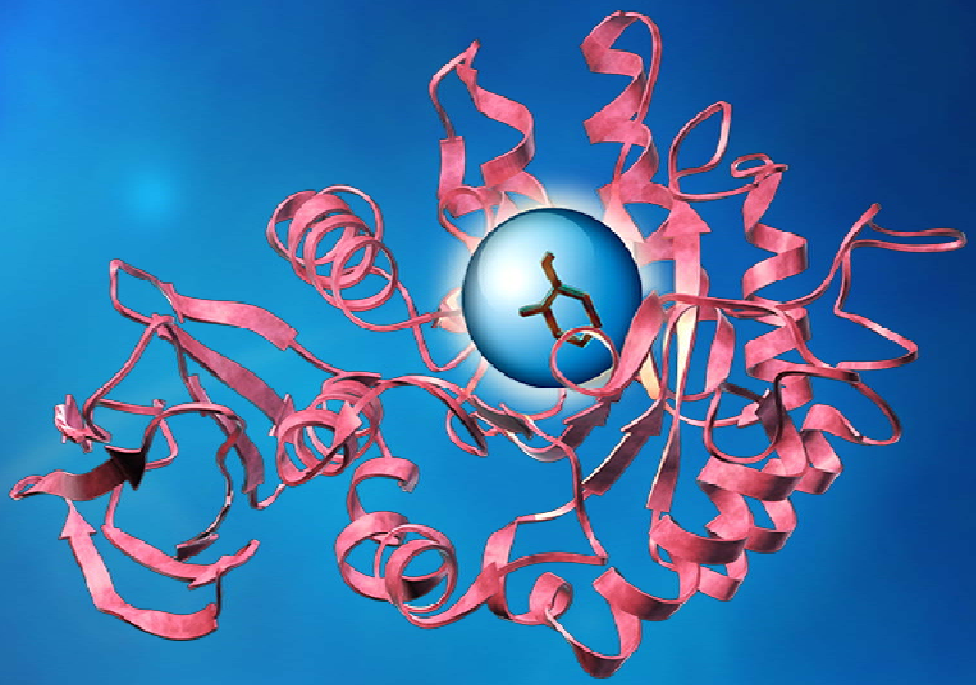
Amicus Therapeutics



33rd Annual J.P. Morgan Healthcare Conference

John F. Crowley, Chairman and CEO

January 13, 2015

at the forefront of therapies for rare and orphan diseases

Safe Harbor

This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 relating to business, operations and financial conditions of Amicus including but not limited to preclinical and clinical development of Amicus' candidate drug products, cash runway, and the timing and reporting of results from clinical trials evaluating Amicus' candidate drug products. Words such as, but not limited to, "look forward to," "believe," "expect," "anticipate," "estimate," "intend," "plan," "would," "should" and "could," and similar expressions or words, identify forward-looking statements. Although Amicus believes the expectations reflected in such forward-looking statements are based upon reasonable assumptions, there can be no assurance that its expectations will be realized. Actual results could differ materially from those projected in Amicus' forward-looking statements due to numerous known and unknown risks and uncertainties, including the "Risk Factors" described in our Annual Report on Form 10-K for the year ended December 31, 2013. All forward-looking statements are qualified in their entirety by this cautionary statement, and Amicus undertakes no obligation to revise or update this presentation to reflect events or circumstances after the date hereof.

Company Mission

Amicus Therapeutics is a biopharmaceutical company at the forefront of developing next-generation medicines to treat a range of rare and orphan diseases, with a focus on improved therapies for Lysosomal Storage Disorders

Amicus Therapeutics

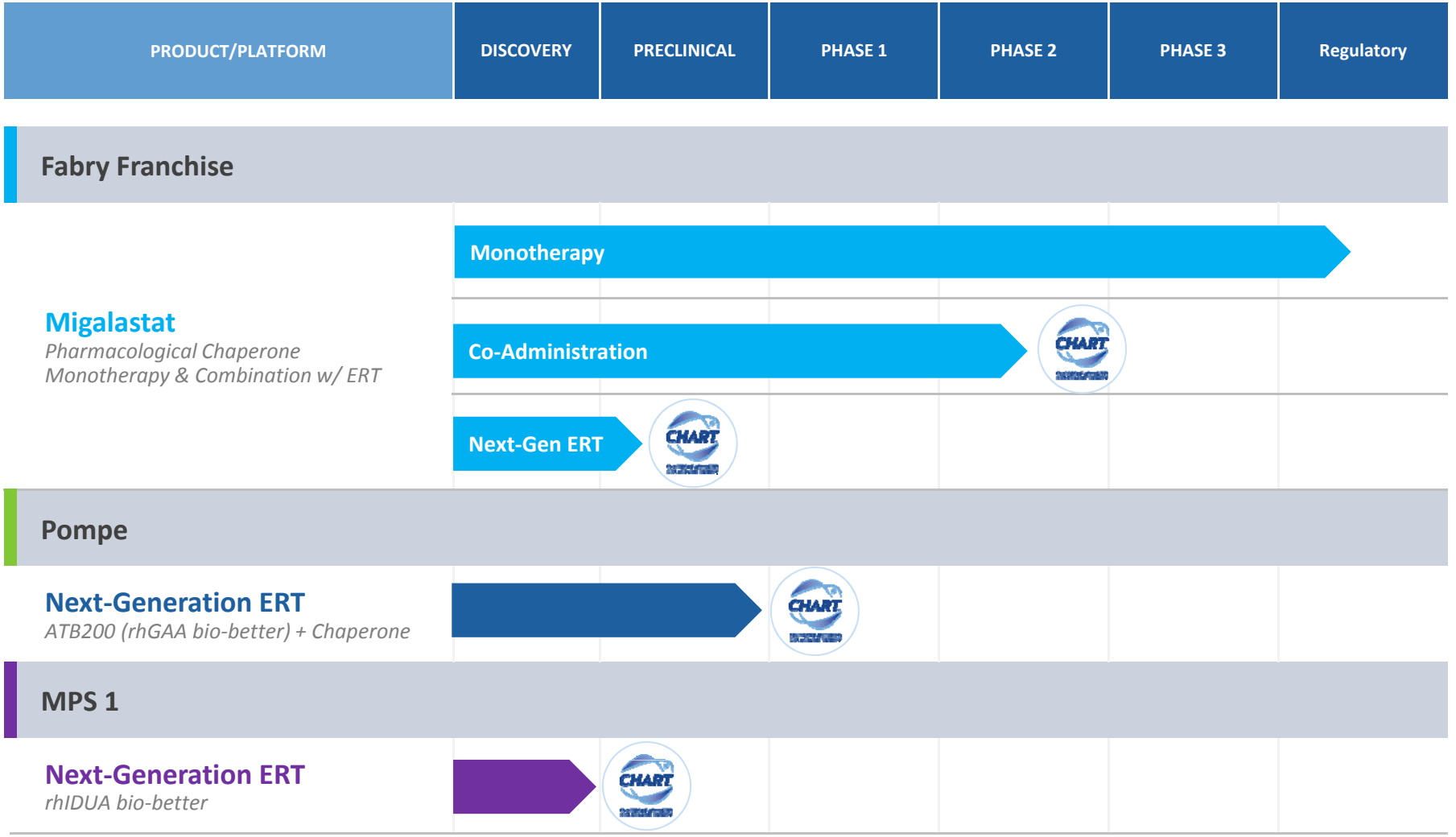
Amicus Value Proposition

Building a Leading Global Rare Disease Company to Transform Lysosomal Storage Disease (LSD) Treatment Paradigm

- Fabry franchise, led by novel pre-commercial asset for patients with amenable mutations
- Next-generation Pompe ERT to improve uptake and tolerability
- Multiple platform technologies to address current ERT limitations
- Financial strength to develop and deliver improved therapies to patients
- Experienced Leadership team

