

Sarcomere Directed Therapies

INCLE MATERIAL IN THE INCLES I



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; projections regarding the size of the addressable patient population for *omecamtiv mecarbil*; Cytokinetics' commercial readiness for omecamtiv mecarbil; the likelihood of approval and timing for approval of omecamtiv mecarbil or any of our other drug candidates; Cytokinetics' ability to earn and receive milestone payments; the timing and results of clinical trials of omecamtiv mecarbil, CK-136 (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, CK-136 (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

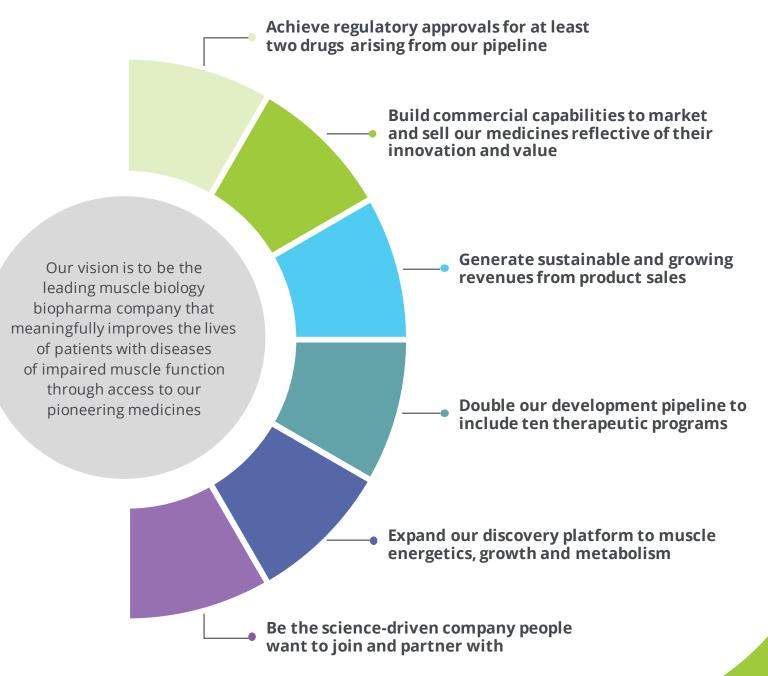
To bring forward new medicines to improve the healthspan of people with devastating cardiovascular and neuromuscular diseases of impaired muscle function.



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.





How Do We Get There?

Exploit muscle biology roots

Measure pharmacodynamics of muscle function

Develop first-in-class, next-in class, best-in-class compounds

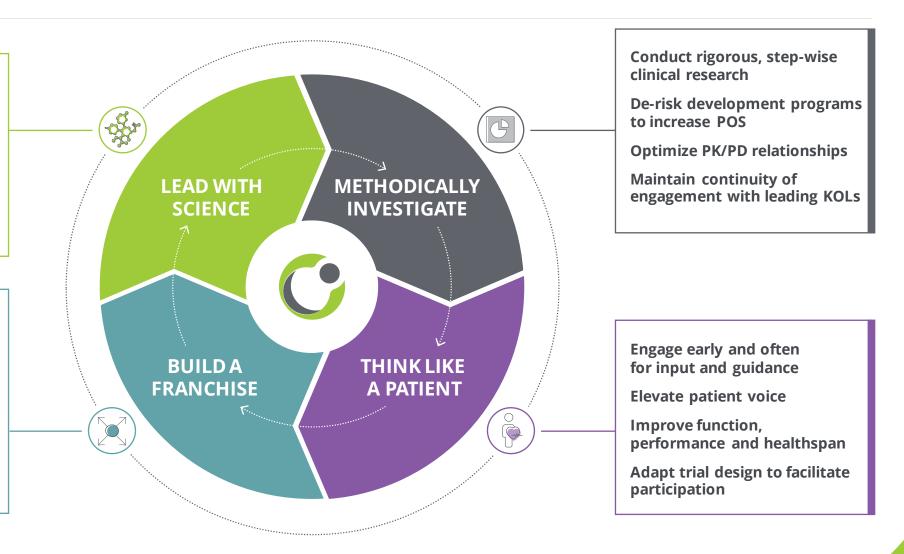
Expand contractility focus to muscle energetics, metabolism

Adopt customer-centric approach to portfolio management

Pioneer and lead: innovate, integrate and scale

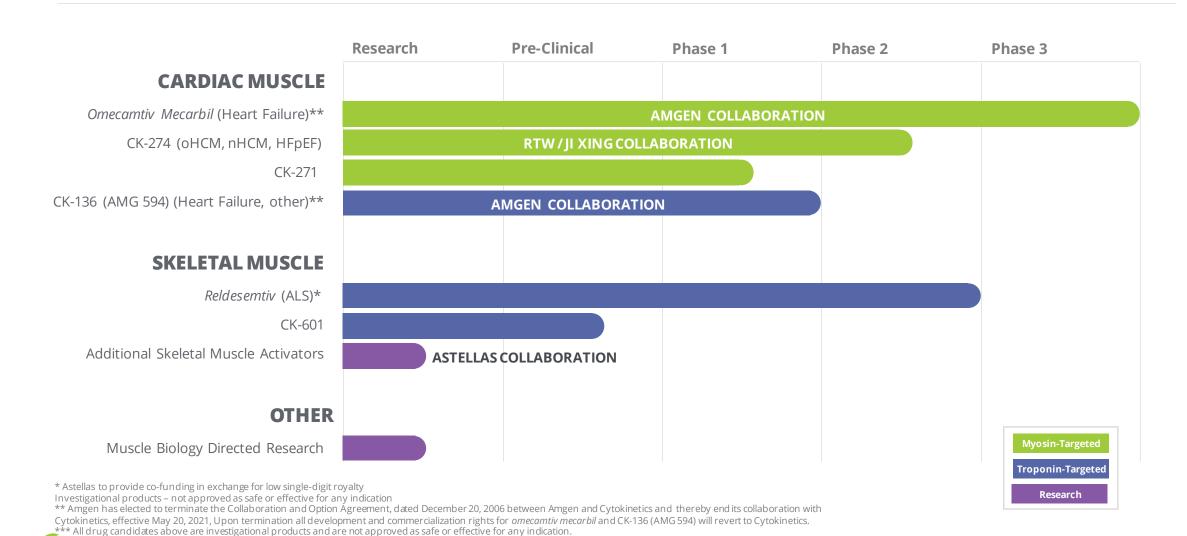
Extend and expand through lifecycle management

Continually pursue back-ups, follow-ons, next-gen drug candidates





Pipeline of Novel Muscle-Directed Drug Candidates



Cytokinetics

Sarcomere Directed Drug Development

CARDIAC MUSCLE

Omecamtiv Mecarbil

CK-136 (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

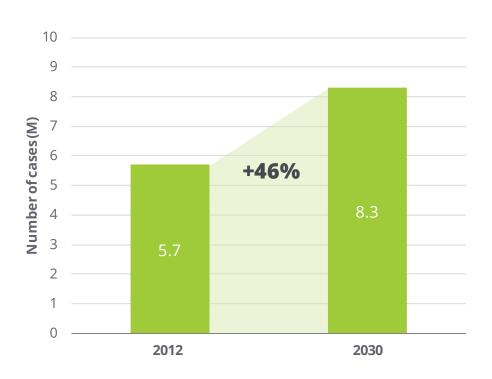
 $Source: NCHS\ Data\ Brief, No.\ 355\ January\ 2020,\ Peterson-KFF,\ Health\ System\ Tracker,\ PharmaProjects.$



Heart Failure: Growing Prevalence and Low Survival Rates

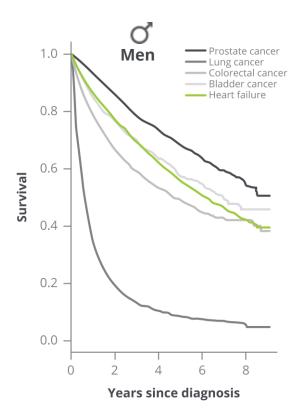
6 million people have heart failure in the United States

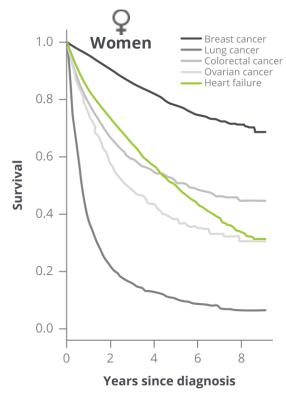
Prevalence Expected to Increase by 46% from 2012 – 2030



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 Hospital Readmission Rates

Heart failure is one of the most frequent causes of hospitalization in people > $65^{1,2}$

1 of 2 hospitalized HF patients are readmitted within 6 months⁵





^{1,} Adams et al. *Am Heart* / 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.

