



Cytokinetics

EMPOWERING
MUSCLE
EMPOWERING
LIVES

Forward Looking Statements

This Presentation contains forward-looking statements for purposes of the Private Securities Litigation Reform Act of 1995 (the “Act”). Cytokinetics disclaims any intent or obligation to update these forward-looking statements, and claims the protection of the Act's Safe Harbor for forward-looking statements. Examples of such statements include, but are not limited to, statements relating to Cytokinetics’ and its partners’ research and development activities; the design, timing, results, significance and utility of preclinical study results, including Cytokinetics’ expectations regarding the timing or results from the clinical trials of *omecamtiv mecarbil* and *reldesemtiv*; enrollment of patients in METEORIC-HF and GALACTIC-HF; initiation of the Phase 1 study of AMG 594; interactions with the FDA; and Cytokinetics’ pipeline expansion in 2019; 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.

Our Mission

We are developing potential medicines to improve the healthspan of people with devastating cardiovascular and neuromuscular diseases of impaired muscle function.

POWERED BY
SCIENCE



Sarcomere-Directed Research

C
A
R
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C

ACTIVATE MYOSIN

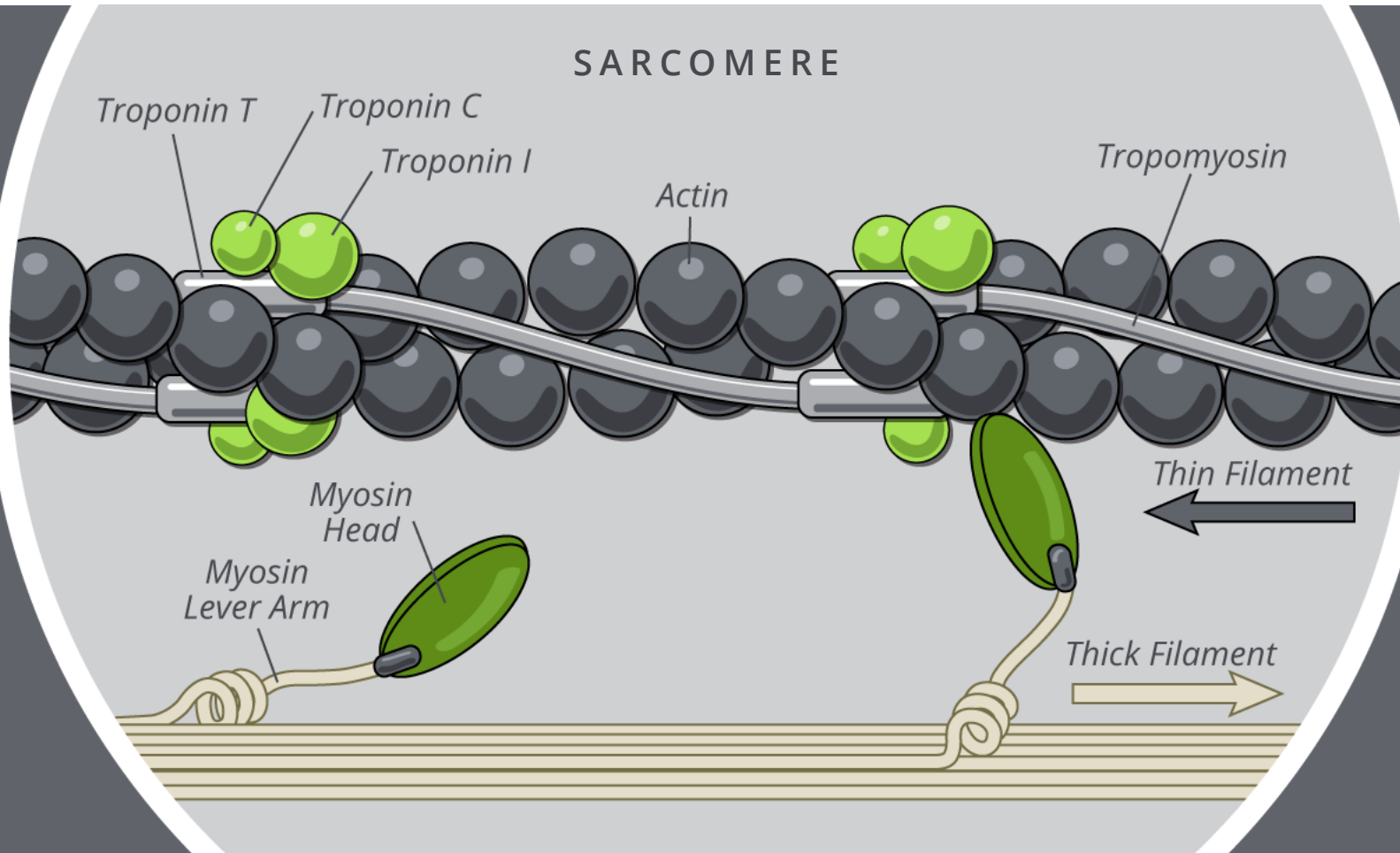
*Omecamtiv
Mecarbil*

INHIBIT MYOSIN

CK-274

ACTIVATE TROPONIN

AMG 594



ACTIVATE TROPONIN

Reldesemtiv

ACTIVATE TROPONIN

CK-601

S
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Pipeline of Novel Muscle-Directed Compounds

CARDIAC MUSCLE

Omecamtiv Mecarbil (Heart Failure)

AMG 594 (Heart Failure, other)

CK-274 (HCM)



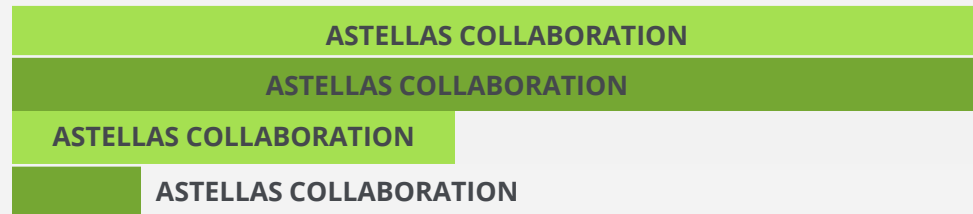
SKELETAL MUSCLE

Reldesemtiv (SMA)

Reldesemtiv (ALS)

CK-601

Additional Skeletal Muscle Activators



OTHER

Muscle Biology Directed Research



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

Eligible for >\$600M in pre-commercial milestone payments & >\$600M in sales-based milestone payments & royalties that can exceed >20% under deals with **Amgen & Astellas**

>24 months cash

Upcoming Milestones

Data Expected from Phase 1
Study of **CK-274**
in Q3 2019

Expect to Initiate Phase 2
Study of **CK-274**
in Q4 2019

Continue to Evaluate Results
from **FORTITUDE-ALS**
& Discuss Next Steps
with Astellas

Continue to Conduct
GALACTIC-HF
through 2019

Continue Enrollment
in **METEORIC-HF**
through 2019

Continue to Conduct Phase
1 Study of **AMG 594**
through 2019

CARDIAC MUSCLE

Omecamtiv Mecarbil

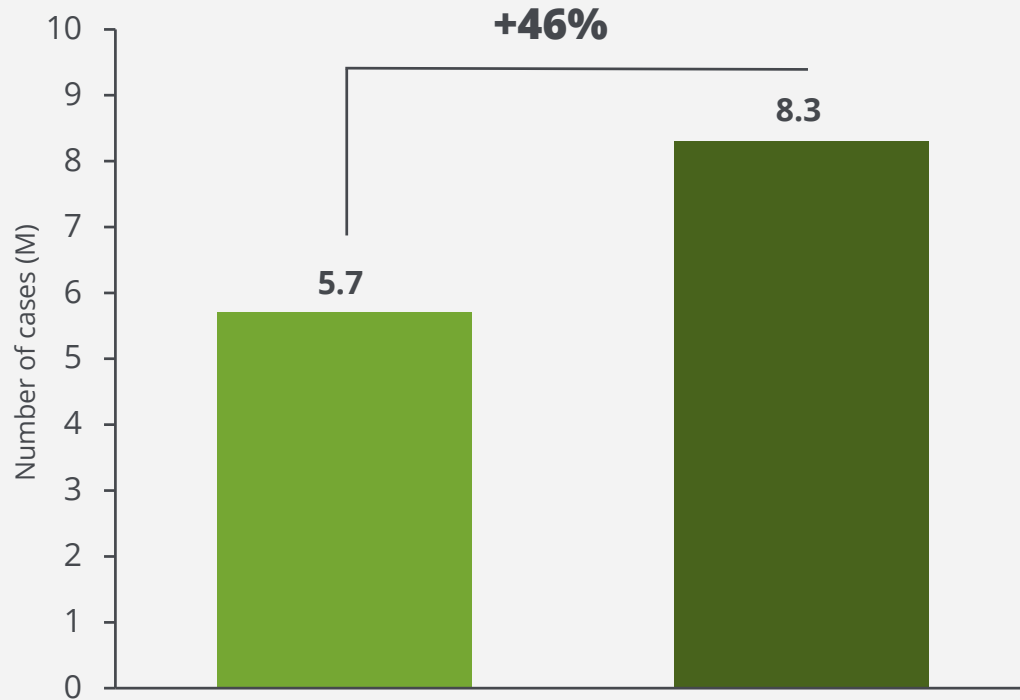
AMG 594

CK-274



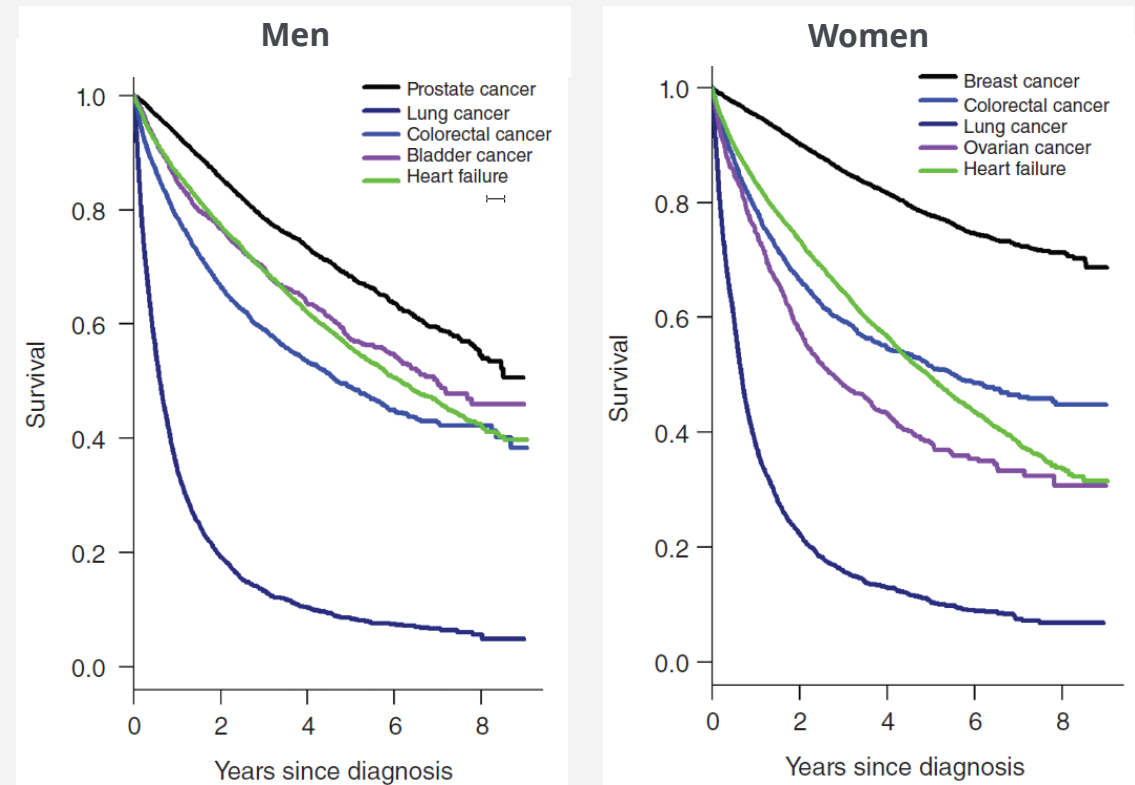
Heart Failure: Growing Prevalence and Low Survival Rate