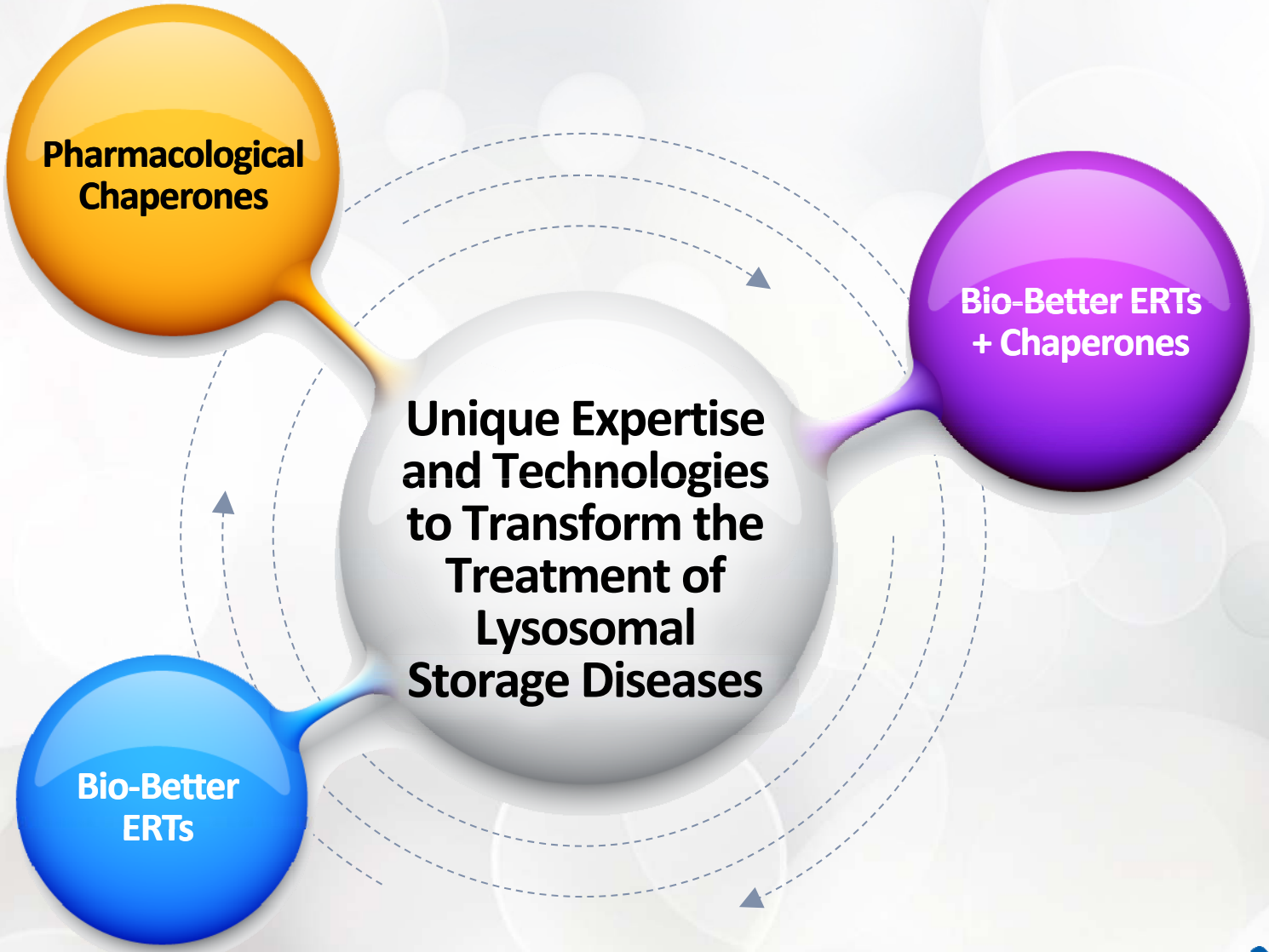
Amicus Therapeutics

Advanced Product Pipeline



Amicus Therapeutics

Amicus R&D Engine: Multiple Technology Platforms



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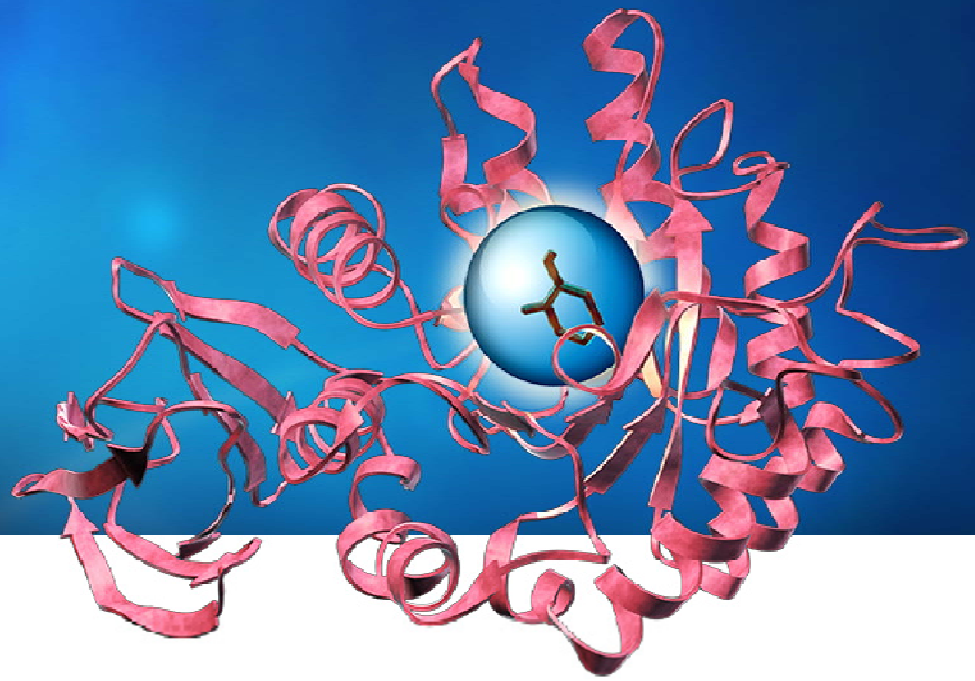
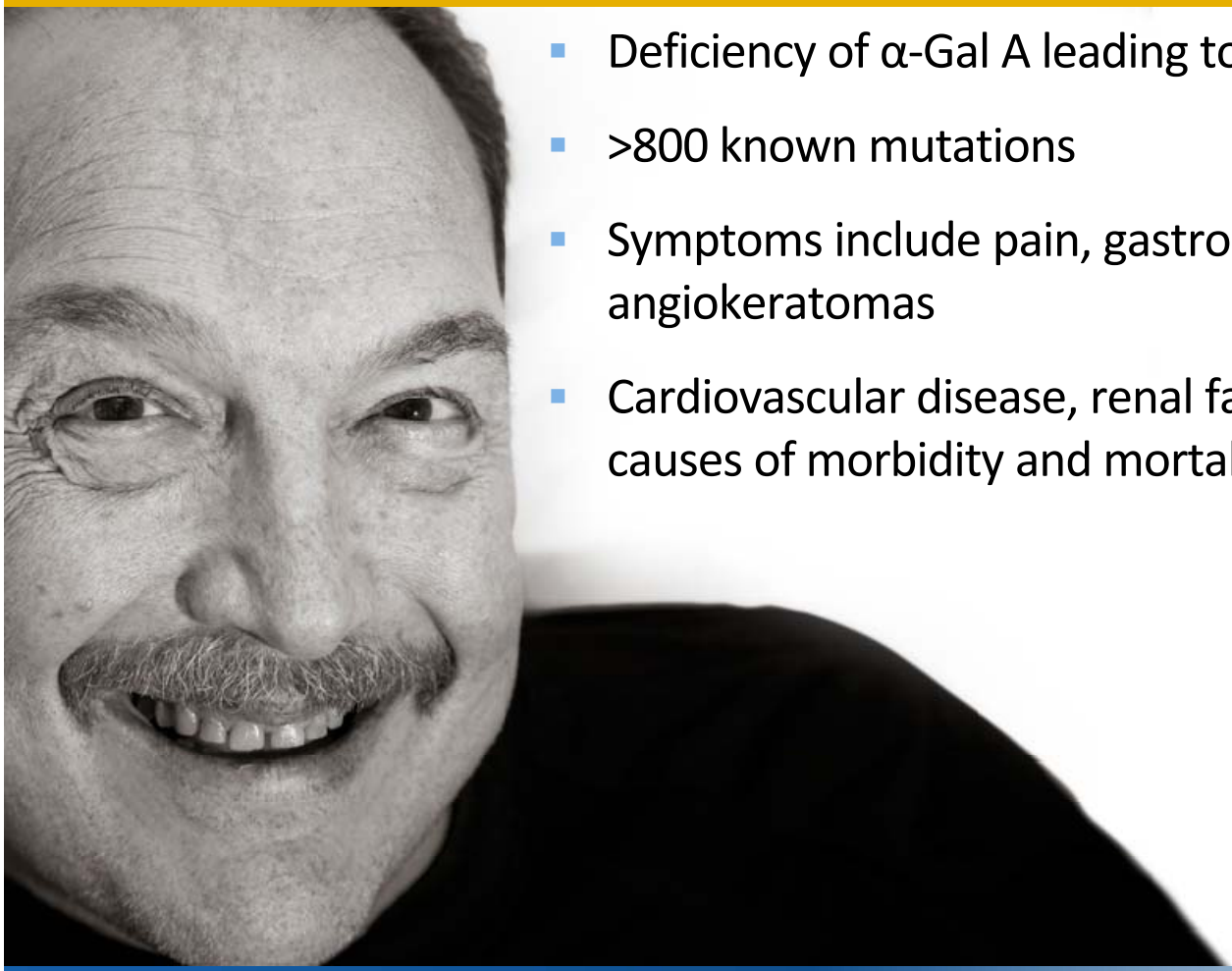


Fabry Franchise

Fabry Disease Overview

Fatal Lysosomal Storage Disease with Significant Unmet Needs Despite Existing Therapies



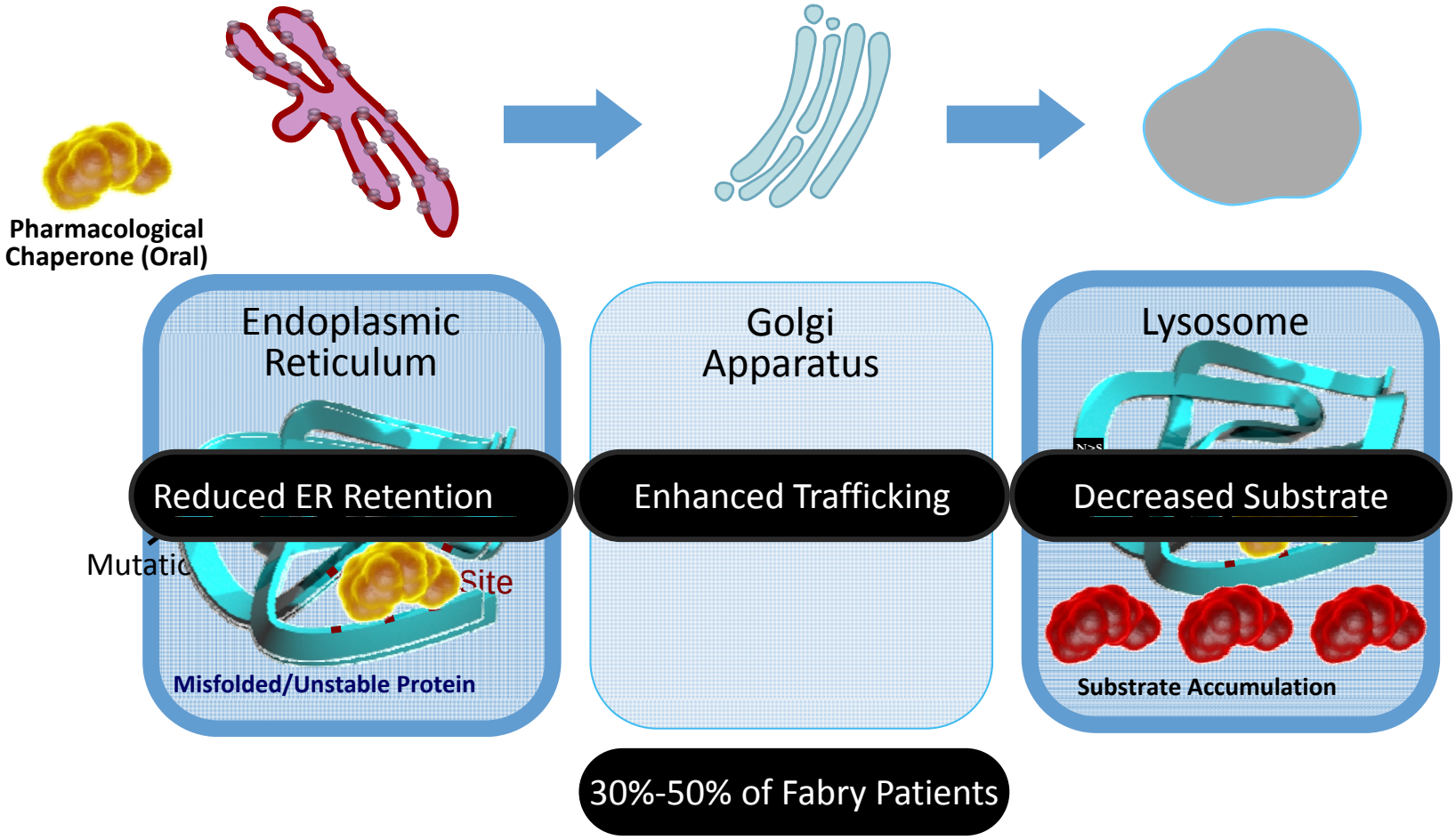
- Deficiency of α-Gal A leading to GL-3 accumulation
- >800 known mutations
- Symptoms include pain, gastrointestinal problems, angiokeratomas
- Cardiovascular disease, renal failure, and stroke are leading causes of morbidity and mortality

