



EMPOWERING
MUSCLE
EMPOWERING
LIVES

Sarcomere Directed Therapies



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 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; 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', Amgen's or Ji Xing's decisions with respect to the design, initiation, conduct, timing and continuation of development activities for *reldesemtiv*, *omecamtiv mecarbil* or CK-274, respectively; Cytokinetics' ability to satisfy and conditions to the sale of its royalty interest in *mavacamten* or disbursement of funding from RTW; 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. 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

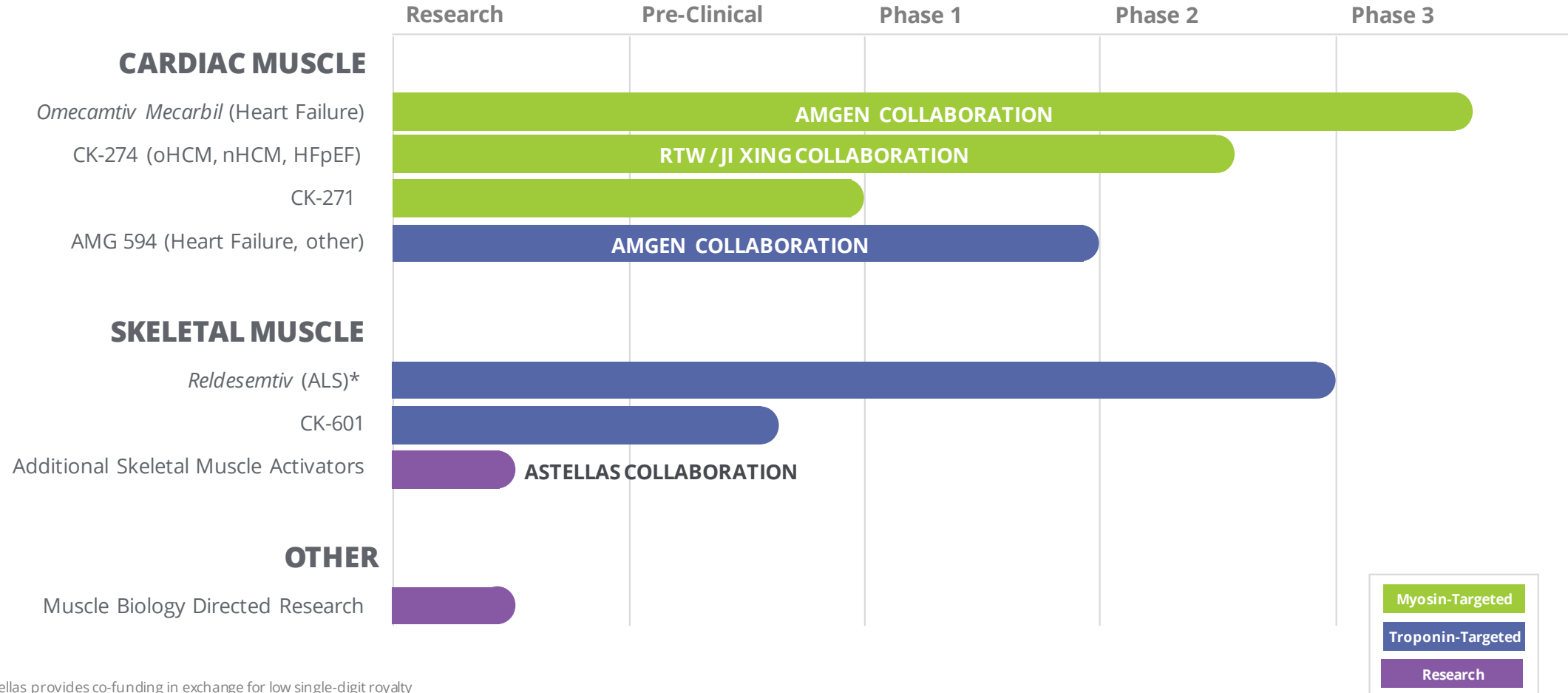
Expand our discovery platform to muscle energetics, growth and metabolism

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

How Do We Get There?

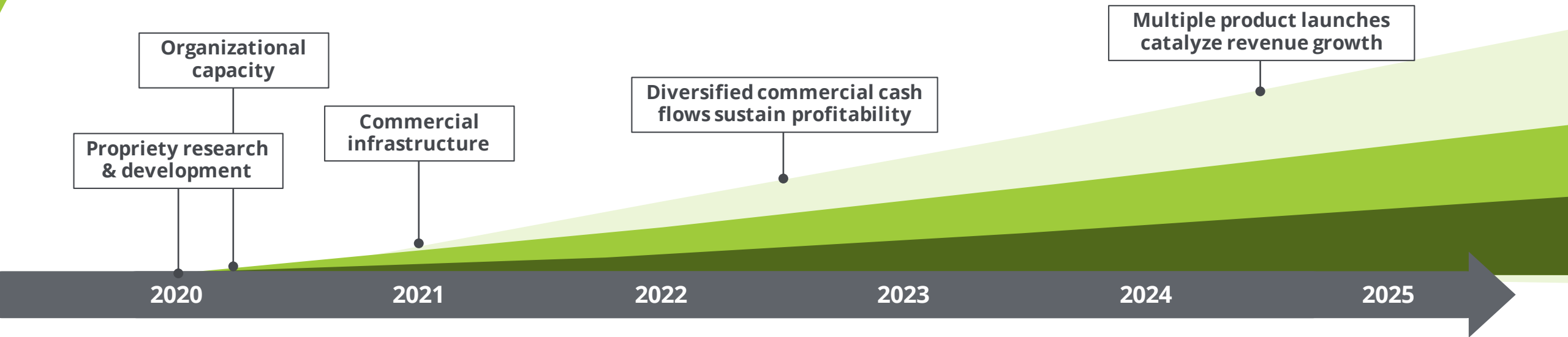


Pipeline of Novel Muscle-Directed Drug Candidates



* Astellas provides co-funding in exchange for low single-digit royalty
Investigational products – not approved as safe or effective for any indication

Corporate Development Strategy



- Potential for \$100M short-term milestones
- Potential for \$300M pre-commercial milestones
- Escalating double-digit royalties in *omecamtiv mecarbil*
- Potential for \$300M post-commercial milestones
- Retained commercial rights and economics

RTW
Investments
CK-274
oHCM, nHCM
COMMITTED CAPITAL FOR
DEVELOPMENT/LICENSING
COLLABORATION IN CHINA

AMGEN
omecamtiv mecarbil
Heart Failure
CO-PROMOTION:
NORTH AMERICA

astellas
reldesemtiv
ALS
CO-FUNDING PHASE 3
CLINICAL DEVELOPMENT

Above illustrative timelines are based on current assumptions and projections. All such timelines are subject to change and may be materially delayed based on a variety of factors, including patient enrollment, clinical trial results, regulatory review, our partners' ability to manufacture products and other factors.

Omecamtiv Mecarbil: Collaborations & Agreements

Amgen & Royalty Pharma



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 \$600M 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.

**Comprised of \$90M for royalty purchase and \$10M for common stock purchase.

CK-3773274: Collaborations & Agreements

RTW Investments, LP & Ji Xing Pharmaceuticals Limited



RTW & Ji Xing Pharma Licensing Collaboration, Funding Commitments & Royalty Monetization

RTW Investments committed capital, funding and sale proceeds of \$250M to Cytokinetics

Ji Xing Pharma to develop & commercialize CK-274 in China, subject to royalties and up to \$200M in milestone payments

RTW Investments purchases equity and agrees to purchase royalty; provides access to capital for development of CK-274

Ji Xing Pharma

Ji Xing to develop & commercialize CK-274 in Greater China and Taiwan

Cytokinetics receives **\$25M upfront**; eligible to receive **\$200M** in development & commercial milestones & double-digit royalties on sales of CK-274 in licensed territory

RTW: Funding for Development of CK-274

Cytokinetics receives options for additional funding for further development of CK-274 in HCMs:

- Eligible for **\$45M** in each of 2 tranches (upon initiation of global registration programs in oHCM and nHCM) in exchange for 2% royalty on sales in U.S. & certain European countries
- If **full \$90M** received, Cytokinetics pays RTW 4% royalty on sales of CK-274 in U.S. & certain European countries, subject to royalty reductions for potential other indications

RTW: Other Purchases

RTW agrees to purchase Cytokinetics' royalty rights **on future sales of mavacamten** for **\$85M**

RTW purchases **\$50M of Cytokinetics' common stock** at \$25 per share

Reldesemtiv: Collaborations & Agreements



Astellas Collaboration

Cytokinetics has exclusive rights to *rel-desemtiv*, CK-601 and other FSRAs

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

Astellas to pay certain costs up to \$12M for potential Phase 3 clinical trial of *rel-desemtiv* in ALS

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

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

Commercialization Strategy

Leveraging partnership with Amgen to finance the build of our commercial business

Amgen to reimburse
Cytokinetics' commercialization
costs in North America

Potential royalties and
milestone payments from
Amgen expected to support
Cytokinetics' commercialization
of CK-274, *relidesemtiv* in North
America and Europe

AMGEN

omecamtiv mecarbil
Heart Failure

RTW

Investments

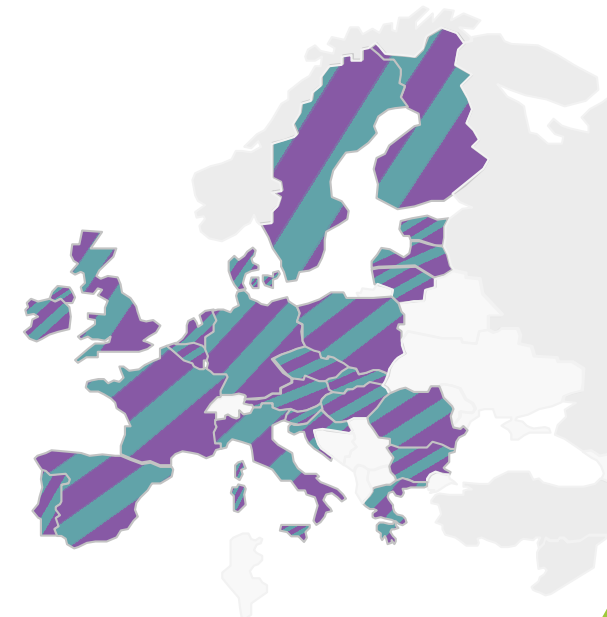
CK-274
oHCM, nHCM



astellas

relidesemtiv
ALS

**Focus to Concentrated Customer Segments
(e.g. Centers of Excellence)**



Sarcomere Directed Drug Development

CARDIAC MUSCLE

Omecamtiv Mecarbil

AMG 594

CK-274, CK-271

Tremendous Need Exists to Improve CV Care

Novel CV drugs are desperately needed to improve patient healthspan

Heart Disease the **Leading Cause of Death** in the US



#1 Heart disease (185)



#2 Cancer (152)



#3 Respiratory (49)



#4 Stroke (38)

2018 US Deaths per 100,000 Standard Population

CV Disease the **Leading Category in Healthcare Spend**



#1 Cardiovascular (\$327B)



#2 Musculoskeletal (\$300B)



#3 Respiratory (\$231B)



#4 Endocrine (\$227B)

2019 US Expenditure by Disease Category

Lack of innovation Exists Across CV Conditions



#1 Rare diseases
(211 drugs approved)



#2 Neurologic disease
(139 drugs approved)



#3 Cancer
(133 drugs approved)



#10 Cardiovascular
(43 drugs approved)
... and **just 4 drugs for HF**

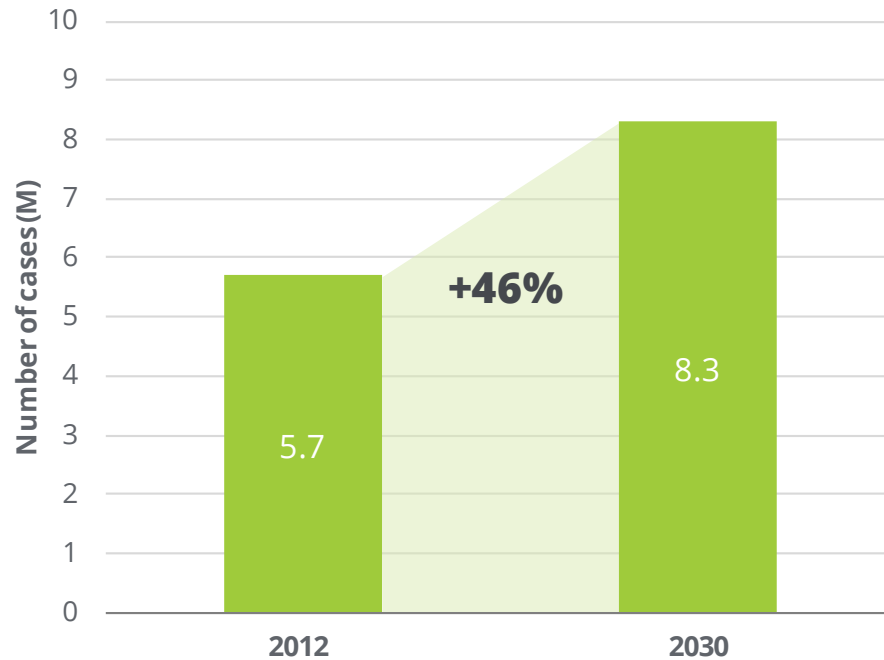
of Approved Drugs since 2010

Source: NCHS Data Brief, No. 355 January 2020, Peterson-KFF, Health System Tracker, PharmaProjects.