6M People Have HF; Prevalence Expected to Increase by 46% from 2012 - 2030



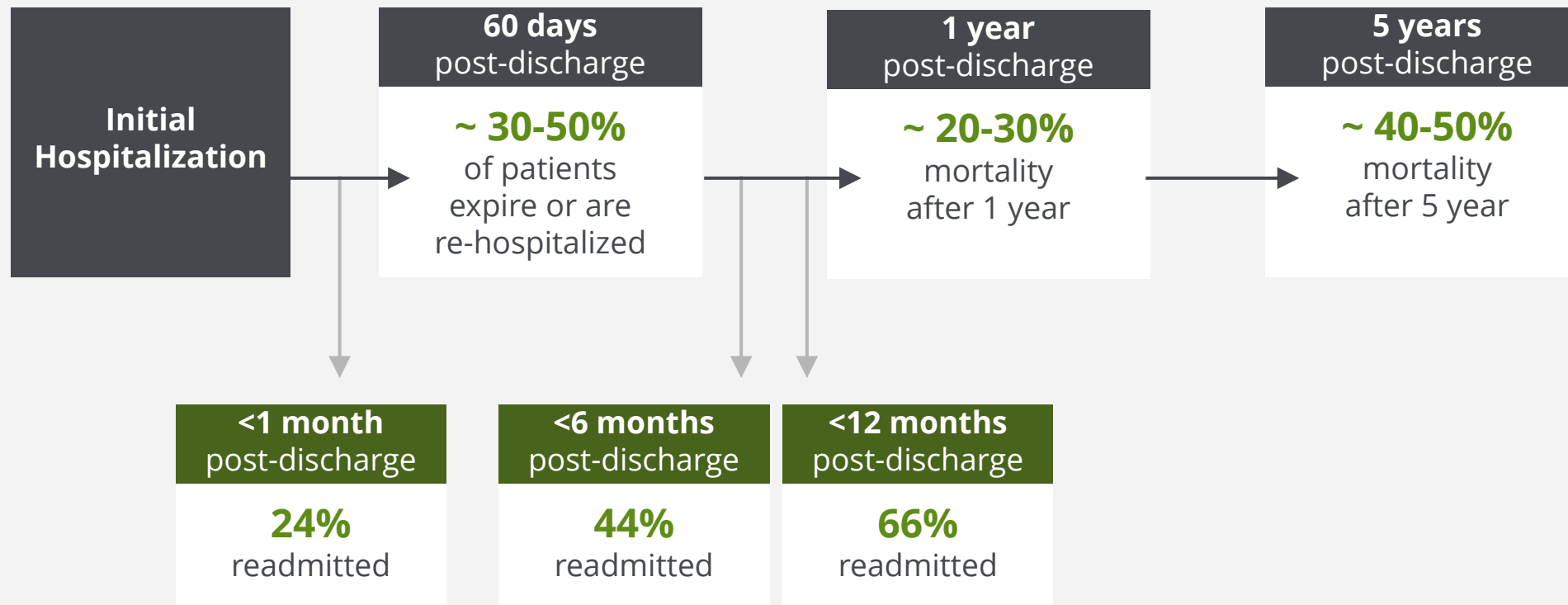
Mozzafarian, et al. *Circulation* 2016; 133: e38-360

HF Survival Rates Worse than Some Prevalent Cancers



Mamas MA, et al. Do patients have worse outcomes in heart failure than in cancer? *European Journal Heart Failure* 2017

High Mortality and Hospital Readmission Rates



Roer et al. *Circulation* 2012;125:32-220
Chen et al. *JAMA* 2011;306:1669-78

Adams et al. *Am Heart J* 2006; 149:209-16
Dickstein et al. *Eur Heart J* 2008;29:2388-442

Krumholz HM, et al. *Arch Intern Med* 1997;157:99 – 105
Loehr et al. *Am J Cardiol* 2008;101:1016-22

Acute heart failure is the most frequent cause of hospitalization in people > 65

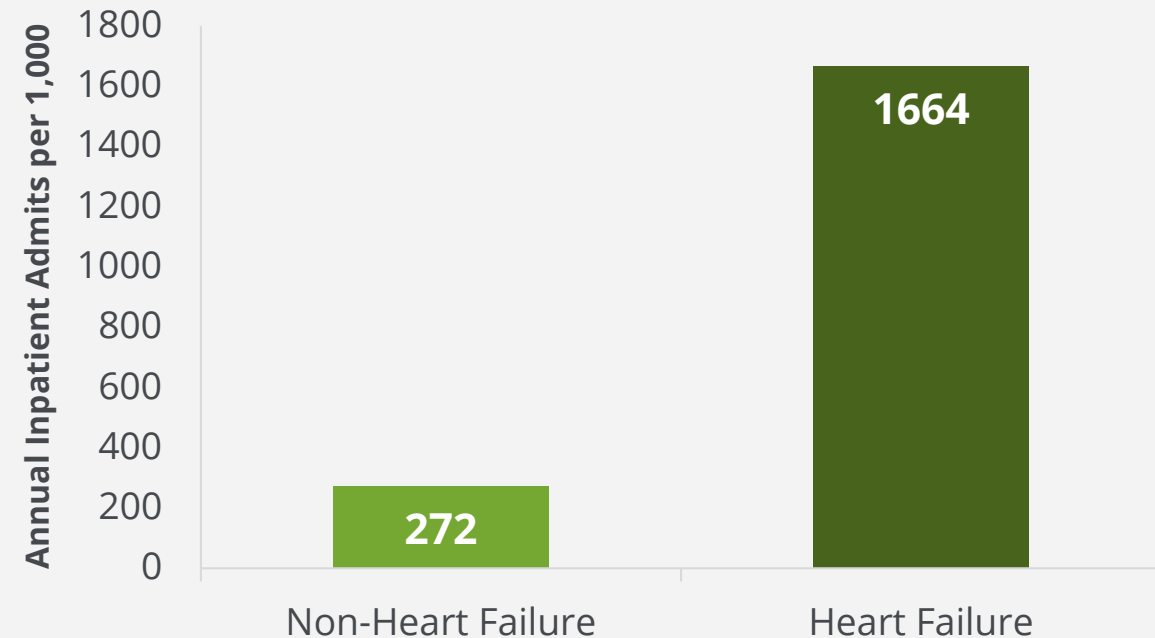
1 of 2 hospitalized HF patients are readmitted within 6 months

High Economic Burden of Heart Failure

Heart failure costs ~\$123 billion annually, which represents **33% of total Medicare budget**

Heart failure is the most frequent diagnosis for hospitalized Medicare patients in the US

**Inpatient Admission Rates for HF Patients
6X Higher than Non-HF Patients**



Source: Milliman Analysis of Medicare 5% Sample 2011-2012 (2012 index year, 2011 look back year)

Source: 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.

Heart Failure: Many Phenotypes with Unmet Need

Decreased Cardiac Contractility

Heart Failure with Reduced Ejection Fraction (HFrEF)

Genetic Dilated Cardiomyopathy

Pulmonary Hypertension with Right Ventricular Heart Failure



Increased/Preserved Cardiac Contractility

Non-obstructive Hypertrophic Cardiomyopathy (nHCM)

Obstructive Hypertrophic Cardiomyopathy (oHCM)

Heart Failure with Preserved Ejection Fraction (certain HFpEF subsets)

Unmet Need for HFrEF

Reduction in mortality & hospital visits

Physicians say Entresto has 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 with molecular targets & inotropic agents

Need drugs that target **novel/more specific molecular targets**;
Need targets other than the neurohormonal pathway;
Need for inotropic drugs as support agents

Disease modifying therapies

Need therapies **that offer contractile support**
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

Proprietary Market Research Suggests
Need for Novel Therapy

Omecamtiv Mecarbil: Clinical Trials Program

11

Phase 1 Studies

324

Subjects Enrolled

**Well characterized safety,
tolerability, PK/PD**

**Robust
Clinical
Trials
Program**

7

Phase 2 Studies

1,414

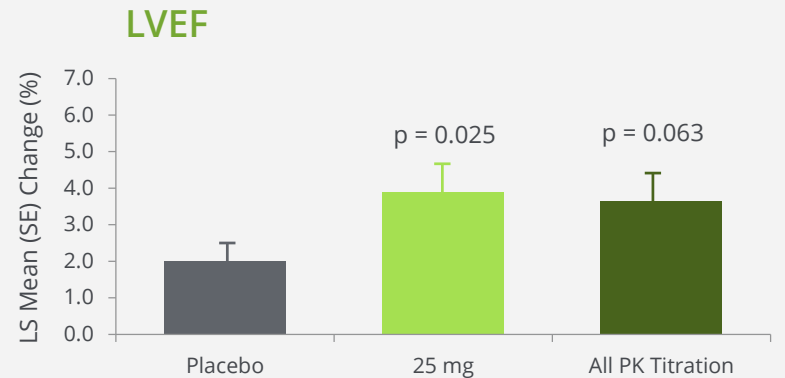
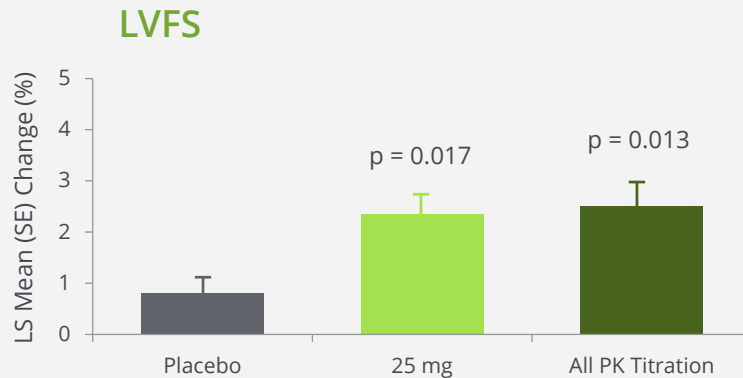
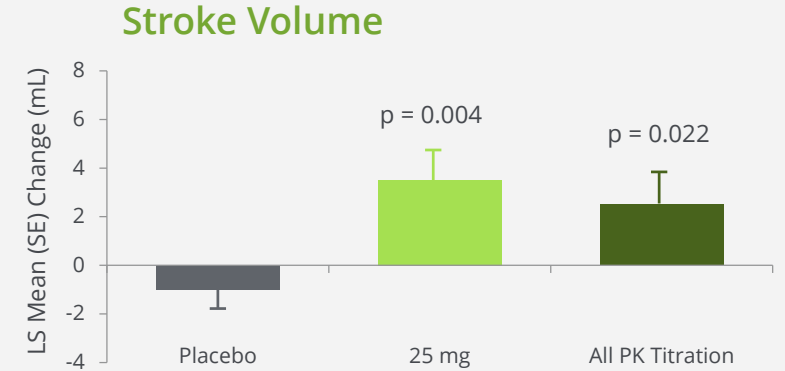
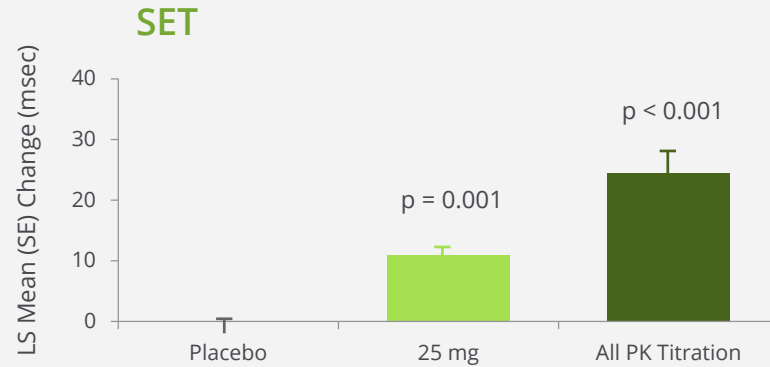
Subjects Enrolled

