



# Credit Suisse 27th Annual Healthcare Conference

**John F. Crowley, Chairman and Chief Executive Officer**  
**November 14, 2018**



# Forward Looking Statements

*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 press release 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 as well as our Quarterly Report on Form 10-Q for the quarter September 30, 2018 filed November 5, 2018 with the Securities and Exchange Commission. 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 news release to reflect events or circumstances after the date hereof.*



# Amicus Today

 **Galafold™**  
(migalastat)

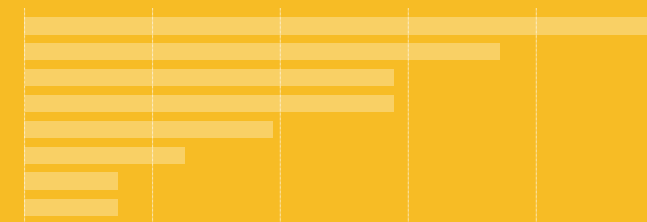
First Oral Precision  
Medicine for Fabry Disease



**500+**  
**EMPLOYEES**  
**globally**

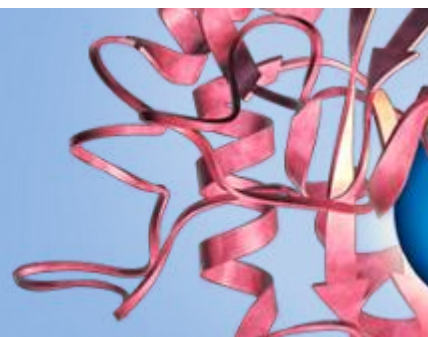


**PORTFOLIO**  
of 15 programs for rare  
metabolic diseases



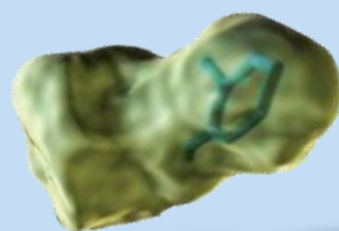
**BIOLOGICS**  
**PLATFORM**

Protein Engineering  
& Glycobiology



**AT-GAA\***

Investigational  
Therapy for  
Pompe Entering  
Phase 3



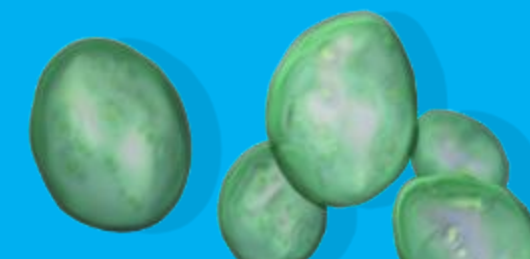
**~\$564M**  
Cash  
(9/30/18)

**Gene  
Therapy  
Platforms**

**GLOBAL  
FOOTPRINT**  
in 27 countries



**Leading Expertise in  
Lysosomal  
Storage  
Disorders**



\* AT-GAA, also known as ATB200/AT2221

# Corporate Highlights: 3Q18 and Early 4Q18

» **Well Capitalized to Advance Toward 2023 Vision: 5,000+ Patients & \$1B+ in Revenue**

» **Current Cash Position is Sufficient to Fund Operations into at least 2021**

» **Galafold: International Growth and Strong U.S. Launch Momentum**

- U.S. launch exceeding expectations following August 2018 approval; now reimbursed in 22 countries
- 3Q18 revenue of \$20.6M – on track to meet \$80M-90M FY18 guidance range
- \$500M+ peak revenue potential; \$1B+ cumulative revenue from 2019E-2023E to drive R&D engine

» **AT-GAA: Positive 18-month Data Presented World Muscle Society (October 2018)**

- Highly differentiated ERT with potential to be the future standard of care
- On track to initiate pivotal study by YE18
- \$1B+ peak revenue potential

» **NEW Gene Therapy Portfolio for 14 Rare Metabolic Diseases**

- Industry leading Batten disease portfolio: Two clinical stage programs (CLN6 and CLN3); One preclinical (CLN8)
- Preclinical AAV (intrathecal) gene therapy programs for 7 additional neurologic LSDs
- Next-generation preclinical gene therapies for Fabry, Pompe, CDKL5 and one other indication
- \$1B+ peak revenue potential

# Robust Rare Disease Portfolio

	DISCOVERY	PRECLINICAL	PHASE 1/2	PHASE 3	REGULATORY	COMMERCIAL
Fabry Franchise						
Galafold™ (Migalastat) monotherapy						
Fabry Gene Therapy	PENN					
Pompe Franchise						
AT-GAA (Novel ERT + Chaperone)						
Pompe Gene Therapy	PENN					
Other Gene Therapy Programs						
CLN6 Batten Disease	NCH					
CLN3 Batten Disease	NCH					
CLN8 Batten Disease	NCH					
Neimann-Pick Type C (NPC)	NCH					
Wolman Disease	NCH					
Tay-Sachs Disease	NCH					
Multiple Other CNS LSDs	NCH					
CDKL5 Deficiency Disorder Gene Therapy / ERT	PENN					
Other	PENN					