^{4.} Korda,, et al. *BMC Hedith 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

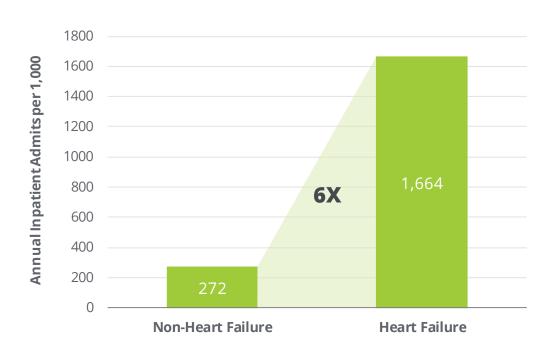
^{8.} Whellan et al. *Circulation* 2010 Jan;3(1):33-40

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



^{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



^{1.} Milliman Analysis of Medicare 5% Sample 2011-2012 (2012 index year, 2011 look back year)

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

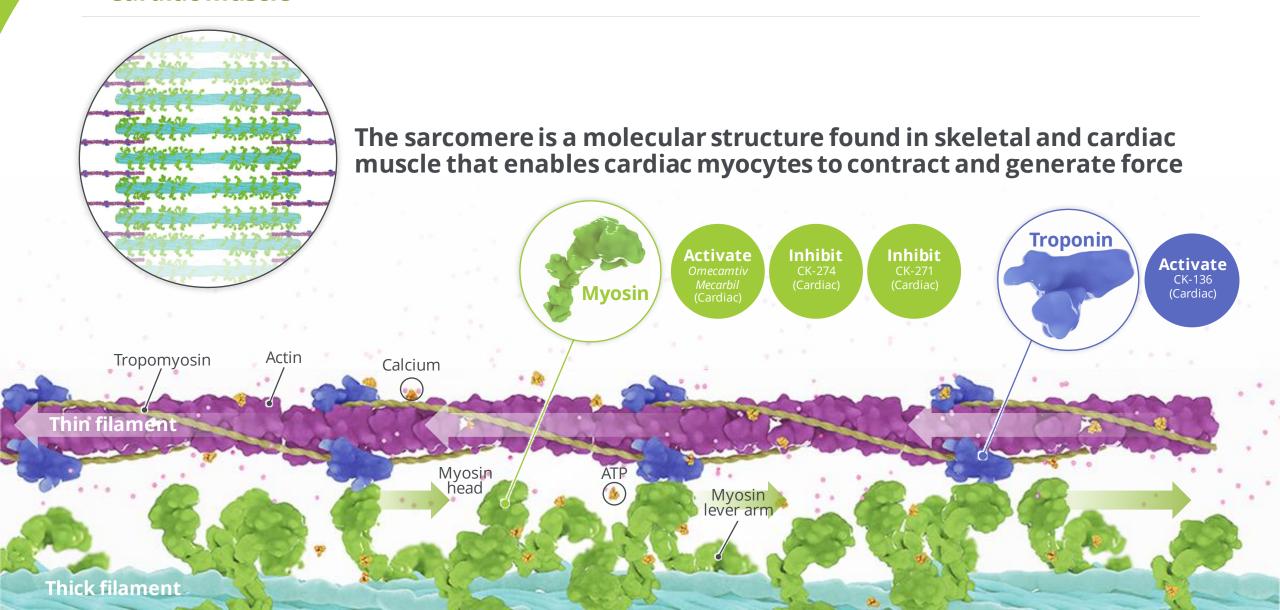
Indirect mechanisms of action with systemic side effects

Variable efficacy, often inadequate



Sarcomere Directed Drug Development

Cardiac muscle



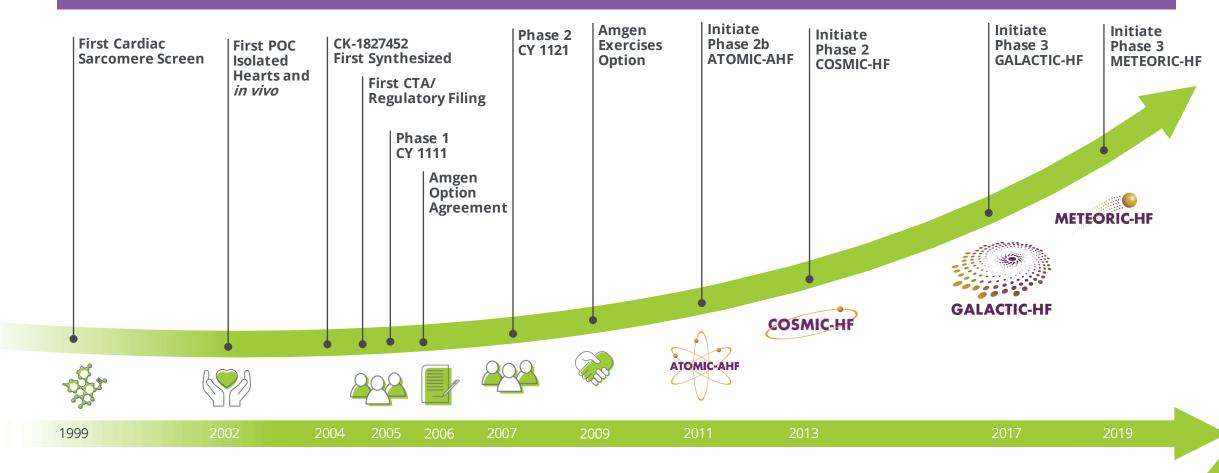
Omecamtiv Mecarbil: Novel Mechanism Approach

Current Treatments Omecamtiv mecarbil Sarcomere **Myocardial Injury** Left ventricular systolic dysfunction Systemic vasoconstriction, renal sodium, and water retention Heart **Current Treatments -**Perceived reduction **Block SNS and RAAS*** in circulating volume ACE inhibitor (ACEI) and pressure Angiotensin-receptor blocker (ARB) Aldosterone antagonist Omecamtiv mecarbil is a selective Beta blocker cardiac myosin activator designed to improve heart muscle **Neurohumoral Activation** performance and increase the *SNS = Sympathetic Nervous System of SNS and RAAS* pumping function of the heart. RAAS = Renin-Angiotensin-Aldosterone System



Omecamtiv Mecarbil: Positive Phase 3 Trial Results

>30 trials: 23 Phase 1 studies with 600+ participants, 7 Phase 2 trials with 1,400+ patients, 2 Phase 3 trials with 8,000+ patients





Pivotal Phase 3 Trial Design



Landmark clinical trial results published in NEJM

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.