Heart Failure: Growing Prevalence and Low Survival Rates

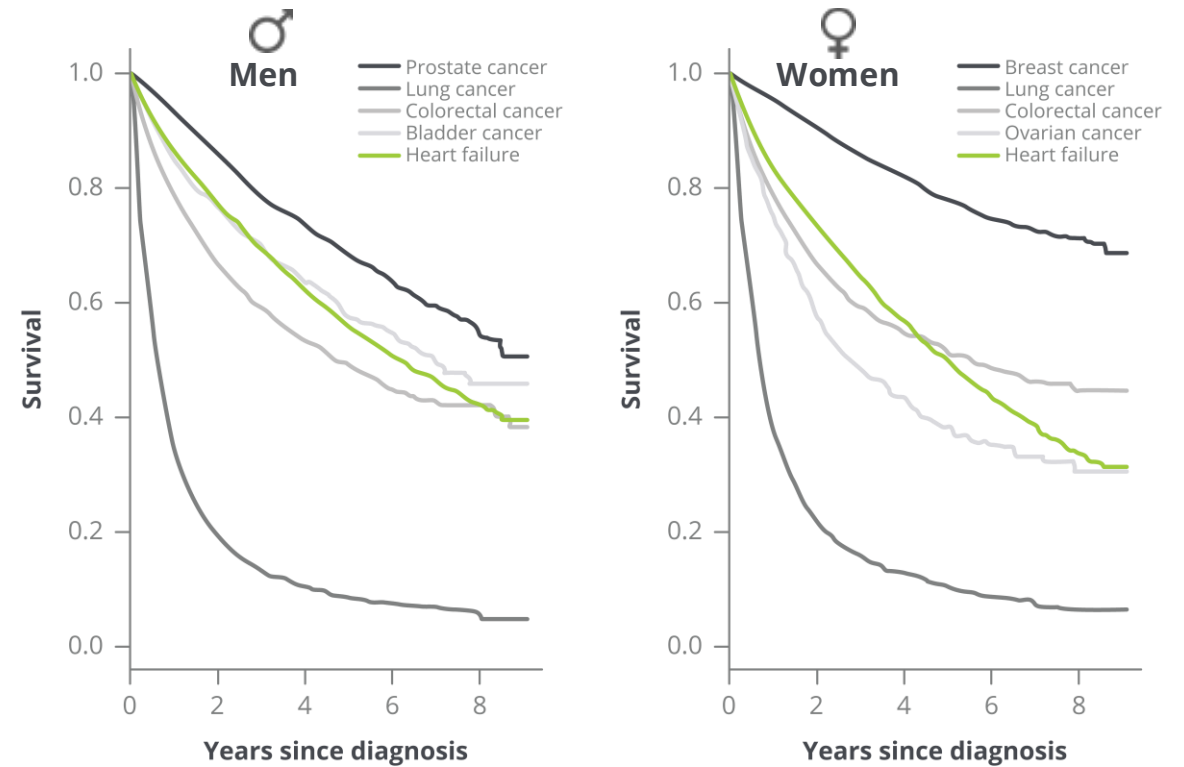
6 million people have heart failure in the United States

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

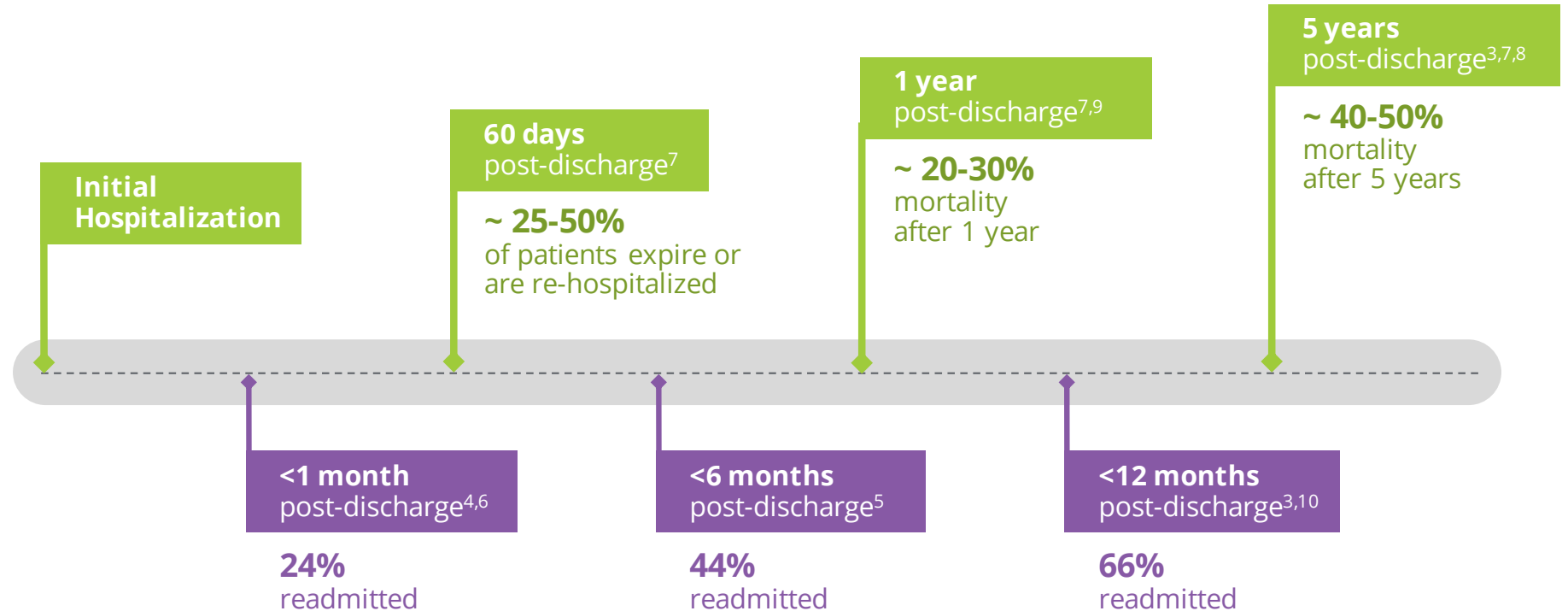


Mamas et al. *Eur J Heart Fail.* 2017 Sep;19(9):1095-104

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 months⁵



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

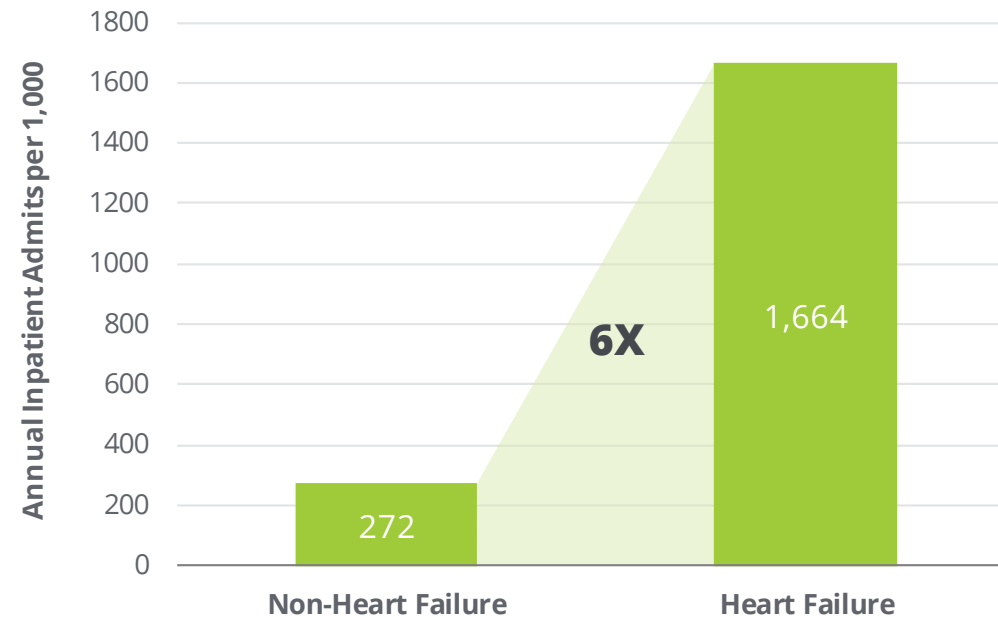
10. Whellan et al. *Circulation* 2010 Jan;3(1):33-40

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 Patients¹



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**



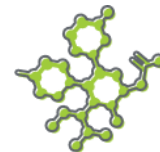
Drugs that do not affect renal function

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



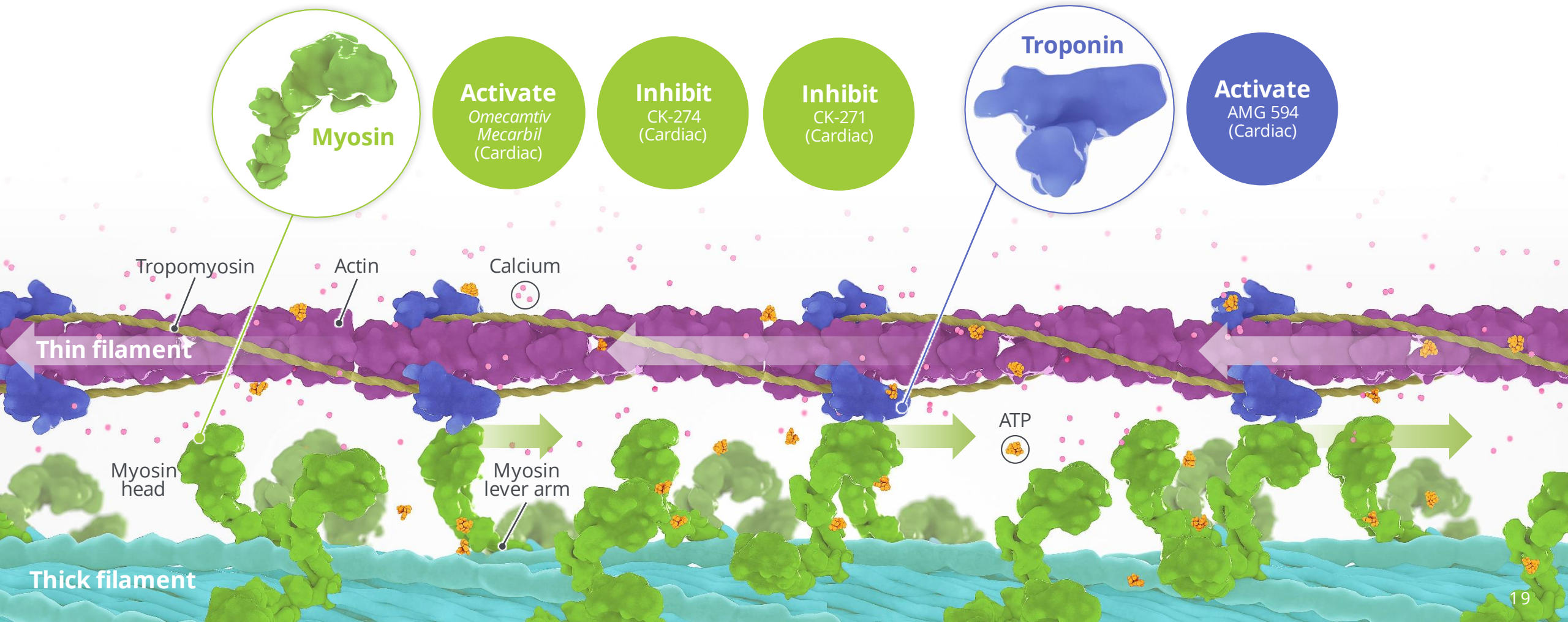
Current medical therapy does not target underlying disease

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

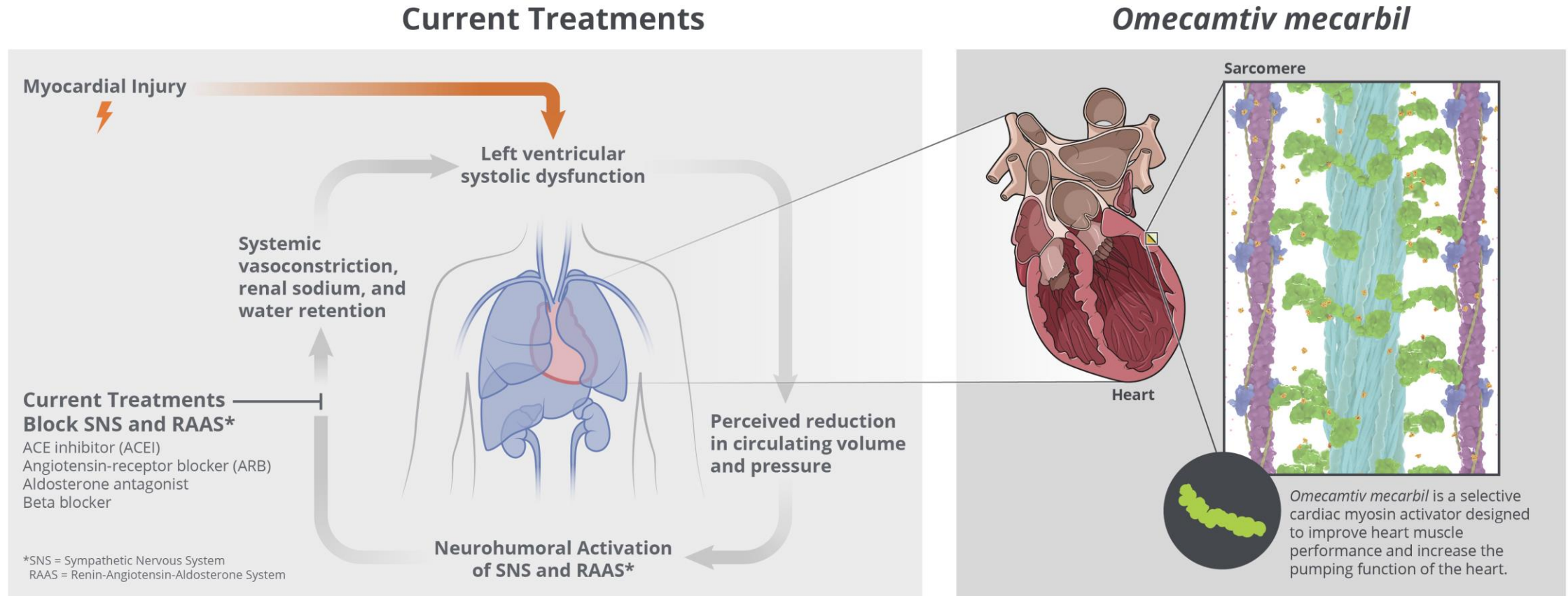
Sarcomere Directed Drug Development

Cardiac muscle

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

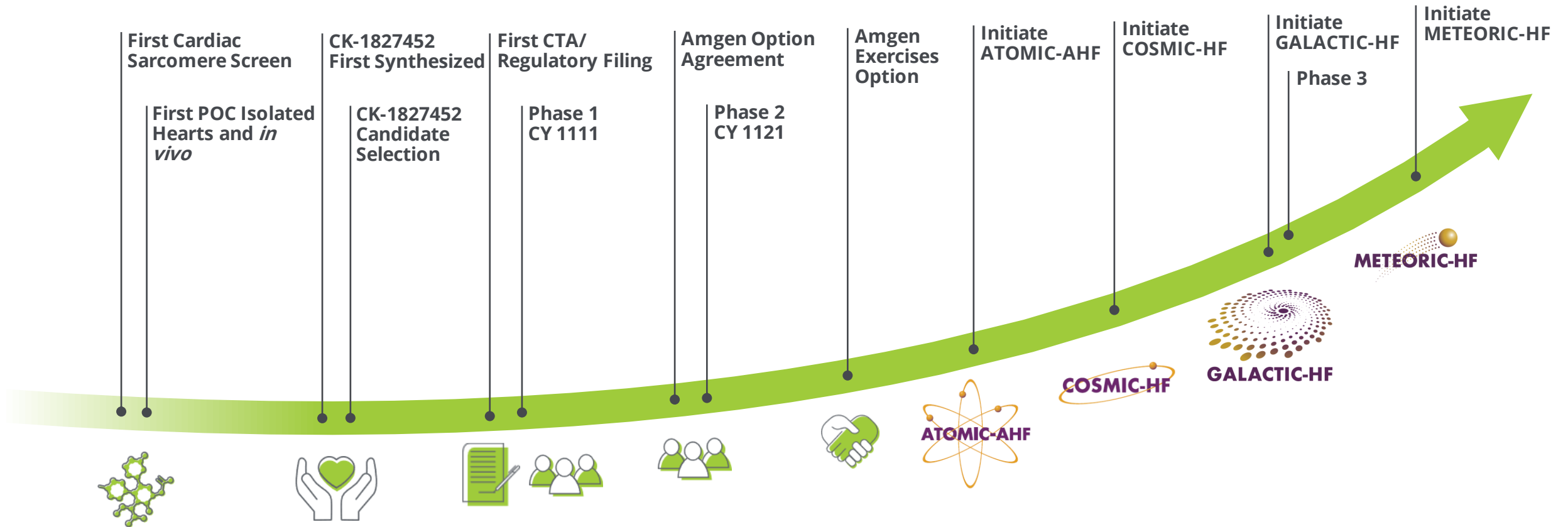


Omecamtiv Mecarbil: Novel Mechanism Approach



Omecamtiv Mecarbil: Pivotal Phase 3 Results Q4 2020

11 Phase 1 studies with over 300 patients, 7 Phase 2 trials with over 1,400 patients



What Did We Learn from COSMIC-HF?



