion Plan for ***Omecamtiv Mecarbil***

Advance **CK-601** in IND-Enabling Studies

Prepare for Potential Phase 3 Clinical Trial of ***Reldesemtiv*** in Patients with ALS

Cytokinetics

Sarcomere Directed Therapies

THANK YOU

John, *diagnosed with heart failure*

Jillian, *diagnosed with HCM*

Chuck, *diagnosed with ALS*