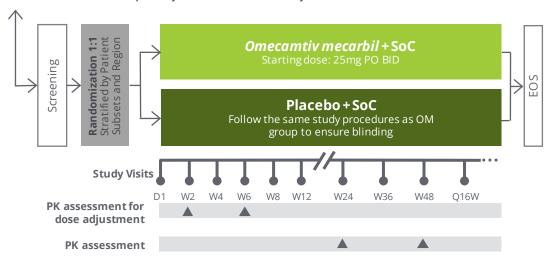
Clinical Trial Overview

Overall median study exposure was 21.8 months

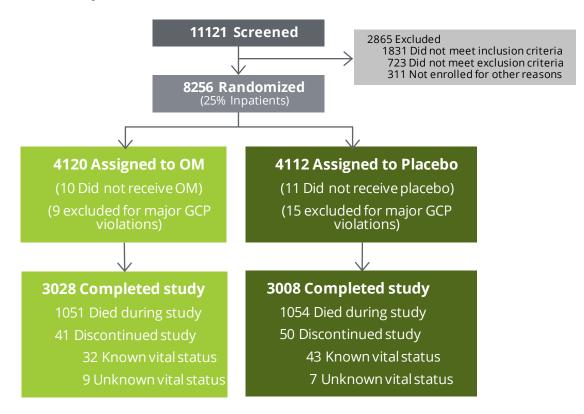


Clinical Trial Schema

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



Patient Disposition





Baseline Characteristics



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

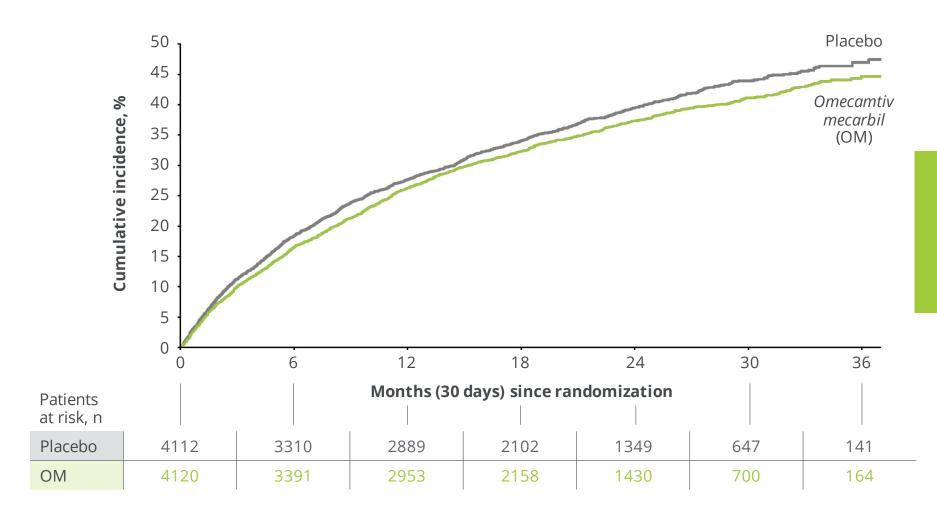
Characteristic	OM (N=4120)	Placebo (N=4112)
Vitals and Laboratory Parameters		
NT-proBNP (pg/mL), median (Q1, Q3)	1977 (980, 4061)	2025 (1000, 4105)
SBP (mmHg), mean (SD)	116 (15)	117 (15)
Heart rate, mean (SD)	72 (12)	72 (12)
eGFR (mL/min/1.73m ²), median (Q1, Q3)	59 (44, 74)	59 (44, 74)
Cardiac TnI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

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



Primary Composite Endpoint Time to First HF Event or CV Death





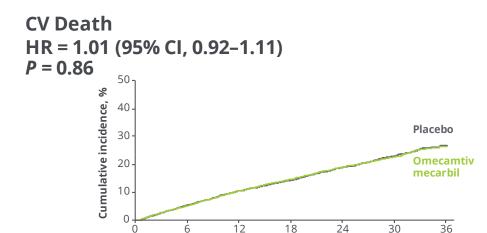
HR = 0.92(95% CI, 0.86-0.99)

P = 0.025

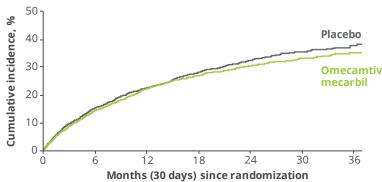


Primary Composite Components and KCCQ TSS



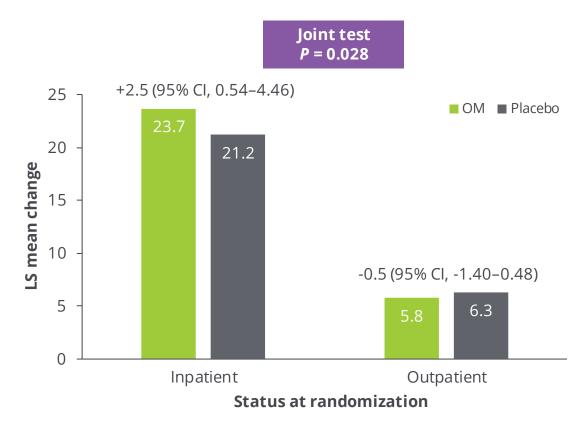


Heart Failure Event HR = 0.93 (95% CI, 0.86-1.00) P = 0.063



Months (30 days) since randomization

Change in KCCQ TSS from Baseline to Week 24



No reduction in the secondary endpoint of time to CV death was observed



Laboratory and Safety Events



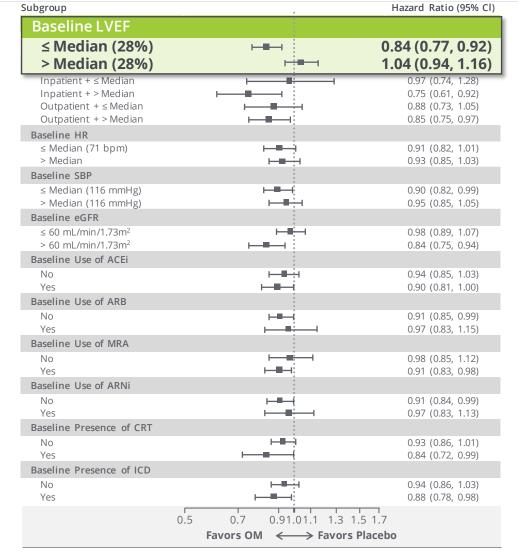
Variable	Omecamtiv Mecarbil (N=4110)	Placebo (N=4101)	Relative Risk or Difference (95% CI)
Laboratory value change from baseline to Week 24			
Systolic blood pressure – mmHg, mean (SD)	1.4 (15.3)	1.5 (15.6)	-0.1 (-0.9, 0.6)
Heart rate, bpm, mean (SD)	-2.1 (12.6)	-0.5 (12.8)	-1.6 (-2.2, -1.0)
Cardiac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



Primary Outcome: Subgroup Results



Subgroup	. Ha	azard Ratio (95%	CI)
Overall Randomization Setting	0 0 0	0.92 (0.86, 0.99)
Inpatient	F	0.89 (0.78, 1.01)	
Outpatient		0.94 (0.86, 1.02))
Region	 		
Asia	: .	0.80 (0.61, 1.05)	
E. Europe with Russia		0.90 (0.80, 1.02)	,
Latin America US and Canada		0.90 (0.75, 1.07) 0.85 (0.73, 0.99)	,
W. Europe, South Afria, and	· - ·		
AUS	<u> </u>	1.07 (0.93, 1.23))
Age	0 0 0		
< 65	⊢ ■÷i	0.91 (0.82, 1.12))
≥ 65	<u>⊢■÷</u> 1	0.94 (0.86, 1.03))
Sex	•		
Female		0.95 (0.81, 1.12))
Male	⊢ ≡ i	0.92 (0.85, 0.99))
Race	9 0 0		
Asian		0.79 (0.61, 1.02)	
Black or African American		0.82 (0.64, 1.04)	,
White Other		0.95 (0.88, 1.03) 0.91 (0.69, 1.21)	
Baseline NYHA Class		0.91 (0.09, 1.21))
	· · · · · · · · · · · · · · · · · · ·	0.97 (0.83, 1.08))
III/IV	<u>-</u>	0.88 (0.80, 0.97)	
Diabetes at Baseline	0 0 0	0.00 (0.00) 0.57	,
No	<u>⊢■</u> i	0.91 (0.83, 1.01))
Yes	⊢ ■ <u>·</u> ·	0.93 (0.84, 1.03)	,
Primary Cause of HF	0 0 0		
Ischemic	⊢= i	0.90 (0.82, 0.98))
Non-ischemic	⊢ ■	0.96 (0.86, 1.07))
History of MI			
No	- ■ - 	0.93 (0.85, 1.03))
Yes	⊢ ■	0.91 (0.83, 1.01))
Presence of Atrial Fib/Flutter	0 0 0		
No	<u> </u>	0.86 (0.79, 0.94)	
Yes		1.05 (0.93, 1.18))
	0.5 0.7 0.91.01.1 1.3 1.5 1.7		
	Favors OM ←→→ Favors Placebo		



