



# *Barclays Global Healthcare Conference 2018*



**Bradley Campbell, President and Chief Operating Officer**

**March 15, 2018**

# Safe Harbor

*This presentation contains "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995 relating to preclinical and clinical development of our product candidates, the timing and reporting of results from preclinical studies and clinical trials, the prospects and timing of the potential regulatory approval of our product candidates, commercialization plans, manufacturing and supply plans, financing plans, and the projected revenues and cash position for the Company. The inclusion of forward-looking statements should not be regarded as a representation by us that any of our plans will be achieved. Any or all of the forward-looking statements in this presentation may turn out to be wrong and can be affected by inaccurate assumptions we might make or by known or unknown risks and uncertainties. For example, with respect to statements regarding the goals, progress, timing, and outcomes of discussions with regulatory authorities, and in particular the potential goals, progress, timing, and results of preclinical studies and clinical trials, actual results may differ materially from those set forth in this release due to the risks and uncertainties inherent in our business, including, without limitation: the potential that results of clinical or preclinical studies indicate that the product candidates are unsafe or ineffective; the potential that it may be difficult to enroll patients in our clinical trials; the potential that regulatory authorities, including the FDA, EMA, and PMDA, may not grant or may delay approval for our product candidates; the potential that we may not be successful in commercializing Galafold in Europe and other geographies or our other product candidates if and when approved; the potential that preclinical and clinical studies could be delayed because we identify serious side effects or other safety issues; the potential that we may not be able to manufacture or supply sufficient clinical or commercial products; and the potential that we will need additional funding to complete all of our studies and manufacturing. Further, the results of earlier preclinical studies and/or clinical trials may not be predictive of future results. With respect to statements regarding projections of the Company's revenue and cash position, actual results may differ based on market factors and the Company's ability to execute its operational and budget plans. In addition, all forward-looking statements are subject to other risks detailed in our Annual Report on Form 10-K for the year ended December 31, 2017 filed March 1, 2018. You are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date hereof. All forward-looking statements are qualified in their entirety by this cautionary statement, and we undertake no obligation to revise or update this presentation to reflect events or circumstances after the date hereof.*

# Amicus Founding Beliefs

## WE BELIEVE...

**In the Fight to Remain  
at the Forefront of  
Therapies for Rare and  
Orphan Diseases**

- We seek to deliver the highest quality therapies for persons living with these diseases
- We support the disease communities - and their families
- We are passionate about what we do
- We encourage and embrace constant innovation
- We have a duty to obsolete our own technologies
- We push ideas as far and as fast as possible
- We take smart risks
- We work hard
- We keep asking the tough questions
- We will never be constrained by prior thinking
- We learn from our mistakes
- We think differently - very differently

## WE BELIEVE...

**In Our Future to Build  
Long-term Value for  
Our Stakeholders**

- We are all owners of this business
- We are business led and science driven
- Maximizing value for our shareholders is the foundation of our future successes
- Our medicines must be fairly priced and broadly accessible
- We build strategic partnerships
- We will not lie, cheat or steal
- We take full responsibility for our actions

## WE BELIEVE...

**In Each Other to  
Foster Teamwork and  
Respect for Each  
Individual's  
Contribution**

- Our passion for making a difference unites us
- Diversity of experience and thought is essential
- We communicate openly, honestly and respectfully
- Our families are part of the Amicus experience
- Work-life balance keeps us healthy



# Amicus Founding Beliefs

WE BELIEVE...

**We push ideas as far and as fast as possible**

Orphan Diseases

WE BELIEVE...

**We encourage and embrace constant innovation**

**We have a duty to obsolete our own technologies**

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- We push ideas as far and as fast as possible
- We take smart risks
- We work hard

**We are business led and science driven**

**Our passion for making a difference unites us**

WE BELIEVE...

In Each Other to  
Respect for Each  
Individual's

- Our passion for making a difference unites us
- Diversity, experience and thought is essential
- We communicate openly
- Work-life balance keeps us healthy

## Amicus Mission

A person in a wheelchair is walking on a sidewalk. They are wearing a light-colored shirt and dark pants. A medical device is attached to their back, connected to a bag. The background shows a building and some trees. The image is overlaid with a blue tint.

***We seek to deliver the highest quality therapies for persons living with rare metabolic diseases***

# Amicus Vision: Delivering for Patients and Shareholders

To build a top-tier, fully integrated, global biotechnology company whose medicines treat 5,000+ patients with \$1B+ in worldwide sales revenue by 2023



>350 Patients\* | \$36.9M Global Sales



5,000 Patients\* | \$1B Global Sales

YE17

2023

\*Clinical & commercial, all figures approximate

# Amicus Strategy

## Strategic Goals:

Create...

Manufacture...

Test...

Deliver...

...Great Medicines

## Critical Initiatives:

Invest in core internal scientific technologies

Actively in-license complementary products and technologies in rare metabolic diseases

Strengthen and expand relationships with WuXi Biologics and other core manufacturing partners

Build internal capabilities and capacity for biologics manufacturing

Complete build-out of global commercial and development footprint with world-class teams

Apply highest levels of business ethics and social responsibility



# Amicus Today



FIRST ORAL PRECISION MEDICINE  
FOR FABRY DISEASE

**ATB200/AT2221**  
NOVEL TREATMENT  
PARADIGM for  
Pompe Completed Phase 1/2

PRECLINICAL  
**PIPELINE**  
of products for rare  
metabolic diseases

**BIOLOGICS**  
PLATFORM

Protein Engineering  
& Glycobiology



CHAPERONE-ADVANCED  
REPLACEMENT THERAPY

**SMALL  
MOLECULE**  
Pharmacological  
Chaperones

**~400**  
**EMPLOYEES**  
**globally**

**~\$359M**  
Cash  
(12/31/17)

**GLOBAL  
FOOTPRINT**  
in 27 countries



# Our Passion for Making a Difference Unites Us



# Excellence in Execution in 2017

**Successful Achievement of FOUR Key Strategic Priorities in 2017 to Build a Top Global Biotechnology Company Focused on Rare Metabolic Diseases**

**1 Advance International Galafold Launch (Target 300 Patients)**



**2 Submit Japanese and U.S. NDAs for Migalastat**



**3 Establish Definitive Proof of Concept for ATB200/AT2221**



**4 Maintain financial strength**



# 2018 Key Strategic Priorities

**Focused on FIVE Key Strategic Priorities in 2018**

**1 Double Galafold (migalastat) revenue to \$75-\$85M**

**2 Secure approvals for migalastat in Japan and the U.S.**

**3 Achieve clinical, manufacturing and regulatory milestones to advance ATB200/AT2221 toward global regulatory submissions and approvals**