Advancing one of the **most robust rare disease portfolios** in biotechnology

# 2018 Key Strategic Priorities

**On Track to Achieve All FIVE Key Strategic 2018 Priorities Outlined in January**

- 1 Double Galafold (migalastat) revenue to \$80-\$90M
- ✓ 2 Secure approvals for migalastat in Japan and the U.S.
- ✓ 3 Achieve clinical, manufacturing and regulatory milestones to advance AT-GAA 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

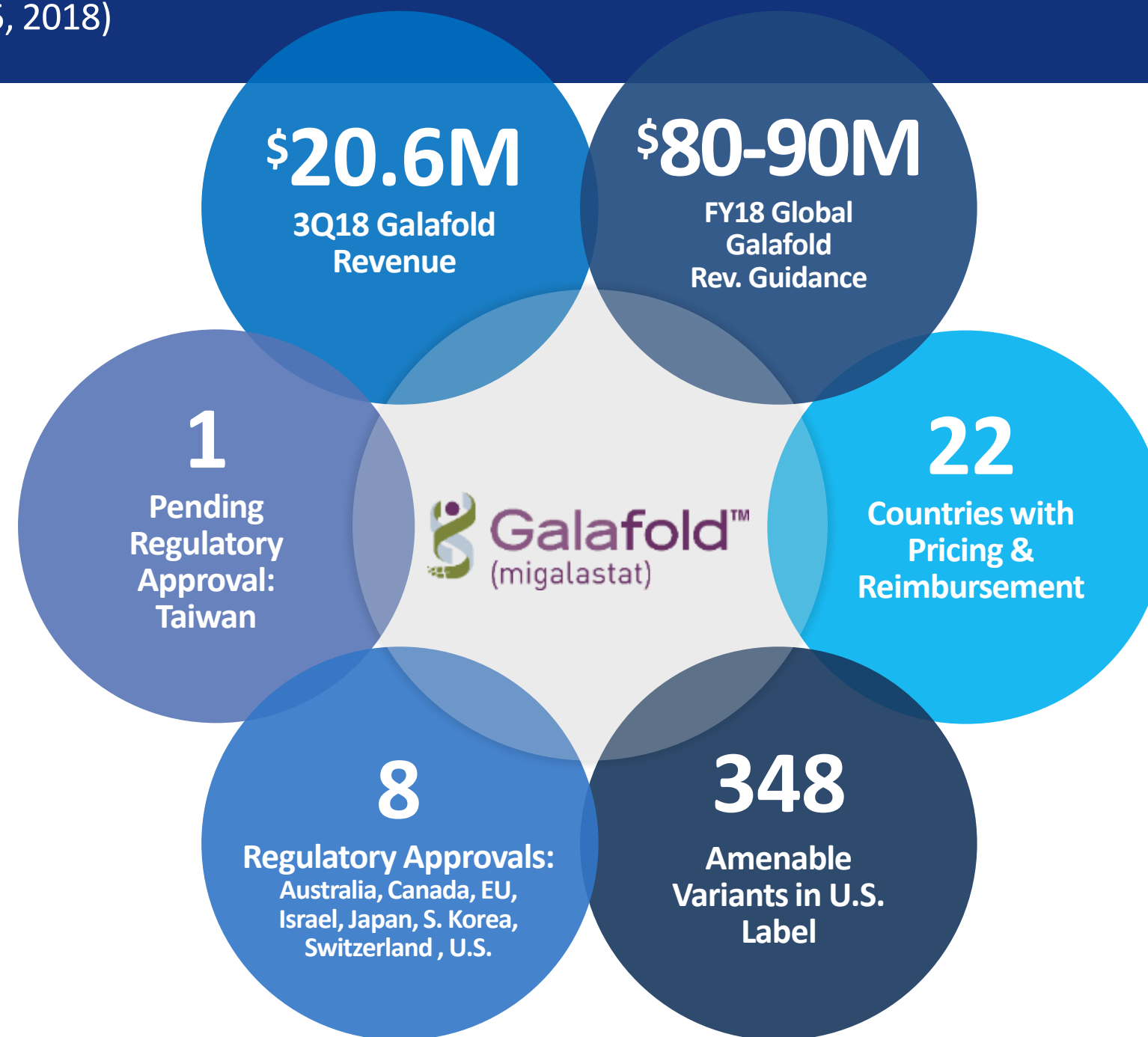


# Galafold® (Migalastat) Precision Medicine for Fabry Disease



# Galafold Snapshot (as of November 5, 2018)

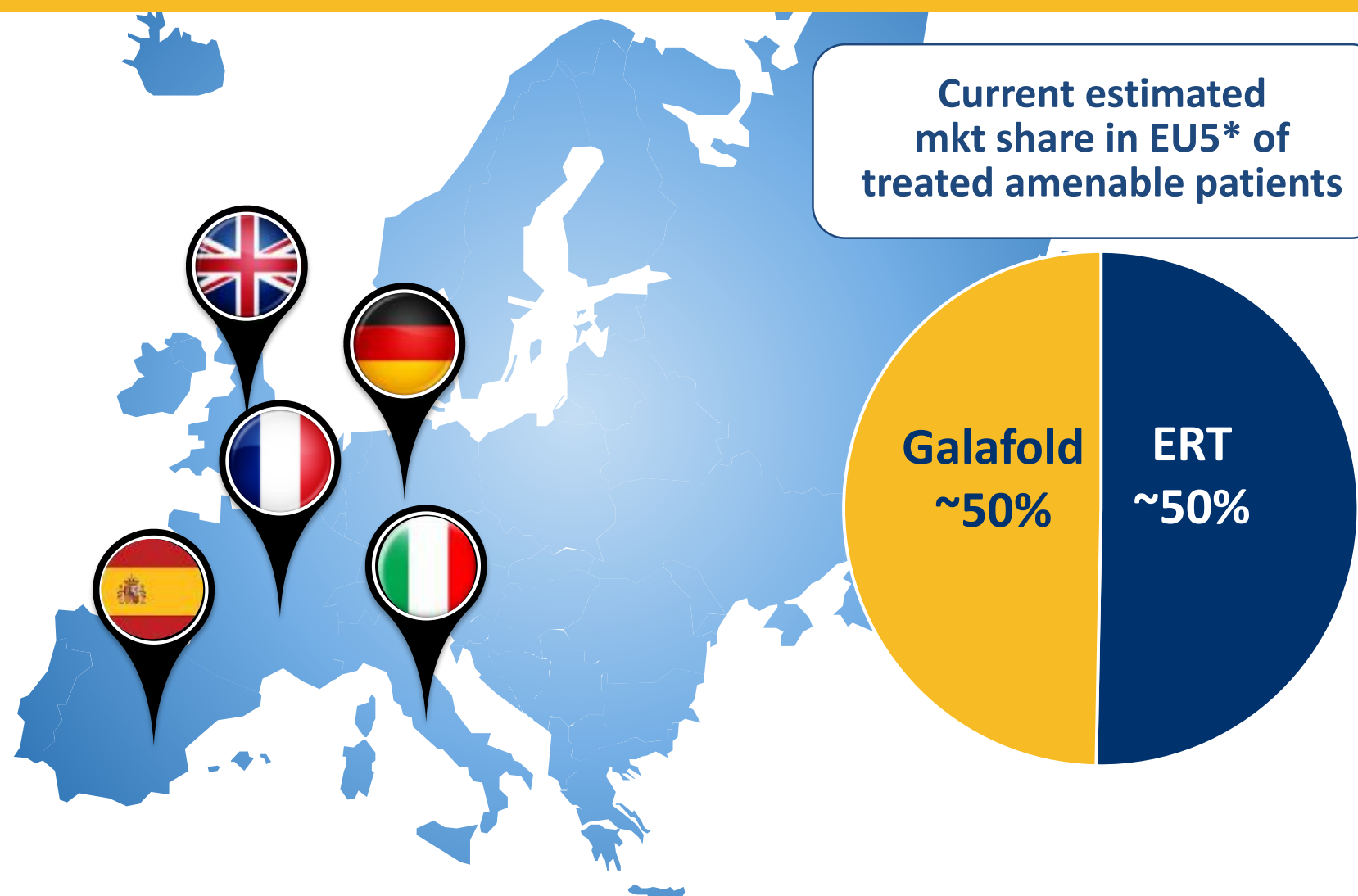
**FIRST Oral Precision  
Medicine for Fabry  
Disease Patients with  
Amenable Variants**





# International Update (as of October 31, 2018)

**Continuing to Execute on Our Strategy with High Compliance and Adherence  
Among 500+ International Patients on Galafold**