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

Dose-Dependent Increases in Cardiac Output

Pharmacodynamic Effects with Omecamtiv Mecarbil

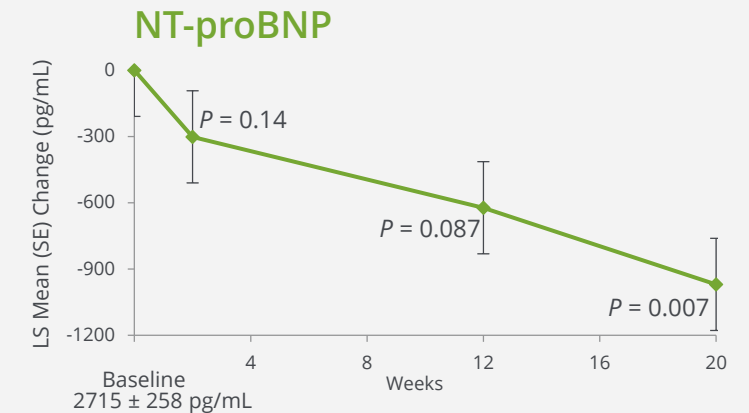
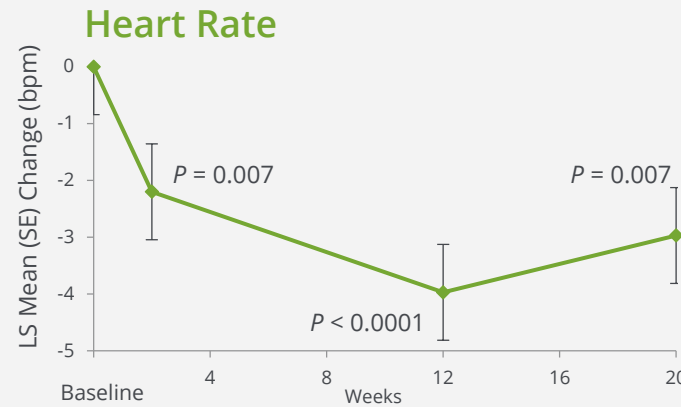
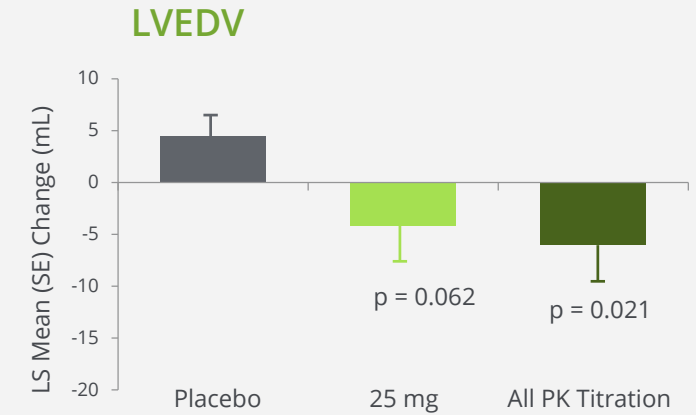
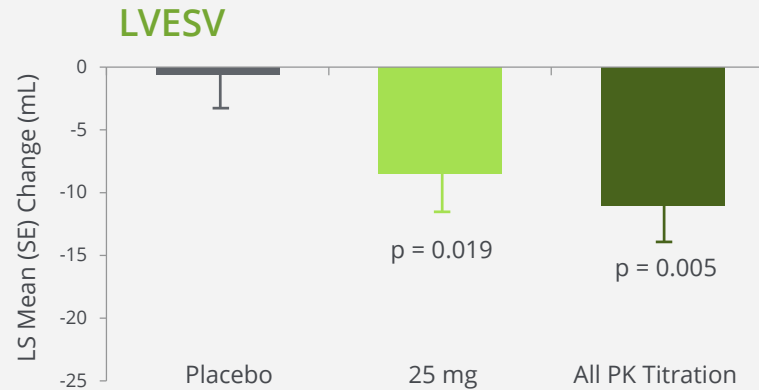
LVEF, left ventricular ejection fraction; LVFS, left ventricular fractional shortening; SE, standard error; SET, systolic ejection time; all p values are nominal without multiplicity adjustment.



Decreases in Physiology & Cardiac Risk

Reductions in Heart
Volume, Oxygen
Demand & Wall
Stress

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





Phase 3 Trial Completed Enrollment

Study Overview

- Enrolled over 8,200 patients at ~1,000 sites in 35 countries

Primary endpoint

- Composite of time to 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.

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
- Enroll patients from time of hospitalization to within 1 year of discharge
 - In-hospital enrollment target is approximately 25% of total enrollment
 - Stratify on randomization setting
- Event driven with 90% power based on secondary endpoint of CV Death

GALACTIC-HF
Continuing
Following Planned
Interim Analysis
Conducted by DMC

Second Interim
Analysis Expected
in 1H 2020



Second Phase 3 Trial Underway

Primary endpoint

- Change in peak VO_2 on CPET from baseline to Week 20

Secondary endpoints

- Change in total workload during CPET from baseline to Week 20
- Change in ventilatory efficiency (V_E/V_{CO_2} slope) during CPET from baseline to Week 20
- Change in the average daily activity units measured over a 2 weeks from baseline to Week 18-20

Exploratory Endpoints

- Change from baseline to Week 20 in oxygen uptake efficiency slope ($\text{VO}_2/\log V_E$ slope), ventilatory threshold (by the V-slope method), VO_2 recovery kinetics, percent predicted pVO_2 , and exercise duration
- Change from baseline in the average daily activity units at Week 6-8 and at Week 12-14
- Change from baseline in the KCCQ Total Symptom Score and its sub-domains from baseline to Week 20

VO_2 = Oxygen Uptake; CPET = Cardio-Pulmonary Exercise Testing; V_E = Ventilatory Efficiency

Multicenter Exercise Tolerance Evaluation of *Omecamtiv Mecarbil* Related to Increased Contractility in Heart Failure

9 Countries in North America & Europe

METEORIC-HF Steering Committee:

Greg Lewis (Co-lead, US)

Michael Felker (Co-lead, US)

John Teerlink (US)

David Whellan (US)

Justin Ezekowitz (Canada)

Adriaan Voors (Netherlands)

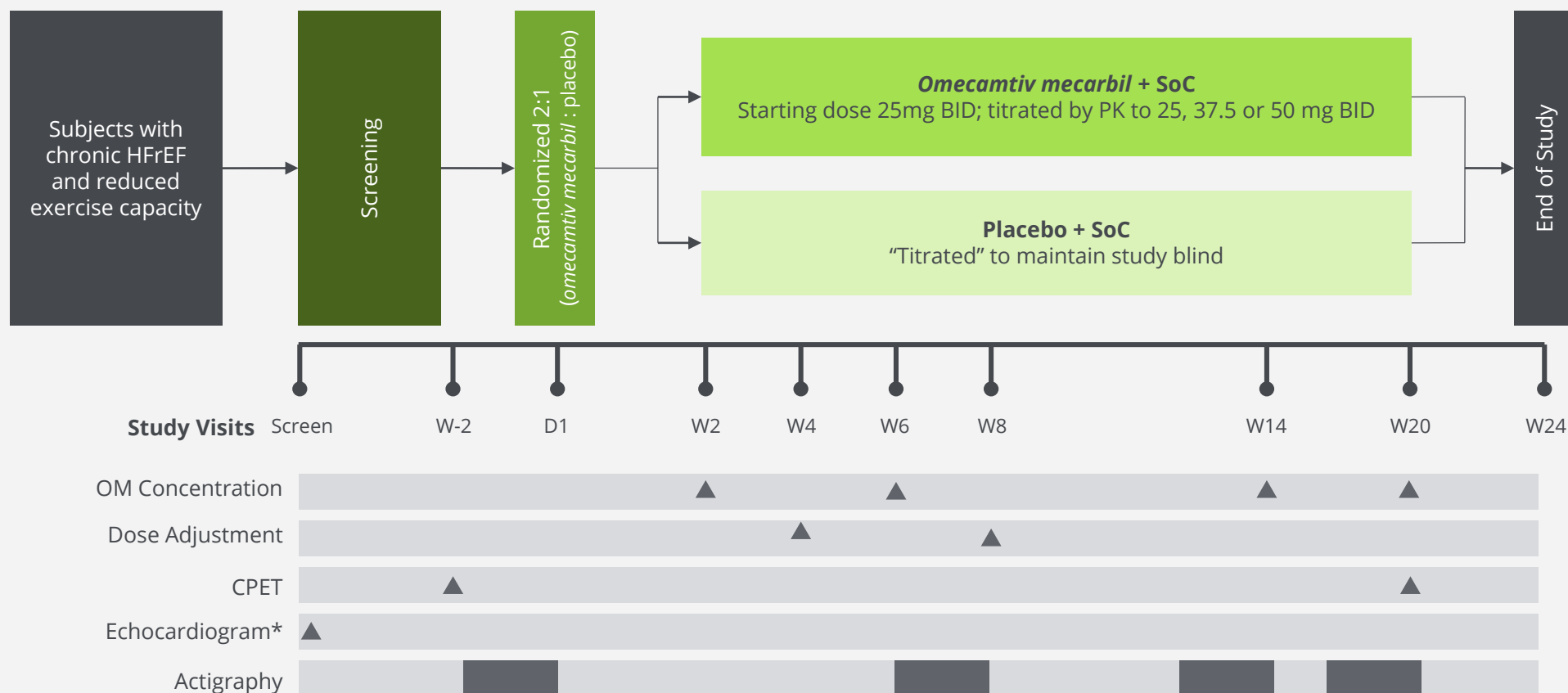
Alain Cohen-Solal (France)

Piotr Ponikowski (Poland)

Michael Böhm (Germany)

Marco Metra (Italy)

Trial Overview



~270 subjects
90% power

5 months of treatment (same as COSMIC-HF)

Dose titration of *omecamtiv mecarbil* same as GALACTIC-HF

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

Collaborations & Agreements

Amgen Collaboration

Purchase Option: 2006
Exercise Option Ex-Japan: 2009
Expanded to Include Japan/Purchase Equity: 2013
Received >\$200M over 11 Years

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

Cytokinetics can earn over \$600 mm in milestone payments

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

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 Pharma Agreement

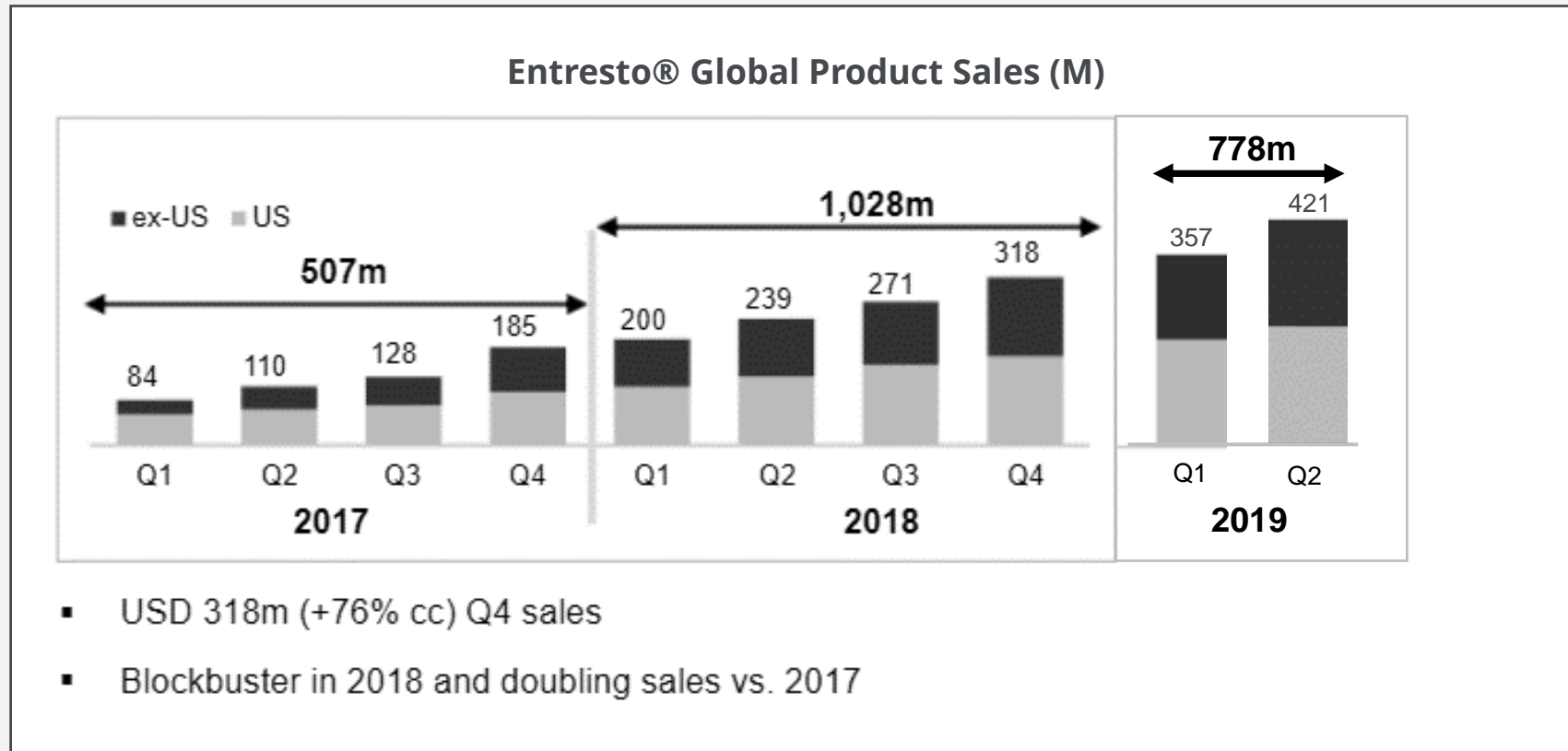
Paid \$100M for 4.5% royalty on worldwide sales of *omecantiv mecarbil*: 2017

Cytokinetics gains right to co-promote *omecantiv mecarbil* 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

Commercial Opportunity for New Heart Failure Therapy



Sources: Novartis Q4 and FY18 results presentation, January 2019; Novartis Q1 2019 results presentation, April 2019; Novartis Q2 2019 results presentation, July 2019

*As with all products in P3, the product profile achieved by omecamtiv mecarbil in GALACTIC-HF is required to provide a better understanding of the expected revenue.