**4 Develop and expand preclinical pipeline to ensure at least one new clinical program in 2019**

**5 Maintain financial strength**

# Building a World Class Organization

**Global Organization of ~400 Employees Dedicated to Create, Manufacture, Test, and Deliver Medicines for Rare Metabolic Diseases**







# Galafold™ (Migalastat) Precision Medicine for Fabry Disease

*"We push ideas as far and as fast as possible"*

- Amicus Belief Statement

# Fabry Disease Overview

**Fabry Disease is a Fatal Genetic Disorder that Affects Multiple Organs and is Believed to be Significantly Underdiagnosed**

## Leading Causes of Death:

**TRANSIENT ISCHEMIC  
ATTACK (TIA) & STROKE<sup>1</sup>**

**HEART DISEASE<sup>2</sup>**

**KIDNEY DISEASE<sup>3</sup>**

## Life-Limiting Symptoms:

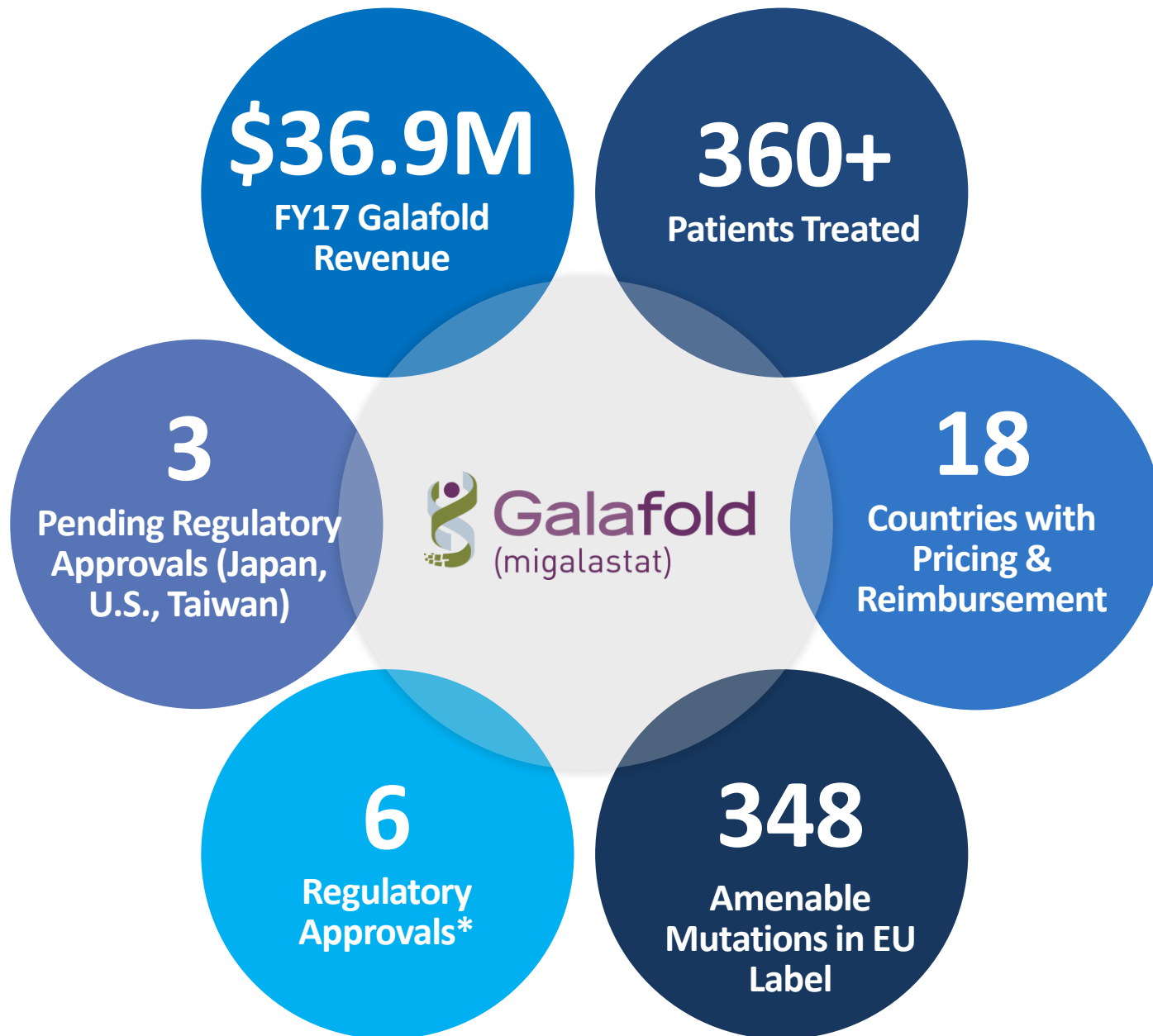
**GASTROINTESTINAL<sup>3</sup>**

## Key Facts:

- $\alpha$ -Gal A enzyme deficiency leads to substrate (GL-3) accumulation
- >1,000 known mutations
- ~10K diagnosed WW (51% female/49% male<sup>4</sup>)
- Newborn screening studies suggest prevalence of ~1:1000 to ~1:4000

1. Desnick R, et al. *Ann Intern Med.* 2003 2. Yousef Z, et al. *Eur Heart J.* 2013 3. Germain D. *Orphanet J Rare Dis.* 2010  
4. Fabry Registry 2011