## MARKET DYNAMICS

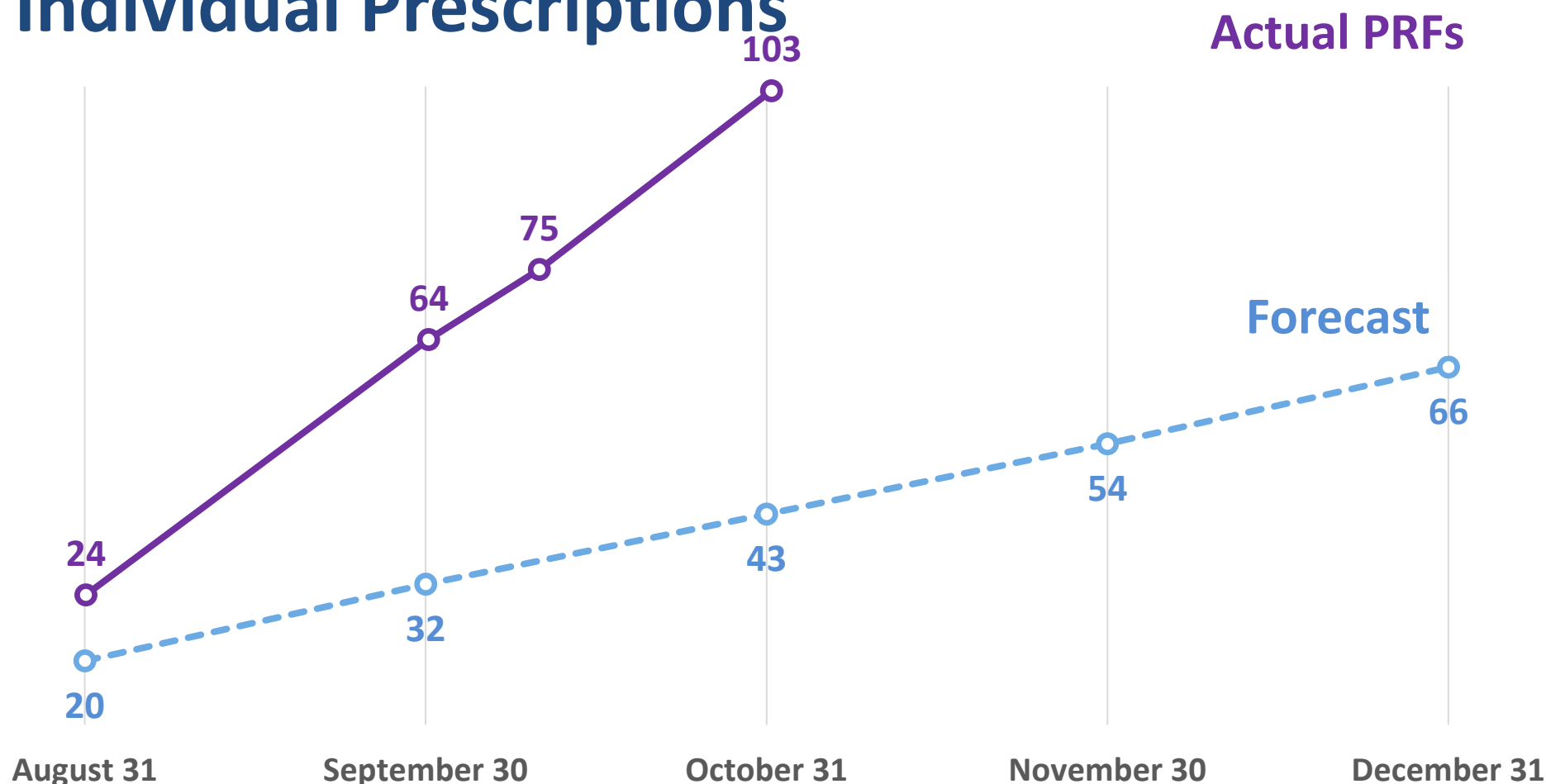
- Continued strong uptake and growth in ERT-switch patients; increasing number of previously untreated patients
- Very high rates of adherence and compliance (>90%)
- Balanced mix of males and females, classic and late-onset patients
- Oral ROA allows for new ordering patterns
- Continued high interest from physician community
- 145 HCPs attended inaugural Amicus *Fabry Connections* meeting in Madrid, Spain

\*Market share assumptions based on estimated number of treated amenable patients in EU5 as of October 2018

# Key U.S. Launch Metric – Individual Prescriptions (Patient Referral Forms)

**103 Individual Prescriptions (10/31/18) Significantly Exceeds Internal Forecast and Provides Strong Foundation for 2019**

## Individual Prescriptions



## Market Dynamics

- Strong patient and physician demand
- High conversion of study patients
- Growing prescriber base of 40+ physicians
- Patient demographics in line with launch strategy
- ~60 day average PRF to shipment limits FY18 impact
- Solid foundation for 2019

# Galafold Success and FY18 Galafold Revenue Guidance

On Track to Achieve Higher End of FY2018 Revenue Guidance of \$80-\$90M



\*QoQ revenue reflects new ordering patterns

# Total Amenable Patient Population (“TAPP”)

Estimate based on 35% - 50% amenability

\$1B+ in 2019E-2023E in Cumulative Revenue Supporting R&D Investment

## Upside Potential

WORLDWIDE

Diagnosis grows due to newborn screening in U.S. & Japan

TAPP: 4,700-6,750

## Peak Potential

WORLDWIDE

Diagnosis continues at current rate

TAPP: 4,200-6,000

## Today

WORLDWIDE\*  
(U.S. & Japan Added)

TAPP: 3,800-5,500

2028

2018

2017

EU & ROW Only

TAPP: 2,000-3,000

\*WORLDWIDE includes total amenable patient population in all Fabry ERT commercial markets today Estimated effect of newborn screening on adult diagnostic rate.