AMG 594: Next-Gen Cardiac Sarcomere Activator

Decreased Cardiac Contractility

Heart Failure with
Reduced Ejection
Fraction (HFrEF)

Genetic Dilated
Cardiomyopathy

Pulmonary
Hypertension with
Right Ventricular
Heart Failure



Amgen & Cytokinetics are considering the Phase 2 clinical trials program

AMG 594 is an oral, small molecule cardiac troponin activator

- Intended to improve ventricular systolic function in patients with heart failure
- Selected from >1.5 million compounds in >80 distinct series
- Preclinical results support the potential for best-in-class safety and efficacy
- Projected once daily dosing

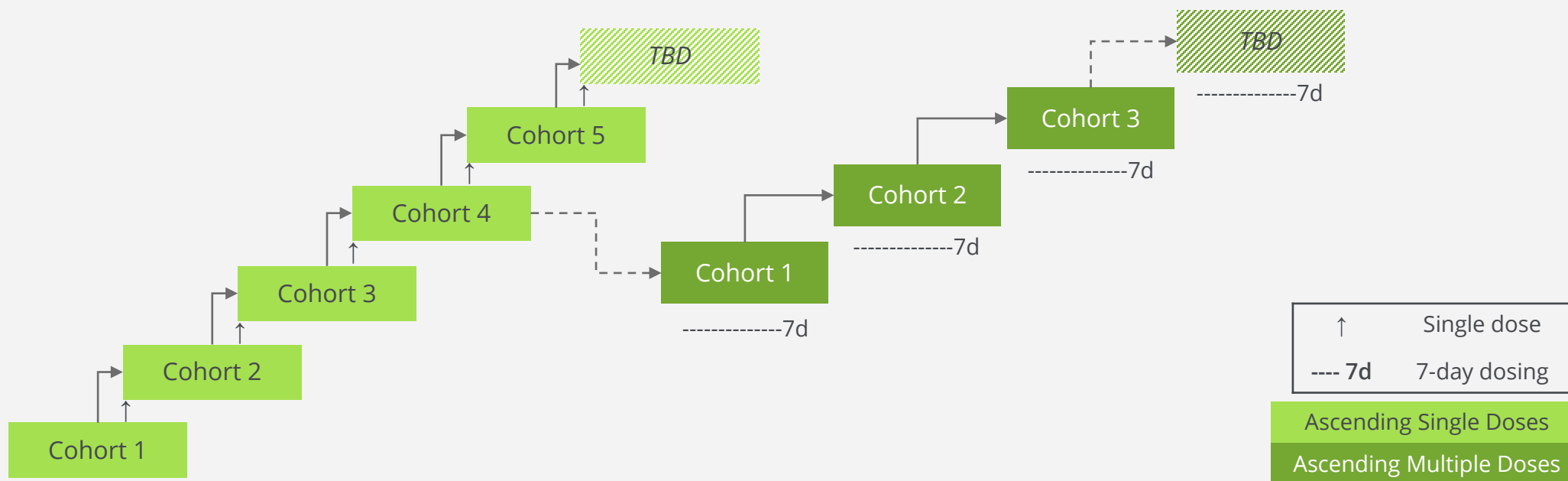
Cytokinetics and Amgen are advancing AMG 594 into clinical development

- IND filed
- Early clinical trials will assess the safety and tolerability of AMG 594, as well as its potential to enhance ventricular contraction

AMG 594 is a Next-Generation Cardiac Sarcomere Activator for the Potential Treatment of Patients with Heart Failure

Potential Applications of AMG 594 for Patients with Distinct Types of Ventricular Dysfunction and Heart Failure are Under Discussion

AMG 594: Nested SAD and MAD in Healthy Subjects



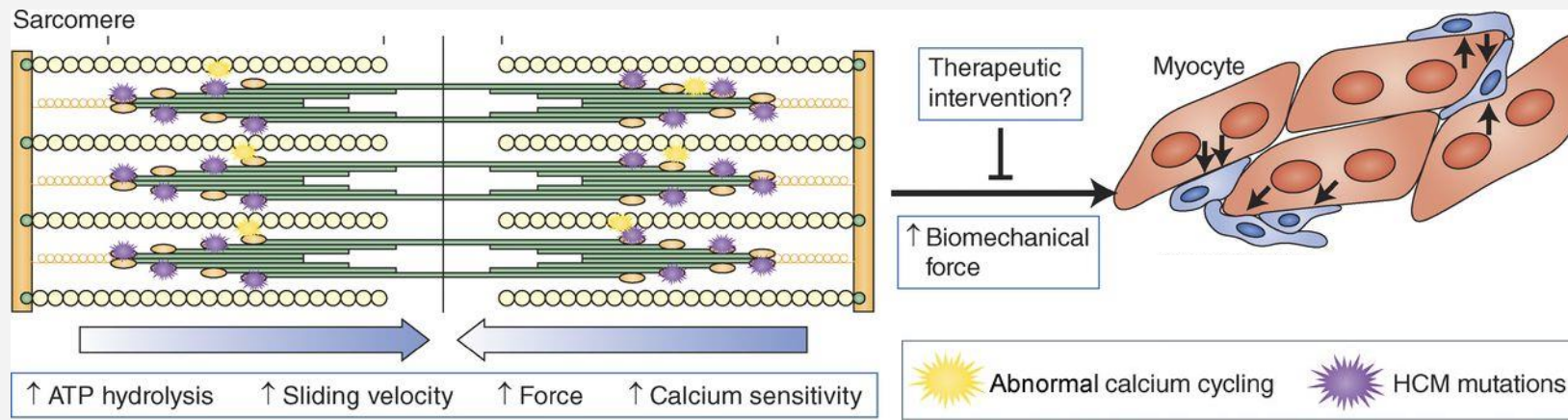
Randomized, placebo-controlled, double-blind, multi-part, single center study

- 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

HCM: Lack of Therapy Targeting Underlying Disease Biology

HCM is a Disease of the Sarcomere



Teekakirikul et al., JCB 2012

Current Medical Therapy:

- Indirect mechanisms of action with systemic side effects
- Variable efficacy, often inadequate
- Treatment failure means resorting to surgical myomectomy or percutaneous ablation

CK-274: Therapeutic Hypothesis

Targeted Oral Therapy Addressing Disease Etiology May Improve Symptoms, Exercise Capacity, and Slow Disease Progression

A cardiac sarcomere inhibitor may counteract the pathologic effects of mutations in the sarcomere that lead to HCM

- Hyperdynamic contraction and obstruction of blood flow out of the LV
- Cardiac hypertrophy, small LV cavity, small stroke volume
- Impaired relaxation and high LV filling pressures



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

- Favorable pharmacokinetic / pharmacodynamic properties and other candidate selection criteria
 - Selective allosteric inhibitor of cardiac myosin
 - *In vivo* pharmacodynamic advantages related to distinctive binding
 - No inhibition of smooth muscle myosin
 - Favorable ADME properties with no CYP inhibition or CYP induction
 - Good oral bioavailability across pre-clinical species
 - Excellent permeability without efflux
 - Clear pharmacokinetic/pharmacodynamic (PK/PD) relationship
 - **Projected once daily dosing to reach steady state rapidly in patients**
 - **Shallow dose response curve may translate to favorable therapeutic window in patients and broaden clinical utility**

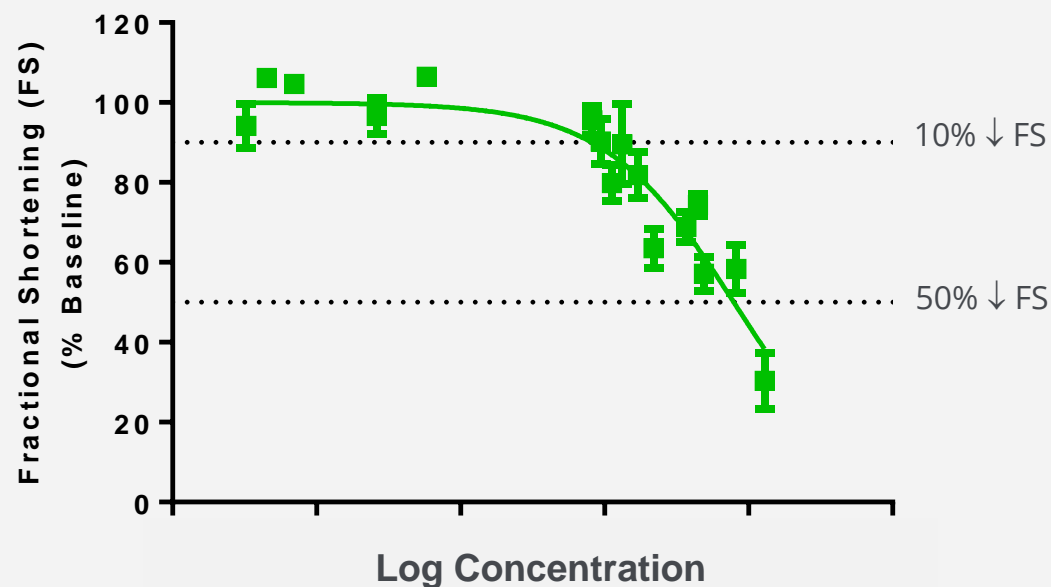
Discovered by
Company Scientists
Independent of
Collaborations

Selected from
Multiple Potential
Development
Candidates (PDCs)

CK-274: Wide PD Window in Rat and Dog Models

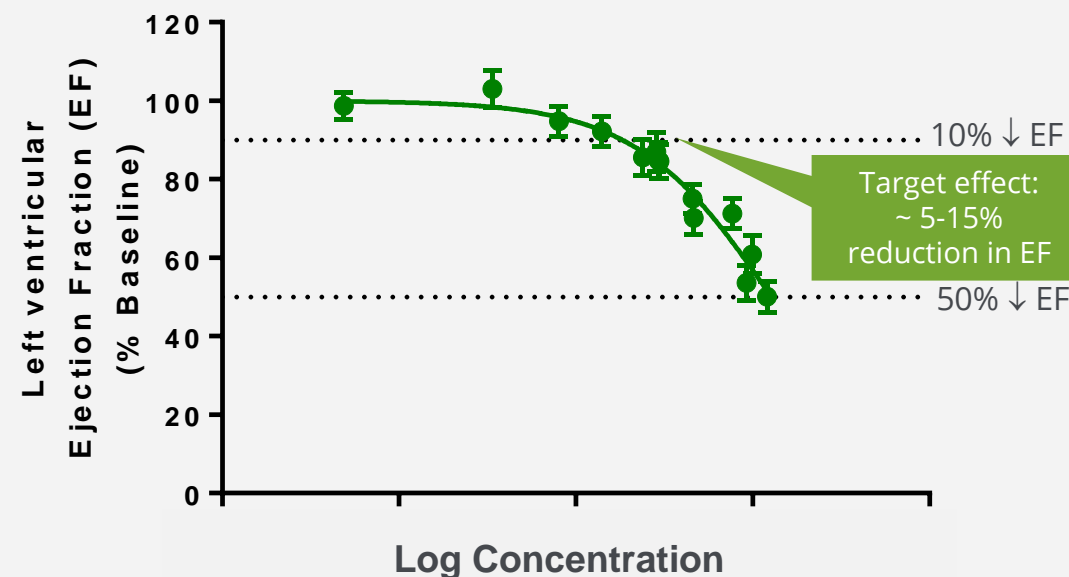
Shallow exposure-response relationship of CK-274 in rats and dogs

