# AMYLYX

## **Company Overview**

Our mission is to end the suffering caused by neurodegenerative diseases. Every day, we strive to bring new treatments to people who deserve better.

NASDAQ: AMLX June 2022

### **Disclaimer**

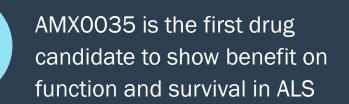
These materials include express and implied "forward-looking statements," including forward-looking statements within the meaning of the Private Securities Litigation Reform Act of 1995. Forward looking statements include all statements that are not historical facts, and in some cases, can be identified by terms such as "may," "might," "will," "could," "would," "should," "expect," "intend," "plan," "objective," "anticipate," "believe," "estimate," "predict," "potential," "continue," "ongoing," or the negative of these terms, or other comparable terminology intended to identify statements about the future. Forward-looking statements contained in these materials include, but are not limited to, statements regarding our product candidates (including AMX0035 ongoing and future clinical trials), timing of the receipt of regulatory approvals, future results of operations or financial condition, business strategy and plans and objectives of management for future operations. By their nature, these statements are subject to numerous risks and uncertainties, including the impact that the ongoing COVID-19 pandemic will have on our development activities and operations, as well as those risks and uncertainties set forth in our US Securities and Exchange Commission filings that could cause actual results, performance or achievement to differ materially and adversely from those anticipated or implied in the statements. You should not rely upon forward looking statements as predictions of future events. Although our management believes that the expectations reflected in our statements are reasonable, we cannot guarantee that the future results, performance or events and circumstances described in the forward-looking statements will be achieved or occur. Recipients are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date such statements are made and should not be construed as statements of fact. We undertake no obligation to publicly update any forward-looking statements, whether as a result of new information, any future presentations or otherwise, except as required by applicable law. Certain information contained in these materials and any statements made orally during any presentation of these materials that relate to the materials or are based on studies, publications, surveys and other data obtained from third-party sources and our own internal estimates and research. While we believe these third-party studies, publications, surveys and other data to be reliable as of the date of these materials, it has not independently verified, and we make no representations as to the adequacy, fairness, accuracy or completeness of, any information obtained from third-party sources. In addition, no independent source has evaluated the reasonableness or accuracy of our internal estimates or research and no reliance should be made on any information or statements made in these materials relating to or based on such internal estimates and research.

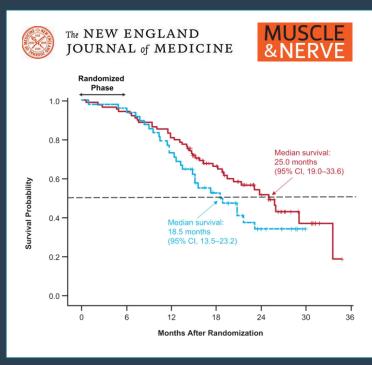




### **Amylyx Highlights**

1 st





#### Approved in Canada with conditions as ALBRIOZA<sup>™</sup>

Pending regulatory decisions in U.S. and Europe –filings supported by robust Phase 2 clinical data published in NEJM





#### Strong global IP position

Composition of matter patents issued; orphan and NCE exclusivity expected



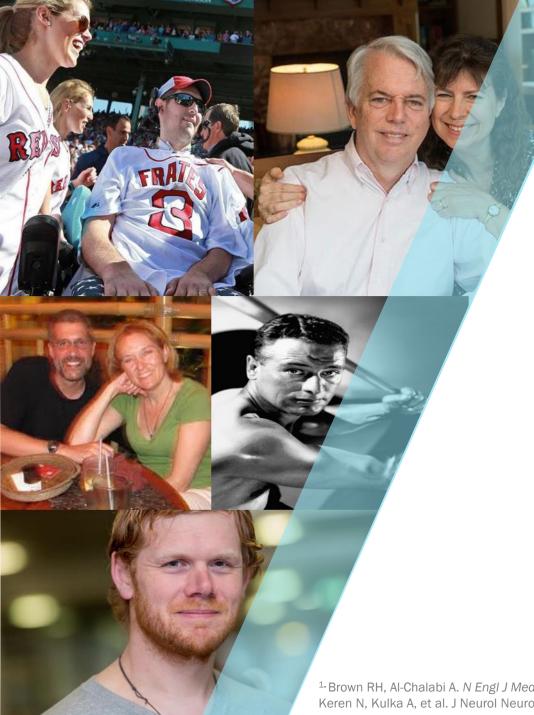


## Why ALS

"We need to work on the ALS clock... I lost the privilege of working on the human clock on January 6, 2018. My clock is a lot faster."

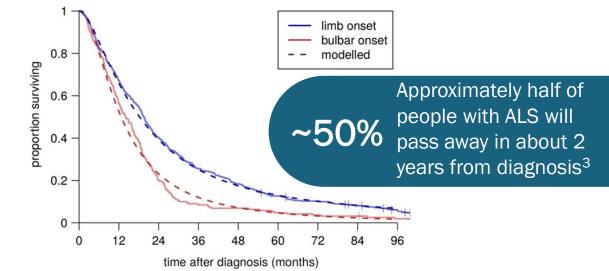
- Sandy Morris, 51-year-old mother of three, person living with ALS, and co-founder of I AM ALS