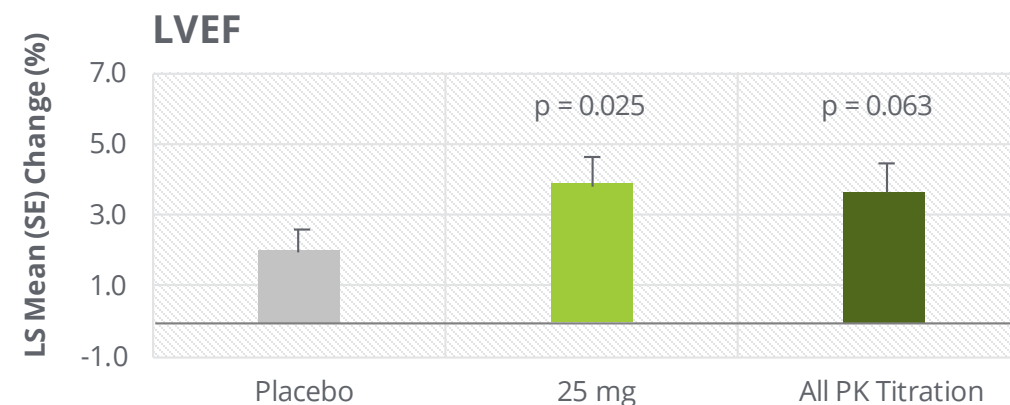
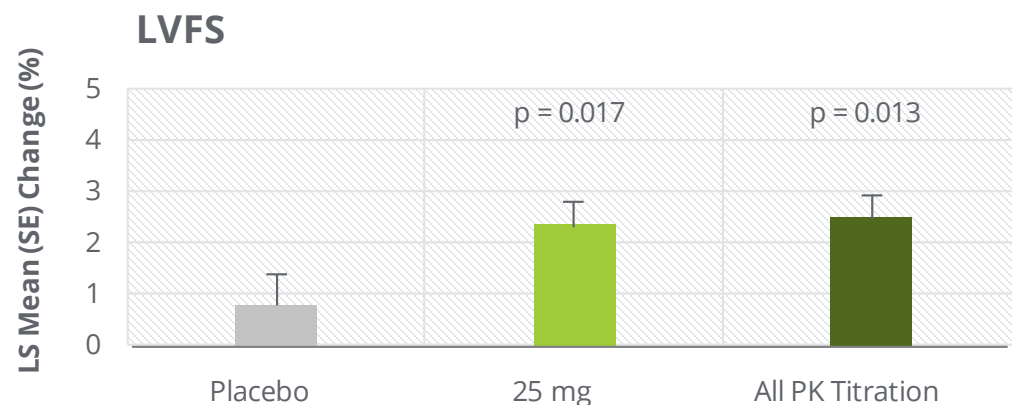
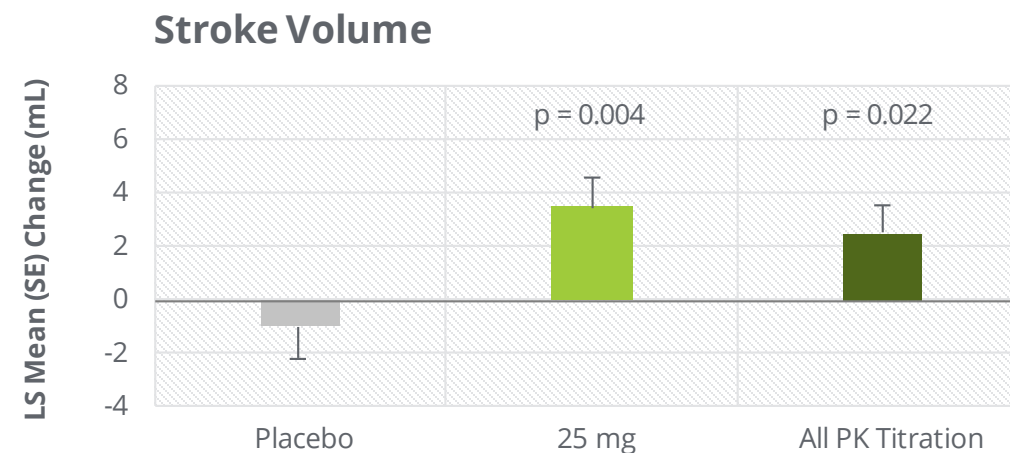
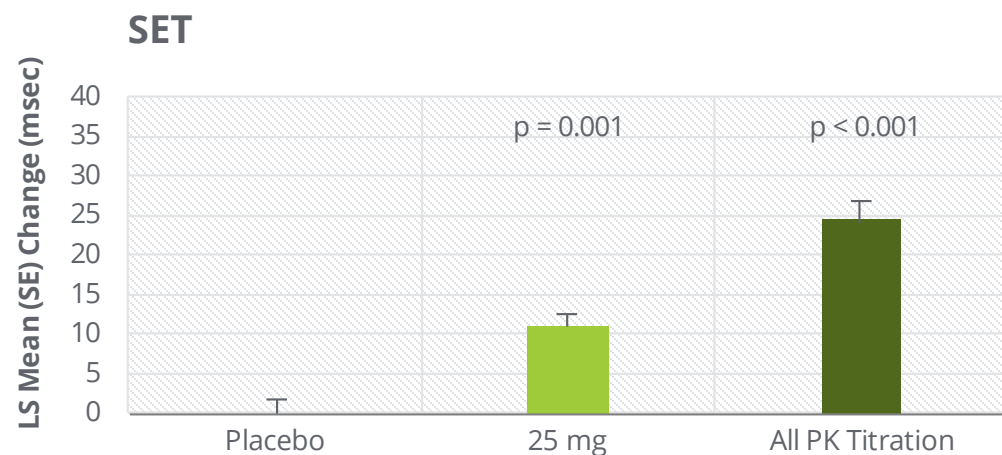
Phase 2 clinical trial of *omecamtiv mecarbil*



- First demonstration of the **effectiveness of PK-guided dose titration to prevent excessive exposures to *omecamtiv mecarbil***
- **Demonstrated improvement** in several different measures that **predict improved prognosis**
 - Decreased left ventricular volumes
 - Decreased NT-proBNP
 - Decreased heart rate
- Demonstrated **favorable tolerability** over 20 weeks of treatment

Dose-Dependent Increases in Cardiac Performance

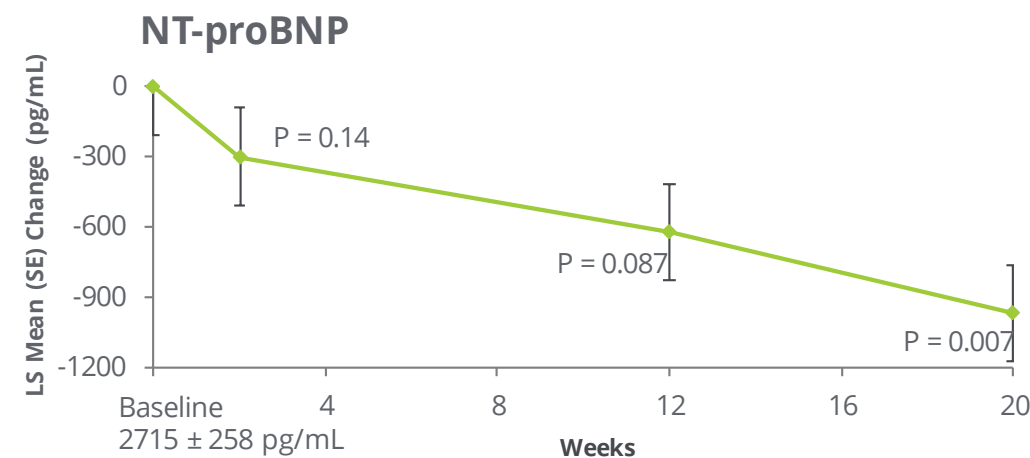
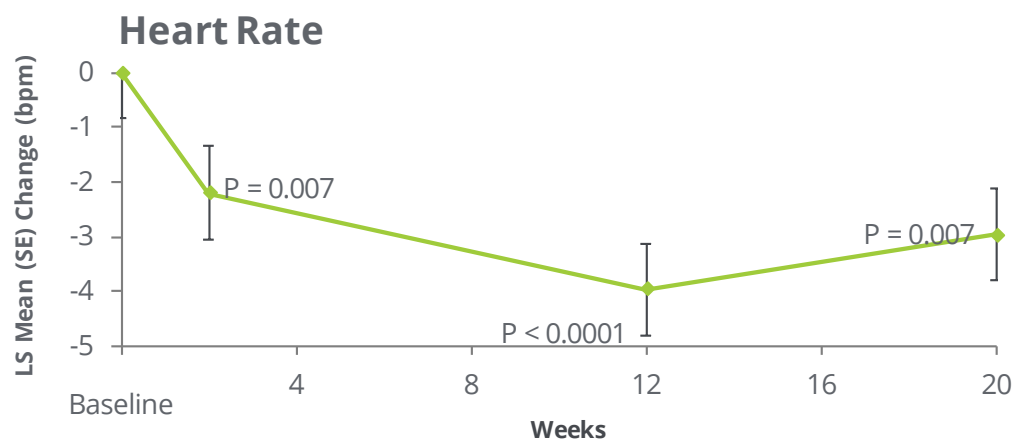
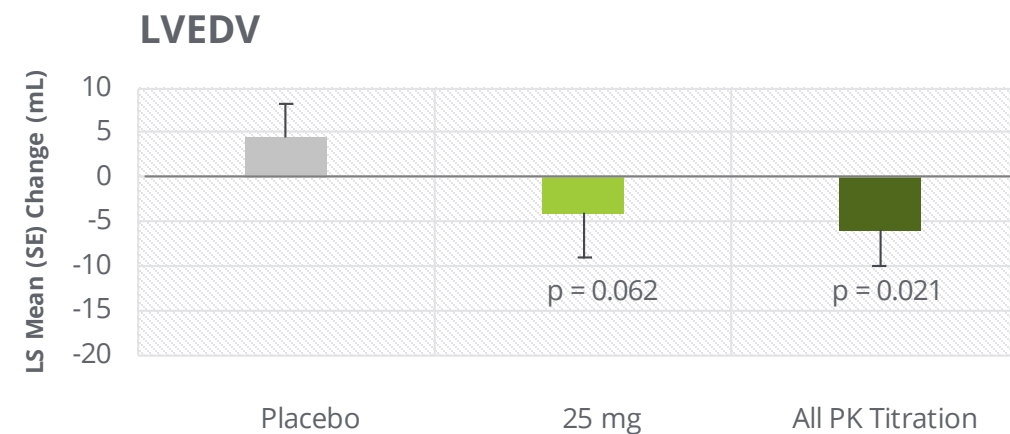
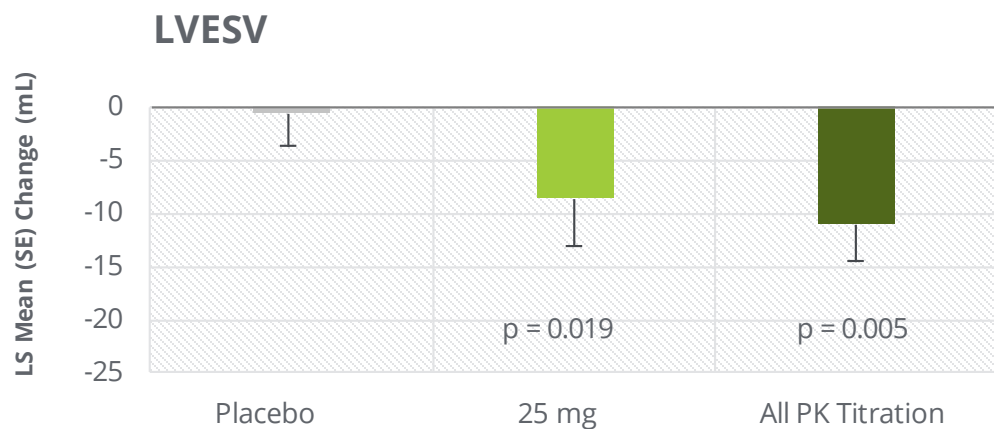
Pharmacodynamic results from COSMIC-HF