# AT-GAA Novel ERT for Pompe Disease

# 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

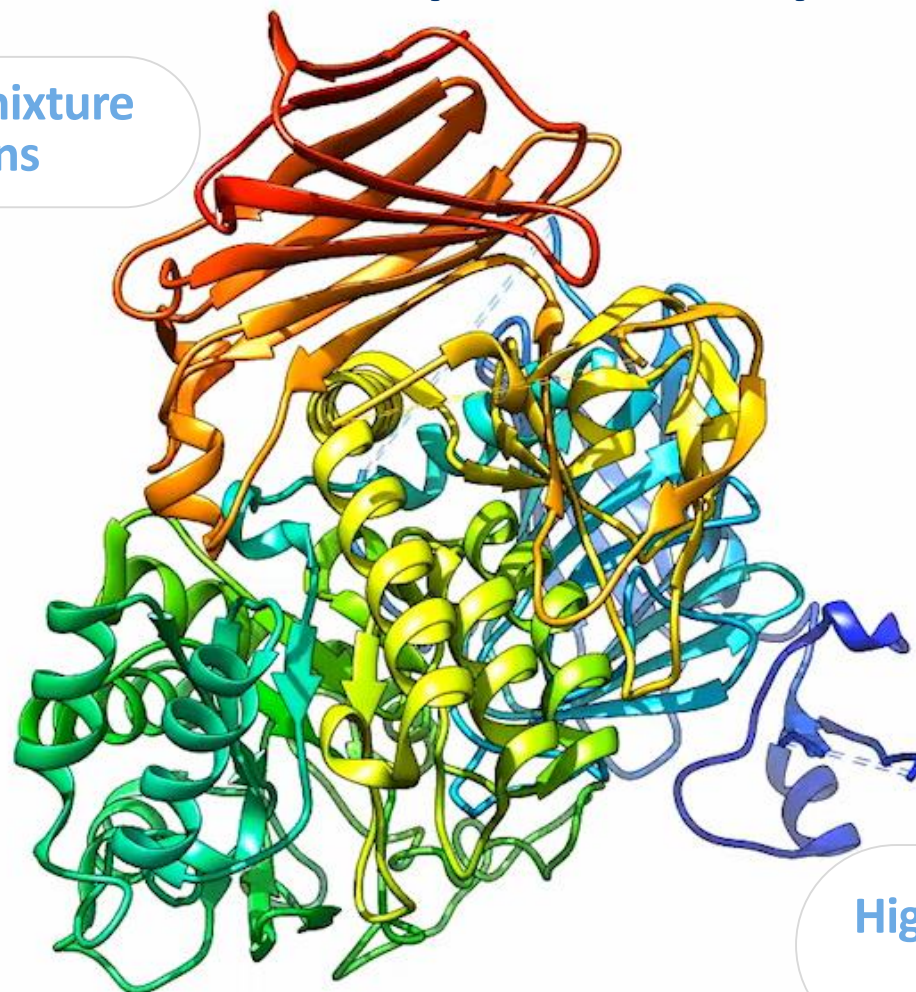
~\$900M+ Global Pompe ERT sales in FY17<sup>2</sup>

# AT-GAA: 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 10/5/18)

**Improvements in Key Functional Measure in both ERT-Naïve and ERT-Switch at Months Six and Nine with Continued Benefit Out to Month 18**

## 6-Minute Walk Test (m)

Cohort	Baseline (n=10)	Change at Month 6 (n=10) Mean (SD)	Change at Month 12 (n=10) Mean (SD)	Change at Month 18 (n=9) Mean (SD)
Cohort 1 ERT-Switch Ambulatory	<b>397.2</b> (96.8)	<b>+23.9</b> (52.2)	<b>+42.2</b> (46.5)	<b>+51.7</b> (45.9)
Cohort	Baseline (n=5)	Change at Month 6 (n=5) Mean (SD)	Change at Month 12 (n=5) Mean (SD)	Change at Month 18 (n=5) Mean (SD)
Cohort 3 ERT-Naïve	<b>399.5</b> (83.5)	<b>+41.8</b> (29.4)	<b>+63.1</b> (29.1)	<b>+49.0</b> (28.3)

## FVC (% Predicted)

Cohort	Baseline (n=9*)	Change at Month 6 (n=9) Mean (SD)	Change at Month 12 (n=9) Mean (SD)	Change at Month 18 (n=8) Mean (SD)
Cohort 1 ERT-Switch Ambulatory*	<b>52.6</b> (14.7)	<b>-1.3</b> (4.1)	<b>-3.3</b> (6.1)	<b>-3.7</b> (7.0)
Cohort	Baseline (n=5)	Change at Month 6 (n=5) Mean (SD)	Change at Month 12 (n=5) Mean (SD)	Change at Month 18 (n=5) Mean (SD)
Cohort 3 ERT-Naïve	<b>53.4</b> (20.3)	<b>+4.2</b> (5.6)	<b>+4.4</b> (8.6)	<b>+5.0</b> (2.9)