[1]Mehta 2009, [2]Waldek 2009, [3]Patel 2011, [4]Kampmann 2008, [5]Germain 2013

Amicus Therapeutics

Chaperone Monotherapy: Personalized Medicine Approach

Unique Mechanism of Action with Orally Bioavailable Small Molecule for Fabry Patients with Amenable Mutations



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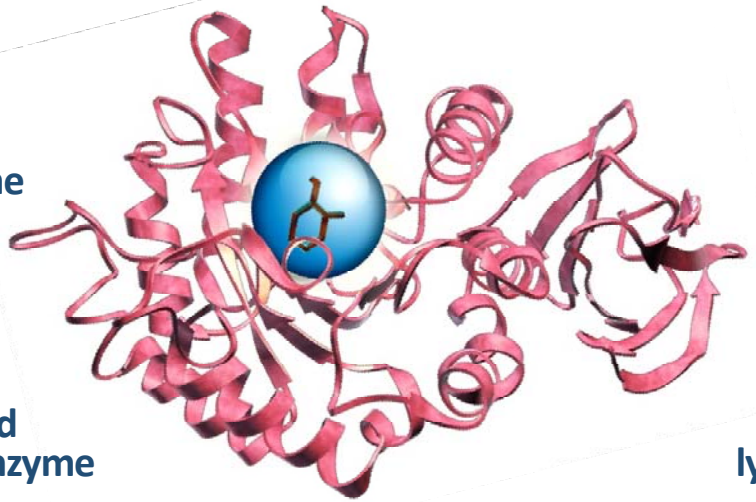
Fabry Franchise

Migalastat is Designed to Stabilize a Patient's Own Enzyme *or* an Infused ERT

Oral Monotherapy (Amenable Mutations)

Binds to and stabilizes endogenous mutant enzyme (α-Gal) in ER

Increases trafficking and lysosomal levels of active enzyme



Chaperone + ERT (Non-Amenable Mutations)

Binds to and stabilizes exogenous enzyme (ERT) in circulation

Increases tissue uptake and lysosomal levels of active enzyme

LOWERED SUBSTRATE

Amicus Therapeutics

Migalastat Monotherapy Experience for Fabry

91 Patients Today Take Migalastat as Only Therapy for Fabry Disease

Total patients who have ever taken migalastat:

143

Patients taking migalastat today as only therapy:

91

Total patient years of therapy:

411

Average retention rate into next study:

96%*

Maximum years on therapy:

9.0

Average Annual Compliance Rates:

>90%

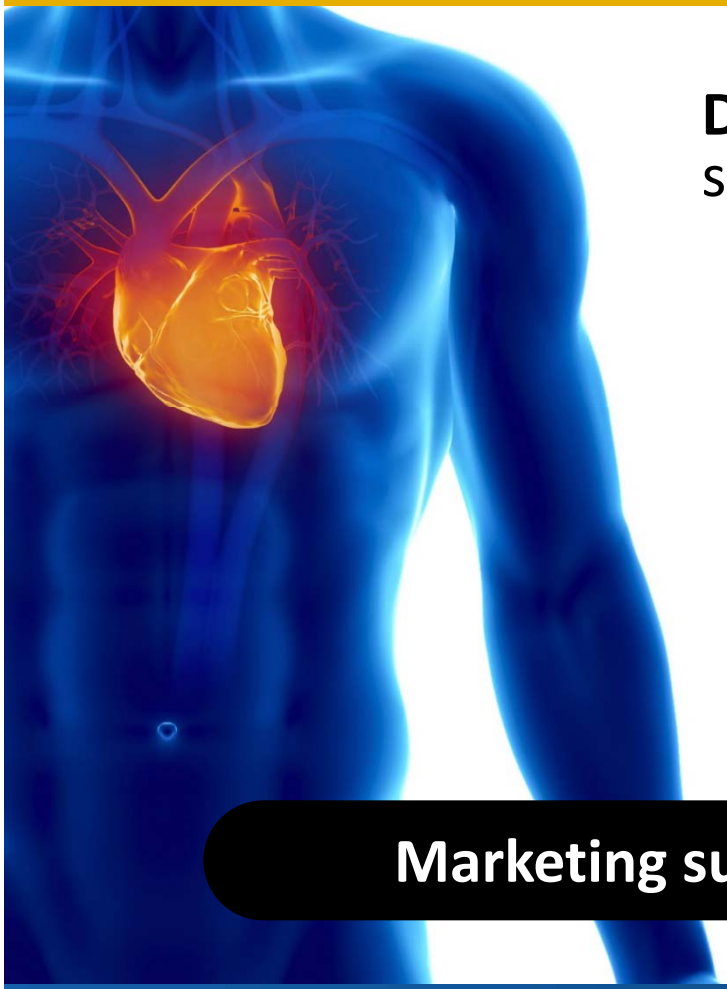
Information as of January 2015. All patients are receiving investigational drug, migalastat HCl, as part of ongoing clinical trials

*Retention defined as # of patients who completed a study and chose to enter extension, e.g., Study 011 12-mo into 24-mo extension

Amicus Therapeutics

Two Successful Global Registration Studies

Positive Results Support Global Approvals of Migalastat for Patients with Amenable Mutations



Data in ERT-naïve (Study 011) and ERT switch (Study 012) patients show:

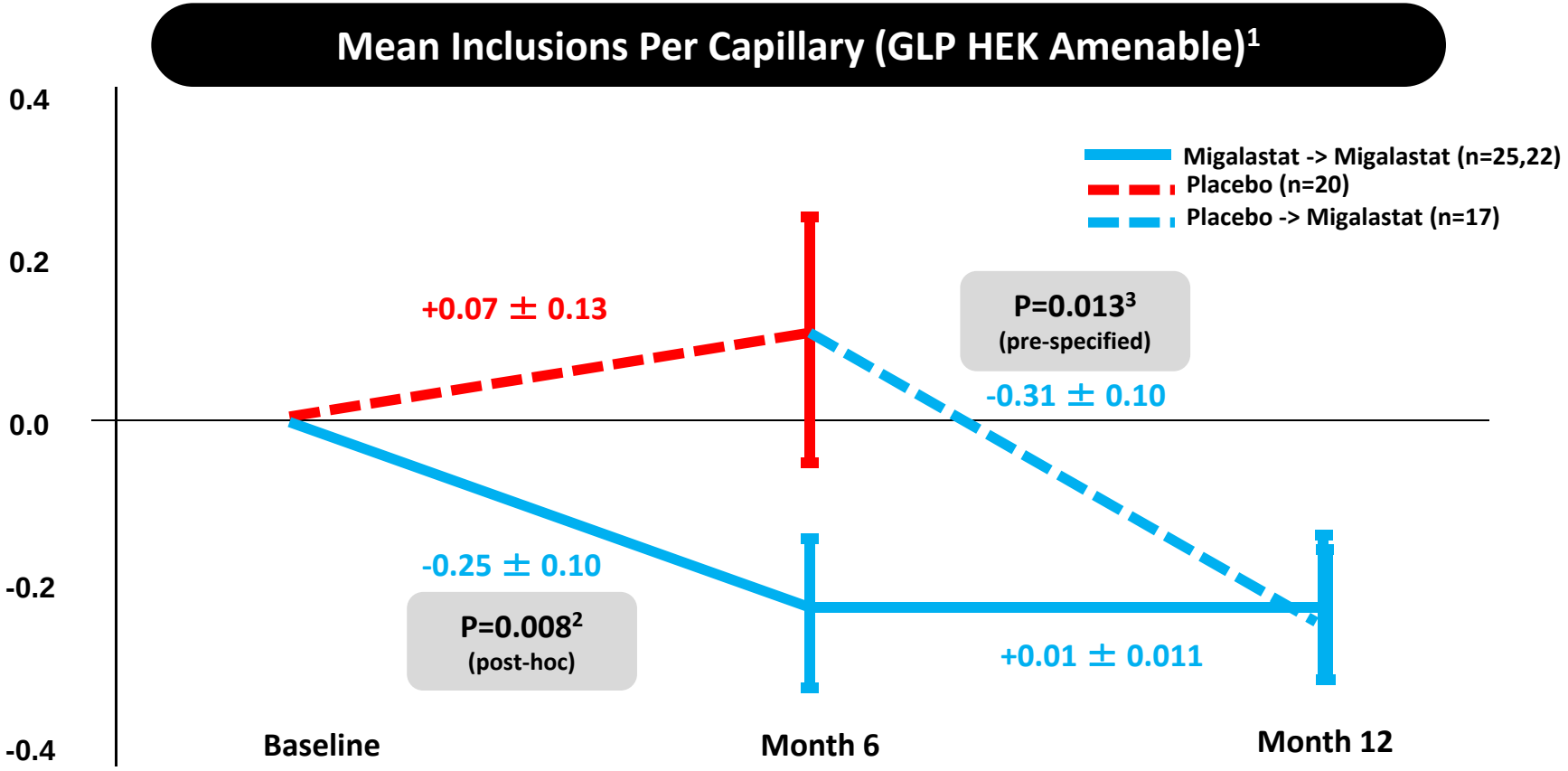
- Reduction in **disease substrate**
- Stability of **kidney function**
- Reduction in **cardiac mass** (LVMi)
- Generally **safe** and **well tolerated**

Marketing submissions planned in 2015

Amicus Therapeutics

Phase 3 (Study 011) Primary Efficacy Analysis

Statistically Significant Reduction in Disease Substrate (Kidney IC GL-3)*



*All patients with evaluable paired biopsies and amenable GLA mutations in GLP-validated HEK assay – post hoc at month 6 and pre-specified at month 12 [1]Data points are baseline corrected; represent mean ± standard error (SEM) change from baseline in the mean number of GL-3 inclusions per capillary after 6 months of treatment with migalastat or placebo. [2]Analysis of covariance (ANCOVA) model with covariate adjustment for baseline value and factors for treatment group and treatment by baseline interaction. P-value corresponding to least-square mean difference between migalastat and placebo is displayed. [3]MMRM Pbo change M6 to M12.