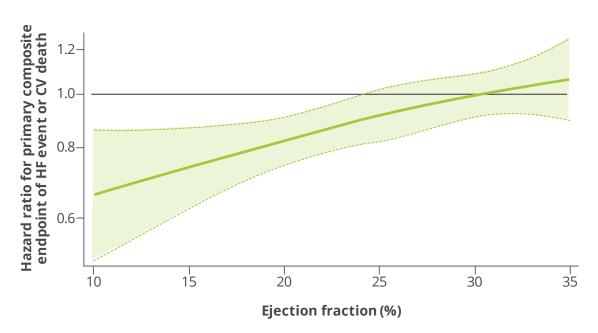


Greater Treatment Effect in Advanced HF Patients



Subgroup	No. of Events/ No. of Patients		Hazard Ratio (95% Cl)	Norm p-value	ARR
All Patients	3103/8232	⊢=	0.92 (0.86, 0.99)	0.025	2.1%
LVEF ≤28%	1821/4456	⊢■→	0.84 (0.77, 0.92)	<0.001	4.9%
Outpatients	1255/3304	⊢■ →	0.83 (0.75, 0.93)	0.001	5.0%
Inpatients	566/1152	—	0.86 (0.73, 1.02)	0.084	3.9%
Hosp <3 mos	1200/2688	⊢ ■	0.83 (0.74, 0.93)	0.001	5.2%
Class III/IV	1055/2132	⊢ ■	0.80 (0.71, 0.90)	<0.001	7.0%
NT-proBNP >2000	1249/2431	⊢ ■	0.77 (0.69, 0.87)	<0.001	8.1%
SBP <110	843/1820	⊢ ■	0.81 (0.70, 0.92)	0.002	7.4%
	0.5	0.8 1.0 1.2 OM ←→→ Plac Better Bet			

 Greater treatment effect in prespecified subgroup of patients with LVEF ≤28%: (n=4,456) HR 0.84; 95% CI 0.77, 0.92



 Continuous relationship between ejection fraction and hazard ratio for the primary composite endpoint in GALACTIC-HF suggested potentially stronger treatment effect of omecamtiv mecarbil in patients with increasingly lower ejection fractions



Comparable Results Supported Recent FDA Approval Approval of Verquvo Reflects Unmet Need in Advanced HF Patients

	Primary Endpoint	Key Secondary Endpoints		Hosp. Patients	Patient Baseline Characteristics		acteristics
Trial	Composite: CV Death or First HFH	CVD	кссо	Inclusion Criteria	Mean LVEF	NYHA Class	Median NT-proBNP
GALACTIC-HF 8,256 patients	8% RRR (p = 0.025)	No effect	2.5-point change*	Hosp required w/in past 12 mos = 75% Currently hospitalized = 25%	26.6	II = 53% III = 44% IV = 3%	1,998
VICTORIA 5,050 patients	10% RRR (p = 0.02)	No effect	N/A**	Hosp <3 mos = 67% Hosp 3-6 mos = 17% IV Diuretic (w/o hosp) <3 mos = 16%	28.9	II = 59% III = 40% IV = 1%	2,816

^{*} Inpatient population only



Approved for Reduction of Risk of CV Death and Heart Failure Hospitalization Following a Hospitalization for Heart Failure or Need for Outpatient Intravenous Diuretics in Adults with Symptomatic Chronic Heart Failure and Ejection Fraction Less than 45%



^{**} Data from the VITALITY-HFpEF trial showed that vericiguat did not improve the KCCQ physical limitation score at 24 weeks

Focusing to the Advanced Heart Failure Patient

High Risk for Developing HF

Hypertension / CAD / Diabetes mellitus / Family history of cardiomyopathy

Asymptomatic HF

LV systolic dysfunction / Previous MI / Asymptomatic valvular disease

Symptomatic HF

Known structural heart disease / Shortness of breath and fatigue / Reduced exercise tolerance

Advanced HF

Substantial disease burden despite maximal medical therapy

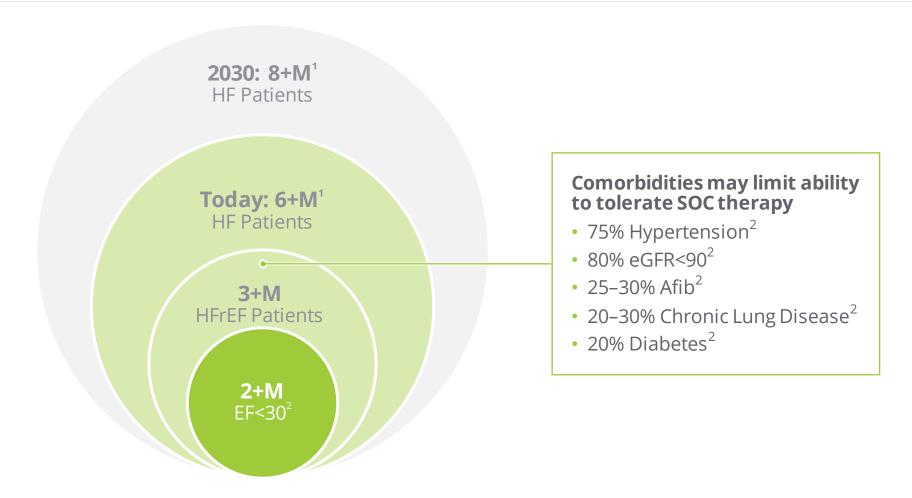
→ Advanced heart failure is defined as:

- Significant persistent symptoms
- Objective evidence of severe impairment of cardiac performance
 - EF < 30%
 - Impaired invasive or non-invasive hemodynamics
- Recurrent hospitalizations
- Severe impairment of functional capacity (6MWD < 300 m, peak VO₂ < 12 mg/kg/min)

Despite optimal medical and device treatment



Addressable U.S. Patient Population: Up to 2M Patients



Sources

1. Virani SS, Alonso A, Benjamin EJ, Bittencourt MS, Callaway CW, Carson AP, et al. Heart disease and stroke statistics—2020 update: a report from the American Heart Association Circulation. 2020;141(9):e139-596. p e509
2. Shannon M. Dunlay, Véronique L. Roger, Susan A. Weston, Ruoxiang Jiang, and Margaret M. Redfield (Circ Heart Fail. 2012;5:720-726.); Olmsted County community cohort of HF patients (1984 to 2009).