# Galafold Snapshot (as of February 28, 2018)



**FIRST Oral Precision Medicine for Fabry Disease**

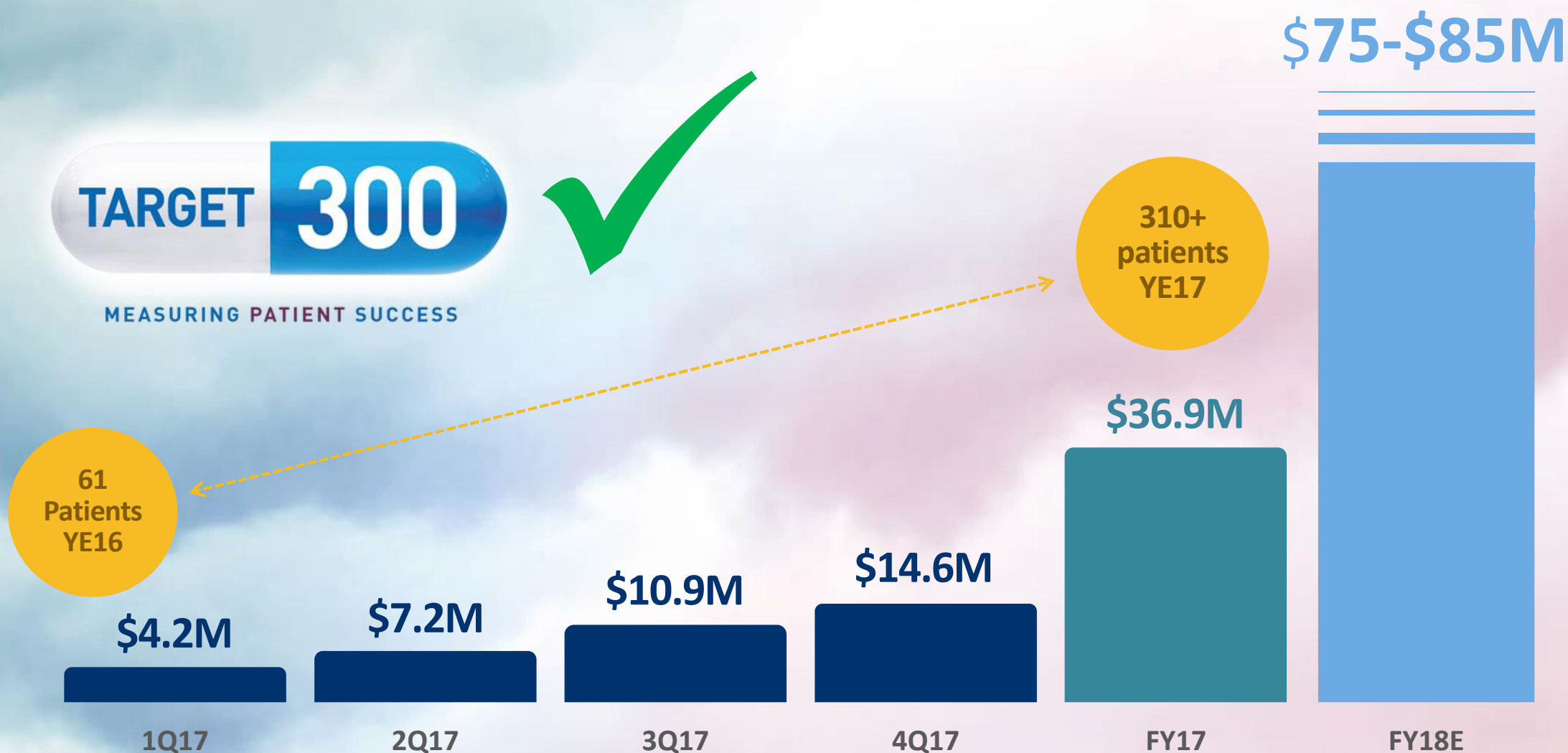
**Galafold Indicated for Long-Term Treatment of Adults and Adolescents Aged  $\geq 16$  years with a Confirmed Diagnosis of Fabry Disease and Who Have an Amenable Mutation\*\***

\*EU, Australia, Canada, Israel, Switzerland, South Korea

\*\*For important safety information for Galafold visit [www.ema.europa.eu](http://www.ema.europa.eu).

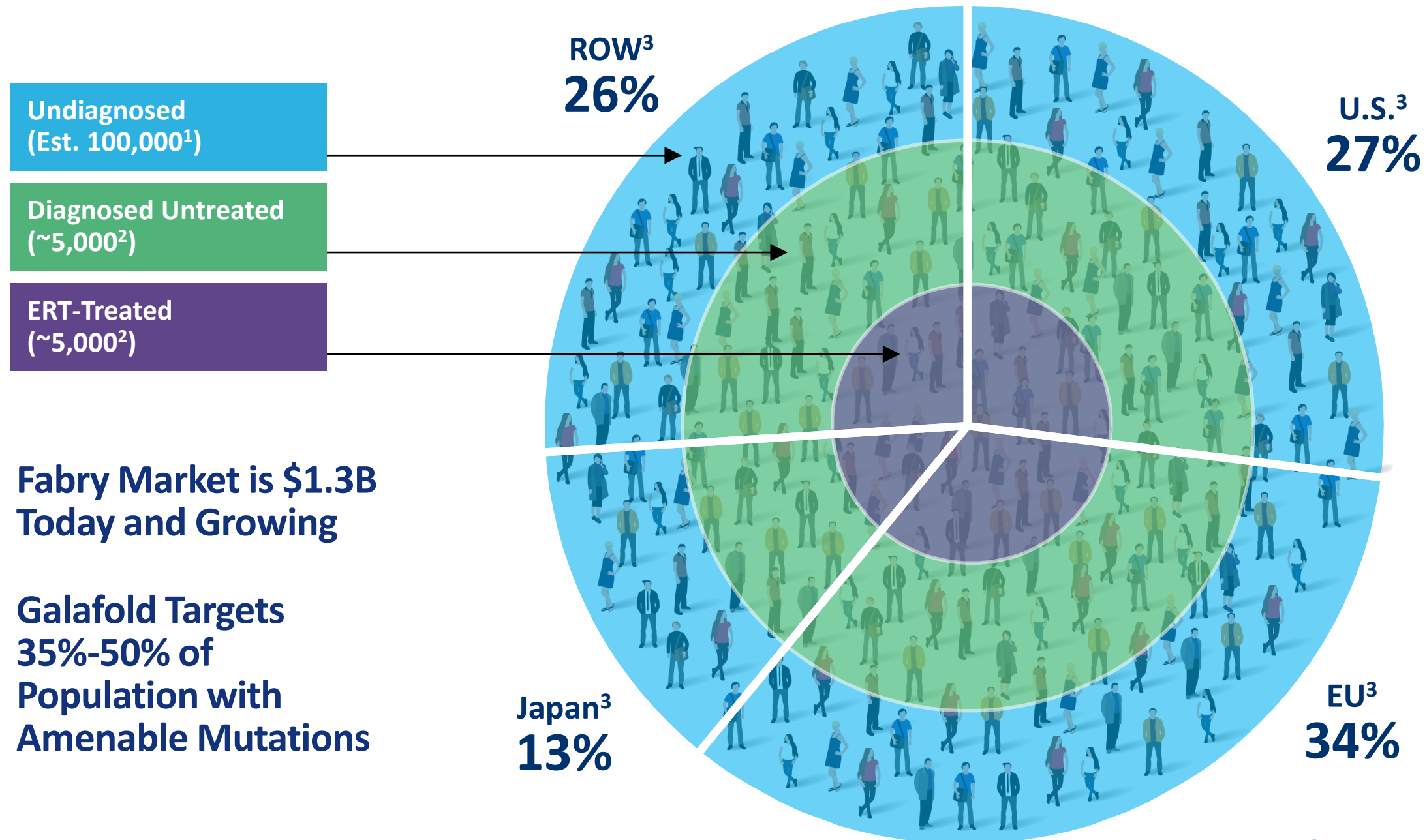
# Galafold Success and FY18 Galafold Revenue Guidance