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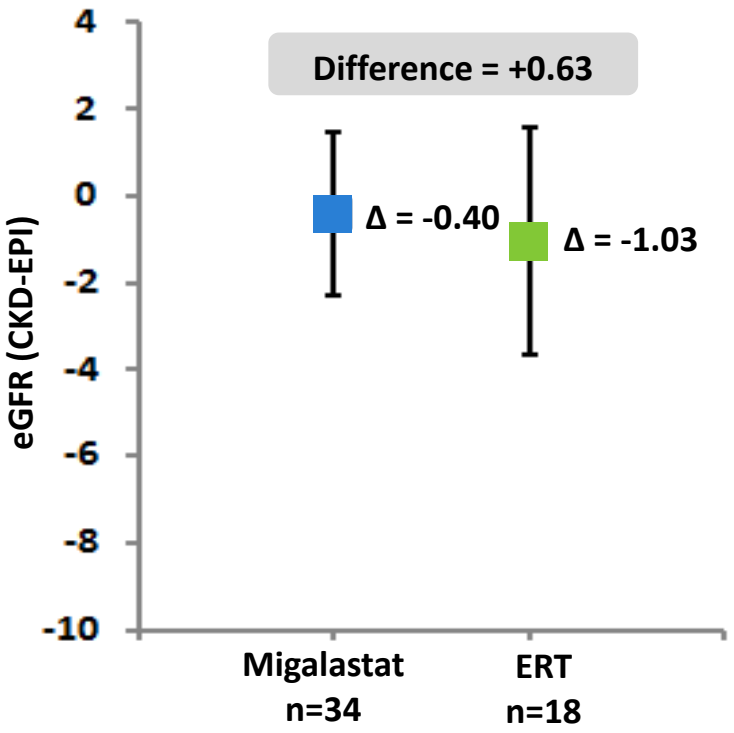
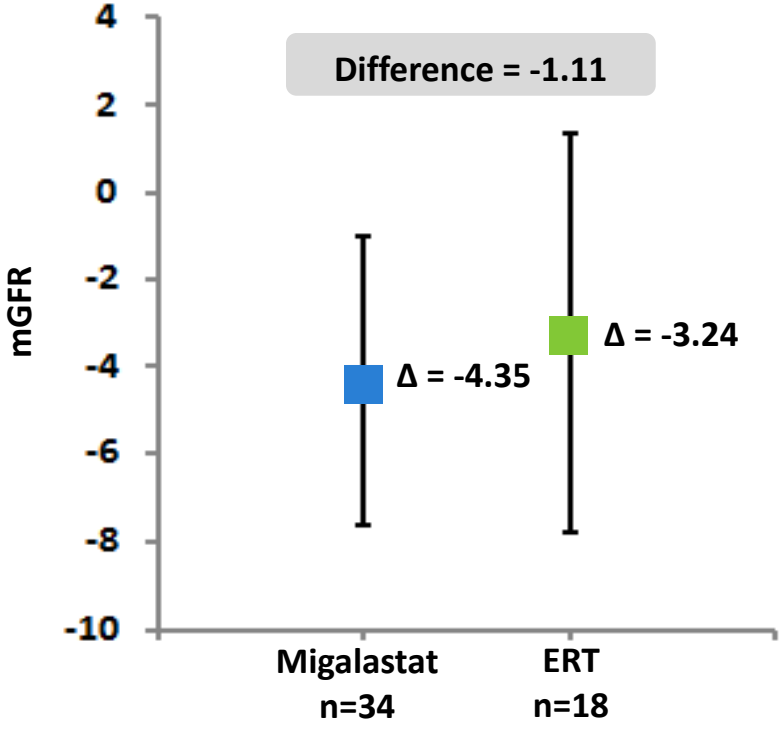
Phase 3 (Study 012) Primary Efficacy Analysis

Met Co-Primary Endpoints Showing Comparability of Kidney Function in Patients Switched from ERT to Migalastat

Annualized Rate of Change in eGFR and mGFR at Month 18 (ml/min/1.73 m^2)





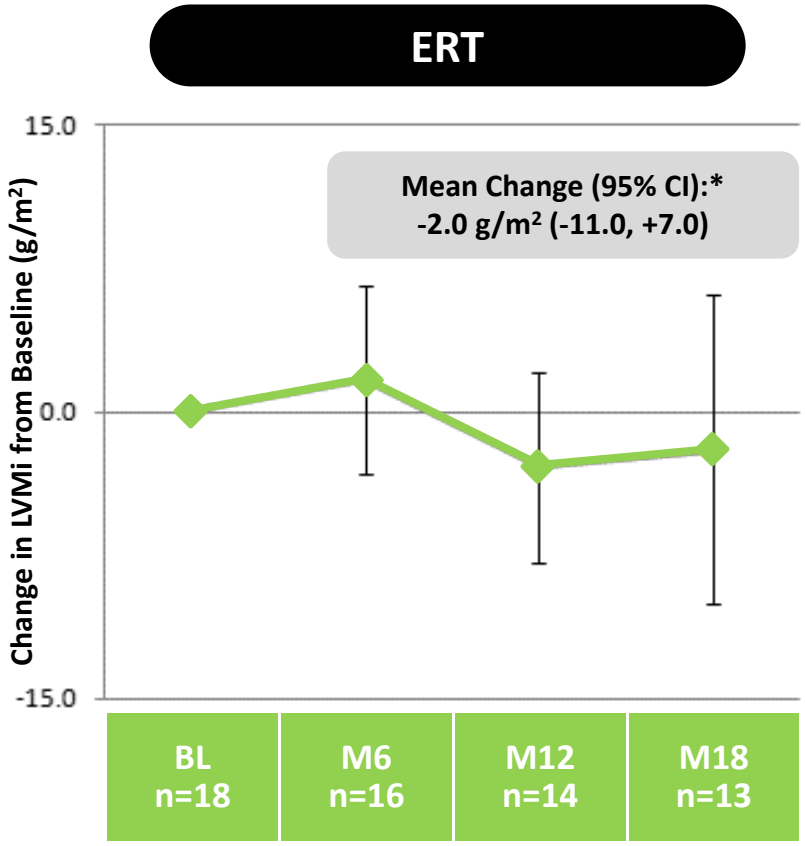
[1] **ANCOVA** model [mITT]. Data represent LS means and 95% confidence intervals

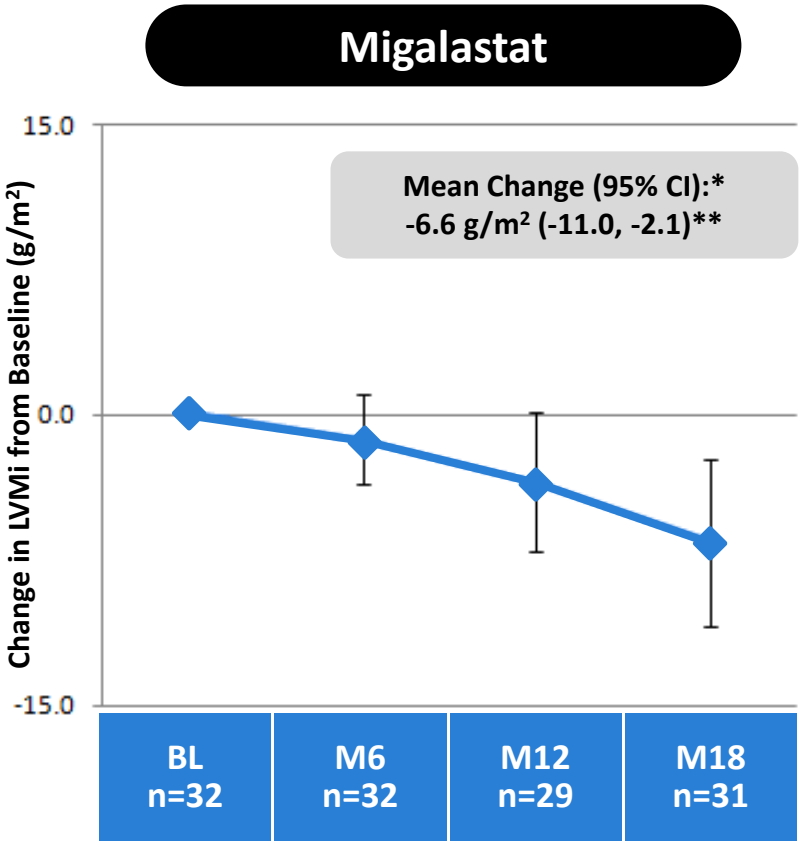
Amicus Therapeutics

(Previously Reported)

Phase 3 (Study 012) Cardiac Data

Reductions in LVMi Observed in Patients Switched from ERT Through Month 18 *





*Mean change to month 18 (mITT; amenable mutations) **Statistically significant (95% CI does not overlap zero)