Clinical and Economic Burden of Advanced HF

High rates of hospitalization and high costs of care





- 63.5% had LVEF ≤25%, despite statistically significantly higher use of guideline-directed medical therapy compared to patients without a worsening heart failure event
- Statistically significant greater rate of HF hospitalizations, all-cause hospitalizations and mortality



For Medicare patients hospitalized for heart failure between 2016-2018²

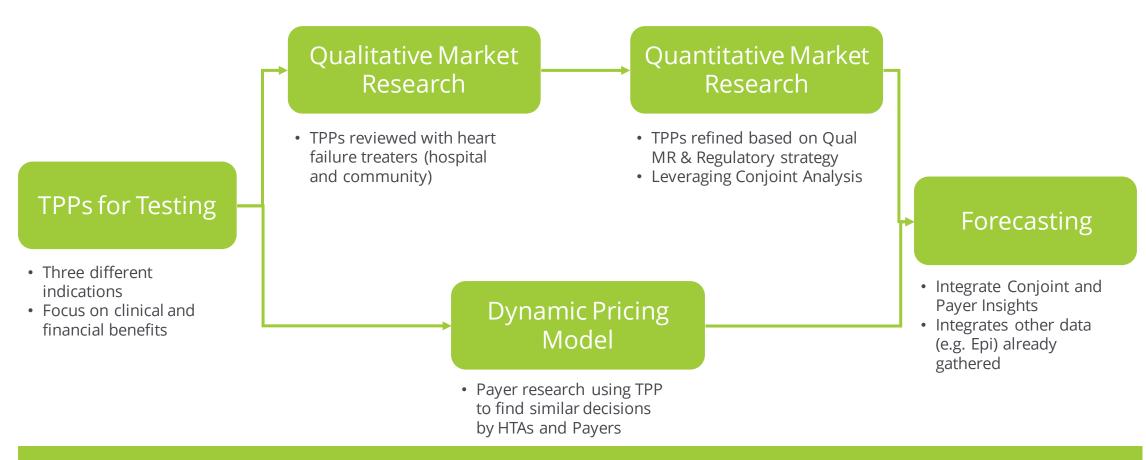
- Mean cost per HFrEF hospitalization:\$10,735
- Mean cost for 30-day post-hospitalization care: \$7,060
- Total 30-day cost for HFrEF hospitalization & post-hospitalization care: \$17,795

Carnicelli et al. Duke Clinical Research Institute, AHA 2020
 Desai et al, Yale University School of Medicine, AHA 2020



Refining the Market Opportunity

Current Workstreams: 1H 2021



Real-World Data & Healthcare Resource Utilization (GALACTIC-HF)



Go-To-Market Strategy: Customer Facing Deployment Key Considerations







Strategic Importance of the Hospital/IDN Channel

- ~45% of patients diagnosed for HF in hospitals and treated by physicians primarily affiliated with strategic hospitals – home of HF COEs, KOLs
- Advanced HF patients more likely to be treated in hospitals a critical capture point and discharge treatment opportunity

Array of Weighted Metrics

- Targeting institutions and high prescribing community physicians based on a weighted blend of
 - Patient claims
 - Entresto® uptake
 - Advanced HF medicine usage
 - Access tiers

Applied Analytics

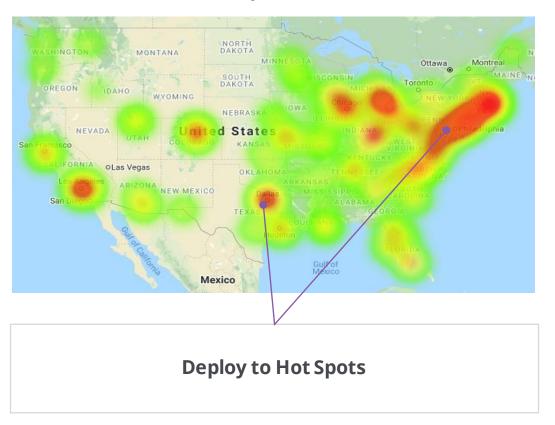
- Deployment of customer facing teams informed by claims data, Rx data, "communities of practice," rep access and digital affinity
- Non-personal promotion leveraged to address "no see" physicians, restricted hospitals, especially post COVID-19

Top 1,100 Hospitals Represent 70% of HFrEF Admissions

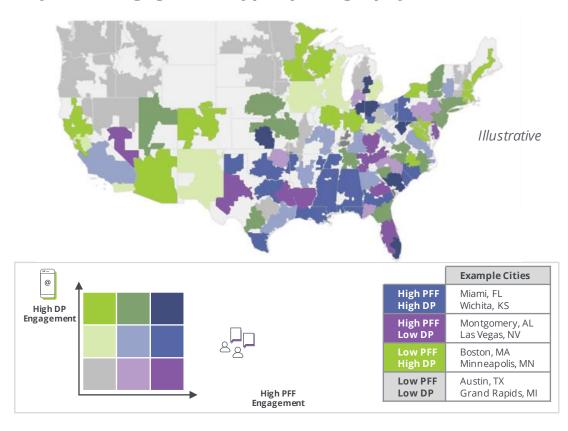


"Future Ready" Deployment & Promotion Enables Customization

Patient and HCP Heat Map in HFrEF



Physician Engagement Type by Geography



Note: Based on 2020 cycle 1 Affinity Monitor TM metrics for LHMs; LHM engagement was considered to be the average engagement of rated HCPs within each LHMs; LHMs are ZS designed market which are homogeneous market within LHM boundaries



Second Phase 3 Clinical Trial Underway



Investigating effect of omecamtiv mecarbil on exercise tolerance

Expect enrollment to complete in 1H 2021

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

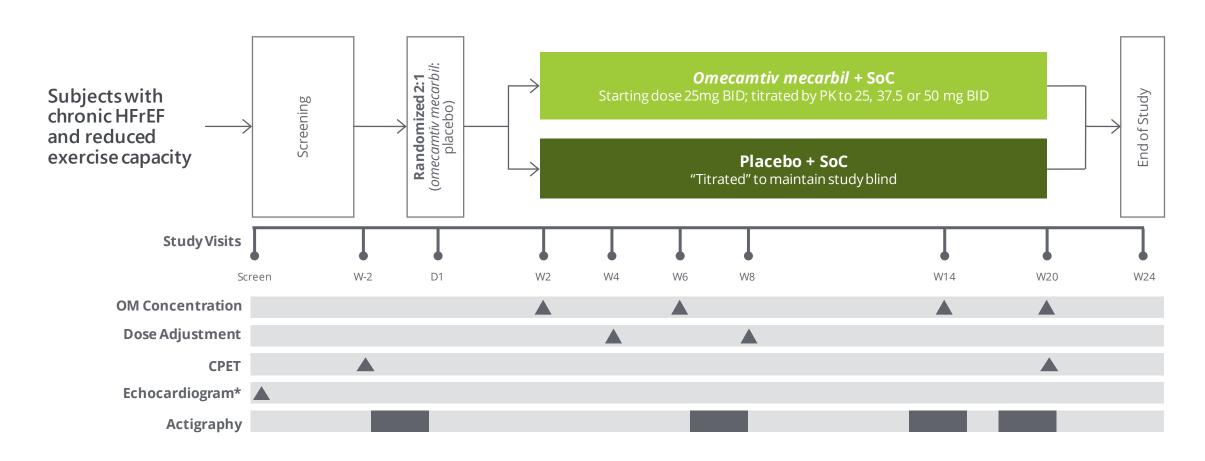
- Designed to enroll approximately 270 patients
- 90% power
- Patients must have LVEF ≤35
 percent, be NYHA heart failure
 class II or III, and have reduced
 exercise capacity
- Patients randomized 2:1 to omecamtiv mecarbil

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



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

Potential treatments for patients with HCM



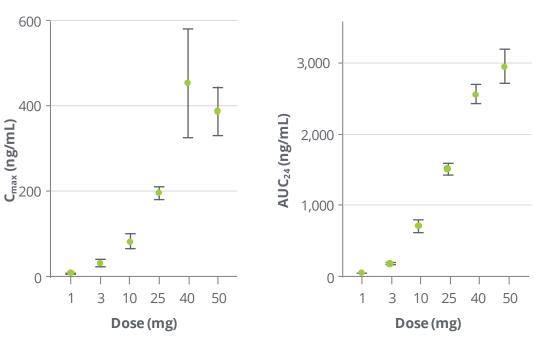
- Discovered by company scientists independent of collaborations
- Selective allosteric inhibitor of cardiac myosin
- No inhibition of smooth muscle myosin observed
- Potential *in vivo* pharmacodynamic advantages related to distinctive binding site
- Optimized to minimize potential drug-drug interactions
- 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 dose optimization in humans as may contribute to its efficacy and safety profile