International Launch Success Positions for Significant Growth in 2018  
and \$500M+ Global Peak Sales Opportunity

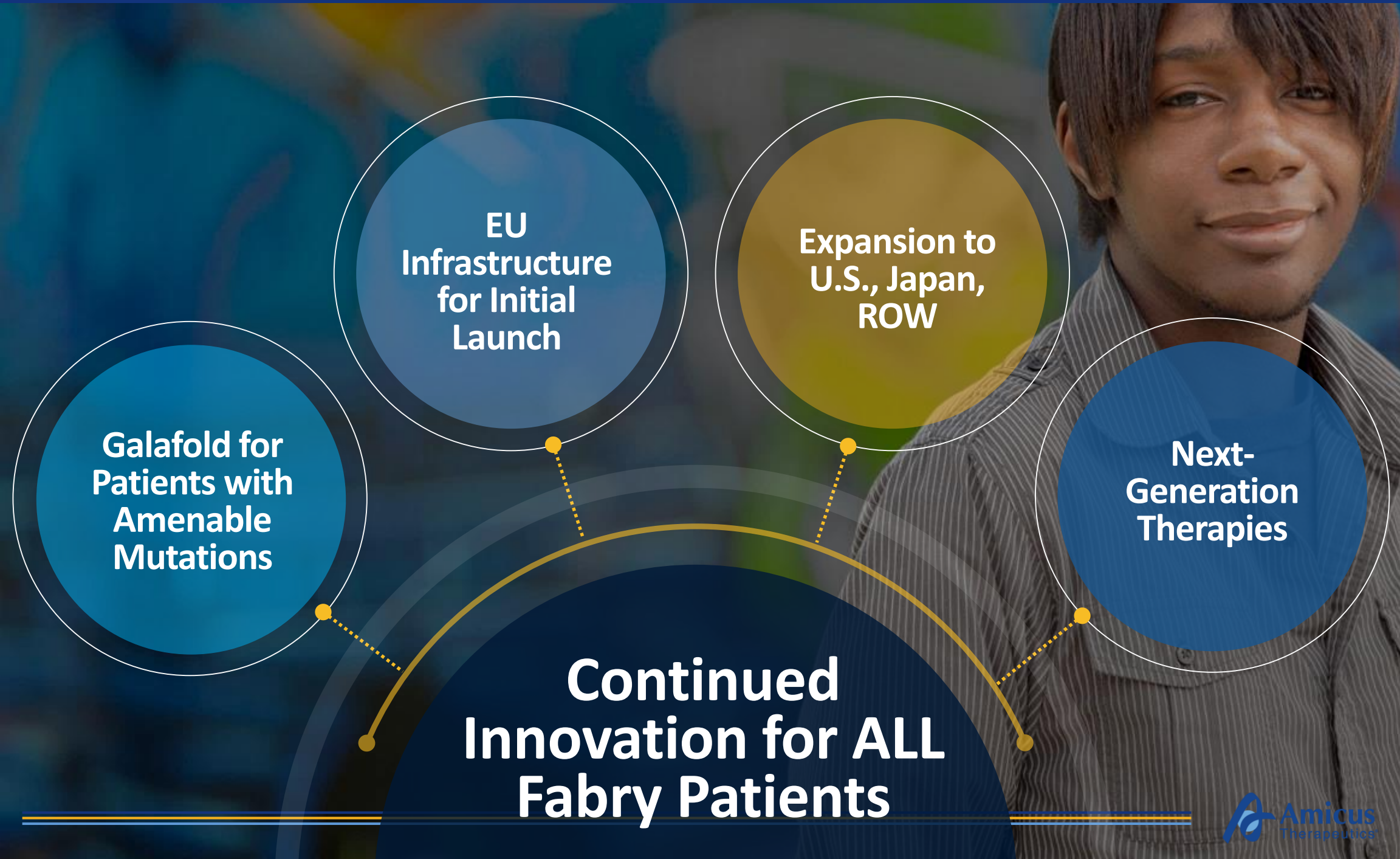




# Galafold \$500M+ Global Peak Revenue Opportunity



# Fabry Franchise Strategy



# Fabry Precision Medicine Driven by a Patient's Genotype

**Amicus Therapeutics  
is Committed to  
Delivering the  
Highest Quality  
Therapies**

**Migalastat**  
Oral Precision Medicine



**~\$1.3B**  
Global Fabry  
Market Today



Growing to  
**~\$2B**  
Global Fabry Market



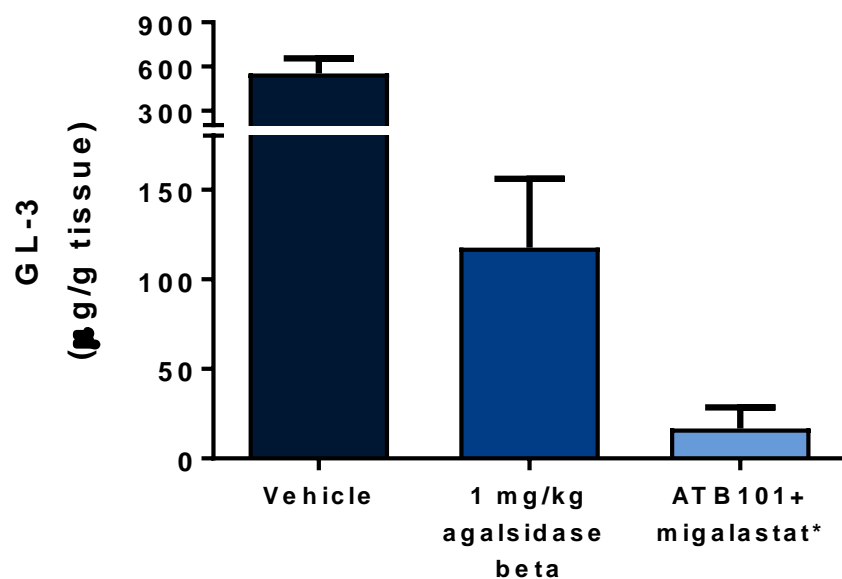
**Novel ERT Co-Formulated  
with Migalastat**