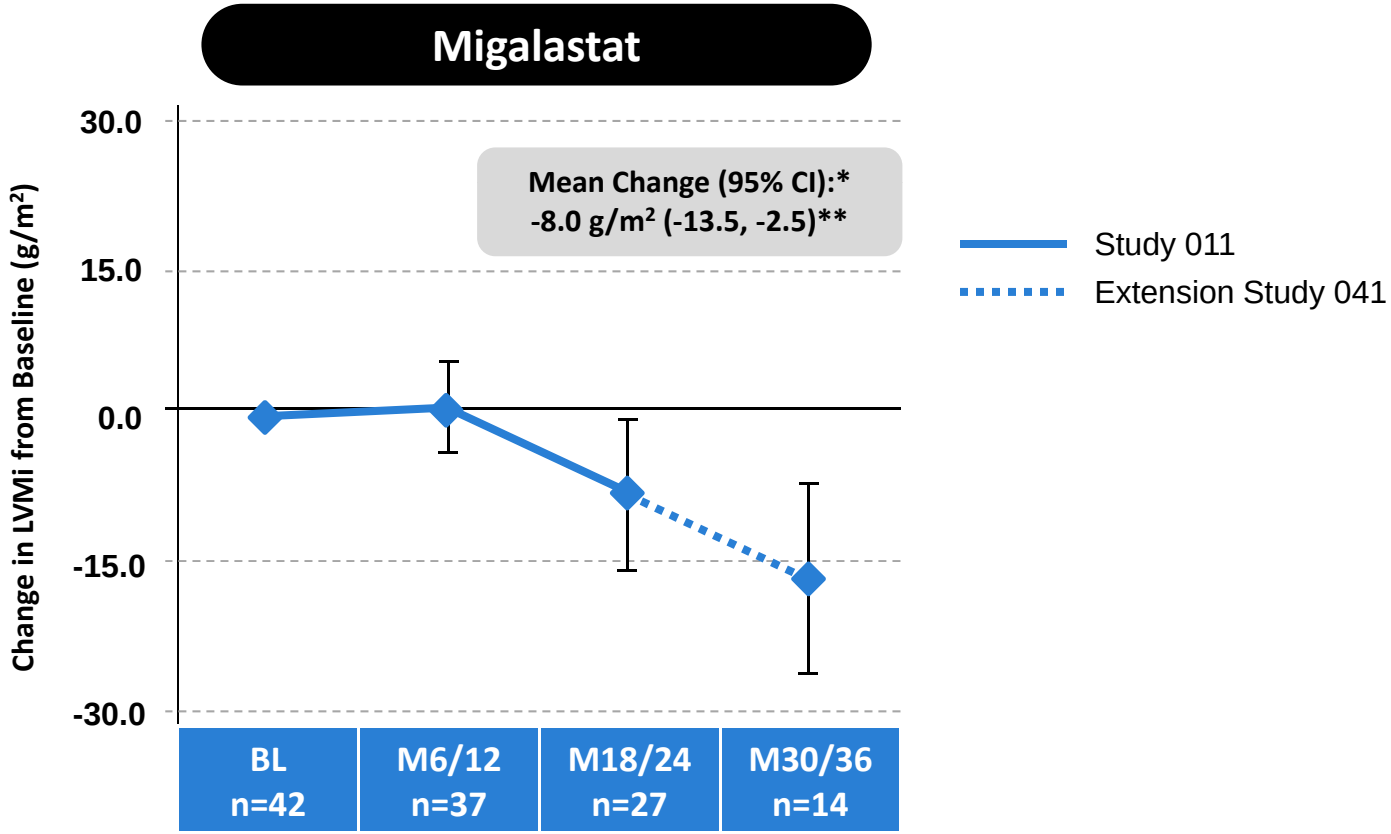
Note: Mean and 95% confidence intervals on change from baseline are plotted

Amicus Therapeutics

(NEW Data)

Phase 3 (Study 011+041) Cardiac Data

New Data Show Migalastat Has Persistent and Increasing Positive Effect on LVMi Over Longer Periods of Time (Up to 36 Months)



*Mean change to last available time point (average 22 months) in all patients with amenable mutations with baseline and post-baseline values.
**Statistically significant (95% CI does not overlap zero)
Sample size differences due to subjects not yet reaching a given timepoint or due to missing Echos

Note: Mean and 95% confidence intervals on change from baseline are plotted

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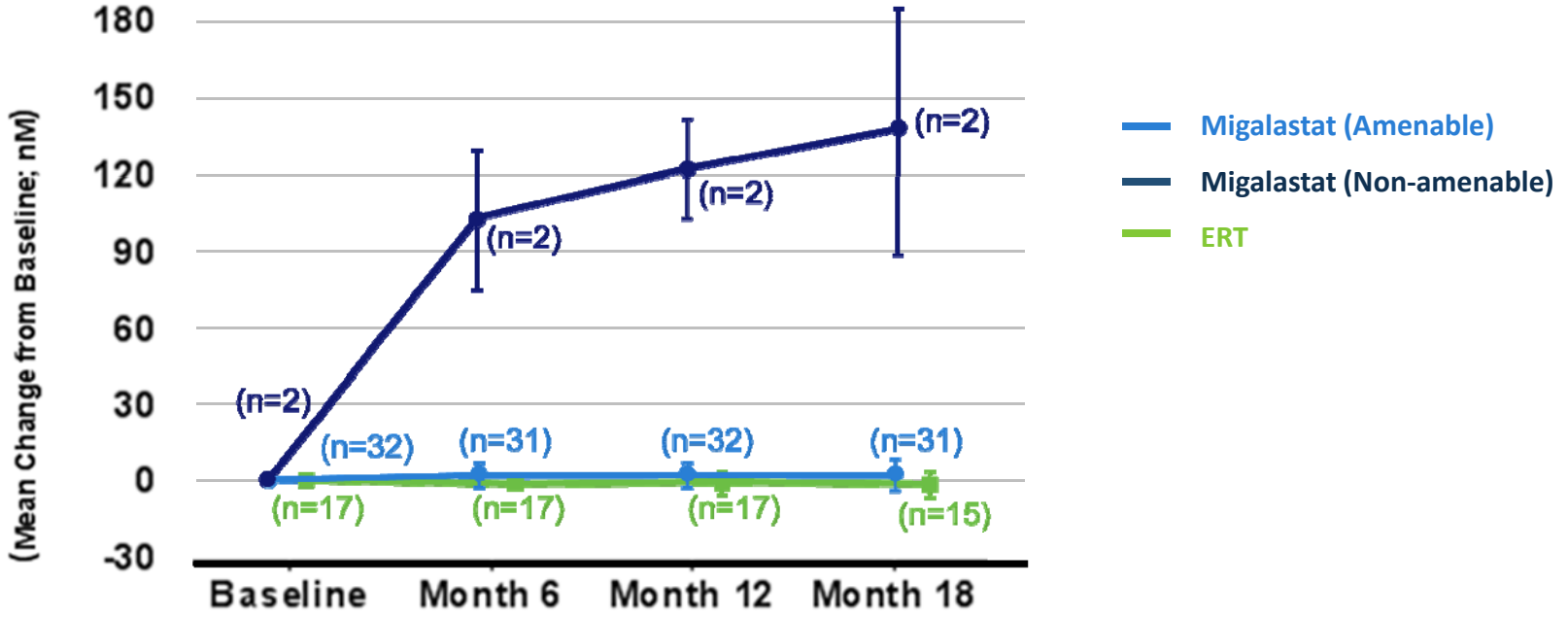
Phase 3 Validation of Personalized Medicine Approach

Lyso-Gb3 Data Validate Pharmacogenetic Approach to Identify Patients Who Respond to Migalastat

Plasma Lyso-GB3 in Study 012[1]



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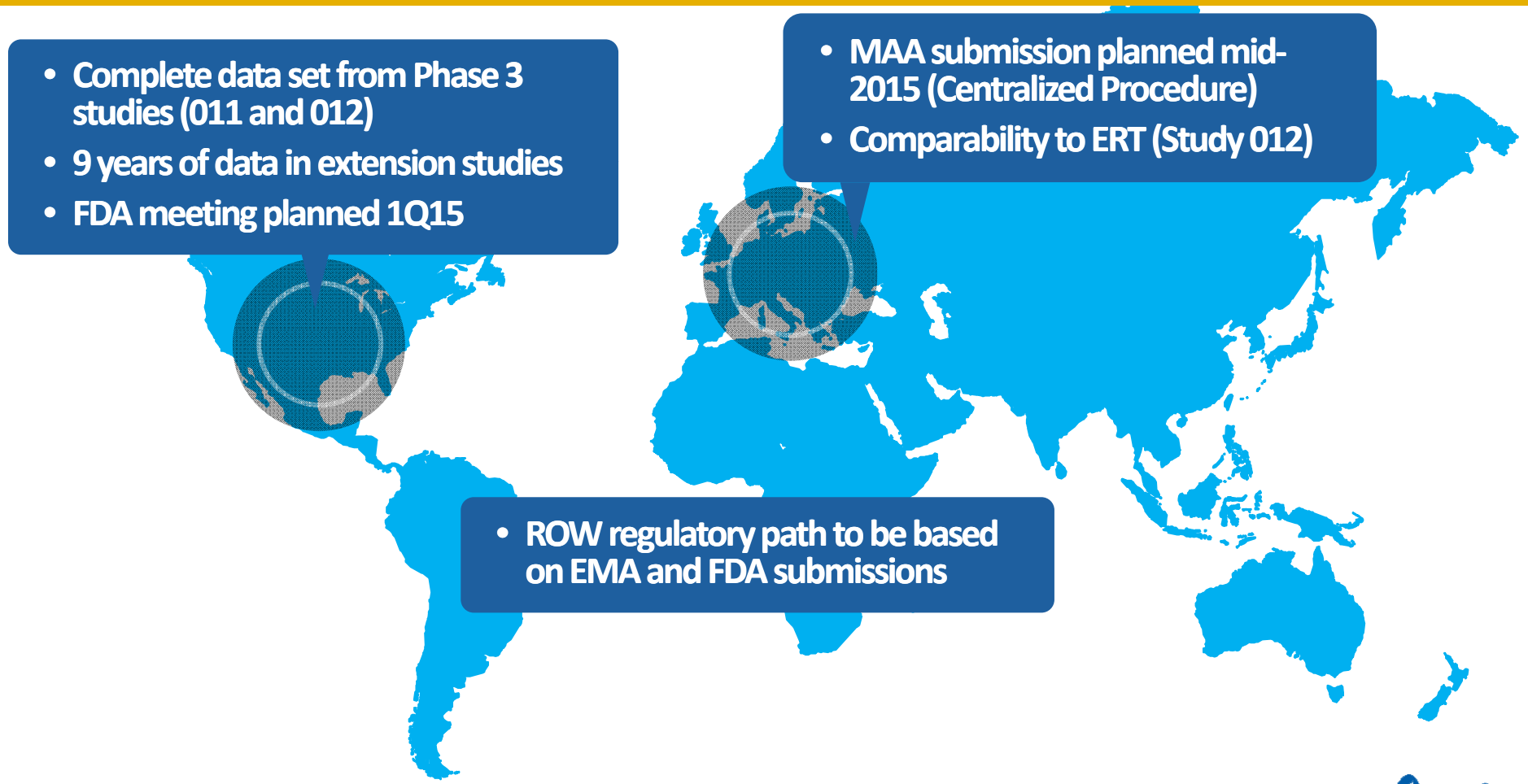
Global Regulatory Strategy