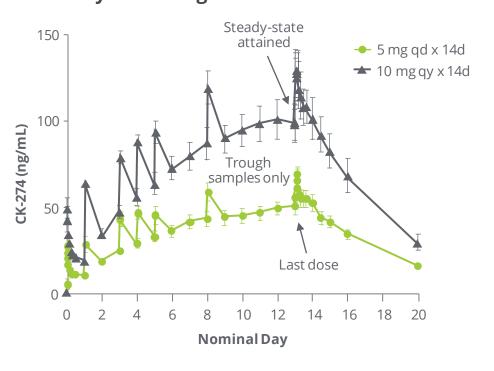
SAD & MAD Results Support Progression to Phase 2

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



Cmax = maximum drug plasma concentration; AUC = area under the plasma concentration curve; SAD = single ascending dose; d = day, qd = once daily



^{*}No SAEs and no clinically meaningful changes in vital signs, ECGs, or laboratory tests Data points represent mean ± standard error of the mean

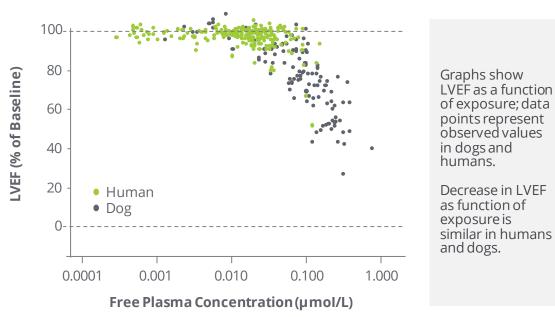
CY 6011: MAD Pharmacokinetic Parameters

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

ean	Dose (n)	5 mg (6)	7.5 mg (6)	10 mg(6)
eometric Mean /)*	C _{max} (ng/mL)	69 (23.2%)	148 (39.5%	141 (19.7%)
seome :V)*	t _{max} (h)	2.75 (1.5–4)	1.0 (0.5–5)	2.5 (0.5–3)
eter, G (%C	AUC ₂₄ (ng•h/mL)	1,321 (23.0%)	2,518 (25.8%)	2,631 (22.8%)
PK Parameter (9	t _{1/2} (h)	86.3 (11.9)	76.9 (14.5)	79.7 (14.1)
PK	AR	4.71	4.5	4.79

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

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



^{*}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;

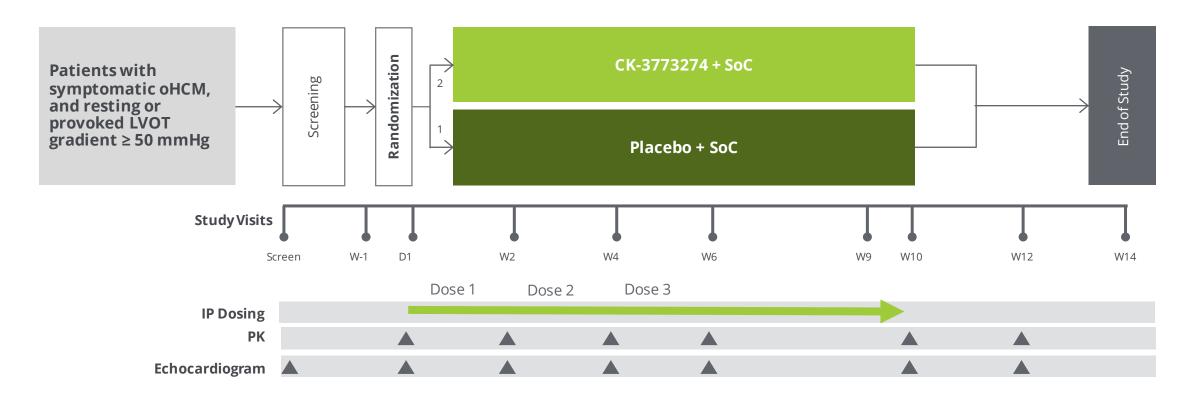
MAD = multiple ascending dose; t½ = apparent plasma terminal elimination half-life; tmax = time to maximum observed plasma concentration.



Phase 2 Clinical Trial Design



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





Interim Analysis Informs Progression to Cohort 2



Cohort 2 Enrollment Complete

Safety and tolerability support continued dose escalation

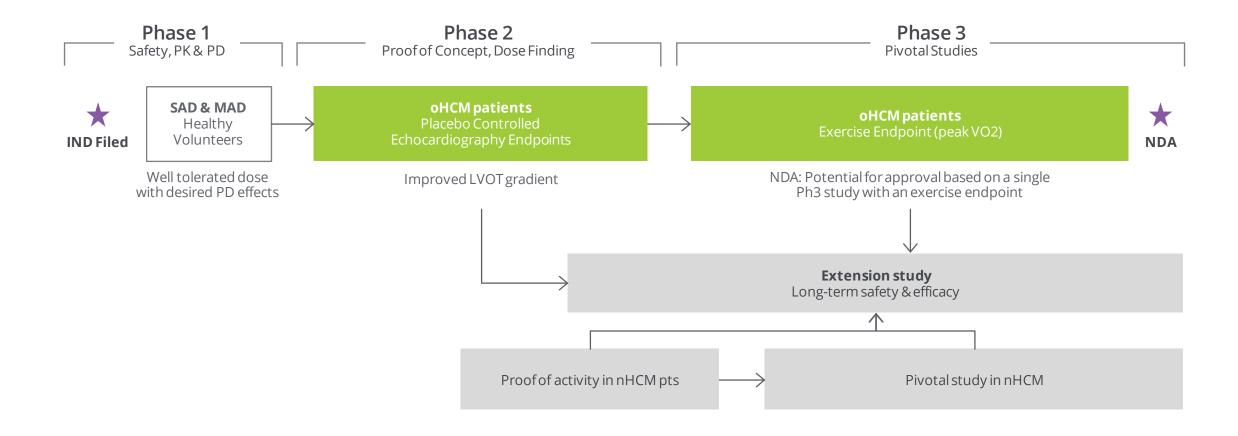
- Interim analysis of data from Cohort 1 demonstrated:
 - Substantial reductions in average resting LVOT-G & post-Valsalva LVOT-G
 - Only modest decreases in average LVEF and no dose interruptions due to LVEF falling below 50% (prespecified safety threshold)
 - No serious adverse events attributed to study treatment

Cohort 1: Escalating doses of 5, 10, 15 mg once daily

Cohort 2: Escalating doses of 10, 20, 30 mg once daily

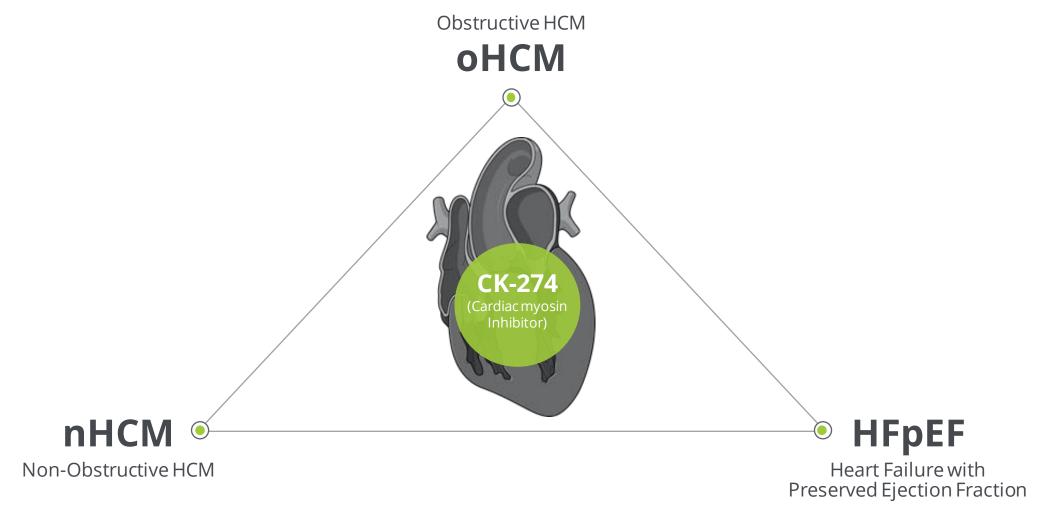


CK-274: Clinical Development Plan for HCM





Novel Approach May Address Multiple Unmet Patient Needs No FDA Approved Therapies