Rat Model: Concentration vs. Fractional Shortening



Rat PD Window (IC_{50}/IC_{10}) > 7X

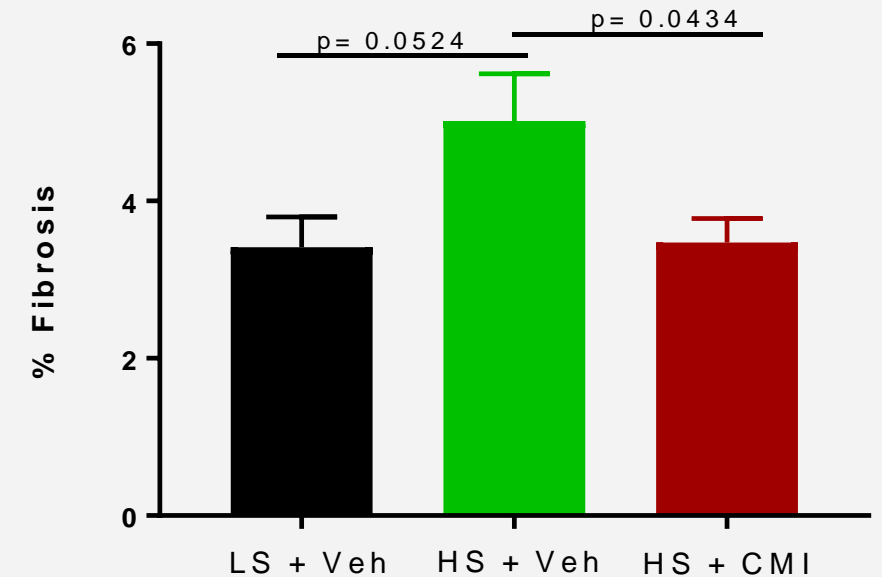
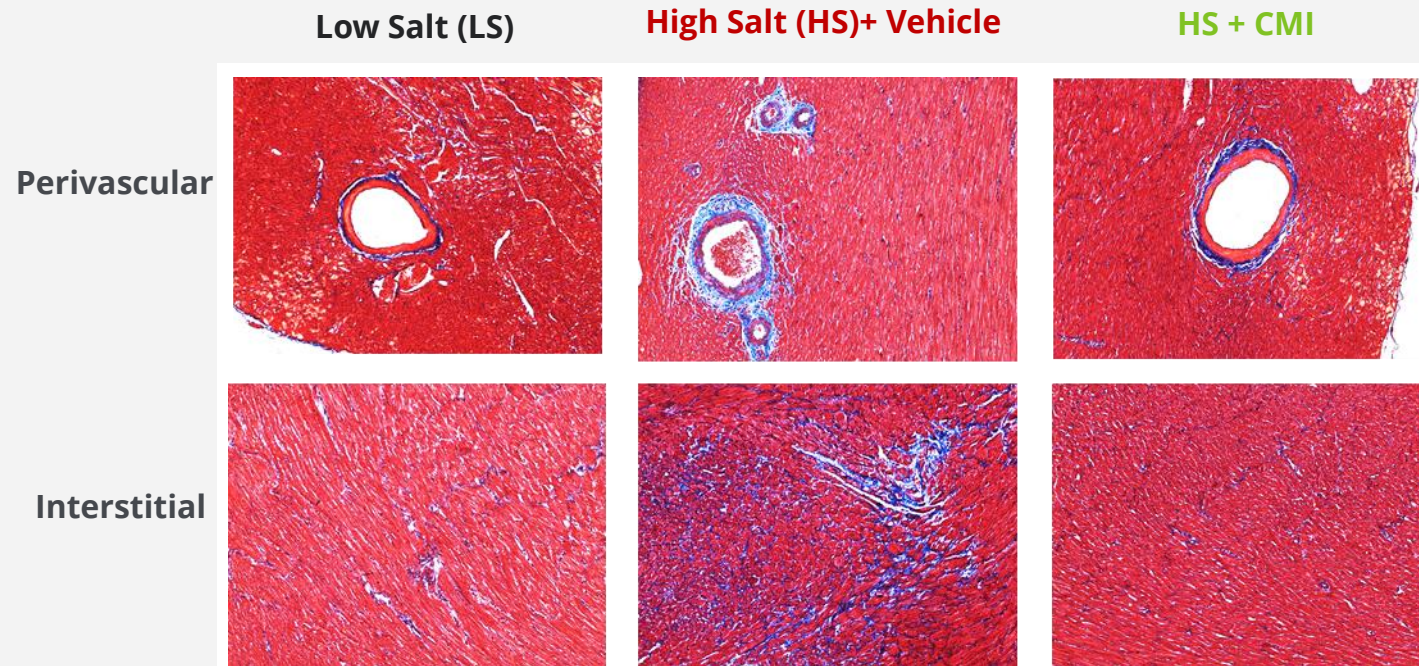
Dog Model: Concentration vs. Ejection Fraction



Dog PD Window (IC_{50}/IC_{10}) > 7X

Cardiac Myosin Inhibitor in Model of Cardiac Hypertrophy

Dahl Salt Sensitive Rat Model of Cardiac Hypertrophy



Significant Decrease in Perivascular and Interstitial Fibrosis

Attributes of an HCM Therapy to Address Unmet Needs*

Essential Requirements

**Improvement
Over Standard of Care**

A therapy indicated for HCM
instead of off-label treatments

**Improvement
in Exercise Capacity and
Cardiac Function**

Efficacy as measured by peak
VO₂

**Safe and Durable
Symptom Relief**

Symptom relief as measured by
LVOT gradient reduction and
NYHA class improvement

Key Value Drivers

**Improved
Quality of Life through
Accelerated Symptom Relief**

Pharmacologic agents that
provide rapid and sustained
symptom relief as measured by
an HCM dedicated PRO and LVOT
gradient reduction

**Efficient, Optimized
and Reversible Dosing**

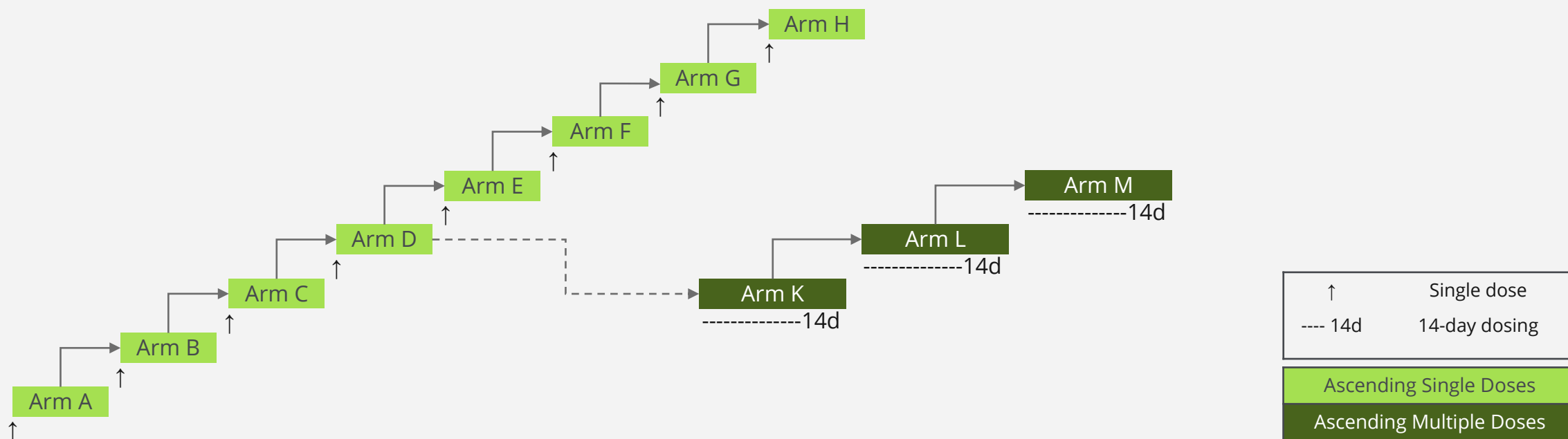
Titrate to target dose quickly,
with expedited washout

**Improvement
over Natural
History of Disease**

Confirmed through PBO
controlled clinical trials,
demonstrating the slowing, and
potential reversal of disease
progression

*Cytokinetics proprietary research

CK-274: Nested SAD and MAD in Healthy Subjects



Randomized, placebo-controlled, double-blind, multi-part, single center study in ~96 healthy subjects

- Part 1: 8 ascending single oral doses (SAD)
- Part 2: 3 ascending multiple oral doses (MAD)

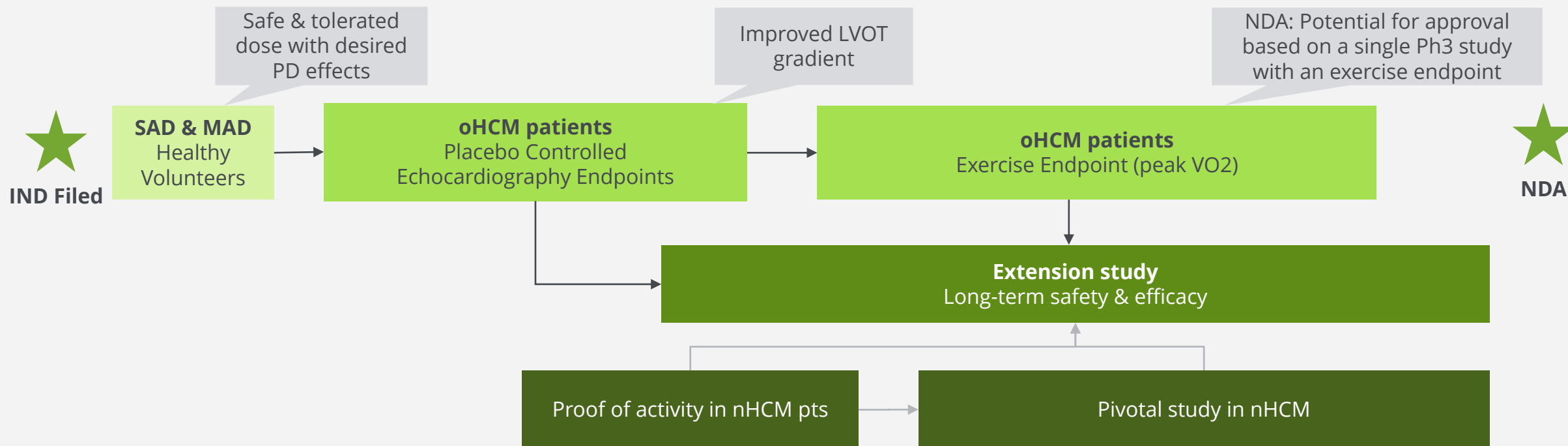
Objectives	Endpoints
Safety and tolerability	AEs, SAEs, LVEF
Pharmacokinetics	C_{max} , T_{max} , AUC, $t_{1/2}$, other
PK-PD Relationship	LVEF, LVFS, LVOT-VTI, other