MAA Submission on Track for Mid-2015
FDA Meeting Planned 1Q15 to Discuss Fastest Path to NDA Submission

- Complete data set from Phase 3 studies (011 and 012)
- 9 years of data in extension studies
- FDA meeting planned 1Q15

- MAA submission planned mid-2015 (Centralized Procedure)
- Comparability to ERT (Study 012)



- ROW regulatory path to be based on EMA and FDA submissions

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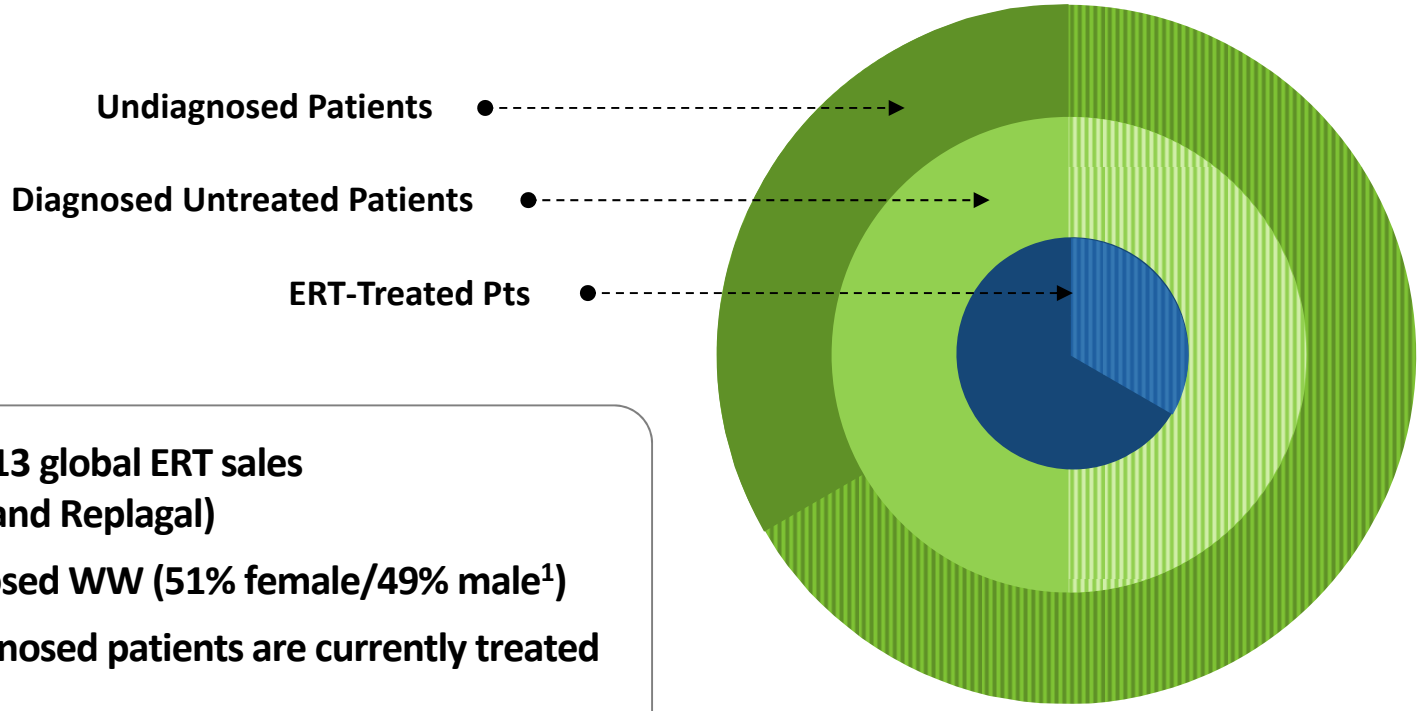
Fabry Commercial Opportunity

Significant Commercial Opportunity with Large and Growing ~$1B Market Today



- $993M in FY13 global ERT sales (Fabrazyme and Replagal)
- 5-10K diagnosed WW (51% female/49% male[1])
- <50% of diagnosed patients are currently treated with ERT
- 30-50% of Fabry patients with amenable mutations

[1]Fabry Registry 2011;

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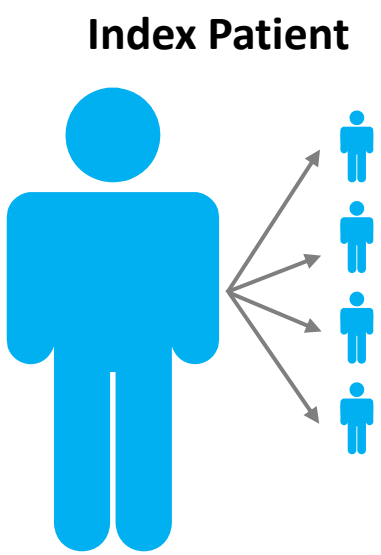
Significant Underdiagnosis of Fabry Disease

Large Number of Patients Identified Through Newborn Screening Suggests Fabry Could Be One of the More Prevalent Human Genetic Diseases

Newborn Screening Study	# Newborns Screened	# Confirmed Fabry Mutations	% Amenable
Burton, 2012, US	8,012	7 [1: ~1100]	TBD
Mechtler, 2011, Austria	34,736	9 [1: ~3,800]	100%
Hwu, 2009, Taiwan	171,977	75 [1: ~2300]	75%
Spada, 2006, Italy	37,104	12 [1: ~3100]	86%
Historic published incidence		**1:40,000 to 1:60,000**	



Majority of Newly Diagnosed Patients Have Amenable Mutations

Burton, **LDN WORLD Symposium,** 2012 Feb.
Mechtler *et al.,* **The Lancet**, 2011 Dec.
Hwu *et al.,* **Hum Mutation**, 2009 Jun
Spada *et al.,* **Am J Human Genet.**, 2006 Jul

Fabry Franchise Strategy

Our Vision is to Develop Next Generation Therapies for All Fabry Patients

Product	Novel small molecule chaperone	Chaperone + marketed ERT; label-expansion	Chaperone + next-generation ERT
Advantages	Oral therapy, broad tissue distribution	Stabilized ERT for better targeting and tissue uptake	Optimized and stabilized ERT for max tissue uptake
2015 Milestones	EU and US marketing applications	Ph 2/3 study start	Cell line optimization

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Key Milestones – Fabry Franchise

Timing	Milestone	
1Q15	Additional 011 and Phase 2 extension data	✓
1Q15	**Scientific Presentations at LDN WORLD**	
1Q15	**FDA Regulatory Interaction**	
Mid-2015	**MAA Submission**	
2H15	**Phase 2 Co-Administration Study Initiation**	
2H15	**Internal Development of Next-Gen ERT Cell Line**	

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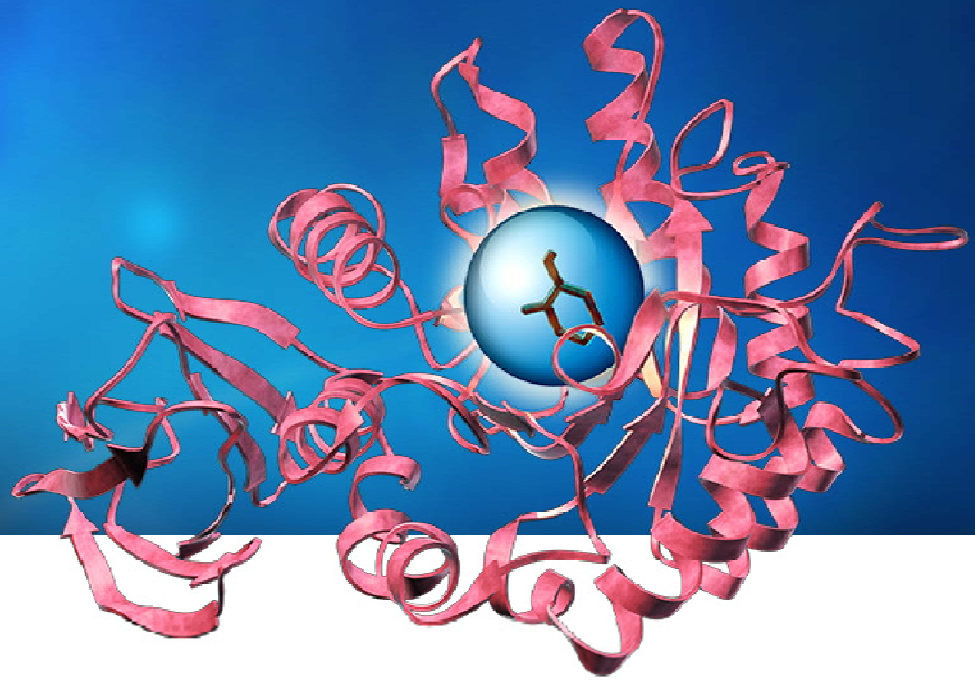
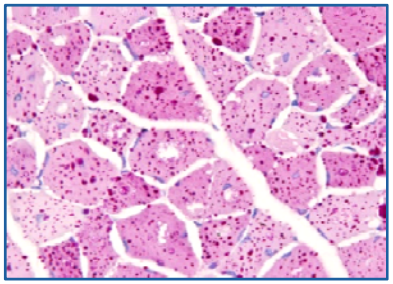


Next-Generation ERT for Pompe Disease

Pompe Disease Overview

Severe, Fatal, Progressive Neuromuscular Disease with Significant Unmet Need Despite Availability of ERT