CK-274: 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 purchased equity and 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

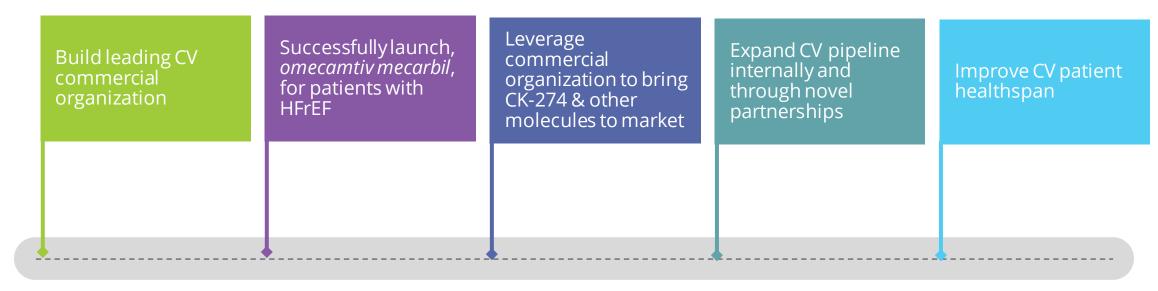
RTW: Other Purchases

RTW purchased Cytokinetics' royalty rights on future sales of mavacamten for \$85M

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



CV Franchise: Building to Improve Patient Healthspan



Today

Leverage deep **leadership in cardiac muscle biology,** to develop and commercialize innovative medicines for CV disease

Tomorrow

Meaningfully **improve the healthspan of CV patients** with an initial focus on HFrEF and HCM



Building Synergistic Commercial Capabilities

Building Today...

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

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

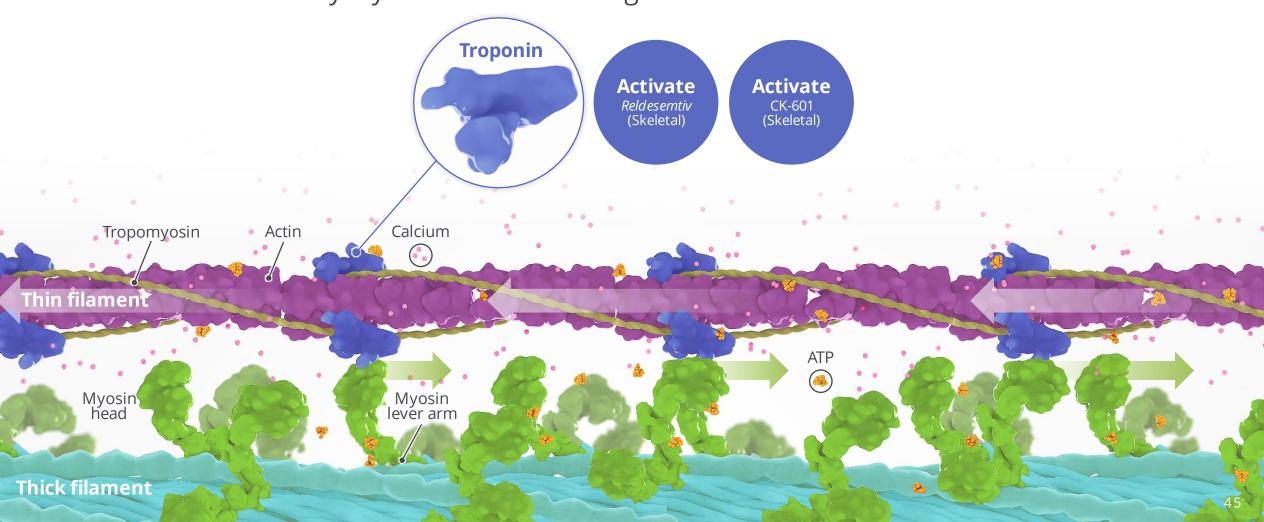
CK-601



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



Randomization 1:1:1:1

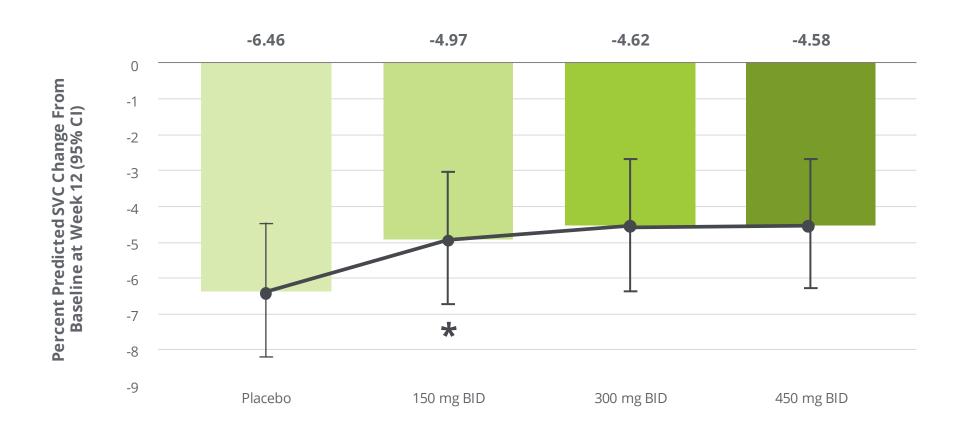
End of Dosing

A



Primary Endpoint: SVC Change from baseline in percent predicted SVC at week 12





Primary Analysis*

P = 0.11for 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

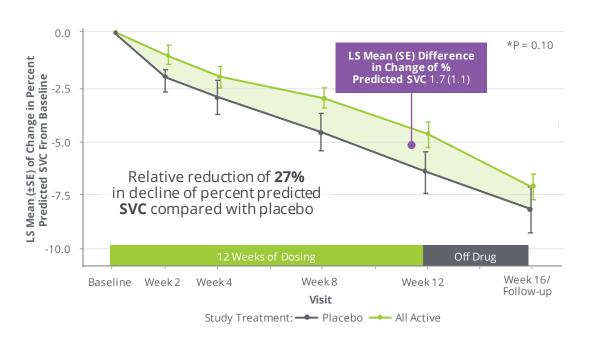


Change From Baseline: All Active vs Placebo*

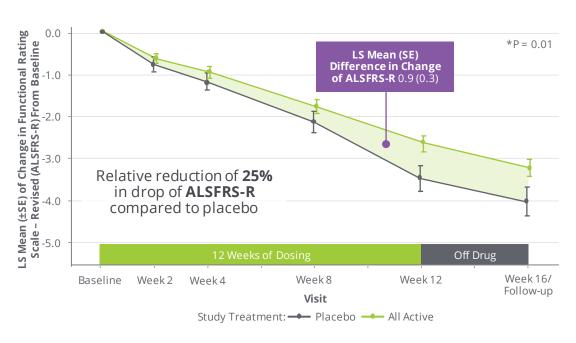


Results support progression to potential Phase 3 clinical trial

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 *reldesemtiv* declined less than patients on placebo