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

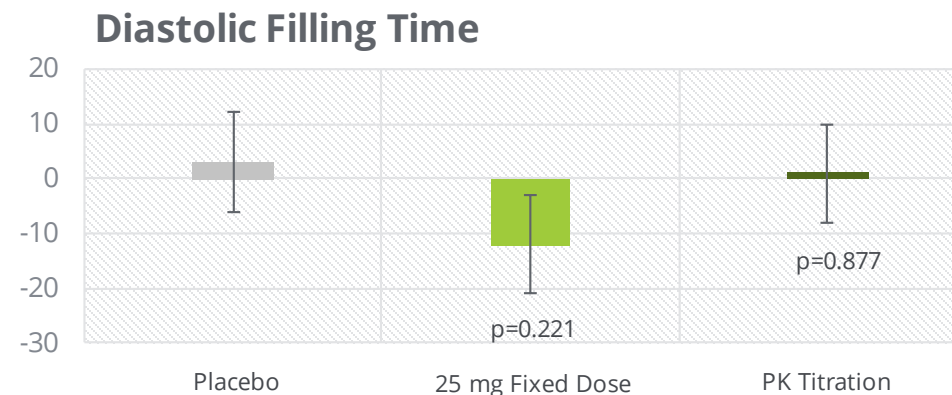
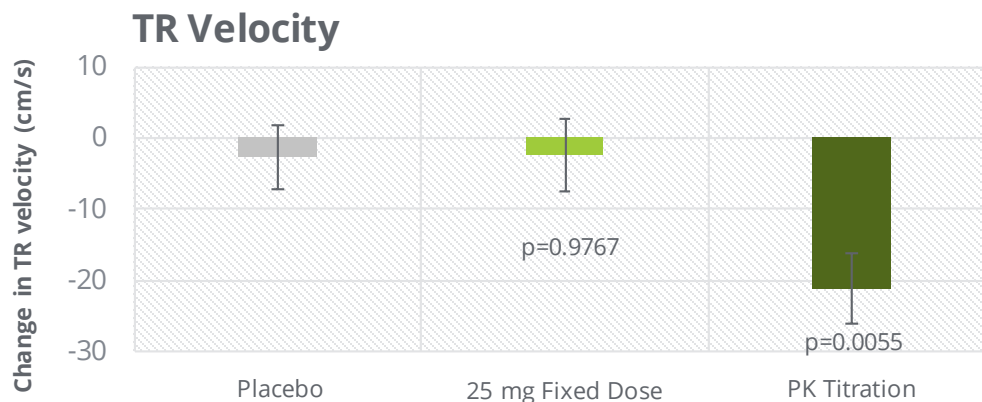
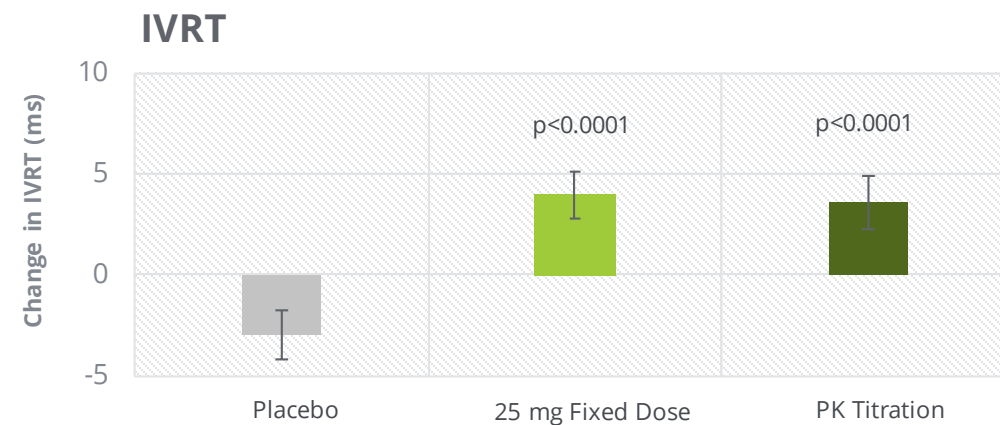
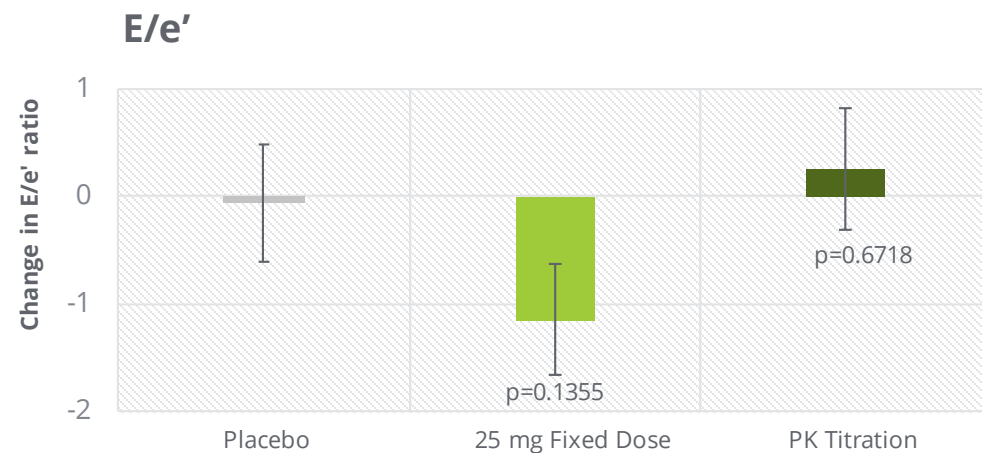
Reductions in heart volume, oxygen demand & wall stress in COSMIC-HF



LVESV 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

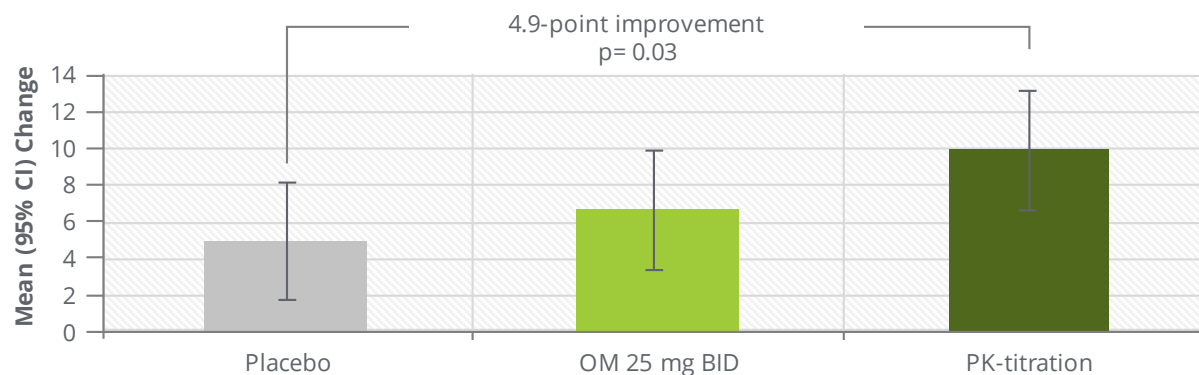
Improved systolic function with no negative impact on diastolic function



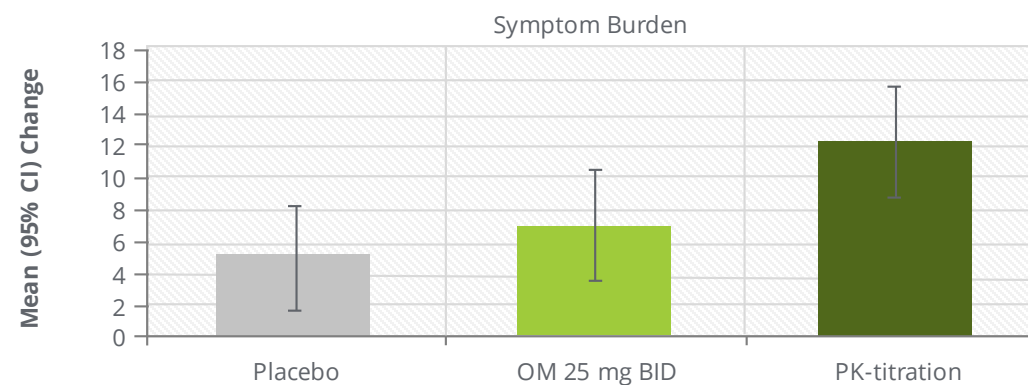
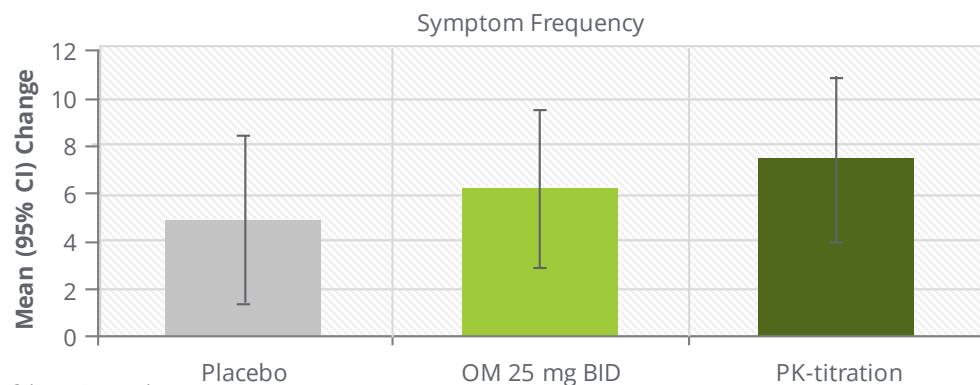
IVRT=isovolumic relaxation time
TR=tricuspid regurgitation

Improvements in Symptoms

Change from Baseline in KCCQ Total Symptoms Score at Week 20



Change from Baseline in KCCQ Subdomain Scores at Week 20

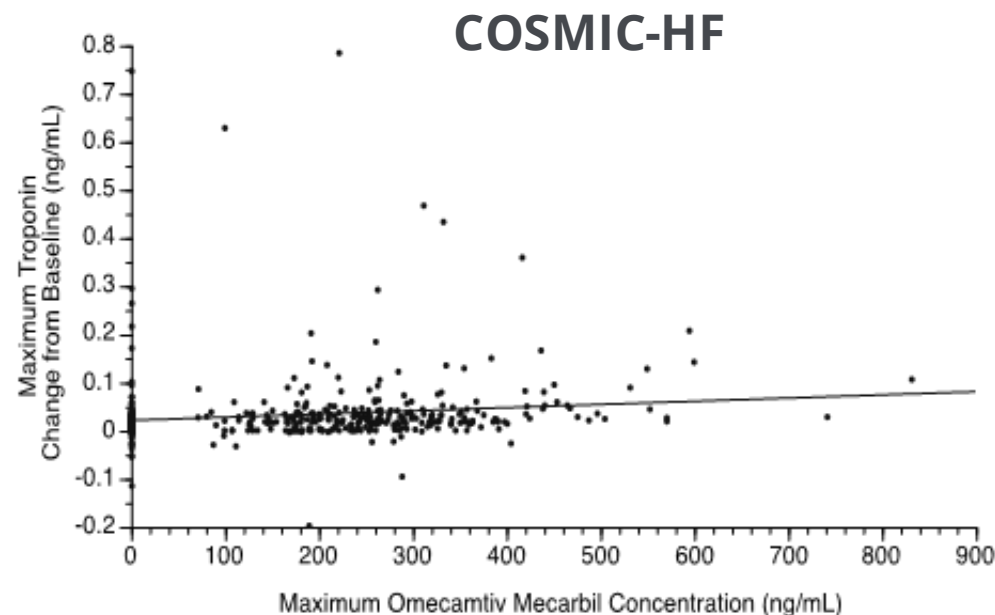


CI: confidence interval

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

- Baseline troponin I levels were above the diagnostic limit for myocardial infarction (0.04 ng/mL) for ~25% in COSMIC-HF
- Events of increased troponin I (n=278 across all treatment groups) were independently adjudicated and **none were determined to be myocardial ischemia or infarction.**¹

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



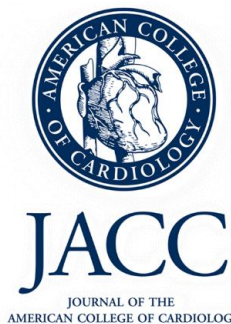
Troponin I Levels in COSMIC-HF (ng/mL)				
	Placebo	25 mg BID	All PK Titration	All OM
Median at Baseline (Q1, Q3)	0.025 (0.016, 0.041)	0.022 (0.016, 0.039)	0.022 (0.016, 0.042)	0.022 0.016, 0.040
Median Change from Baseline to Week 20 (Q1, Q3)	0.000 (-0.007, 0.004)	0.001 (0.000, 0.012)	0.006 (0.000, 0.024)	0.004 (0.000, 0.019)

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 hospitalization¹

Meta-analysis of drug/device therapies demonstrated association between LV remodeling and longer-term effects on mortality in patients with LVD²



1. Zile et al. JACC 2016; 68(22): 2425-2436

2. Kramer et al. JACC 2010; 56(5): 392-406

Pivotal Phase 3 Trial Completed Enrollment

GALACTIC-HF continuing following second planned interim analysis



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

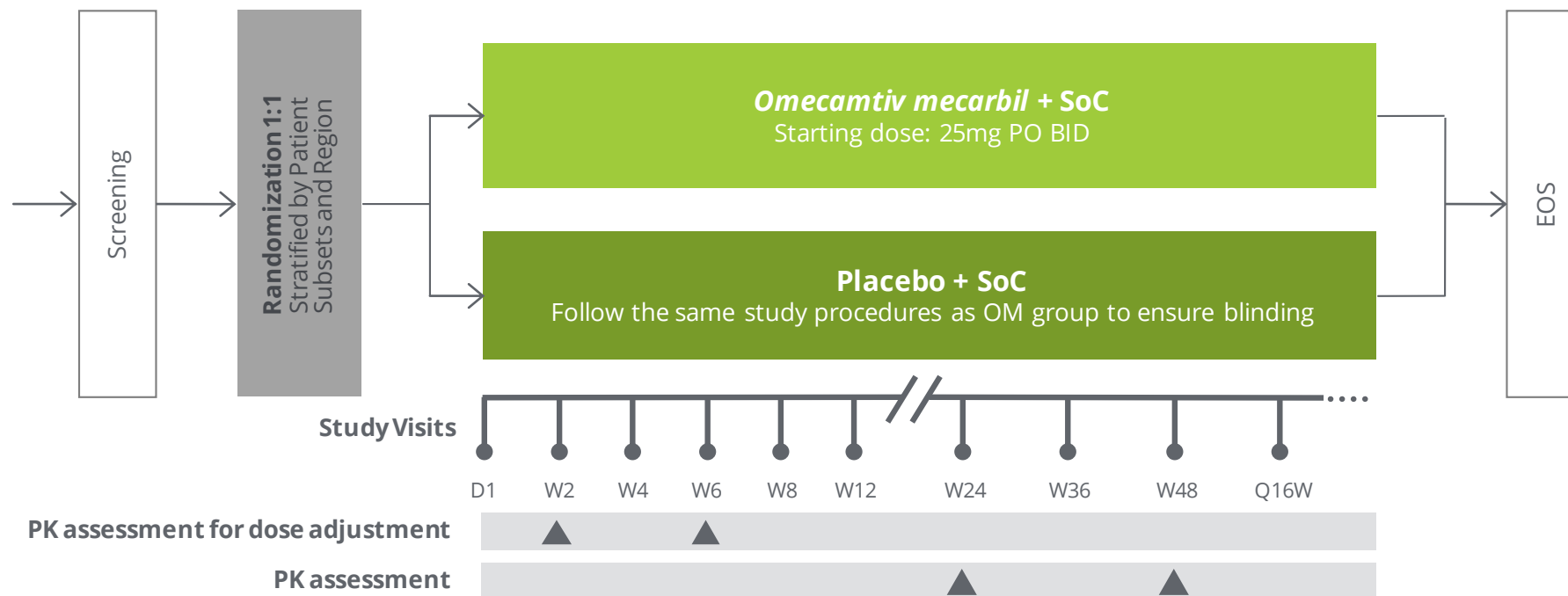
Key Design Points

- Dose optimization based on trough concentration of *omecamtiv mecarbil* at 2 weeks and 6 weeks
- High risk patients enrolled from inpatient and outpatient settings
- Designed to provide 90% statistical power to assess risk of CV 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.