- Deficiency of GAA leading to glycogen accumulation
- Age of onset ranges from infancy to adulthood
- Symptoms include muscle weakness, respiratory failure and cardiomyopathy
- Respiratory and cardiac failure are leading causes of morbidity and mortality
- Incidence 1:28,000[1]

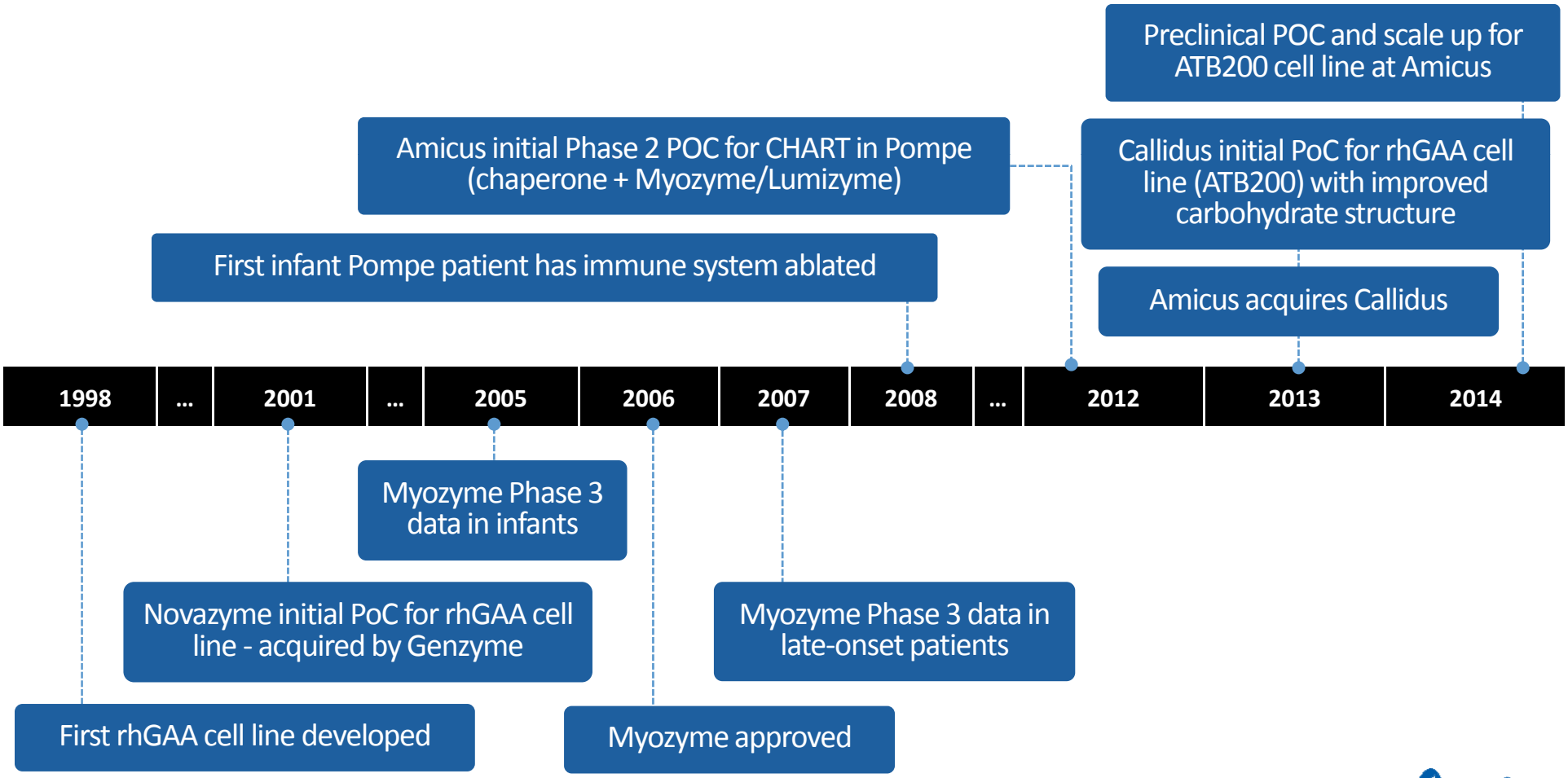


Elevated Glycogen in Muscle

[1]Evidence Report – Newborn Screening for Pompe Disease – June 2013 – HRSA.gov

Select Milestones in Pompe Drug Development

A Decade After Initial Clinical Studies of Myozyme, Researchers Still Working to Develop Next-Generation Treatment for Pompe Patients



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Current Pompe ERT Limitations

Significant Unmet Needs Remain Due to Limitations of First-Generation Pompe ERT

"…Biologic drugs, including enzyme-replacement therapies, can elicit anti-drug Abs (ADA) that may interfere with drug efficacy and impact patient safety." (Journal of Immun. 2014)

"…recurrent injections of rhGAA during ERT can elicit high titer antibody formation against GAA; this reduces the efficacy of ERT and may prompt infusion associated reactions (IAR) that may be life-threatening." (Doerfler, et al. WORLD 2014)

Pediatric RESEARCH

"All 18 patients who enrolled in the initial [infantile-onset Pompe] study survived significantly longer and with fewer ventilation events … However, morbidity and mortality remain substantial, with a 28% mortality rate and a 51% invasive ventilation rate at age 36 months." (Kishnani, *et al.* 2009)

The NEW ENGLAND JOURNAL of MEDICINE

"…14% of pts on [Lumizyme] treatment have declining 6-minute walk test and 36% have declining forced vital capacity." (van der Ploeg, et al. 2010)

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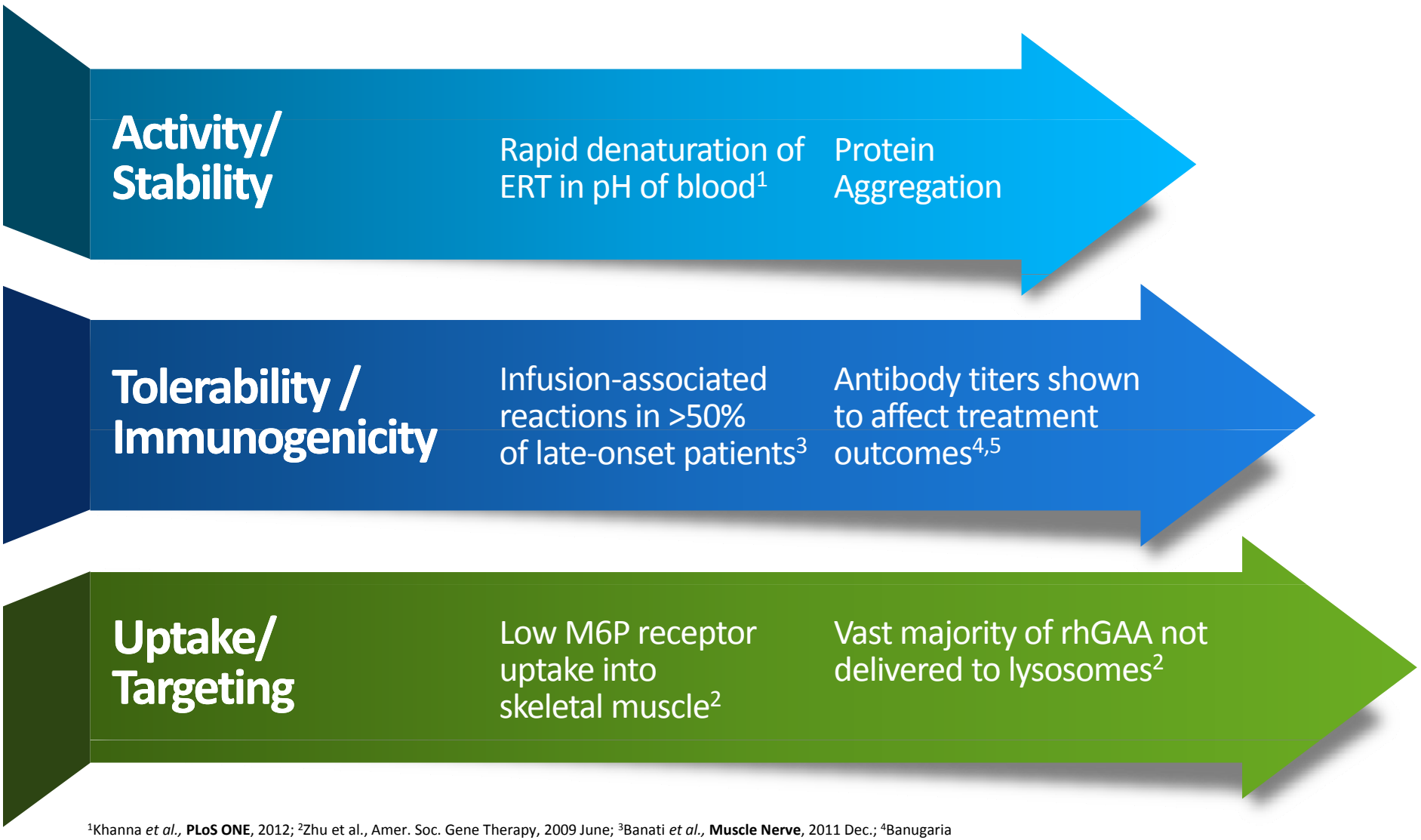
Three Challenges with Pompe ERT Today



[1]Khanna *et al.,* **PLoS ONE**, 2012; [2]Zhu et al., Amer. Soc. Gene Therapy, 2009 June; [3]Banati *et al.,* **Muscle Nerve**, 2011 Dec.; [4]Banugaria *et al.*, **Gen. Med.,** 2011 Aug.; [5]de Vries *et al.,* **Mol Genet Metab**., 2010 Dec.