Subgroup Analyses*



Percent Predicted SVC

	No. of Patients (pbo/ <i>reldesemtiv</i>)	LSM Difference (95% Cl)	Estimate	<i>P</i> value
Percent predicted SVC at baseline				
<80 ≥80	38/102 52/187	 	1.037 2.135	0.5935 0.0834
ALSFRS-R total score at baseline				
<median (38.0)<br="">≥Median (38.0)</median>	43/118 47/171		2.886 0.451	0.1.41 0.7146
ALSAQ-5 total score at baseline				
<150 ≥150	49/159 41/130		0.568 3.489	0.6689 0.0287
Anatomic site of disease onset				
Limb Bulbar	73/234 17/55	} = 1	2.309 -0.027	0.0448 0.9923
Time since ALS symptom onset				
<2 Years ≥2 Years	50/188 40/101	- 	0.530 3.640	0.7211 0.0094
Time since ALS diagnosis				
<1 Year ≥1 Year <6 Months ≥6 Months	65/210 25/79 39/130 51/159	-=- -=- -=-	0.819 4.237 1.230 2.285	0.5263 0.0172 0.4538 0.1024
Pre-study rate of disease progression				
(ALSFRS-R total score reduction per month) 1^{st} tertile \leq (0.3667) 2^{nd} tertile > (0.3667) - (0.6673) 3^{rd} tertile (0.6673)	29/107 35/94 26/88	 	0.663 2.960 1.620	0.6361 0.0976 0.4597
	-15 -1 Favo Place	ors Fav) 15 vors tment	

ALSFRS-R Total Score

	No. of Patients (pbo/ reldesemtiv)	LSM Difference (95% Cl)	Estimate	<i>P</i> value
Percent predicted SVC at baseline				
<80	43/109	├	1.588	0.0089
≥80	57/196	⊢ i− ⊢	0.264	0.5296
ALSFRS-R total score at baseline				
<median (38.0)<="" td=""><td>48/129</td><td><u></u>-</td><td>1.107</td><td>0.0585</td></median>	48/129	<u></u> -	1.107	0.0585
≥Median (38.0)	52/176	i = 	0.685	0.0987
ALSAQ-5 total score at baseline				
<150	52/164	H = -1	0.266	0.5025
≥150	48/141	; H	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	56400		4 400	
<2 Years ≥2 Years	56/199 44/106		1.422 0.475	0.0025
Time since ALS diagnosis	44/106		0.475	0.3439
<1 Year	71 /225	i	1 122	0.0101
<1 Year ≥1 Year	71/225 29/80	- -	1.123 0.359	0.0101 0.5350
<6 Months	42/137		1.359	0.3330
≥6 Months	58/168	! = 1	0.566	0.1820
Pre-study rate of disease progression		•		37.525
(ALSFRS-R total score reduction per month)		÷		
1 st tertile \leq (0.3667)	32/110	<u>, ∔=</u>	0.389	0.4298
2 nd tertile > (0.3667) - (0.6673)	38/99	⊢=	0.987	0.0665
3 rd tertile (0.6673)	30/96	⊢ •−−1	1.733	0.0177
	-5		5	
	Favo Place		vors tment	
	Flace	ibo irea	tinent	

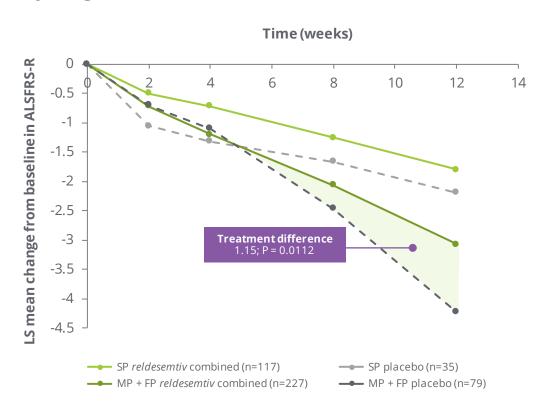
^{*}FORTITUDE-ALS did not achieve statistical significance, but patients on all dose groups of reldesemtiv declined less than patients on placebo



Post-Hoc Analyses Inform Potential Path Forward FORTITUDE 25

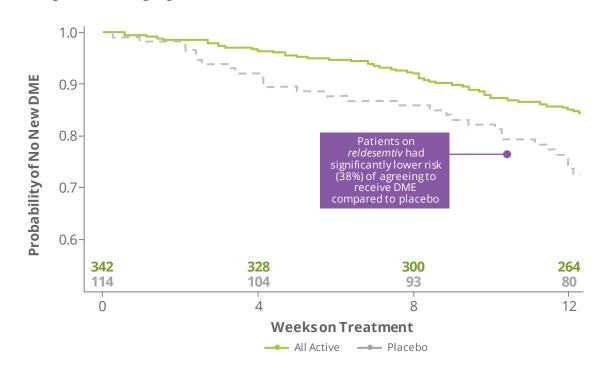


Change From Baseline in ALSFRS-R by Progressor Tertiles



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

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





Planned Phase 3 Clinical Trial Design



↑ Both In-Clinic & Remote

Trial to open for enrollment in 2021

Enrolling 555 patients with ALS in the US, Canada, **Australia** and **Europe evaluating** change from baseline ALSFRS-R at 24 weeks of treatment with reldesemtiv or placebo



↑ In-Clinic

↑ Remote



Reldesemtiv: Collaborations & Agreements



Astellas Collaboration

Cytokinetics has exclusive rights to *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

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

Astellas has funded **joint research program** with 15 Cytokinetics employees through 2020



Sarcomere Directed Therapies

CORPORATE PROFILE



Robust Pipeline, Solid Financial Position

Pipeline*

Positive trial readout in O4 2020

Pivotal trials in 2021

Potential FDA approvals by 2025 **Clinical stage** programs

Development programs by

Programs*

Omecamtiv mecarbil

Heart Failure

- Positive outcomes trial results from GALACTIC-HF
- o Phase 3 exercise capacity trial results 2H 2021



CK-136

o Phase 1

HCM

CK-274

o Phase 2 trial results from REDWOOD-HCM mid-year 2021

ALS

Reldesemtiv

Prepare for COURAGE-ALS, potential Phase 3 trial

Ongoing R&D

Additional research in muscle biology, energetics & metabolism

Foundations



Full time employees \$501M

At O4 2020

More than two years of cash runway



^{*} Timelines and milestones reflect Cytokinetics' current expectations and beliefs

Cytokinetics Financing History

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R&D

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Investors	
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Strategic
Partners
& Grants

_	Financing	Equity	& Milestones Reimbursemen	t 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
	-			
RTW/Ji Xing		\$50	\$110	\$160
Astellas		\$10	\$130 \$98	\$ \$238
Amgen		\$43	\$145 \$53	3 \$241
Royalty Pharma		\$10	\$90	- \$100
GSK		\$24	\$22 \$33	3 \$79
AstraZeneca		_	- \$2	2 \$2
MyoKardia		_	- \$2	2 \$2
Global Blood		_	- \$2	2 \$2
Grants (ALS Assoc/NINDS/other)		-	\$6	- \$6
		\$137	\$503 \$190	\$830

Capital raised: combination of strategic partners and investors



Upfront Cash, Option,

^{*}Net of fees and expenses, and Capped Call costs

Balance Sheet & Financial Guidance

Ended 2020 with > \$501M representing 2+ years of cash based on 2021 guidance

2020 Condensed Balance Sheet

As of 12/31/2020

	in millions
	Total
Cash and investments	\$501.0
Other assets	\$32.8
Total Assets	\$533.8
Debt	\$134.0
Liability related to sale of future royalties	\$166.1
Deferred Revenue	\$87.0
Other liabilities	\$33.3
Total Liabilities	\$420.4
Working capital	\$443.0
Accumulated deficit	(\$992.3)
Stockholders' equity	\$113.4
Wtd Avg Basic Shares Outstanding	64.5

2021 Financial Guidance

	in millions
	Total
Cash Revenue	\$23 - 28
Cash Operating Expenses	\$195 – 205
Net	~ \$160-170



Upcoming 2021 Milestones

Engage Regulatory Authorities for *Omecamtiv Mecarbil* in Q1 2021

Develop Go-To-Market Strategy and Launch Plan for *Omecamtiv Mecarbil* in 1H 2021

Expect to Complete Enrollment in METEORIC-HF in 1H 2021

Expect Results from REDWOOD-HCM in mid-2021 and expect to begin open label extension study in Q2 2021

Expect to Begin **Phase 3 Trial of CK-274** by Year End

Conduct Start-Up Activities for COURAGE-ALS, 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