Clinical Trial Overview

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



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



Baseline Characteristics: High Risk Population



- 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

Highest risk patients in VICTORIA; lower risk in PARADIGM-HF, DAPA-HF



	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)
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%)
Ejection fraction at screening (% mean (SD))	26.6 (6.3)	28.9 (8.3)	29.5 (6.2)	31.1 (6.8)
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%)
NT-proBNP at Screening (pg/ml, median (25th, 75th))	1,998 (990-4078)	2,816 (1556-5314)	1,608 (886-3,221)	1,428 (857-2,649)
NYHA Class at Baseline				
Class II	4,376 (53.0%)	2,975 (59.0%)	5,919 (70.1%)	3,203 (67.5%)
Class III	3,633 (44.0%)	2,003 (39.7%)	2,018 (23.9%)	1,498 (31.6%)
Class IV	248 (3.0%)	66 (1.3%)	60 (0.7%)	43 (0.9%)

Outcomes of Large Heart Failure Trials

		VICTORIA	DAPA-HF	PARADIGM-HF	EMPEROR-REDUCED
Primary Endpoint	Composite: CV Death or First HF Hospitalization (Relative Risk Reduction)	10% First HF hospitalization and CV death	26% Worsening HF instead of HFH	20% HF hospitalization and CV death	25% HF hospitalization and CV death
Secondary Endpoints	CVD	1.0% ARR <i>Not sig.</i>	18% RRR	20% RRR	N/A
	KCCQ	N/A	2.8-point change <i>34w TSS</i>	1.64-point change	<i>EMPERIAL failed to show sig change in 6MWT</i> <i>52w CSS</i>

Second Phase 3 Clinical Trial Underway

Investigating effect of *omecamtiv mecarbil* on exercise tolerance



Trial enrolling 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 by accelerometry

Study Plan

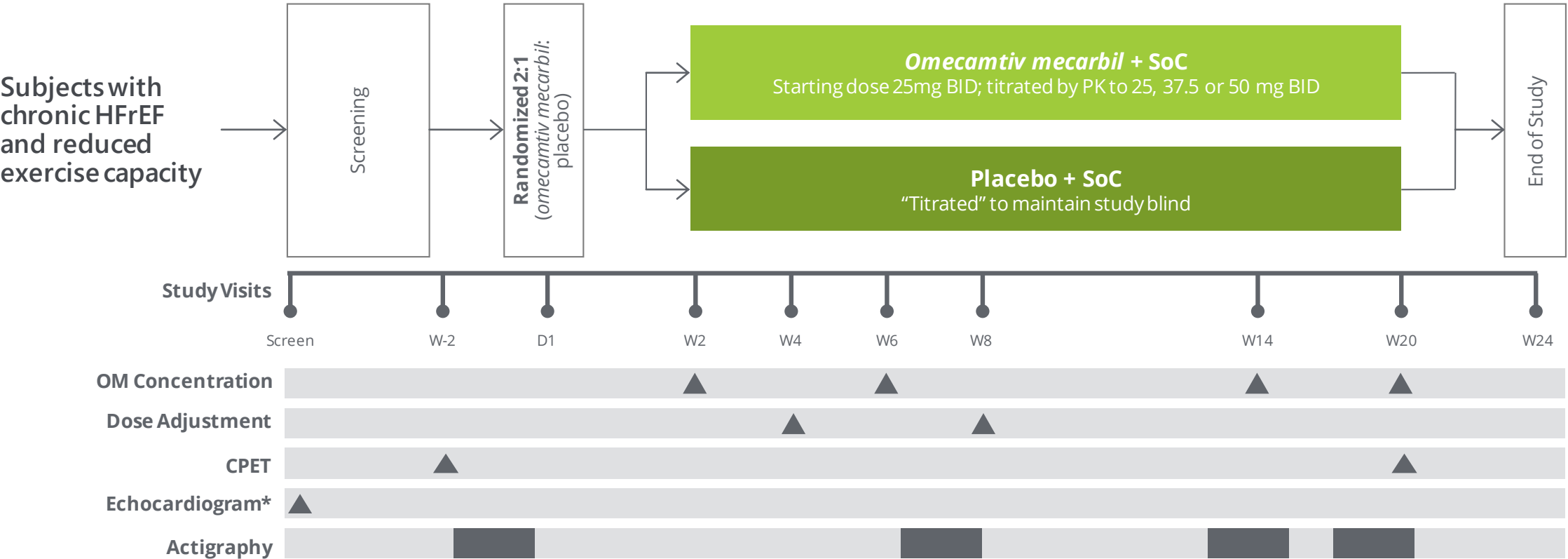
Total Countries Planned	9
Active Countries	4
Total Sites Planned	92
Activated Sites	69
Total Patients Planned	270

Key Design Points

- Designed to enroll approximately 270 patients
- 90% power
- Patients must have LVEF ≤35 percent, be NYHA heart failure class II or III, and have reduced exercise capacity
- Patients randomized 2:1 to *omecamtiv mecarbil*

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

Clinical Trial Overview

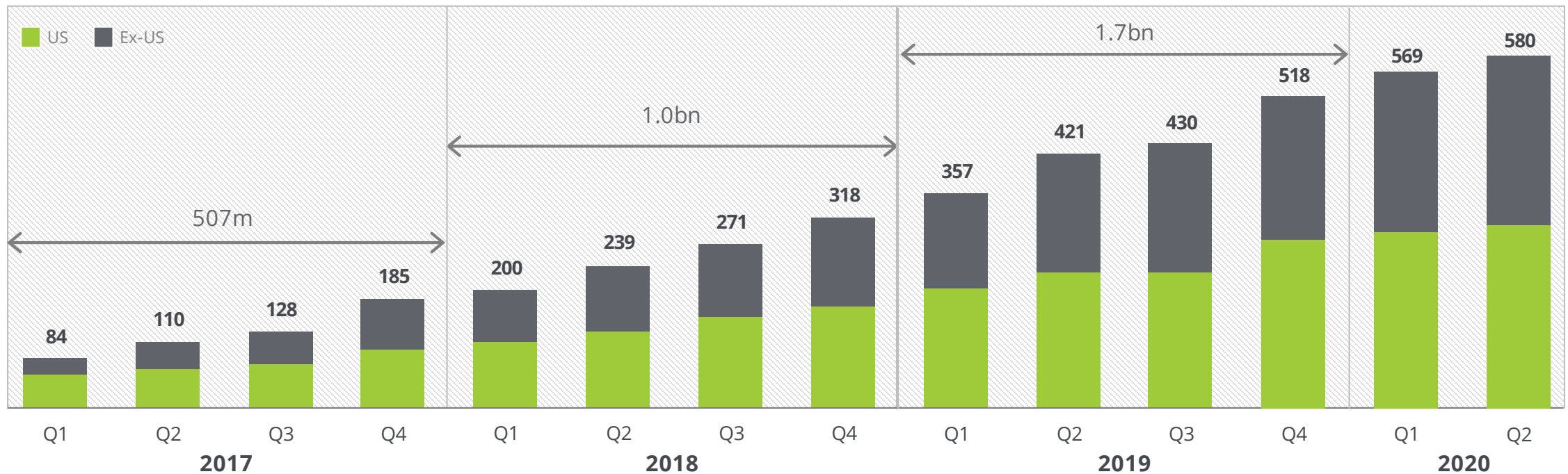


*Screening echocardiogram is not required if an appropriate LVEF assessment has been performed within one year

Commercial Opportunity for New Heart Failure Therapy

\$1.7B sold in 2019; Q1 2020 sales increased 62% year over year

Entresto® Global Product Sales (M)



*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



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

Potential treatments for patients with HCM

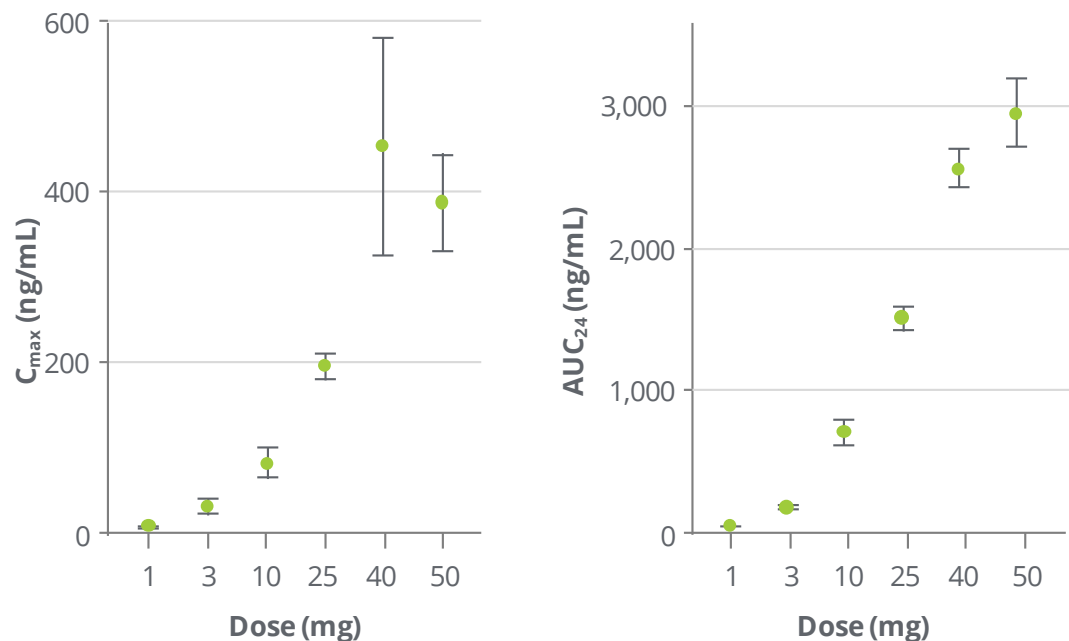


- Discovered by company scientists independent of collaborations
- Selective allosteric inhibitor of cardiac myosin
- No inhibition of smooth muscle myosin observed
- Potential *in vivo* pharmacodynamic advantages related to distinctive binding site
- Optimized to minimize potential drug-drug interactions
- High oral bioavailability observed across pre-clinical species
- Clear pharmacokinetic/pharmacodynamic (PK/PD) relationship observed
- Shallow exposure-response relationship
- Projected once daily dosing to reach steady state in patients expeditiously
- **Goal: Enable flexible and convenient dose optimization in humans as may contribute to its efficacy and safety profile**

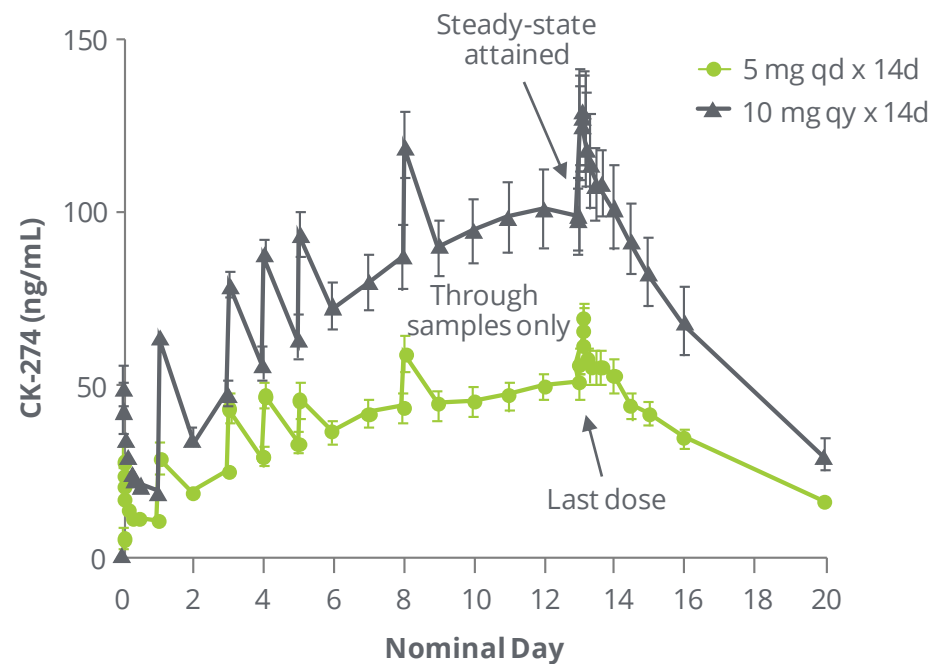
SAD & MAD Results Support Progression to Phase 2

Phase 1: CK-274 was well tolerated in healthy participants, no SAEs*

SAD PK: Absorption and Elimination Generally Dose Proportional



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



*No SAEs and no clinically meaningful changes in vital signs, ECGs, or laboratory tests

Data points represent mean \pm standard error of the mean

C_{max} = 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

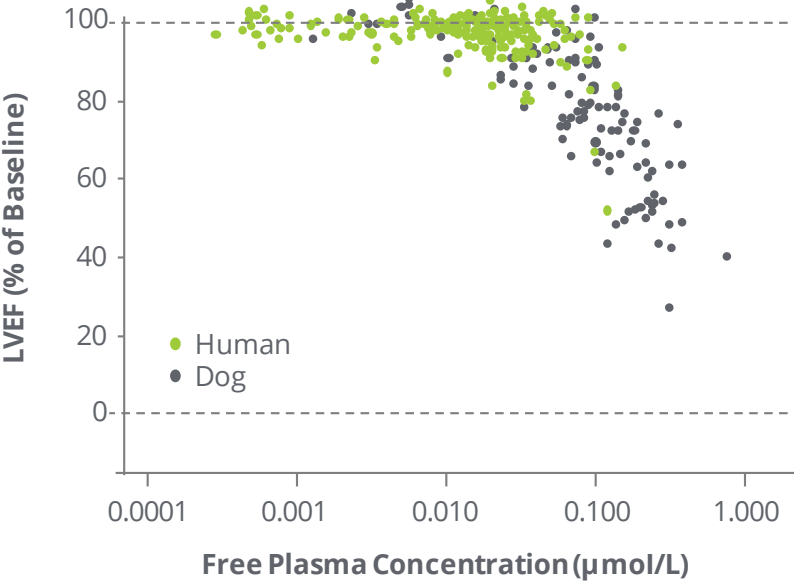
Half-Life of CK-274 at Steady-State was ~81 hours (3.4 days) On Average

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

*Except data for t_{max} shown as median (minimum-maximum), and t_{1/2} 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; C_{max} = maximum plasma concentration; AUC₂₄ = area under the plasma concentration curve;
MAD = multiple ascending dose; t_{1/2} = apparent plasma terminal elimination half-life; t_{max} = time to maximum observed plasma concentration.