\*FVC not available for one subject



# AT-GAA 18-Month Clinical Data Summary (ATB200-02 Study)

## Consistent and Durable Responses Across Key Measures of Safety, Functional Outcomes and Biomarkers in both ERT-Switch and ERT-Naïve Pompe Patients out to Month 18

- 6-minute walk test (6MWT) showed continued benefit in ERT-naïve and ERT-switch patients
- Timed motor function tests generally consistent with 6MWT results in both ambulatory cohorts
- Muscle strength increased in all cohorts, including nonambulatory ERT-switch patients
- Pulmonary function
  - Forced vital capacity (FVC), maximal inspiratory pressure (MIP), and maximal expiratory pressure (MEP) generally increased in ERT-naïve patients
  - FVC, MIP, and MEP were generally stable in ERT-switch patients
- Fatigue severity scale
  - Improvement in fatigue score was observed in all cohorts
- Biomarkers and safety
  - Creatine kinase (CK) and urine hexose tetrasaccharide (Hex4) levels decreased in all cohorts
  - AT-GAA (ATB200/AT2221) was generally well tolerated
  - Adverse Events Generally Mild and Transient
- Very low rates of IARs (<1%) after 890+ total infusions across all cohorts

# Key Activities in 2018

## Significant Progress in Clinical, Regulatory, and GMP Manufacturing Activities in 2018

### Year-to-Date Progress

#### CLINICAL

- ☒ Addt'l. Phase 1/2 ATB200-02 extension data presented at *WORLDSymposium*
- ☒ Addt'l. patients in Phase 1/2 ATB200-02 clinical study
- ☒ Initiation of retrospective natural history of ERT-treated patients
- ☒ 18-month data from ATB200-02 clinical study (4Q18)
- ☐ Initiation of larger registration-directed study
- ☐ Completion of a retrospective natural history study (4Q18)

#### REGULATORY

- ☒ EMA: Received Scientific Advice Working Party Guidance
- ☒ U.S. FDA type C meeting and U.S. update

#### MANUFACTURING

- ☒ Final FDA agreement on comparability between 1,000L and 250L GMP scale
- ☒ German regulatory authorities (BfArM) agreement on strategy to demonstrate comparability between 1,000L and 250L GMP scale
- ☒ Release for clinic of 1,000L GMP commercial scale material
- ☐ Announce plan for long-term commercial manufacturing



# Gene Therapy Pipeline

# Leading Gene Therapy Portfolio in Lysosomal Storage Disorders

License Through Nationwide Children’s Hospital and Collaboration with Penn  
Combine with Successful Amicus Development and Commercial Track Record in LSDs

Ground-Breaking, Clinically Validated Science

14 Gene Therapy Programs

Expertise and Relationships in Gene Therapy

Compelling Data in Three Lead Batten Disease Programs; Earlier-Stage Fabry and Pompe Programs

Leading Gene Therapy Portfolio in Lysosomal Storage Disorders

Amicus Gene Therapy Portfolio

	DISCOVERY	PRECLINICAL	PHASE 1/2	PHASE 3
CLN6 Batten Disease	NCH			
CLN3 Batten Disease	NCH			
CLN8 Batten Disease	NCH			
Fabry Gene Therapy	PENN			
Pompe Gene Therapy	PENN			
Neimann-Pick C	NCH			
Wolman Disease	NCH			
Tay-Sachs	NCH			
Multiple Other CNS LSDs	NCH			
CDKL5 Gene Therapy / ERT	PENN			
Other	PENN			



# Batten Disease Overview

**Batten Disease is a Group of Rare, Fatal, Lysosomal Storage Disorders of the Central Nervous System with High Unmet Need and Limited Treatment Options**

## Disease Overview

- A group of disorders known as neuronal ceroid lipofuscinoses (NCLs), collectively referred to as Batten disease
- Mutation in one of 13 different CLN genes leads to lysosomal dysfunction
- Signs and symptoms typically begin in early and late childhood
- Most affected children do not survive into adulthood



# Platform Proof-of-Concept for Lead Batten Disease Programs

**CLN6 and CLN3 Programs are Clinical Stage; CLN8 has Definitive Preclinical Efficacy Data in a Mouse Model of Disease – All Following Single AAV Intrathecal Administration**

PRECLINICAL MOUSE MODEL DATA

	Storage Material & Glial Activation	Motor & Cognitive Function	Survival	Safety & Brain Expression in NHP	GMP Clinical Supply	IND Active	Preliminary Clinical Data
CLN6	✓	✓	✓	✓	✓	✓	✓
CLN3	✓	✓	N/A*	✓	✓	✓	Pending
CLN8	✓	✓	✓	Pending	Pending	Pending	Pending