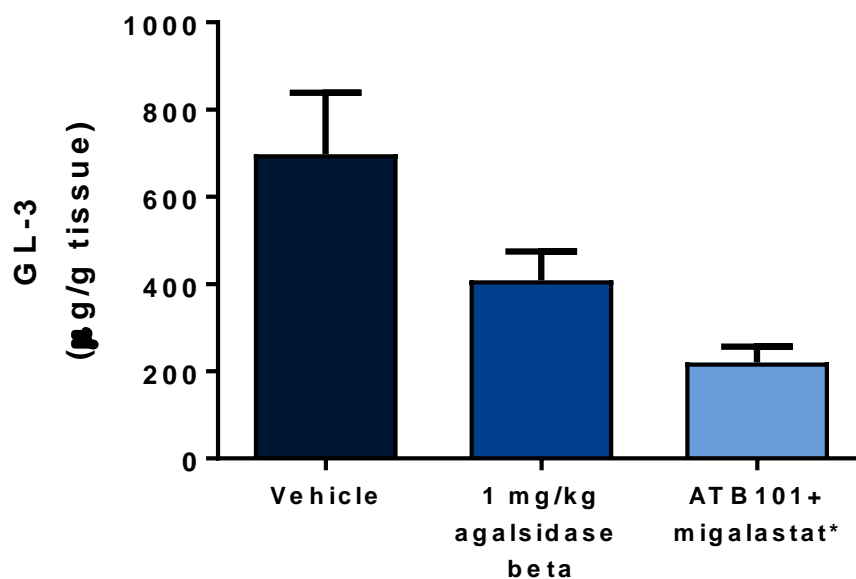
# Amicus Proprietary ERT Preclinical Proof of Concept

## ATB101 Co-formulated with Migalastat Results in Significantly Greater Substrate Reduction In Fabry KO Model

### Heart



### Kidney







# ATB200 Novel ERT for Pompe Disease

*“We encourage and embrace constant innovation”*

- Amicus Belief Statement

# Pompe Disease Overview

**Pompe Disease is a Fatal Neuromuscular Disorder that Affects a Broad Range of People**



5,000 – 10,000 patients  
diagnosed WW<sup>1</sup>

Respiratory and cardiac  
failure are leading causes of  
morbidity and mortality

Age of onset ranges from  
infancy to adulthood

Deficiency of GAA leading to  
glycogen accumulation

Symptoms include muscle  
weakness, respiratory failure,  
and cardiomyopathy

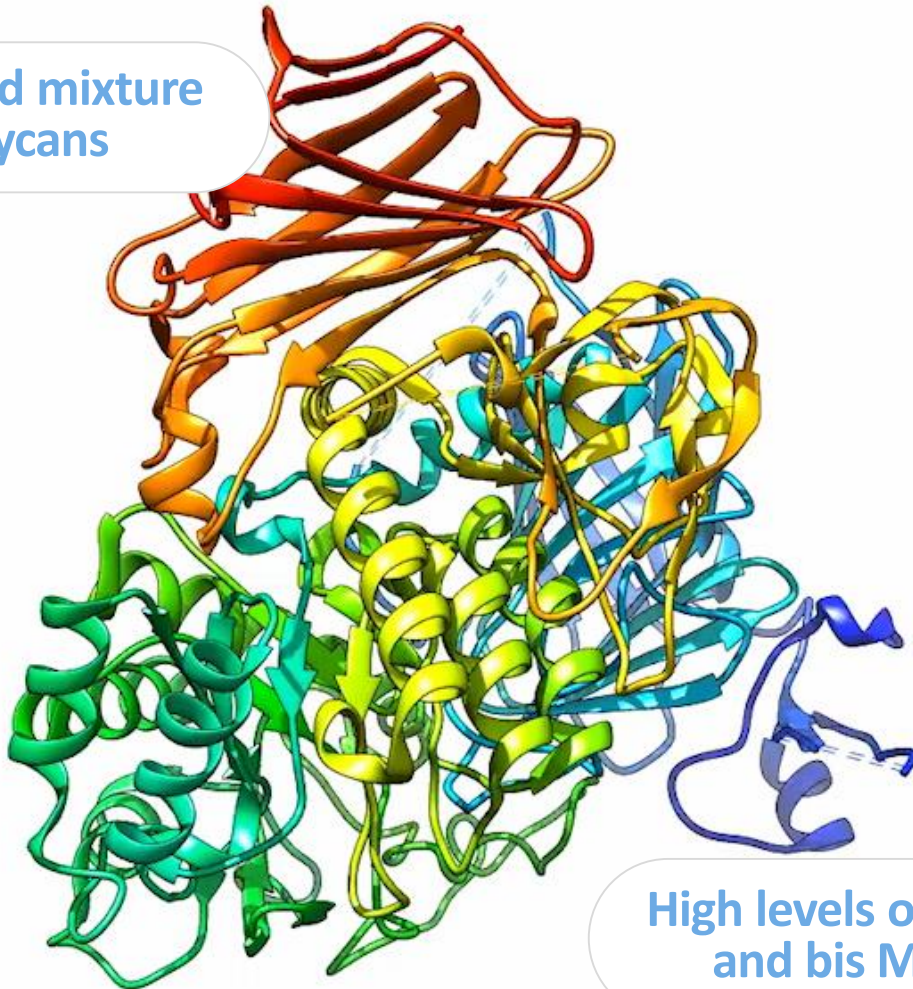
~\$900M+ Global  
Pompe ERT sales in  
FY17<sup>2</sup>

# ATB200 + Chaperone: A Differentiated Treatment Paradigm

## Application of Platform Technologies for Potential New Treatment Paradigm

### ATB200 (Novel ERT)

Optimized mixture  
of glycans



High levels of M6P  
and bis M6P



CHAPERONE-ADVANCED  
REPLACEMENT THERAPY

Chaperone  
addition





# 6-Minute Walk Test (6MWT) and Forced Vital Capacity (FVC) (as of 2/7/18)

**Improvements in Key Functional Measure in both ERT-Naïve and ERT-Switch at Months Six and Nine with Continued Benefit Out to Month 12**