CK-274: Clinical Development Plan for HCM

Phase 1
Safety, PK & PD

Phase 2
Proof of Concept, Dose Finding

Phase 3
Pivotal Studies



Cardiac Muscle: Upcoming Milestones

Continue Enrollment in METEORIC-HF Through 2019

Complete Patient Screening in GALACTIC-HF in 1H

Expect Data from Phase 1 Study of CK-274 in Q3

Continue to Conduct Phase 1 Study of AMG 594 through 2019

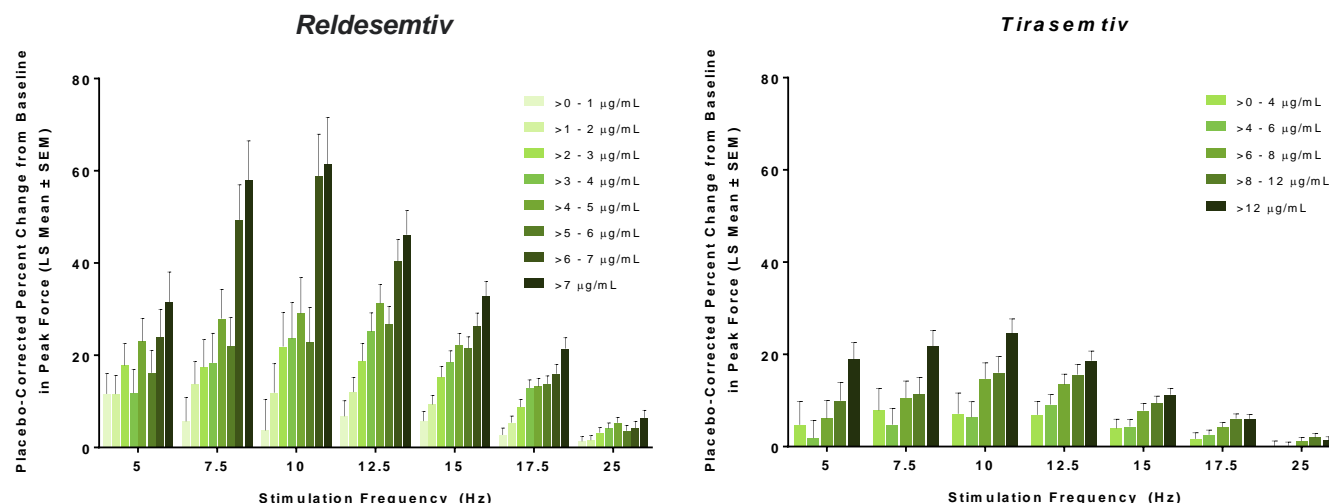
SKELETAL MUSCLE

Reldesemtiv



Reldesemtiv: Potentially More Potent, Well Tolerated

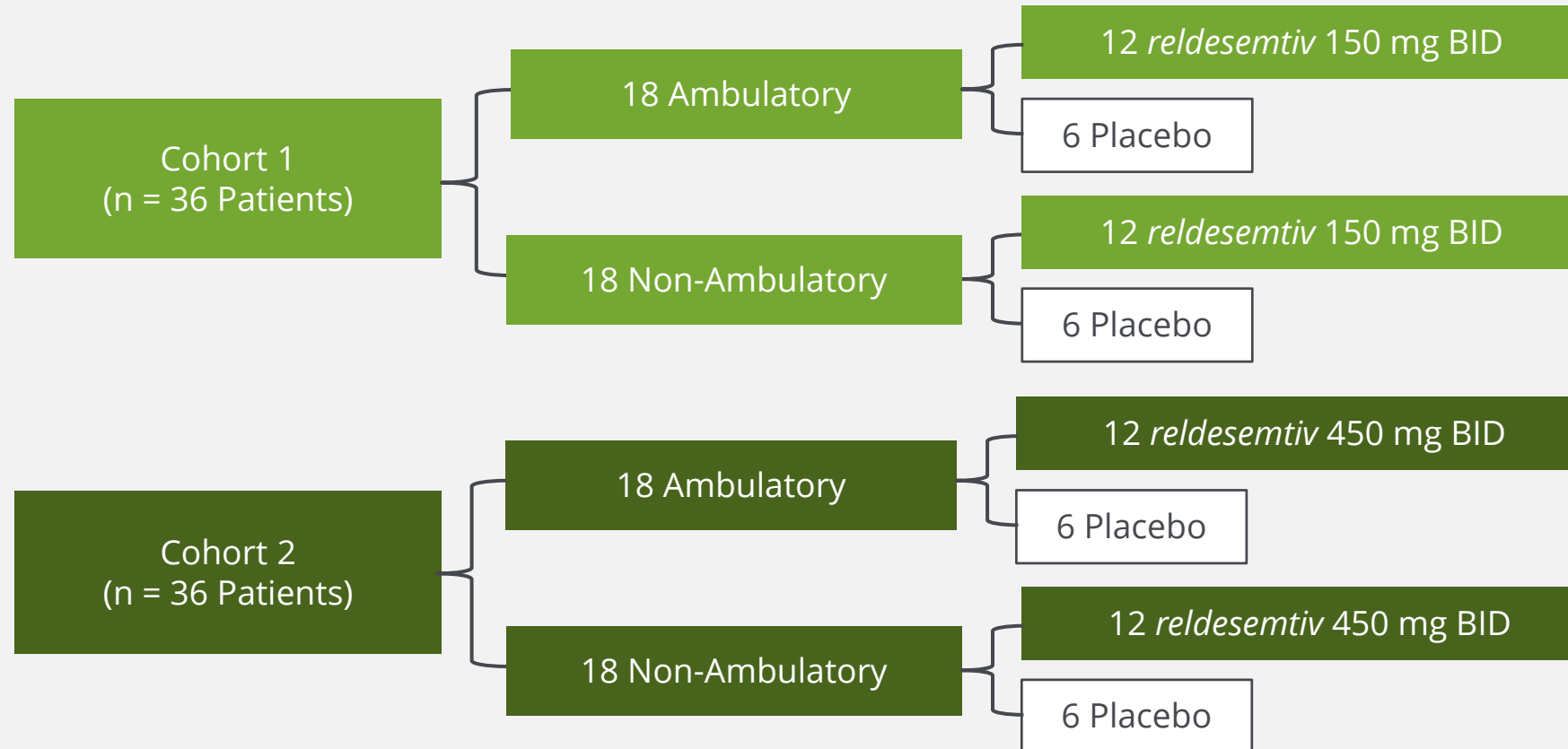
- *Reldesemtiv* increased the force generated by the tibialis anterior muscle versus placebo in response to nerve stimulation in a dose, plasma concentration, and frequency-dependent manner
- The overall largest increase from baseline in peak force, compared to placebo, was **58.7** (10.2)% (least-squares mean [SE]) at a stimulation frequency of 10 Hz.
- The largest response *tirasemtiv* produced in a comparable study was a **24.5** (3.1)% increase in peak force at 10 Hz
- Single doses of *rel-desemtiv* were well-tolerated in healthy volunteers at doses up to 4000 mg. No SAEs were reported, AEs were mild or moderate



Results from Three Phase 1 Studies of *Reldesemtiv* Published in *Muscle & Nerve*

Andrews JA, Miller TM, Vijayakumar V, Stoltz R, James JK, Meng L, Wolff AA, Malik FI. CK-2127107 amplifies skeletal muscle response to nerve activation in humans. *Muscle & Nerve*. 2017 Nov 18.

CY 5021: Phase 2 Clinical Trial in SMA

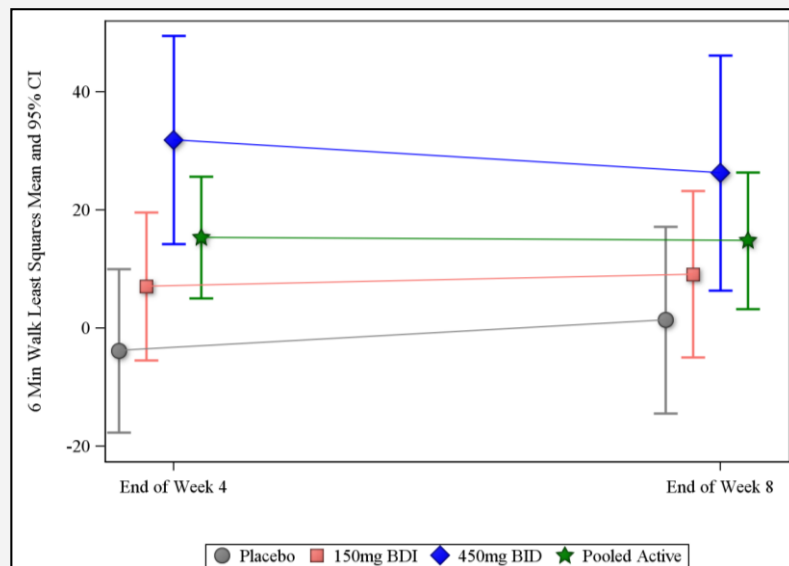


Hypothesis generating study enrolled 70 people with Type II-IV SMA over 8 weeks. Study included two dose cohorts, stratified by ambulatory versus non-ambulatory status, randomized 2:1 to receive *reldesemtiv* or placebo 2 times daily

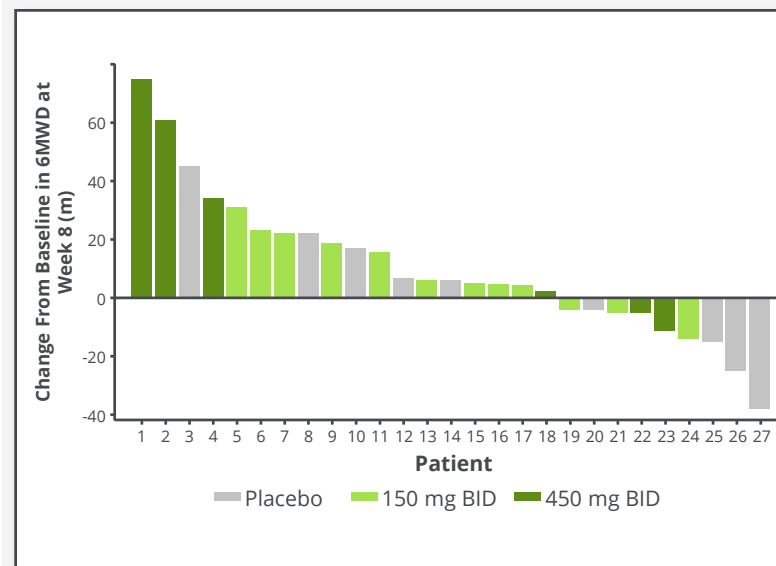
CY 5021: Increases in 6MWD

Dose-Dependent Increases in 6MWD

Change from Baseline Over Time

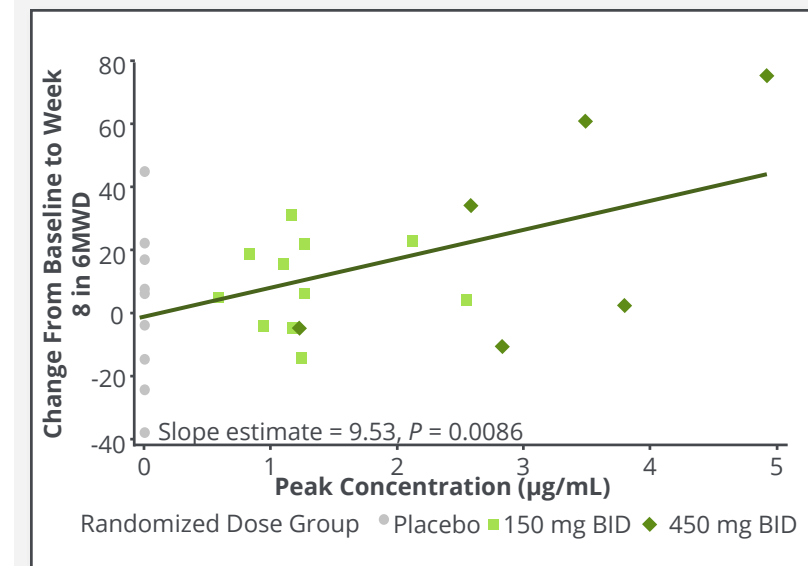


Change from Baseline at Week 8



Concentration-Dependent Increases in 6MWD

6 Minute Walk Change from Baseline at Week 8 versus C_{max}



C_{max} : maximum concentration
Data Transfer on 24MAY18

6MWD is Validated, Approvable Endpoint

Drug Name	Disease	Duration of Treatment (weeks)	Study Size	Improvement in 6MWD compared to placebo (meters)	Indication	6MWD in Label
ALDURAZYME (laronidase)	MPS I Hurler/Hurler-Scheie	26	45	38 (p = 0.07)	Increase walking capacity	Yes
ELAPRASE (idursulfase)	MPS II Hunter syndrome	53	64	35 (p = 0.01)	Increase walking capacity	Yes
VIMIZIM (elosulfase)	MPS IVA Morquio A syndrome	24	176	22.5 (p = 0.017)	Treat MPS IVA	Yes
LUMIZYME (alglucosidase alpha)	GAA deficiency Pompe Disease	78	90	28 (p=0.06)	Pompe Disease	Yes
TRACLEER (bosentan)	Pulmonary Hypertension	213	16	35 (low dose), 54 (high dose) (p = 0.01, 0.0001)	Increase exercise ability	Yes
LETAIRIS (ambrisentan)	Pulmonary Hypertension	201	12	27 (low dose), 39 (high dose) (p = 0.008, <0.001)	Increase exercise ability	Yes