\*CLN3 mouse model does not have impaired survival

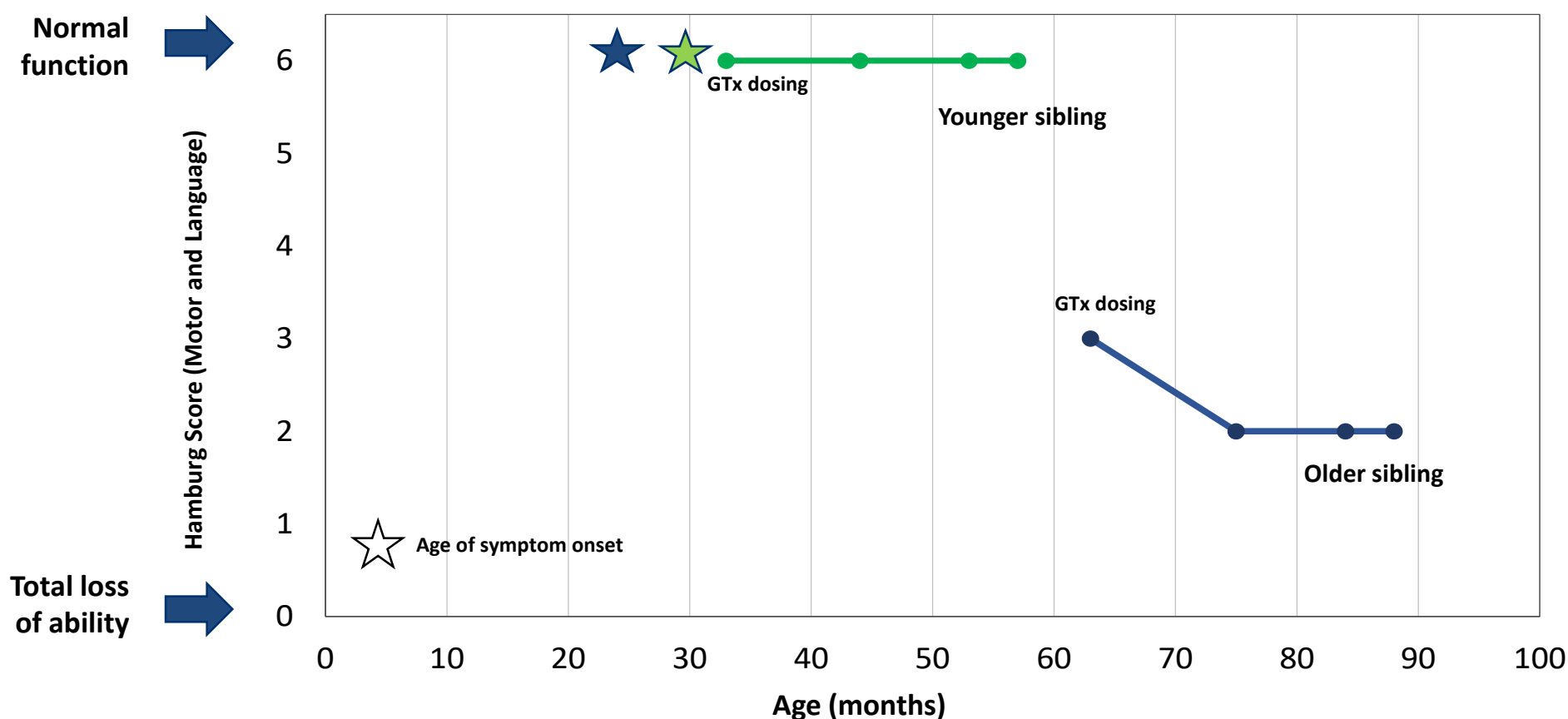
# CLN6: Clinical Study Design and Safety Summary (Interim Data)

## Data from an Ongoing Single-arm Phase 1/2 Study Indicate Single AAV9-CLN6 Administration is Generally Well Tolerated

- Single-arm study with all patients receiving single intrathecal administration gene therapy
- Ten patients currently treated with single intrathecal administration
  - Average follow-up duration: 12 months (range 1-24 months)
  - Additional patients in screening
- Adverse events (n=94 events reported)
  - Majority of adverse events (AEs) were mild and unrelated to treatment
  - Five Grade 3 (severe) AEs (defined as medically significant) reported in 4 patients
  - No Grade 4 (life-threatening) or Grade 5 (death) AEs reported to date
- T-cell response and antibody elevations not associated clinical manifestations
  - No changes in treatment required
- Data Safety Monitoring Board (DSMB) has permitted study to proceed and enroll additional patients

# Efficacy Data: Matched Sibling Case Report

## Encouraging Interim Efficacy Data in First Two Patients Treated with Gene Therapy with Two Years of Follow-up



- Two siblings (same genotype) treated with gene therapy at ages 2.8 and 5.3 years, respectively
- Two years post treatment, Hamburg motor and language scores indicate no disease progression in the younger sibling
- Disease progression in older sibling has shown evidence of stabilization