## 6-Minute Walk Test (m)

Cohort	Baseline (n=10)	Change at Month 6 (n=10) Mean (SD)	Change at Month 9 (n=10) Mean (SD)	Change at Month 12 (n=8) Mean (SD)
Cohort 1 ERT-Switch Ambulatory	<b>397.2</b> (96.8)	<b>+23.9</b> (52.2)	<b>+24.5</b> (40.8)	<b>+57.4</b> (34.4)
Cohort	Baseline (n=5)	Change at Month 6 (n=5) Mean (SD)	Change at Month 9 (n=5) Mean (SD)	Change at Month 12 (n=2) Mean (SD)
Cohort 3 ERT-Naïve	<b>399.5</b> (83.5)	<b>+41.8</b> (29.4)	<b>+63.5</b> (23.1)	<b>+86.8</b> (11.1)

## FVC (% Predicted)

Cohort	Baseline (n=9)	Change at Month 6 (n=9) Mean (SD)	Change at Month 9 (n=9) Mean (SD)	Change at Month 12 (n=7) Mean (SD)
Cohort 1 ERT-Switch Ambulatory*	<b>52.6</b> (14.7)	<b>-1.3</b> (4.1)	<b>-1.7</b> (3.9)	<b>-3.1</b> (4.8)
Cohort	Baseline (n=5)	Change at Month 6 (n=5) Mean (SD)	Change at Month 9 (n=5) Mean (SD)	Change at Month 12 (n=2) Mean (SD)
Cohort 3 ERT-Naïve	<b>53.4</b> (20.3)	<b>+4.2</b> (5.6)	<b>+6.2</b> (5.3)	<b>+6.0</b> (7.1)

\*FVC not available for one subject



## 6-Minute Walk Test Patient-Level Data – Cohort 1 ERT-Switch (n=10) (as of 2/7/18)

6MWT Improved for ERT-Switch Patients at Months 6 and 9 With Continued Benefit Observed Out to Month 12

### 6-Minute Walk Test (m)

ID	Baseline	Change From Baseline		
		Month 6	Month 9	Month 12
1052	544	+51	+56	+112
1252	379	+125	+110	+103
1251	339	+21	+45	+73
1751	332	+8	+26	+45
1201	456	-5	+8	+41
1451	500	+55	+20	+33
1051	220	+29	+21	+30
1053	410	+38	+11	+22
1701	464	-4	-9	N/A
1601	328	-78	-43	N/A
<b>Mean (SD)</b>	<b>397.2</b> (96.8)	<b>+23.9</b> (52.2)	<b>+24.5</b> (40.8)	<b>+57.4</b> (34.4)

➤ 6MWT increased in 7/10, 8/10, and 8/8 ERT-switch patients at Months 6, 9 and 12 respectively

N/A = data not available (patients have not reached 12 month time point)

## 6-Minute Walk Test Patient Level Data – Cohort 3 ERT-Naïve (n=5) (as of 2/7/18)

All Five ERT-Naïve Patients Showed Increases in 6MWT Distance Out to Month 12

### 6-Minute Walk Test (m)

ID	Baseline	Change From Baseline		
		Month 6	Month 9	Month 12
3551	480	+41	+72	+95
3552	384	+62	+78	+79
3051	460	+79	+89	N/A
3554	406	+14	+44	N/A
3553	267	+13	+35	N/A
Mean (SD)	399.5 (83.5)	+41.8 (29.4)	+63.5 (23.1)	+86.8 (11.1)

➤ 6MWT increased in 5/5, 5/5, and 2/2 ERT-naïve patients at Months 6, 9 and 12 respectively

N/A = data not available (patients have not reached 12 month time point)

# Muscle Strength Testing : Cohort 2 Non-Ambulatory ERT-Switch (n=4) (as of 2/7/18)

**Substantial Increases Observed in Upper Extremity Strength in  
Non-Ambulatory ERT-Switch Patients at Month 6 and Month 9**

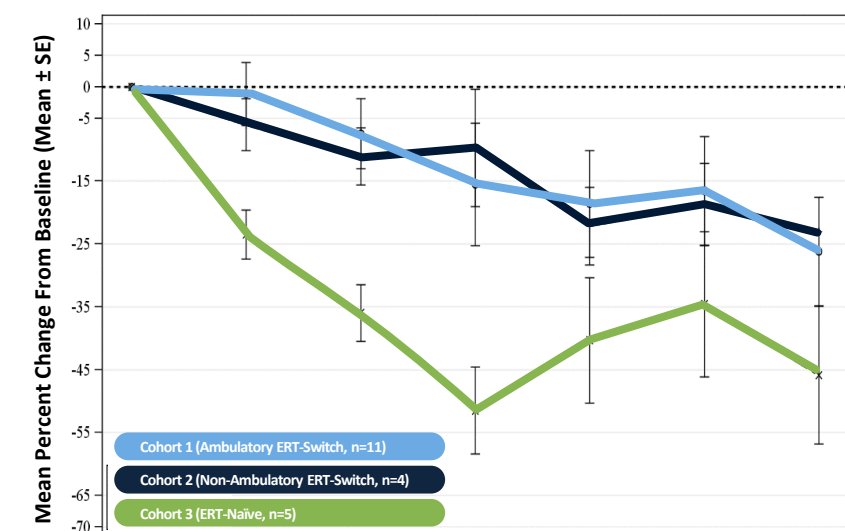
Assessment	Muscle Group Tested	Baseline (n=4)	Change to Month 6 (n=4)	Change to Month 9 (n=4)
QMT- Quantitative Muscle Testing - Dynamometer (pounds force)	Shoulder Adduction *	5.7 (8.8)	+8.1 (12.8)	+9.6 (12.3)
	Shoulder Abduction	16.7 (18.1)	+1.0 (6.6)	+0.5 (9.3)
	Elbow Flex	12.7 (13.7)	+2.4 (15.9)	+6.0 (19.3)
	Elbow Extension	12.3 (13.9)	+5.5 (4.7)	+7.5 (8.2)
Assessment	Muscle Group Tested	Baseline ** (n=3)	Change to Month 6 (n=3)	Change to Month 9 (n=3)
MMT - Manual Muscle Testing (manual score)	Shoulder Adduction	2.3 (2.1)	+1.3 (2.3)	0.0 (4.0)
	Shoulder Abduction	2.7 (2.3)	+0.5 (0.7)	-1.0 (2.7)
	Elbow Flex	4.3 (4.5)	+1.7 (1.5)	+1.7 (1.5)
	Elbow Extension	4.0 (4.0)	+1.7 (1.5)	+1.7 (1.5)