Amicus Therapeutics

Amicus Biologics Platform Technologies

Multiple Complementary Amicus Platform Technologies Address The Challenges with Existing ERTs Today

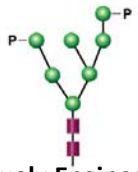
Activity/ Stability

CHART
CHAPERONE-ADVANCED REPLACEMENT THERAPY

Tolerability / Immunogenicity

CHART
CHAPERONE-ADVANCED REPLACEMENT THERAPY

Uptake/ Targeting



Uniquely Engineered rhGAA
Optimized M6P & Carbohydrates

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Human Proof-of-Concept: Currently Marketed ERT + Chaperone

Investigator-Initiated Study Demonstrates Profound Effect of Chaperone Co-Administered with Pompe ERT

Two Pompe patients could not tolerate ERT infusions

Investigator re-initiated ERT with oral co-administration of pharmacological chaperone

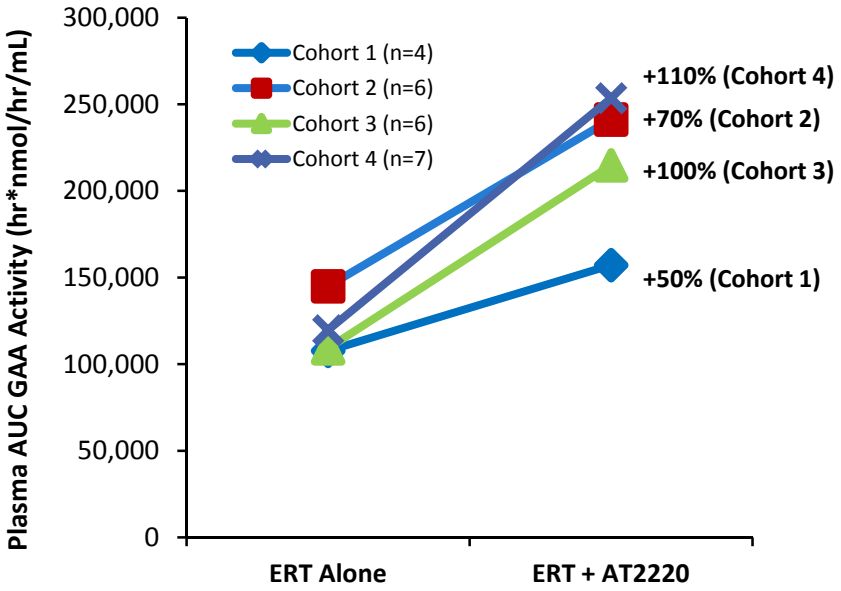
The two Pompe patients now able to fully tolerate ERTs

Amicus Therapeutics

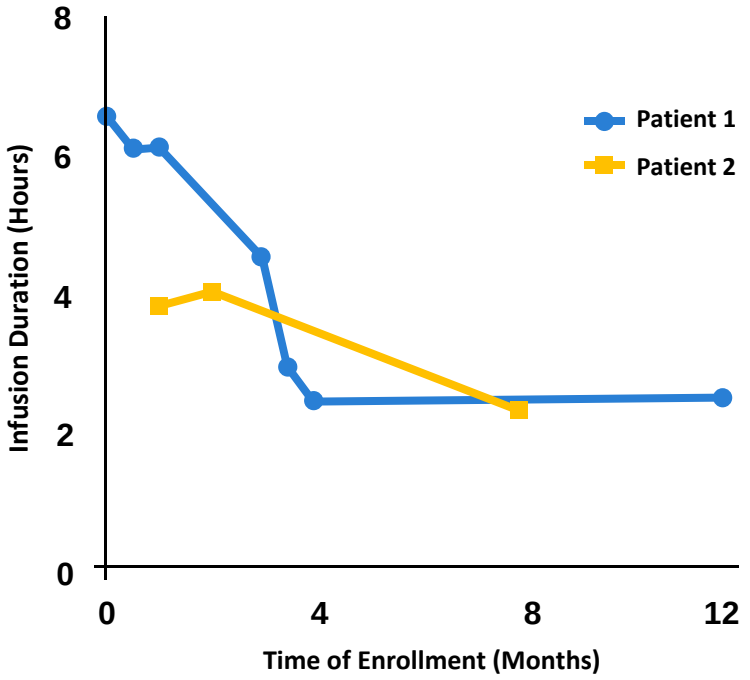
Human Proof-of-Concept: Currently Marketed ERT + Chaperones

ERT Activity Increased and Infusion Time Decreased with Chaperones*

Amicus Phase 2 Study 010: Enzyme Activity[1]



Investigator-Initiated Study: Infusion Time[2]



[1]Kishnani, et al., LDN WORLD 2013
[2]Doerfler, et al. WORLD 2014
*Cohort 1 (AT2220 50 mg) muscle GAA activity not shown; 50 mg dose did not demonstrate meaningful change in tissue uptake (muscle)

Amicus Therapeutics

Amicus Biologics Capabilities

ATB200 Successfully Manufactured at Clinical Scale While Maintaining Optimized Carbohydrate Structure

- Cell line scaled to 250 L
- 2 engineering batches completed in 2014
- IND-enabling tox underway

Amicus Pompe ERT: Highly Differentiated Approach

Amicus to advance ATB200 + Chaperone into Phase 2 in 2015
Potential Solution for Key ERT Limitations

Pompe ERT Challenges	IGF2-GAA	Neo-GAA	ATB200 + Chaperone
Stability & Activity			✓ (Chaperone)
Targeting & Uptake	✓ (IGF2 Tag)	✓ (M6P)	✓✓ (M6P, Chaperone)
Tolerability & Immunogenicity			✓ (Chaperone)
Development Stage	Phase 3	Phase 1	Late Preclinical

✓ = May address

Amicus Therapeutics

Pompe: Multiple Milestones to Clinic

Timing	Milestone
1Q15	Initiate GMP Batch
3Q15	Tox Studies
Mid-2015	Pre-IND Meeting
2H15	Phase 1/2 study initiation

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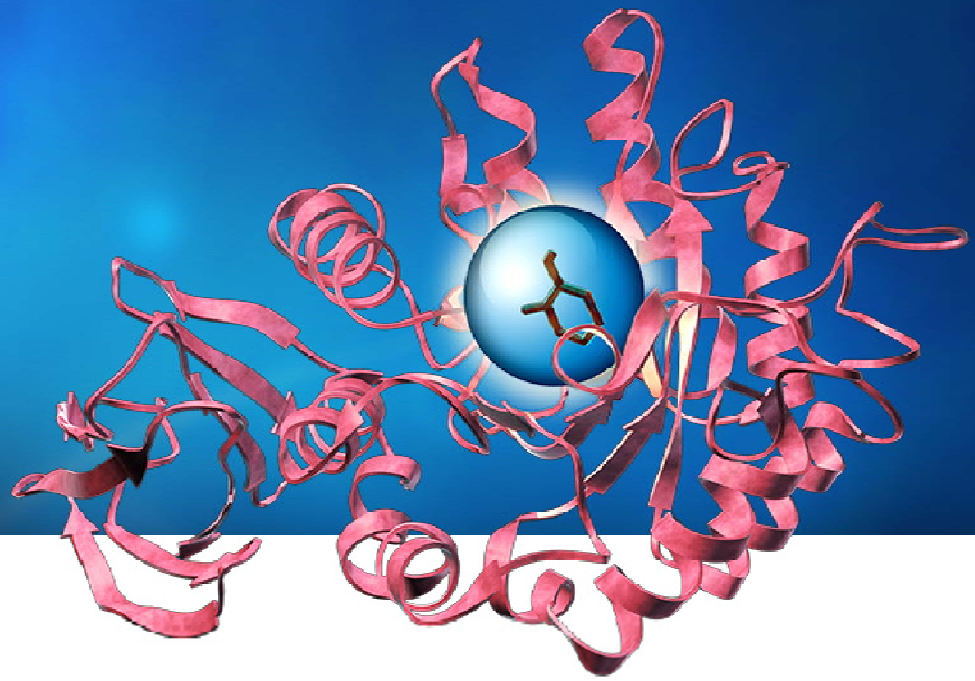

Financial Summary

Financial Summary

Strong Balance Sheet to Fund Operations into 2017

Financial Position	**Dec. 31, 2014**
Cash:	$169.1M
2015 Net Cash Spend Guidance:	$73M-83M
Capitalization	
Shares Outstanding:	95,556,277

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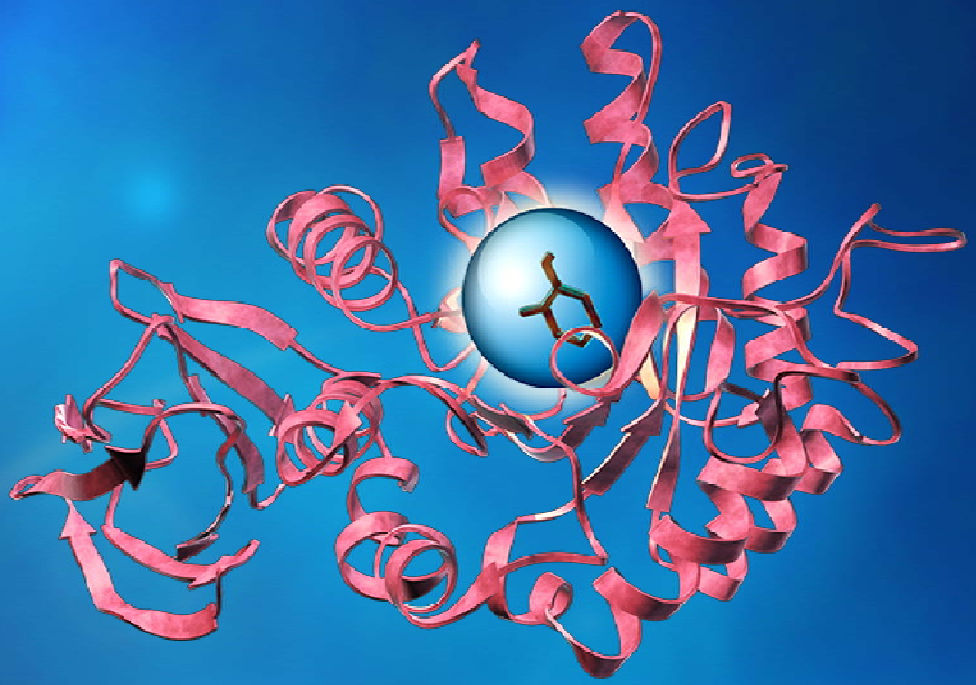

33rd Annual J.P. Morgan Healthcare Conference

John F. Crowley, Chairman and CEO

January 13, 2015

at the forefront of therapies for rare and orphan diseases