6 Minute Walk Distance
Used as Endpoint in
Clinical Trials Outside of
SMA and Included in
Labels

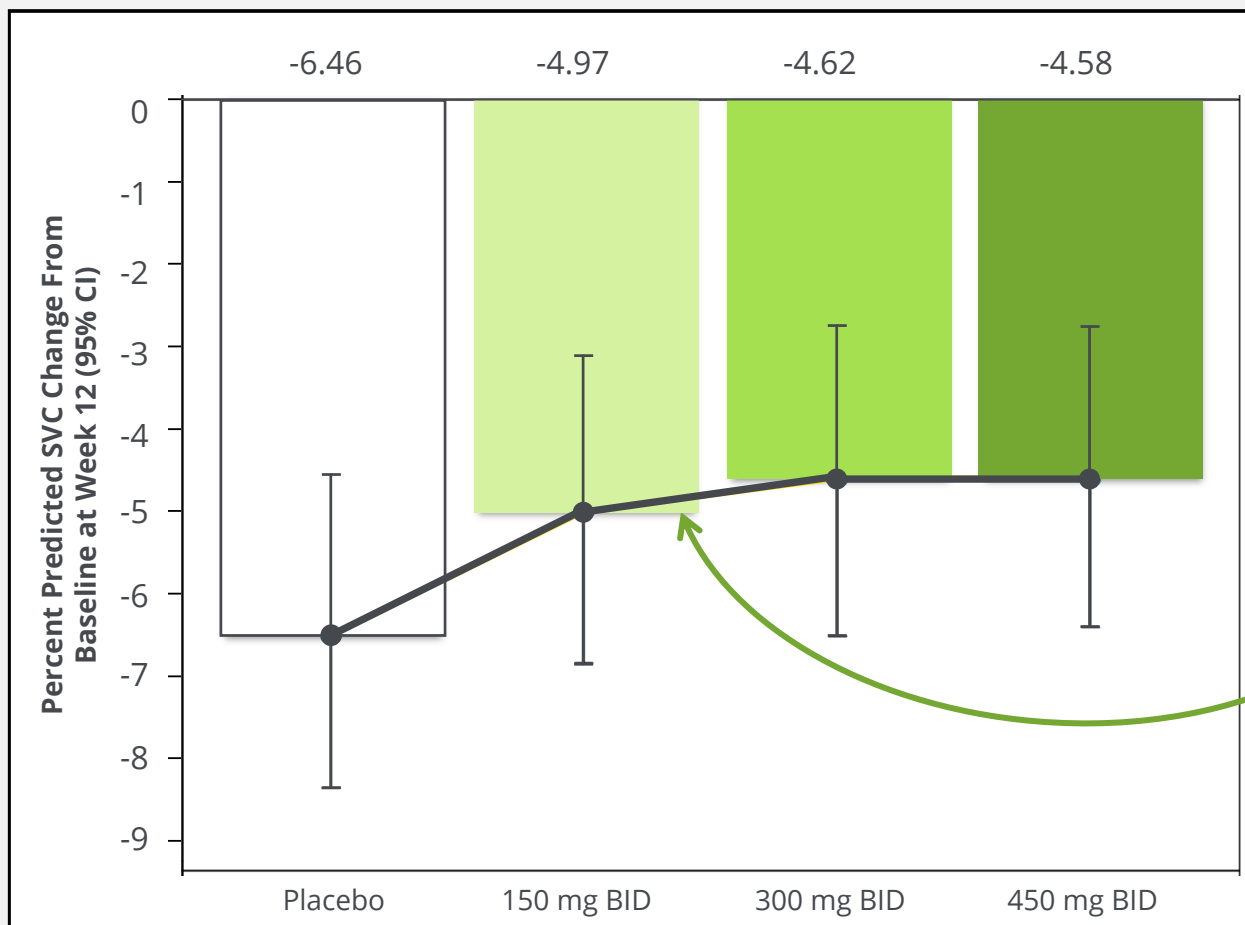
Phase 2 Clinical Trial in ALS



Functional
Outcomes in a
Randomized
Trial of
Incvestigational
Treatment with CK-107
to **U**nderstand
Decline in
Endpoints in
ALS

Parallel group, dose ranging study enrolling 450 patients with ALS in the US and Canada, evaluating change from baseline in the percent predicted slow vital capacity (SVC) at 12 weeks of treatment with *reldecentiv* or placebo

Primary Endpoint: SVC



Primary Analysis

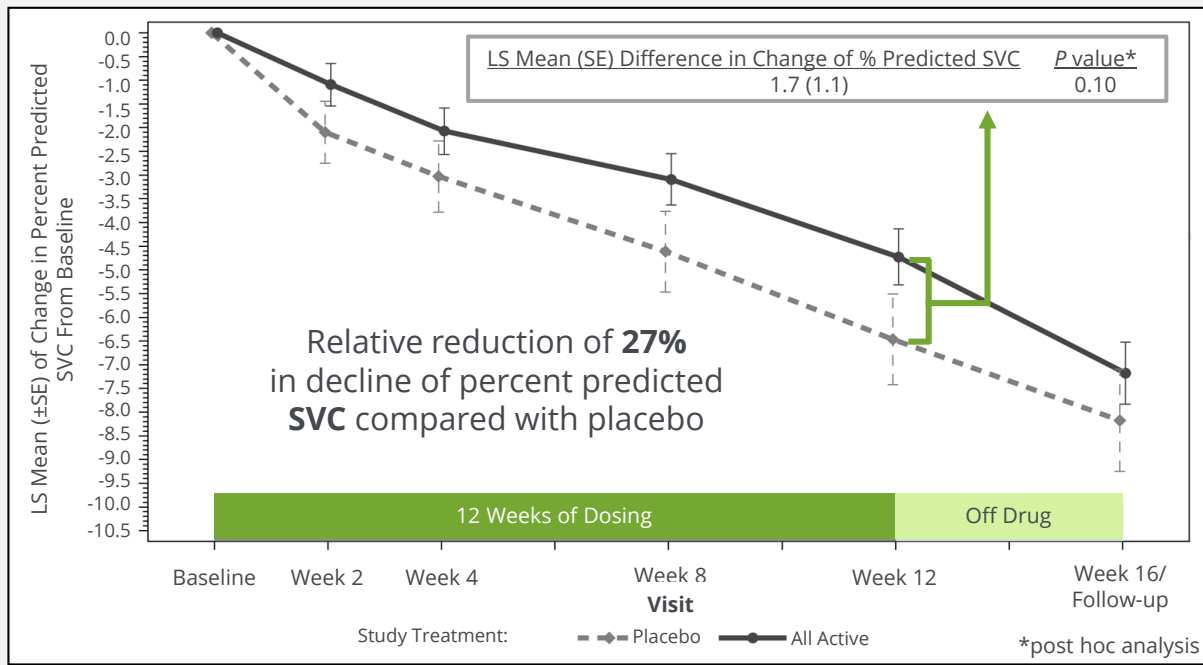
$P = 0.11$
for weighted
dose-response
relationship*

Change from
Baseline in
Percent
Predicted SVC
at Week 12

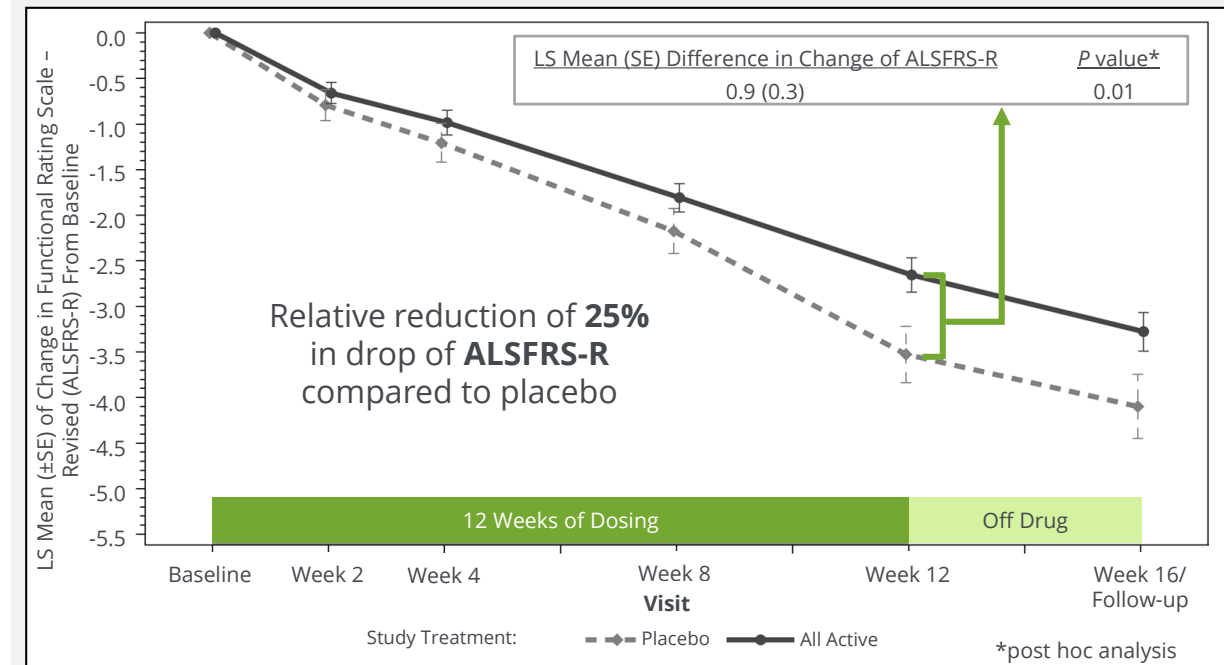
*Based on Mixed Model for Repeated Measures (MMRM) with the contrasts of (-5, -1, 3, 3) for placebo, reldesemtiv 150 mg, 300 mg and 450 mg BID, respectively

Change From Baseline: All Active vs Placebo*

SVC Change From Baseline (All Active vs Placebo)



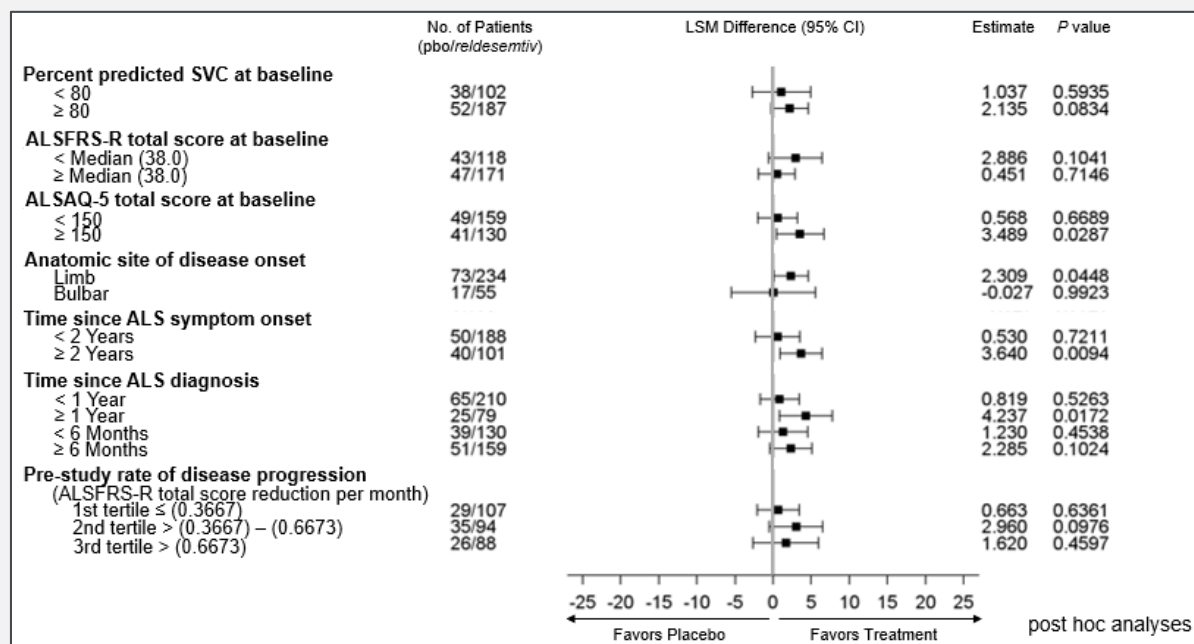
ALSFRS-R Change From Baseline (All Active vs Placebo)