\* Shoulder adduction not available for one subject; \*\* Total Score MMT = 10 (R+L) N=3 due to assessment not being performed at some visits for some patients

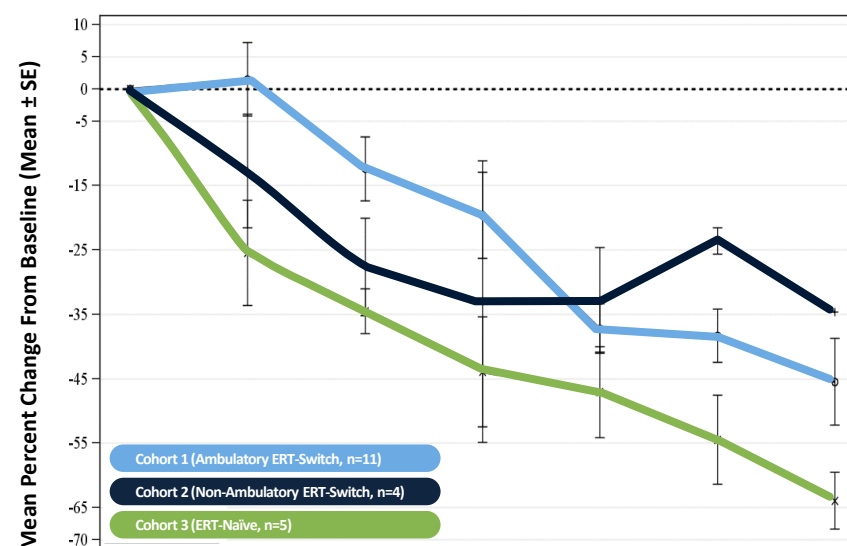
# Biomarkers (n=20) (as of 2/7/18)

**All Cohorts Demonstrated Persistent Improvement in Biomarkers of Muscle Damage (CK) and Disease Substrate (Hex4) For Up To 12 Months**

## Muscle Damage Biomarkers (% Change from Baseline for CK)



## Disease Substrate Biomarker (% Change from Baseline for Hex 4)



CK=creatine kinase; Hex4=urine hexose tetrasaccharide.  
Missing values either unable to be analyzed or not yet analyzed.



# Safety Summary (n=20)\* (as of 2/7/18)

**AEs Have Been Generally Mild and Transient with Very Low Rate of Infusion-Associated Reactions (< 1%) After 550+ Total Infusions Across All Cohorts**

- AEs were generally mild and transient
  - Most common treatment emergent AEs (TEAEs) were abdominal pain\*\* (8/20), diarrhea (8/20), nasopharyngitis (6/20), nausea (5/20), headache (5/20), upper respiratory tract infection (5/20).
- Three incidents of infusion-associated reactions in 550+ infusions which were controlled by standard premedication
  - One IAR event in one non-ambulatory ERT-switch patient (skin discoloration)
  - Two IAR events in one ERT-naïve patient (localized pruritus, erythema and burning sensation)
- Longest duration of treatment is 20+ months

AE, adverse events; IAR, infusion-association reaction.

\*Reported through interim data analysis (maximum 20+ months)

\*\*Includes upper and lower abdominal pain

# Pompe Development Pathways

**Our Goal: To Work with Global Regulators to Ensure That as Many People Living with Pompe Have Access to This Novel Treatment Paradigm as Quickly as Possible**

## Potential Pathways Include:\*



\*Subject to ongoing discussions with regulatory authorities, update anticipated 1H18

# Biologics Manufacturing Capabilities

## Scaling up Manufacturing to Meet Needs of the Pompe Community

**1000L**

(Registration & Commercial)

**First GMP Manufacturing Campaign of Drug Substance at 1000L Scale Successfully Completed**

**Analytical and *in vivo* comparability studies completed between 250L and 1000L engineering batches**

**FDA agreement reached on comparability between 250L GMP scale and 1000L engineering batches**

**FDA agreement reached on testing strategy for demonstrating comparability between 250L scale and 1000L GMP batches**



# Key Clinical & Manufacturing Activities 2018

**Significant Clinical and GMP Manufacturing Activities Ongoing in 2018 to Lay Foundation for Most Successful and Fastest Approval Pathways**

## CLINICAL

- Additional Phase 1/2 extension data
- Additional 4-6 patients added to Phase 1/2 study
- Retrospective natural history of ERT-treated patients
- Prospective data collection on current ERT-treated patients
- Initiation of larger registration-directed study



## MANUFACTURING

- Final regulatory agreement on comparability between 1,000L and 250L GMP scale
- Completion and release for clinic of 1,000L GMP commercial scale material
- Continued capacity to ensure sufficient medicines to supply patient population
- Announce plan for long term commercial manufacture and capacity







# Pipeline Strategy

***“We have a duty to obsolete our own technologies”***

**- Amicus Belief Statement**

# Pipeline Strategy

**Sharply Focused on Developing Therapies for People Living with Rare Metabolic Diseases**

*Technology Landscape*

Enzyme Replacement Therapies (ERTs)

Gene Therapy/Editing

Blood-Brain Barrier Technologies

Small Molecules

*Development Criteria*

Obsolete Current Treatments

Significant Benefits for Patients

First/Best-in-Class

*Pipeline Expansion*

*One or more new clinical programs in 2019*



# Financial Summary & Key Milestones

*"We are business led and science driven"*

- Amicus Belief Statement

# Financial Summary & Guidance

**Strong Balance Sheet with \$359M Cash at 12/31/17 and \$300M in Gross Proceeds from February 2018 Following On Offering - Cash Runway into at Least 2021**

## FINANCIAL POSITION

December 31, 2017

Cash	\$359M
Debt	\$250M
Cash Runway	Into at least 2021

## CAPITALIZATION

Shares Outstanding <sup>1</sup>	186.9M
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## FINANCIAL GUIDANCE

FY18 Net Cash Spend Guidance	\$230-\$260M
GalaFold Revenue Guidance	\$75-\$85M

<sup>1</sup>Includes shares from the February 2018 equity offering



# 2018 Key Strategic Priorities

Focused on FIVE Key Strategic Priorities in 2018

**1** Double Galafold (migalastat) revenue to \$75-\$85M

**2** Secure approvals for migalastat in Japan and the U.S.

**3** Achieve clinical, manufacturing and regulatory milestones to advance ATB200/AT2221 toward global regulatory submissions and approvals