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)

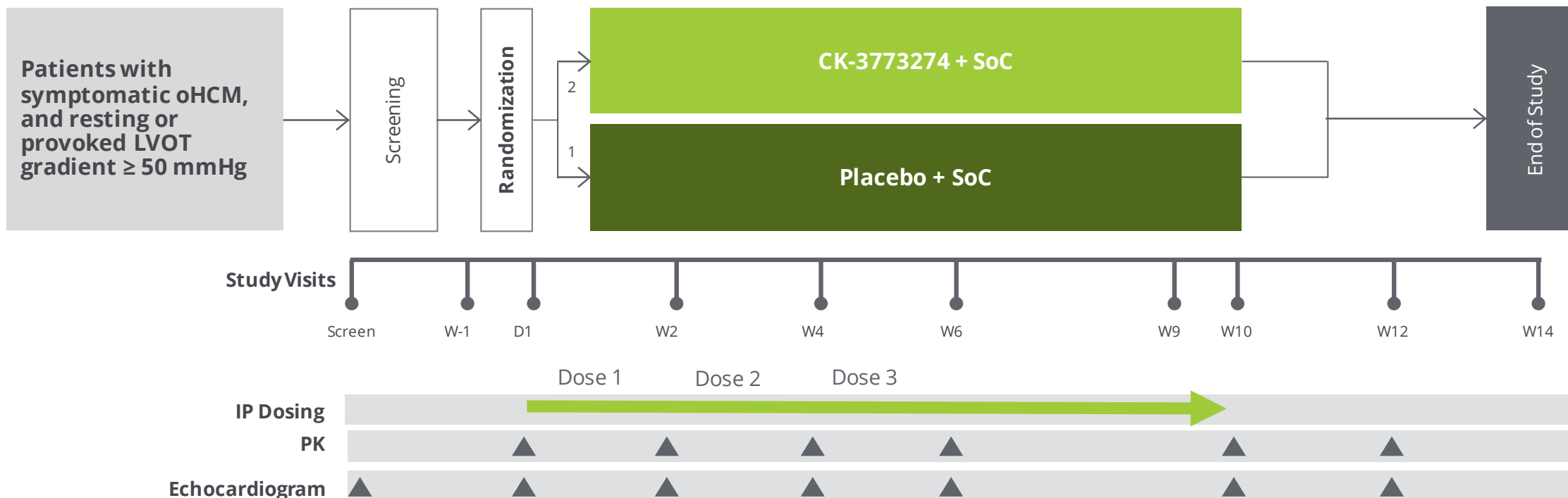


Graphs show LVEF as a function of exposure; data points represent observed values in dogs and humans.

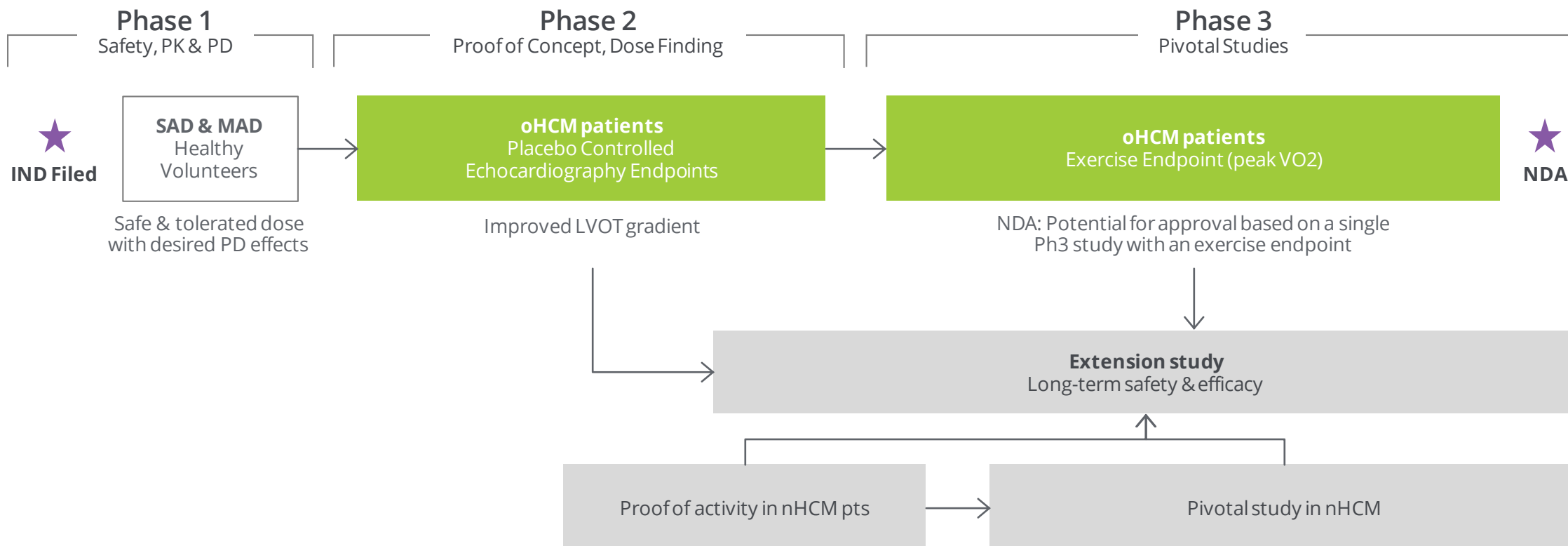
Decrease in LVEF as function of exposure is similar in humans and dogs.

Phase 2 Clinical Trial Design

Two sequential dose-finding cohorts (optional 3rd cohort)



CK-274: Clinical Development Plan for HCM



Obstructive HCM: Potential Phase 3 Trial Endpoints

- **CPET – Cardiopulmonary exercise testing**
 - Peak VO_2 (oxygen uptake)
 - V_E/VCO_2 (ventilatory efficiency)
 - OUES (oxygen uptake efficiency slope)
- **NYHA class**
- **Echocardiographic parameters** – LVOT gradient, LVEF, LVFS, GLS
- **Biomarkers** – NT-proBNP, Troponins
- **PROs – Patient-Reported Outcomes**
 - PROMIS scores – Dyspnea, Fatigue, Physical Function
 - HCM-specific instruments currently being validated



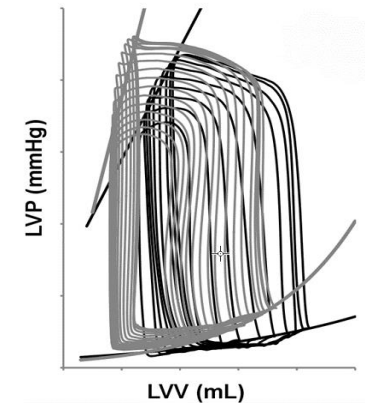
Non-Obstructive HCM: Human Model of HFpEF Subgroup

nHCM patients with similarities to subgroups of HFpEF patients with hypercontractility

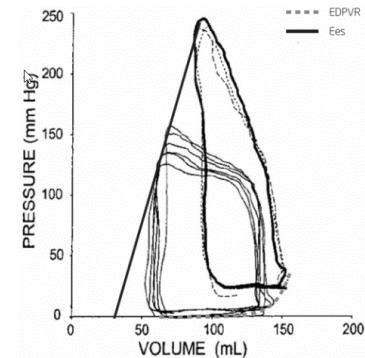
Symptoms and Pathophysiology are Similar in Both Conditions

Symptoms	Pathophysiology
Dyspnea	Increased Contractility
Exercise Capacity Diminished	Left Ventricular Hypertrophy
Peripheral Edema	Diastolic Dysfunction
Fatigue	Increased LV Filling Pressure

nHCM

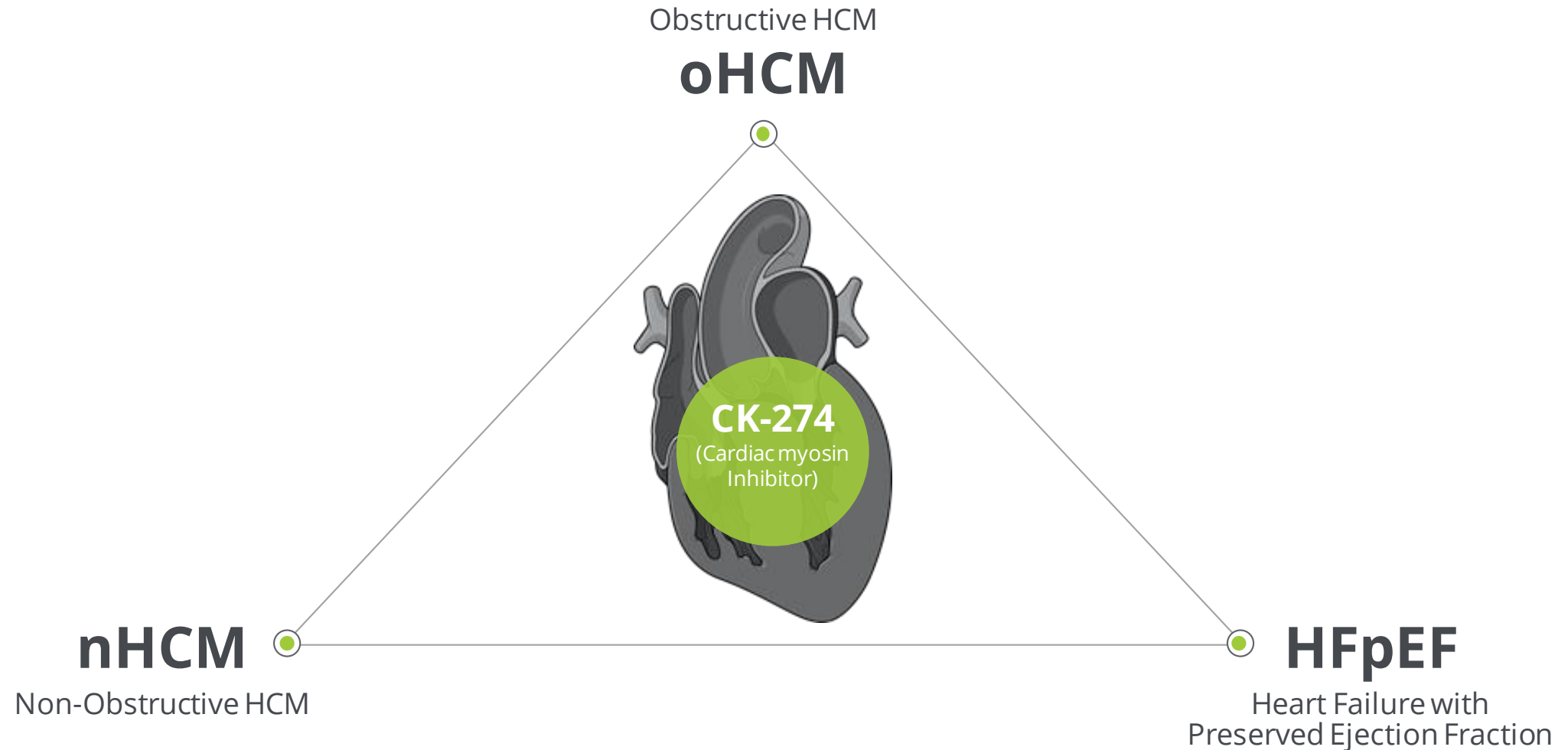


HFpEF Subgroup

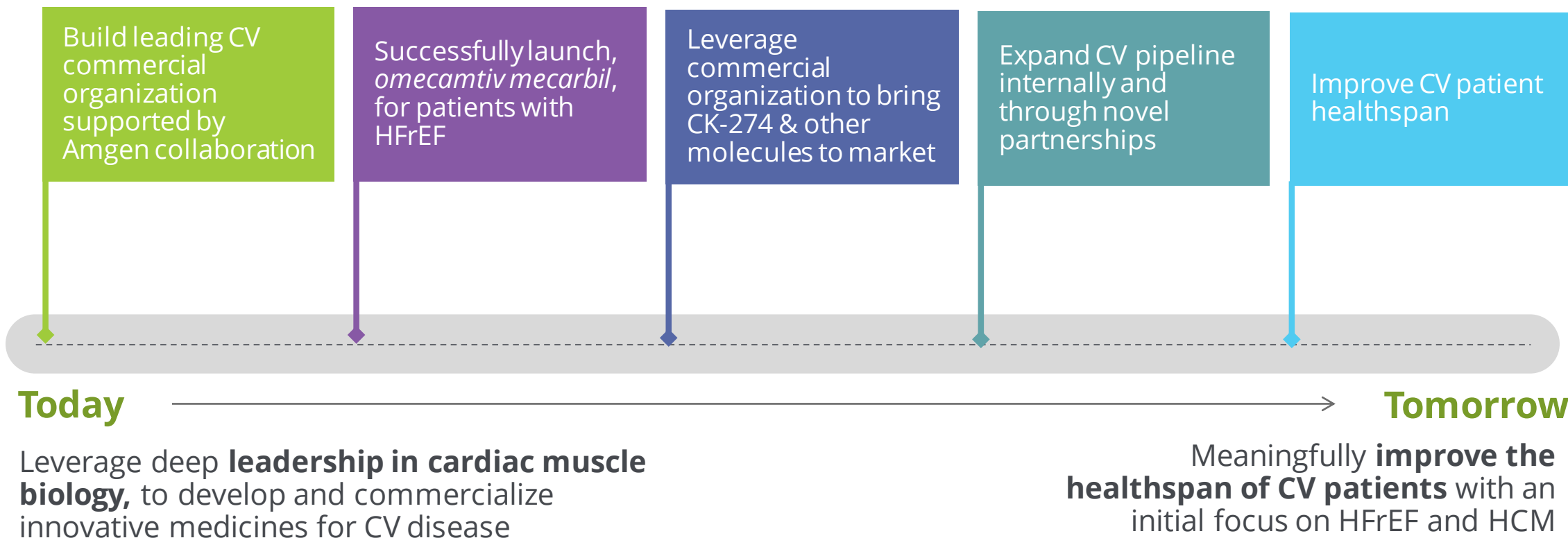


Novel Approach Addresses Multiple Unmet Patient Needs

No FDA Approved Therapies



CV Franchise: Building to Improve Patient Healthspan



Building Synergistic Commercial Capabilities

Building Today...