# Addressable Patient Populations in Neurologic LSDs\*

**Advances Amicus Vision  
with 10,000+ Addressable  
Patients Across 10 Programs**



\*Estimated addressable U.S., EU, Japan, and other major, reimbursable markets based on published incidence and prevalence

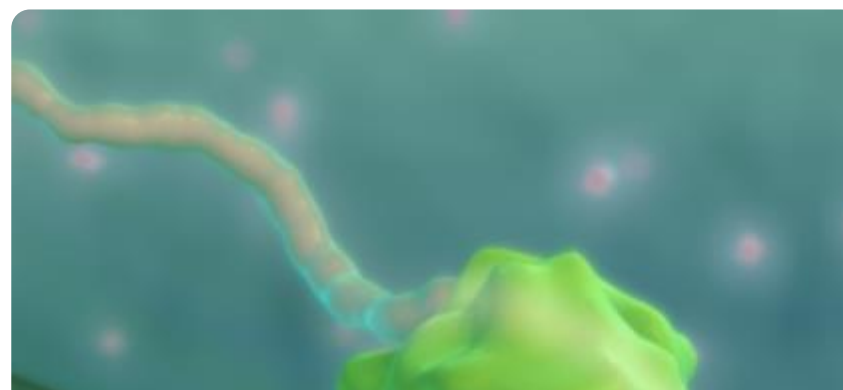
# Amicus Protein Engineering Expertise & Technologies for Gene Therapy

**Collaboration with Penn to Enable Greater Protein Expression and Delivery at Lower Gene Therapy Doses for Fabry, Pompe, CDKL5 Deficiency Disorder and 1 Additional Indication**



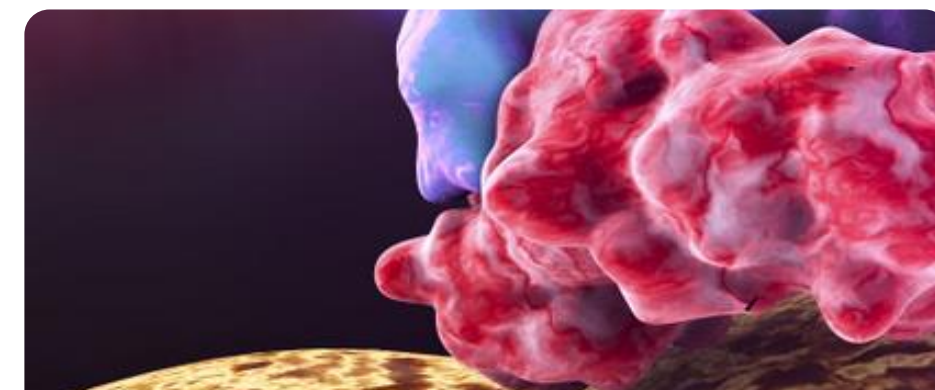
## Increased Protein Expression

Novel untranslated sequences to avoid inhibition of initiation and drive efficient protein synthesis



## Increased Protein Secretion

Effective signal sequences to increase protein expression & secretion



## Improved Protein Targeting and Stabilization

Targeting moieties  
Protein design



# Financial Summary and Upcoming Milestones

# Financial Summary & Guidance

**Strong Balance Sheet with \$564M Cash at 9/30/18 - Cash Runway into at Least 2021**

FINANCIAL POSITION		September 30, 2018
Cash		\$564M
Debt		\$319M
Cash Runway <sup>1</sup>		Into at least 2021
CAPITALIZATION		
Shares Outstanding <sup>2</sup>		189,254,341
FINANCIAL GUIDANCE		
FY18 Net Cash Spend Guidance		\$190M-\$210M
Galafold Revenue Guidance		\$80-\$90M

<sup>1</sup>Based on existing operating plan. <sup>2</sup>Includes shares from the February 2018 equity offering



# Anticipated Milestones: 2018-2019

## Well-Positioned to Create Significant Value for Shareholders and Patients in 2018-2019

### Galafold: Fabry Disease

- On track to achieve higher end of FY18 revenue guidance (\$80M-\$90M)
- Continued growth in existing markets
- Expansion into new markets
- Fabry market growth opportunities

### AT-GAA: Pompe Disease

- PROPEL pivotal study initiation (4Q18)
- Completion of natural history study (4Q18)
- Additional Phase 1/2 study data (2019)
- Initiation of additional supportive studies (2019)
- Update on long-term manufacturing strategy

### Gene Therapy Programs

- First Patient in CLN3 Batten disease Phase 1/2 Study (4Q18)
- CLN6 Batten disease Phase 1/2 preliminary data
- Preclinical data for next-generation gene therapies for Fabry, Pompe and CDKL5 Deficiency Disorder
- Preclinical work across additional neurologic LSDs

# 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

YE17



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

2023

\*Clinical & commercial, all figures approximate

Thank You