**4** Develop and expand preclinical pipeline to ensure at least one new clinical program in 2019

**5** Maintain financial strength

# Amicus Vision: Delivering for Patients and Shareholders

To build a top-tier, fully integrated, global biotechnology company whose medicines treat 5,000+ patients with \$1B+ in worldwide sales revenue by 2023



>350 Patients\* | \$36.9M Global Sales



5,000 Patients\* | \$1B Global Sales

YE17

2023

\*Clinical & commercial, all figures approximate

# Thank You

*“Our passion for making a difference unites us”*

*-Amicus Belief Statement*





# Appendix



# Fabry Disease Overview

**Fabry Disease is a Fatal Genetic Disorder that Affects Multiple Organs and is Believed to be Significantly Underdiagnosed**

## Leading Causes of Death

### TRANSIENT ISCHEMIC ATTACK (TIA) & STROKE<sup>1</sup>

### HEART DISEASE<sup>2</sup>

- Irregular heartbeat (fast or slow)
- Heart attack or heart failure
- Enlarged heart

### KIDNEY DISEASE<sup>3</sup>

- Protein in the urine
- Decreased kidney function
- Kidney failure

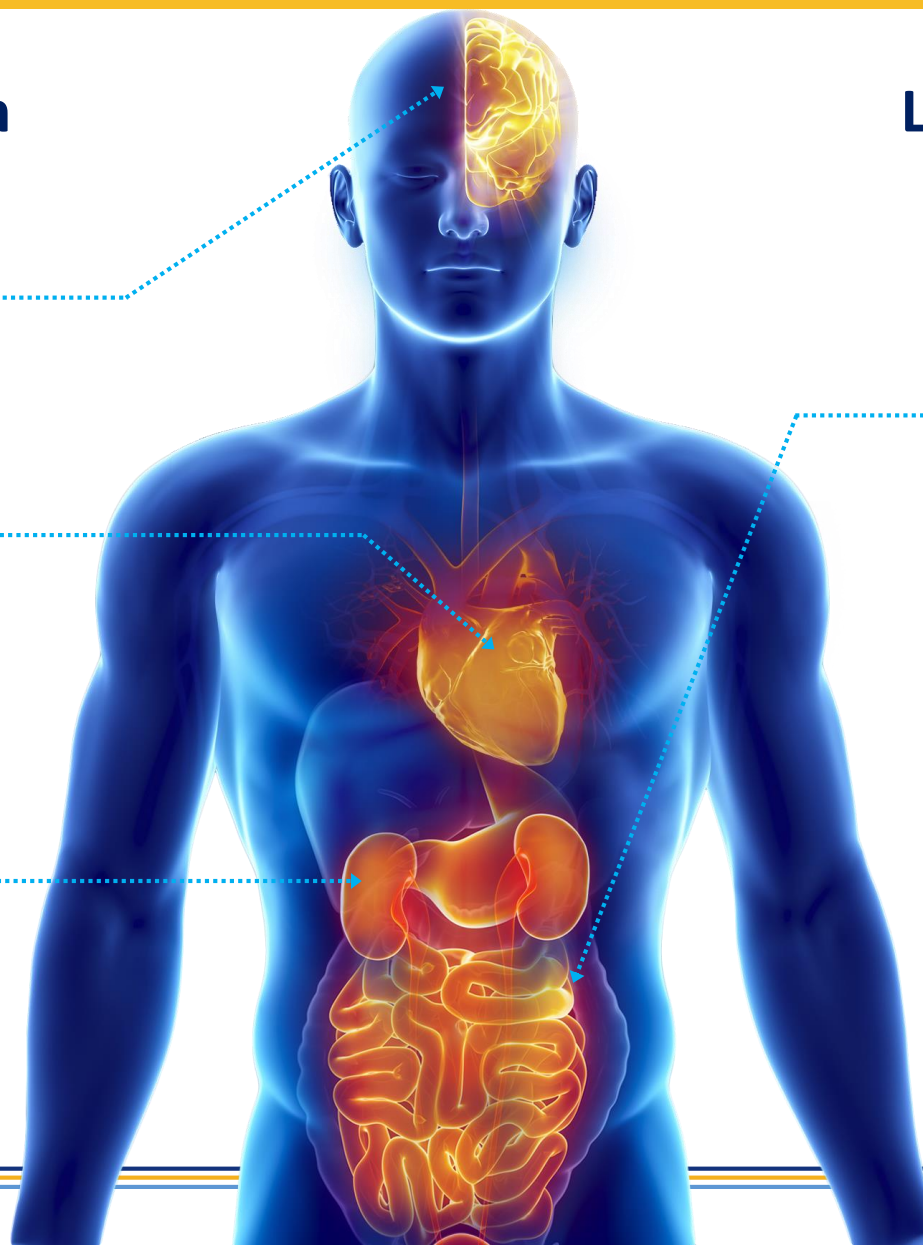
## Life-Limiting Symptoms

### GASTROINTESTINAL<sup>3</sup>

- Nausea, vomiting, cramping, and diarrhea
- Pain/bloating after eating, feeling full
- Constipation
- Difficulty managing weight

## Key Facts

- Deficiency of  $\alpha$ -Gal A enzyme leading to GL-3 accumulation
- >900 known mutations
- ~10K diagnosed WW (51% female/49% male<sup>4</sup>)
- Newborn screening studies suggest prevalence of ~1:1000 to ~1:4000



1. Desnick R, et al. *Ann Intern Med.* 2003 2. Yousef Z, et al. *Eur Heart J.* 2013 3. Germain D. *Orphanet J Rare Dis.* 2010 4. Fabry Registry 2011

# Fabry Global Operations Excellence

## FABRY Initial Launch Success

### People

Deep experience in rare disease space

Hire “best and brightest” from range of leading biotech companies

Culture of strong patient focus

### Product

Differentiated safety and efficacy published in seminal journals\*

First-in-class oral therapy for Fabry

Precision medicine based on genotype

### Access

Compelling value proposition led to rapid reimbursement

Specialty distributor with high touch services

Commitment to patient access and support services

### Execution

Clear focus at launch on priority patient segments

Efficient outreach to key Fabry centers

Strong education efforts on importance of genotype

\*New England Journal of Medicine, Journal of Medical Genetics