Building commercial organization focused on hospitalized CV patients and HCPs to optimize opportunity for *omecamtiv mecarbil*

- Leverage funding from Amgen collaboration
- Cultivate advocacy with CV patients and HCPs

To Lead Tomorrow

Establish Cytokinetics as a CV leader by leveraging commercial capabilities for future product launches

- Significant overlap between HFrEF & HCM accounts
- Simultaneously gain experience in HFrEF & HCM



IQVIA HPD – Q3'18 – Q2'19

Sarcomere Directed Drug Development

SKELETAL MUSCLE

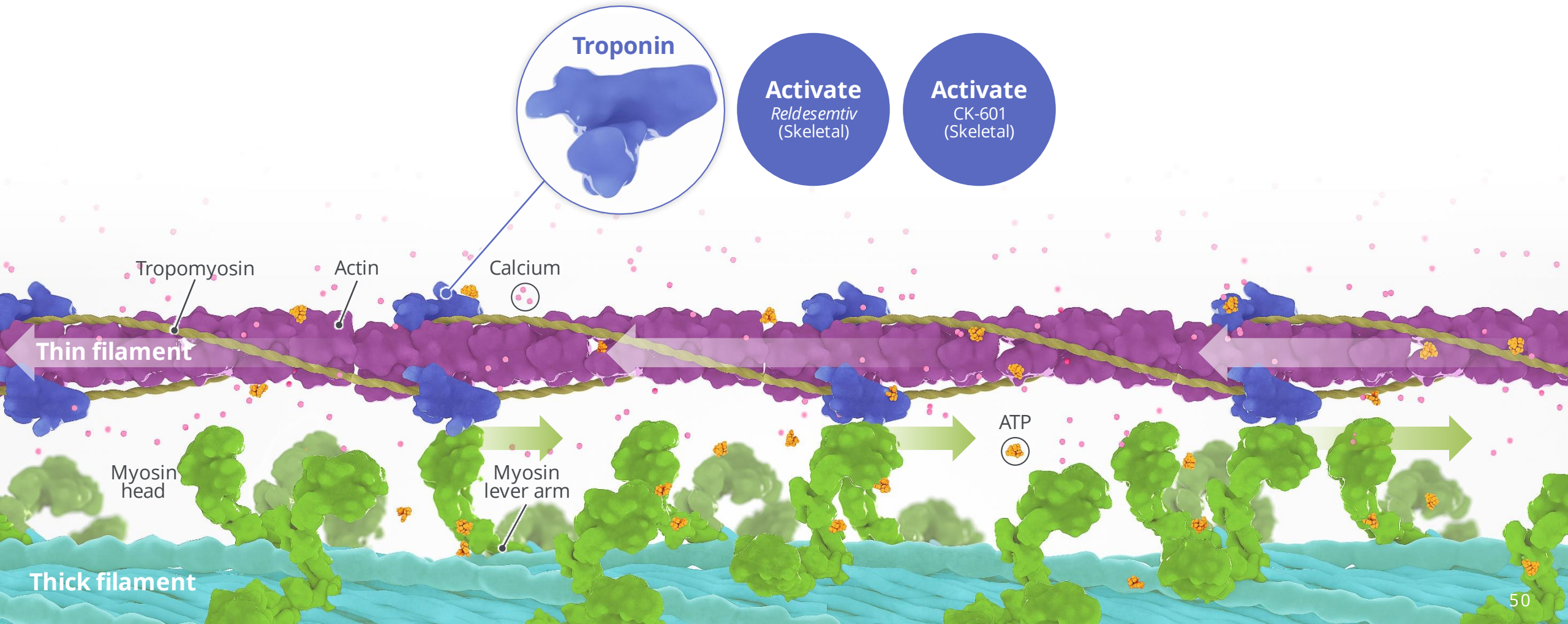
Reldesemtiv

CK-601

Sarcomere Directed Drug Development

Skeletal muscle

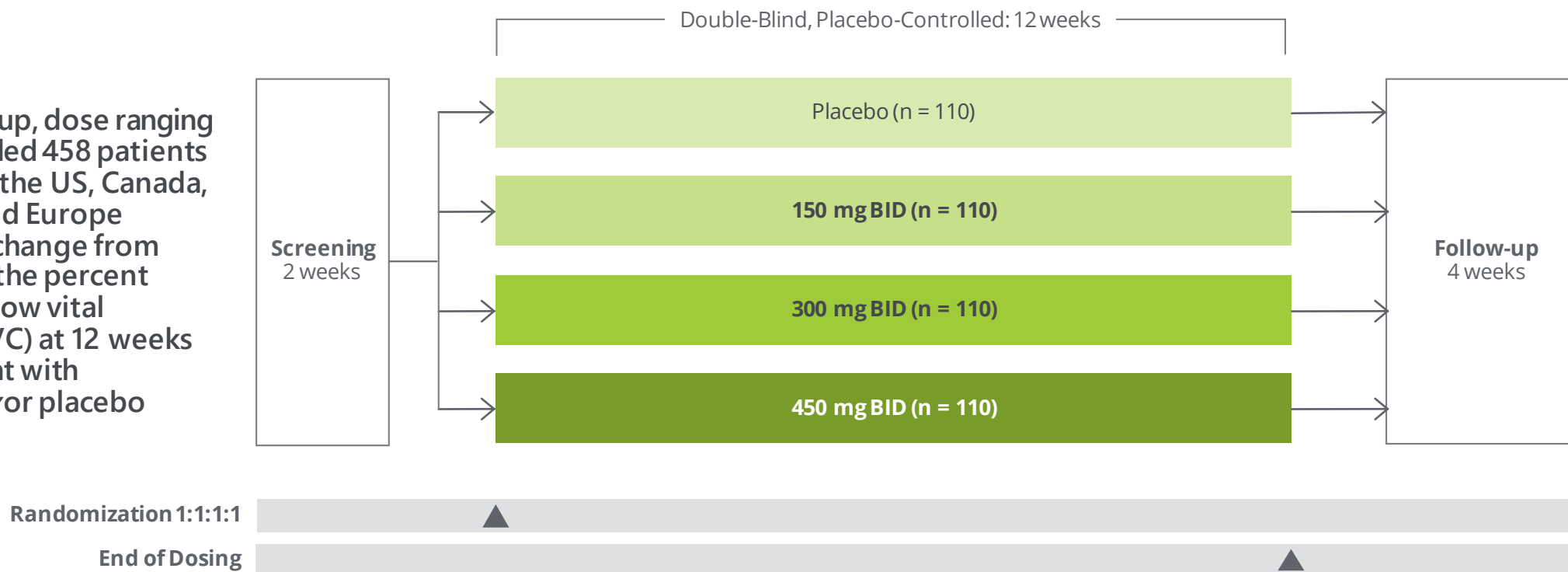
The sarcomere is a molecular structure found in skeletal and cardiac muscle that enables skeletal myocytes to contract and generate force



Phase 2 Clinical Trial in ALS

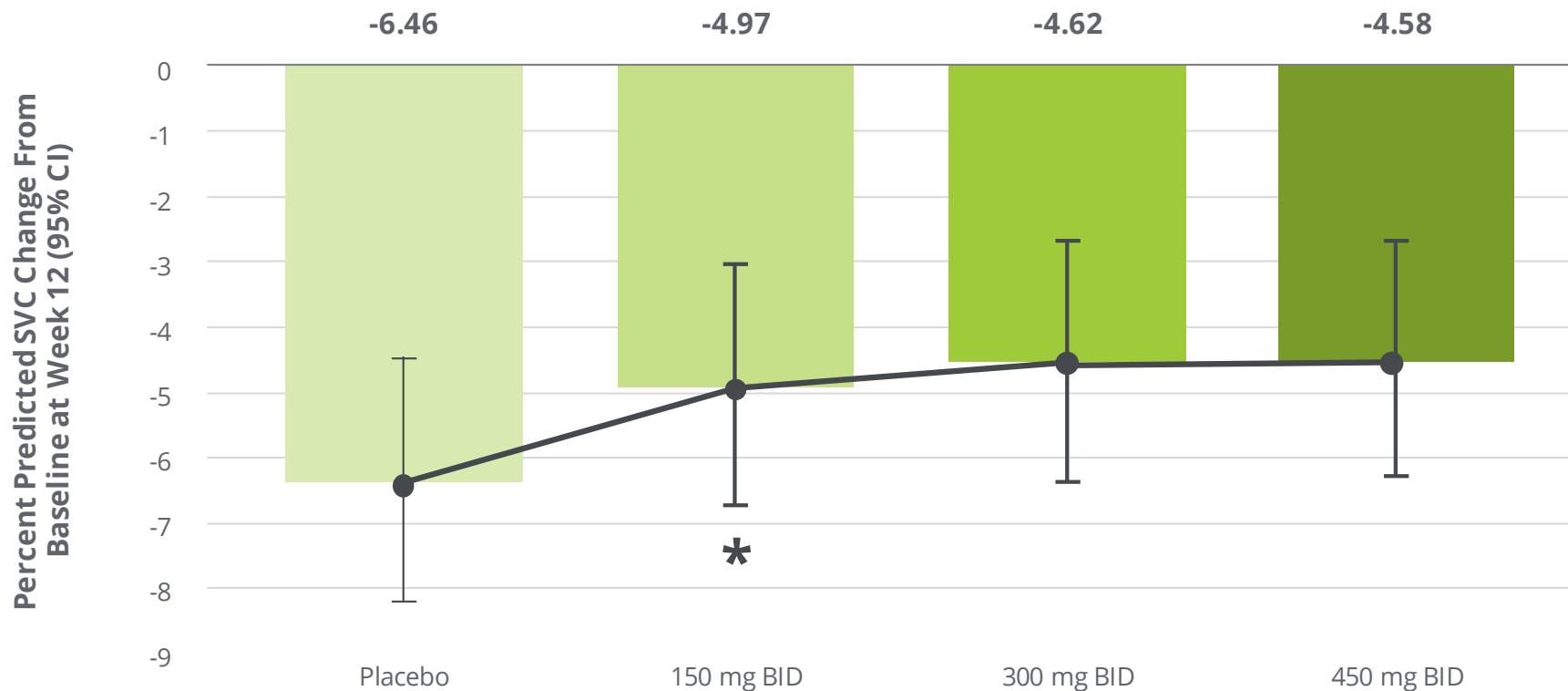
Results presented at American Academy of Neurology 2019

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*

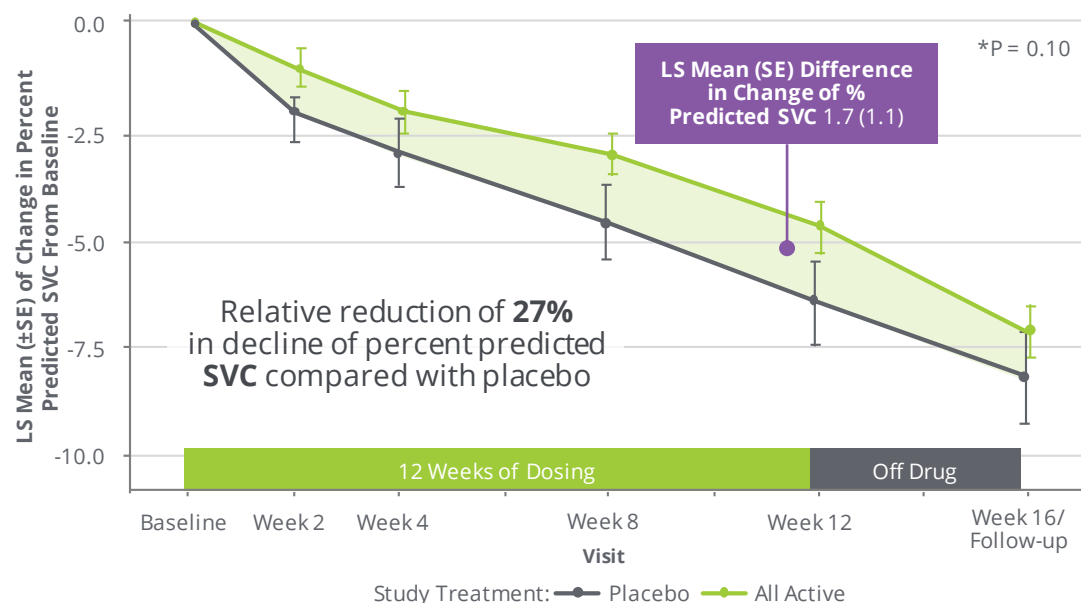
P = 0.11
for weighted
dose-response
relationship

*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

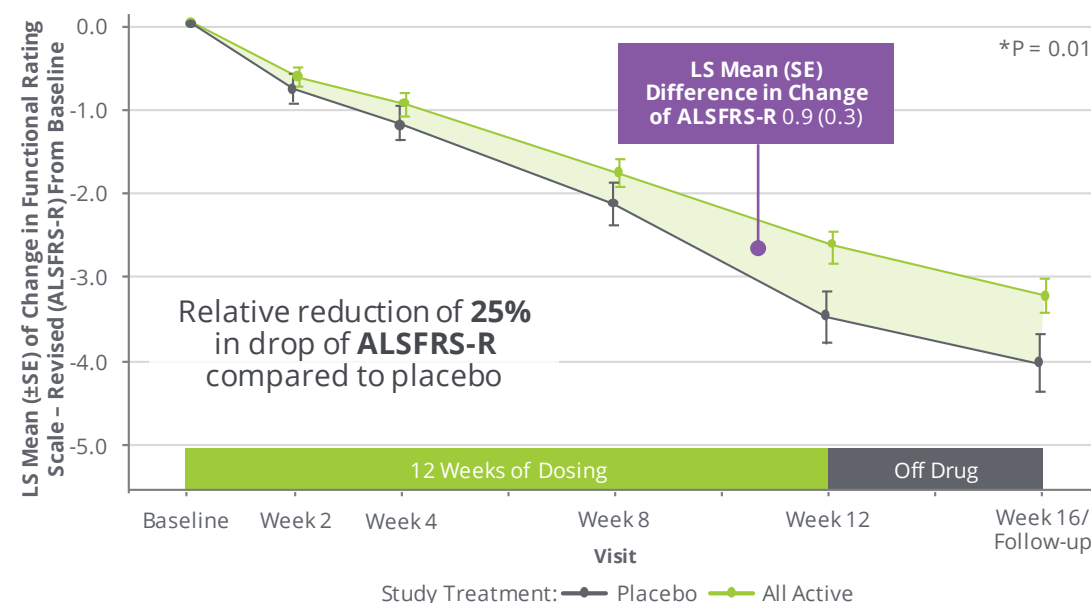
Change From Baseline: All Active vs Placebo*

Results support progression to potential Phase 3 clinical trial

SVC Change From Baseline (All Active vs Placebo)