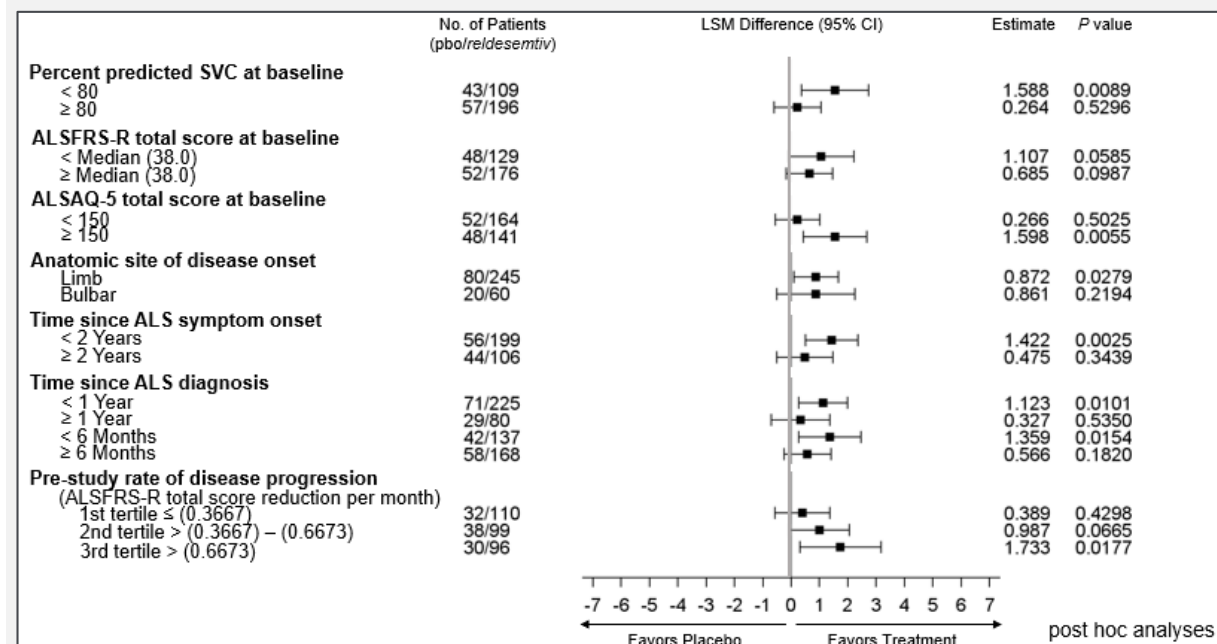
*FORTITUDE-ALS did not achieve statistical significance, but patients on all dose groups of *reldesemtiv* declined less than patients on placebo

Subgroup Analyses*

Percent Predicted SVC



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

Treatment-Emergent Adverse Events (TEAEs) (≥ 10 TEAEs in Any Treatment Group)

Preferred Term	Placebo (N=115) n (%)	150 mg BID (N=112) n (%)	300 mg BID (N=113) n (%)	450 mg BID (N=117) n (%)	Overall (N=457) n (%)
At Least One TEAE	97 (84.3%)	100 (89.3%)	98 (86.7%)	108 (92.3%)	403 (88.2%)
Clinical Adverse Events					
Fatigue	12 (10.4%)	14 (12.5%)	19 (16.8%)	20 (17.1%)	65 (14.2%)
Nausea	14 (12.2%)	10 (8.9%)	13 (11.5%)	22 (18.8%)	59 (12.9%)
Headache	15 (13.0%)	16 (14.3%)	16 (14.2%)	11 (9.4%)	58 (12.7%)
Contusion	15 (13.0%)	8 (7.1%)	14 (12.4%)	17 (14.5%)	54 (11.8%)
Dizziness	11 (9.6%)	8 (7.1%)	12 (10.6%)	7 (6.0%)	38 (8.3%)
Constipation	5 (4.3%)	7 (6.3%)	13 (11.5%)	10 (8.5%)	35 (7.7%)
Viral upper respiratory tract infection	9 (7.8%)	6 (5.4%)	10 (8.8%)	9 (7.7%)	34 (7.4%)
Diarrhea	8 (7.0%)	12 (10.7%)	7 (6.2%)	4 (3.4%)	31 (6.8%)
Laboratory Adverse Events					
Cystatin C increased	2 (1.7%)	8 (7.1%)	9 (8.0%)	20 (17.1%)	39 (8.5%)
GFR decreased	1 (0.9%)	6 (5.4%)	6 (5.3%)	11 (9.4%)	24 (5.3%)
ALT increased	1 (0.9%)	2 (1.8%)	5 (4.4%)	12 (10.3%)	20 (4.4%)
AST increased	1 (0.9%)	2 (1.8%)	3 (2.7%)	10 (8.5%)	16 (3.5%)

Incidence of early treatment discontinuations, SAEs and clinical adverse events similar between placebo and active treatment

Astellas Collaboration

Original Deal: 2013

Expanded to include SMA: 2014

Expanded to Include ALS: 2016

>\$200M in Upfront Payments/R&D Sponsorship

- Collaborative research program on next-generation skeletal muscle activators through 2019 (under Astellas' sponsorship)
- Development of *reldesemtiv* in non-neuromuscular and neuromuscular indications (e.g., SMA and ALS)
- Cytokinetics conducts Phase II clinical trials of *reldesemtiv* in SMA and ALS (at Astellas' expense)
- Astellas primarily responsible for development; Cytokinetics' option to co-fund (e.g., SMA) and co-funding obligation (e.g., ALS)
- Cytokinetics has option to conduct early-stage development for certain indications at its expense, subject to reimbursement

Astellas to commercialize products subject to Cytokinetics' option to co-promote for neuromuscular indications in US, Canada, and Europe; **Cytokinetics** has the option to co-promote for all other indications in the US and Canada

Astellas will reimburse Cytokinetics for certain expenses associated with co-promotion activities

Cytokinetics eligible to receive over \$600 mm in pre-commercialization and commercialization milestones plus royalties, which are increased for co-funded products

Skeletal Muscle: Upcoming Milestone

Continuing to Evaluate Results from FORTITUDE-ALS

Discussing Next Steps in Development Program with Astellas

CORPORATE **PROFILE**

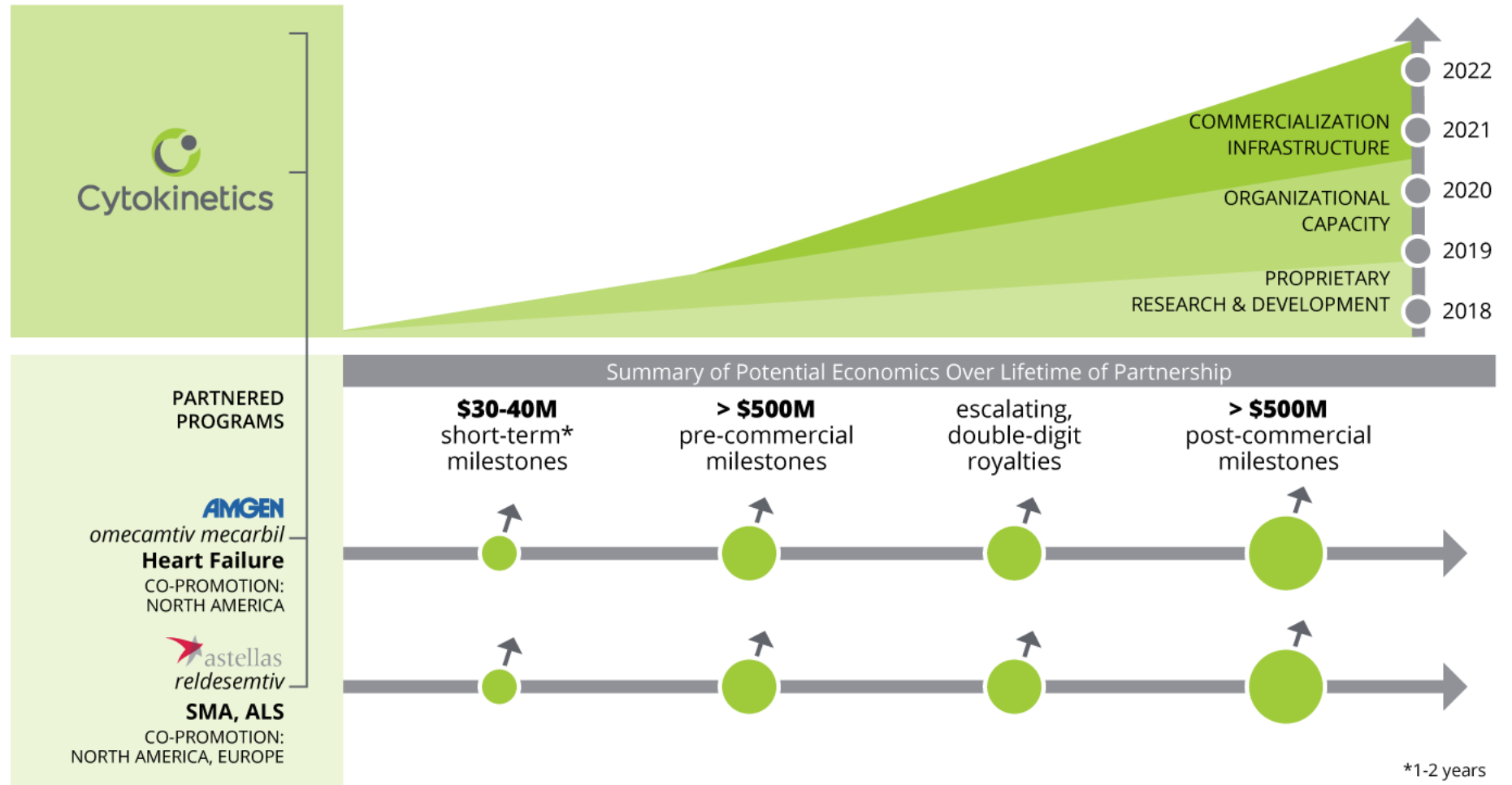
Vision 2020: Five-Year Strategic Roadmap



- **Progress** proprietary research programs focused on muscle contractility, growth and energetics into development under new collaborations
- **Advance** next-generation skeletal and cardiac muscle activator compounds into clinical development by leveraging existing research collaborations
- **Conduct** late-stage clinical development of novel, first-in-class muscle activators for the potential treatment of ALS, SMA, heart failure and other diseases impacting muscle function
- **Collaborate** with patient communities to support the urgent development of new medicines for diseases of impaired muscle function with pressing unmet medical needs
- **Mature** operations to enable development, registration and commercialization of muscle biology drug candidates across North America and Europe

Corporate Development Strategy

Leveraging
Partnerships to
Fund R&D and
Commercialization



Cytokinetics Financing History

Strategic Partners
and Institutional
Investors Have
Committed
Approximately
Equal Amounts of
Capital to
Cytokinetics

		Equity	Upfront Cash, Option, and Milestones	R&D Reimbur.	Total
Investors	Private Investors (VCs)	\$116M			
	IPO	\$94M			
	Public Post-IPO/Other	\$420M			
	Total	\$630M			\$630M
Strategic Partners & Grants	Astellas	\$10M	\$130M	\$81M	\$221M
	Amgen	\$43M	\$145M	\$31M	\$219M
	Royalty Pharma	\$10M	\$90M		\$100M
	GSK	\$24M	\$22M	\$33M	\$78M
	AstraZeneca			\$2M	\$2M
	MyoKardia			\$2M	\$2M
	Global Blood			\$2M	\$2M
	Grants (ALS Assoc / NINDS / other)		\$6M		\$6M
	Total	\$87M	\$393M	\$143M	\$631M

Note: Figures above exclude current debt outstanding of \$43M.

Q2 2019 Condensed Balance Sheet

	6/30/19 (in millions)
Cash and investments	\$175.1
Other assets	<u>\$23.1</u>
Total assets	\$198.2
Debt	\$44.5
Liability related to sale of future royalties	\$132.4
Other liabilities	<u>\$26.2</u>
Total liabilities	\$203.1
Working capital	\$163.0
Accumulated deficit	-\$804.8
Stockholders' Equity (Deficit)	-\$4.9
Basic shares outstanding	58.1

2019 Financial Guidance

	(in millions)
Cash Revenue	\$28 - 32
Cash Operating Expenses	\$110 - 115
Net	~\$90

Financial guidance confirmed on May 9, 2019 earnings call

Over 24 Months of
Cash Based on
2019 Guidance

Upcoming Milestones

Data Expected from Phase 1
Study of **CK-274**
in Q3 2019

Expect to Initiate Phase 2
Study of **CK-274**
in Q4 2019

Continue to Evaluate Results
from **FORTITUDE-ALS**
& Discuss Next Steps
with Astellas

Continue to Conduct
GALACTIC-HF
through 2019

Continue Enrollment
in **METEORIC-HF**
through 2019

Continue to Conduct Phase
1 Study of **AMG 594**
through 2019



Cytokinetics

**THANK
YOU**