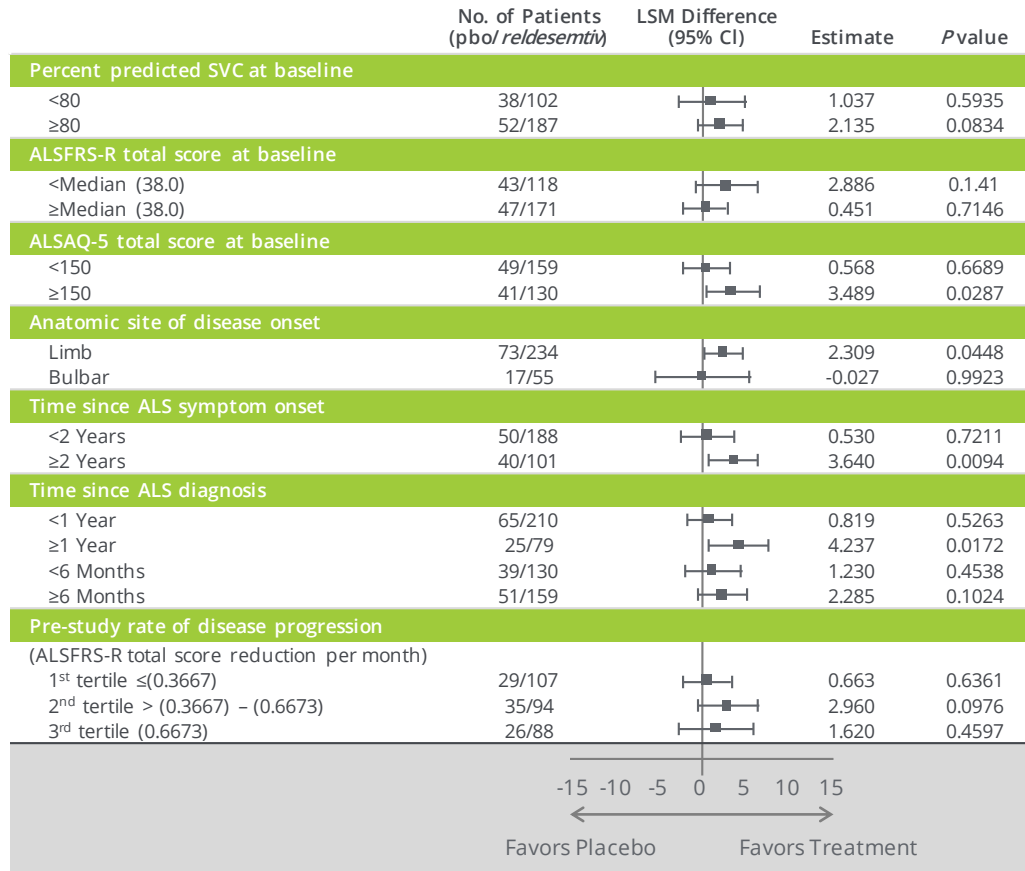
ALSFRS-R Change From Baseline (All Active vs Placebo)



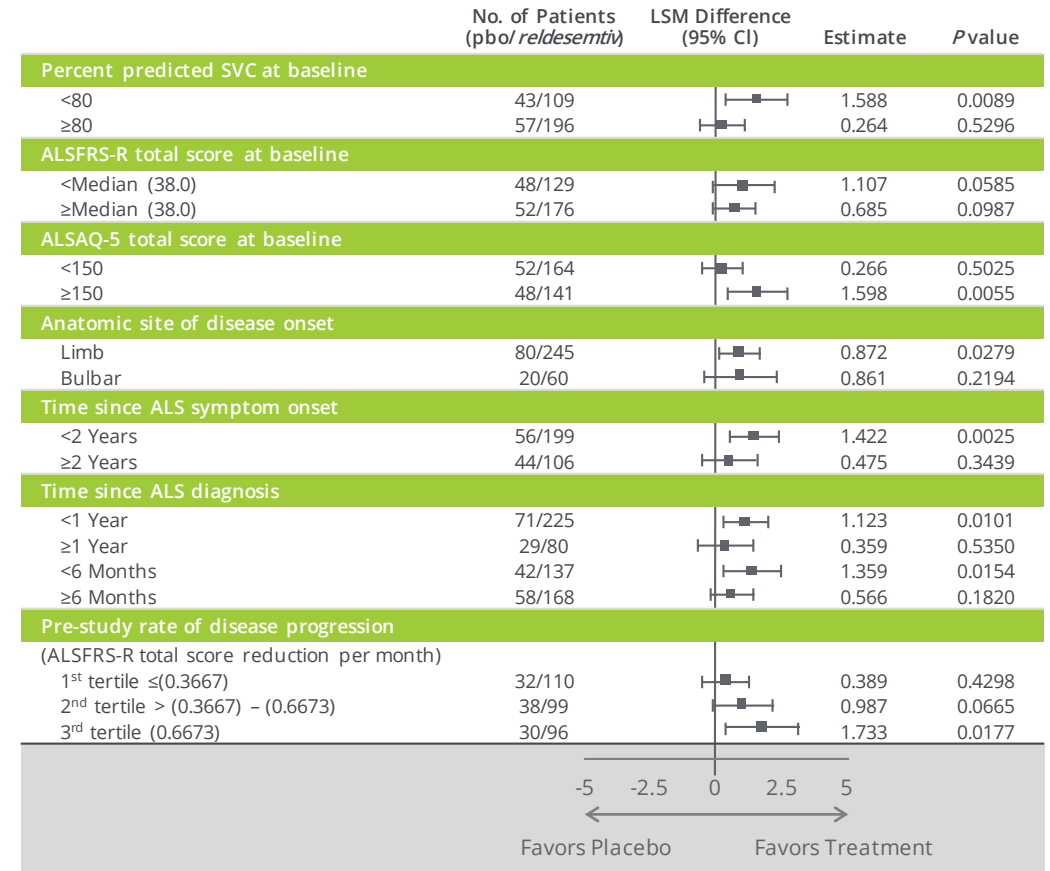
*post hoc analysis
FORTITUDE-ALS did not achieve statistical significance, but patients on all dose groups of *reltesemtiv* declined less than patients on placebo

Subgroup Analyses*

Percent Predicted SVC



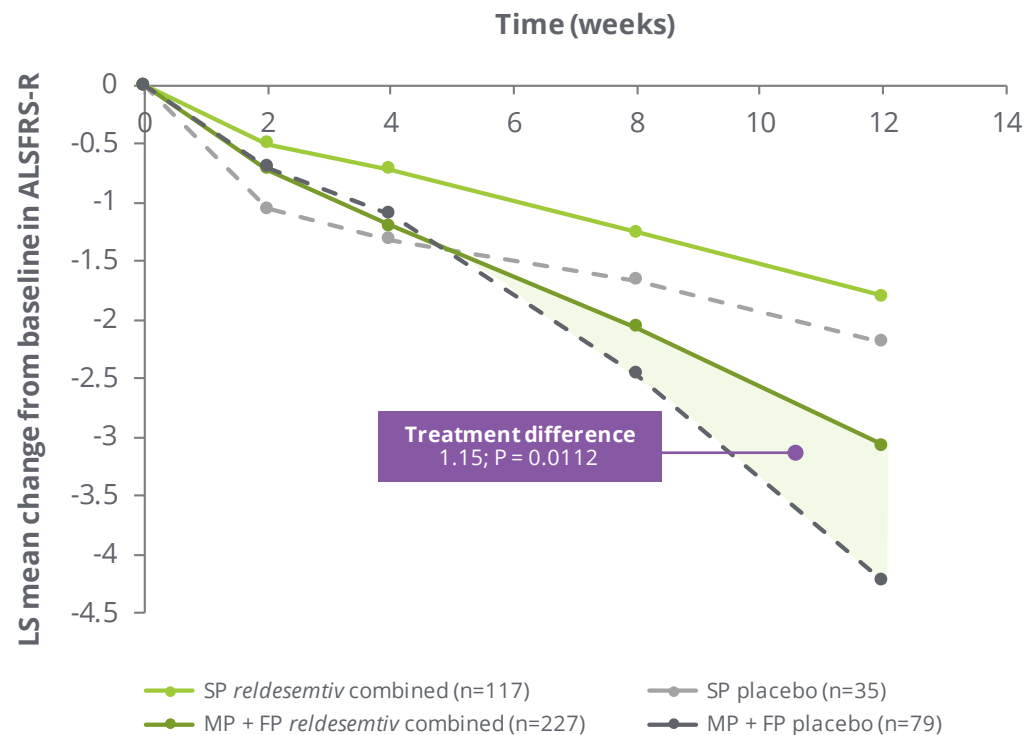
ALSFRS-R Total Score



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

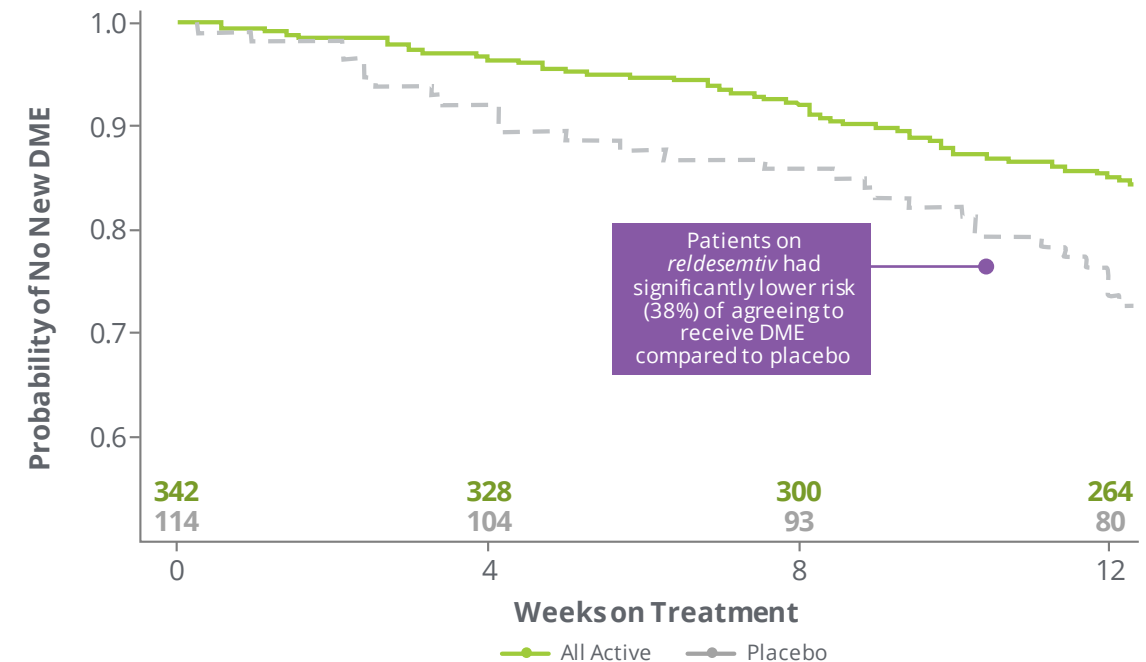
Post-Hoc Analyses Inform Potential Path Forward

Change From Baseline in ALSFRS-R by Progressor Tertiles

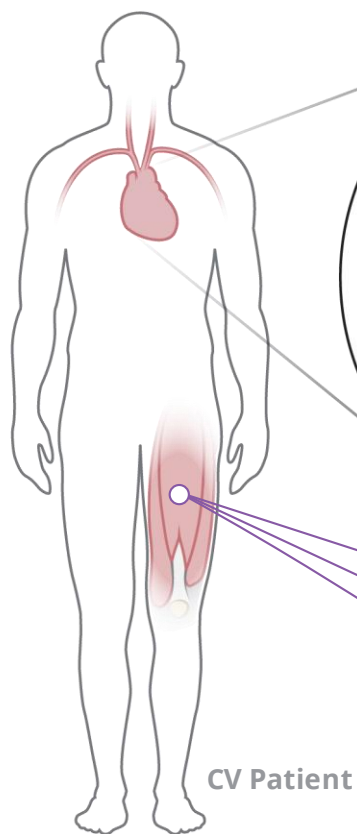


Probability of No New DME* Over Time With Treatment With *Reldesemtiv*

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



Convergence of Verticals Addresses CV Conditions & Co-Morbidities



- HFrEF ✓
- HCM ✓
- HFpEF
- Other Cardiomyopathies
- Right Ventricle (RV) Dysfunction

Enhanced Cardiac
Muscle Performance
**Applicable Across
Additional
CV Conditions**





- Frailty
- Reduced Work Capacity
- Muscle Weakness

Enhanced Skeletal
Muscle Performance
Can Address **CV
Patient Co-Morbidities**

Sarcomere Directed Therapies

CORPORATE PROFILE

Robust Pipeline, Solid Financial Position

Pipeline*	1 Pivotal trial readout in Q4 2020	2 Pivotal trials in 2021	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"> Phase 3 CV outcomes trial results Q4 2020 Phase 3 exercise capacity trial results 2H 2021 	 AMG-594 <ul style="list-style-type: none"> Phase 1 	HCM CK-274 <ul style="list-style-type: none"> Phase 2 trial initial results 2H 2020 	ALS Reldesemtiv <ul style="list-style-type: none"> Prepare for potential phase 3 trial starting in Q4 2020 	Ongoing R&D  Additional research in muscle biology, energetics & metabolism
Foundations	175  Full time employees	\$213M At Q2 2020 Plus additional cash proceeds from Business Development & equity transactions. Expect to end 2020 with more than \$500M in cash & committed cash*	>\$500M Eligible milestone payments in partnerships 	~20% Eligible for double-digit escalating royalties** on worldwide sales on omecamtiv mecarbil <small>**Outside Japan; lower royalty rate in Japan</small>	

* Subject to closing conditions
 ** Timelines and milestones reflect Cytokinetics' current expectations and beliefs

Cytokinetics Financing History

in millions

Investors

	Financing	Equity	Upfront Cash, Option, & Milestones	R&D Reimbursement	Total
Private Investors (VCs)		\$116			\$116
IPO		\$94			\$94
Public Post-IPO/Other		\$609			\$609
Term Loan	\$45				\$45
Convertible Debt (net)*	\$120.5				\$120.5
	\$165.5	\$819			\$984.5

Strategic Partners & Grants

RTW		\$50	\$110		\$160
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
		\$137	\$503	\$180	\$820

Capital raised:
combination of
strategic partners
and investors

**Net of fees and expenses*

Balance Sheet & Financial Guidance

Q2 2020 ended with approximately 2 years of cash based on 2020 guidance

Q2 2020 Condensed Balance Sheet

As of 6/30/2020

	<i>in millions</i>
	Total
Cash and investments	\$213.1
Other assets	\$19.4
Total Assets	\$232.5
Debt	\$132.4
Liability related to sale of future royalties	\$154.9
Other liabilities	\$23.3
Total Liabilities	\$310.6
Working capital	\$196.3
Accumulated deficit	-\$945.2
Stockholders' Deficit	-\$78.1
Basic Shares Outstanding	59.4

2020 Financial Guidance

	<i>in millions</i>
	Total
Cash Revenue	\$18 – 22
Cash Operating Expenses	\$120 – 130
Net	~ \$110-115

After the quarter, Cytokinetics executed a series of transactions which contribute up to \$250 million in cash plus committed cash, as well as up to \$200 million in potential milestone payments plus royalties. Also, after the quarter, the company raised \$189 million through a public offering of common stock. Cytokinetics expects to end 2020 with more than \$500 million in cash plus committed cash, subject to closing conditions.

Upcoming 2020 Milestones

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

Expect to Complete Enrollment in Cohort 1 of **REDWOOD-HCM**, and Expect Data to Inform Cohort 2 by End of 2020

Expect to Complete Enrollment in **METEORIC-HF** in early 2021

Expect to Initiate Phase 1 Study of **CK-271** in Q3 2020

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

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



THANK YOU

Sarcomere Directed Therapies



John, diagnosed with heart failure



Jillian, diagnosed with HCM



Chuck, diagnosed with ALS