### ALS is Relentlessly Progressive, Debilitating, and Universally Fatal

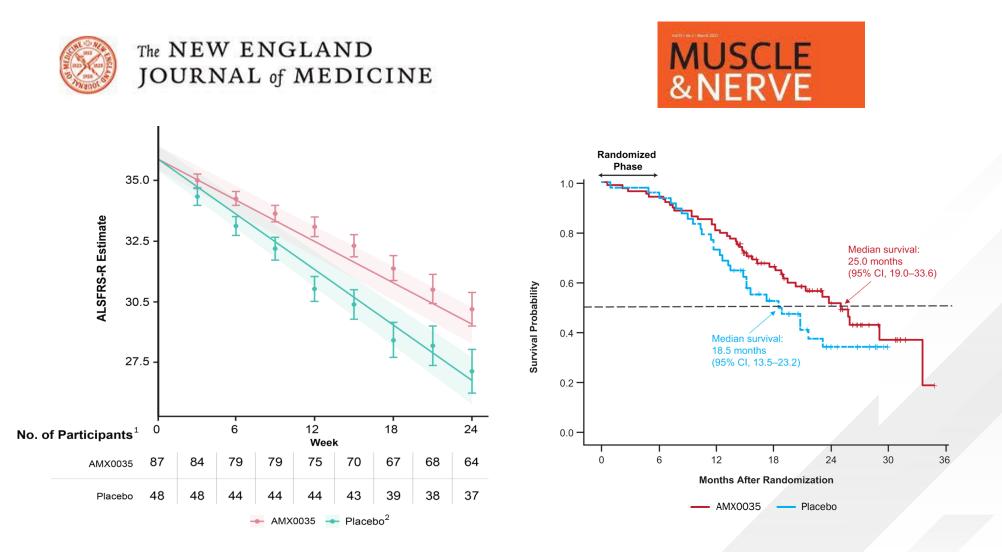
- ALS leads to deteriorating muscle function, the inability to move and speak, respiratory paralysis, and death<sup>1,2</sup>
- Diagnosis between ages 40 and 75
- >90% of people with ALS have no family history of the disease



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<sup>1</sup>· Brown RH, Al-Chalabi A. *N Engl J Med*. 2017;377(2):162-172. <sup>2</sup>· Al-Chalabi A, et al. *Lancet Neurol*. 2016;15(11):1182-1194 <sup>3</sup>. Knibb JA, Keren N, Kulka A, et al. J Neurol Neurosurg Psychiatry. 2016;87(12):1361-1367.

## Phase 2 CENTAUR Trial Results The First Randomized Controlled Trial to Show Benefit on Function and Survival

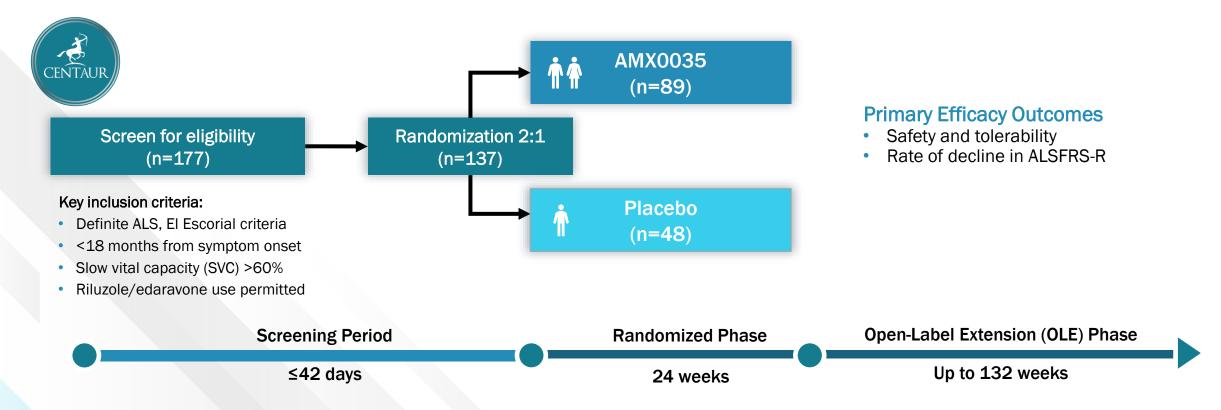


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## Phase 2 CENTAUR Trial Design for AMX0035

Primary Objectives:

- To determine the safety and tolerability of AMX0035 taken orally or via feeding tube twice daily
- To measure the impact of AMX0035 on ALSFRS-R slope





The NEW ENGLAND JOURNAL of MEDICINE

## **Baseline Characteristics – CENTAUR**

Characteristic	AMX0035 (n=87)	Placebo (n=48)
Age (y), mean (SD)	57.6 (10.4)	57.3 (7.6)
BMI (kg/m²), mean (SD)	26.9 (4.4)	26.4 (5.8)
Pre-baseline ALSFRS-R slope (points/mo), mean (SD)	0.95 (0.4)	0.93 (0.6)
Months since ALS diagnosis, mean (SD)	5.9 (3.3)	6.3 (3.2)
Months since ALS symptom onset, mean (SD)	13.5 (3.8)	13.6 (3.6)
Edaravone or riluzole use at or prior to study entry, n (%)	62 (71)	42 (88)
Edaravone use	22 (25)	24 (50)
Riluzole use	59 (68)	37 (77)
Use of both	19 (22)	19 (40)
Bulbar onset, n (%)	26 (30)	10 (21)
SVC (% predicted), mean (SD)	83.6 (18.2)	83.9 (15.9)
Mean ALSFRS-R total score, mean (SD)	35.7 (5.8)	36.7 (5.1)
ATLIS total score (% predicted), mean (SD)	56.8 (20.1)	53.9 (20.9)
ATLIS upper extremity score (% predicted), mean (SD)	54.8 (24.4)	51.4 (25.2)
ATLIS lower extremity score (% predicted), mean (SD)	57.6 (24.9)	57.1 (25.8)



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Average age
58

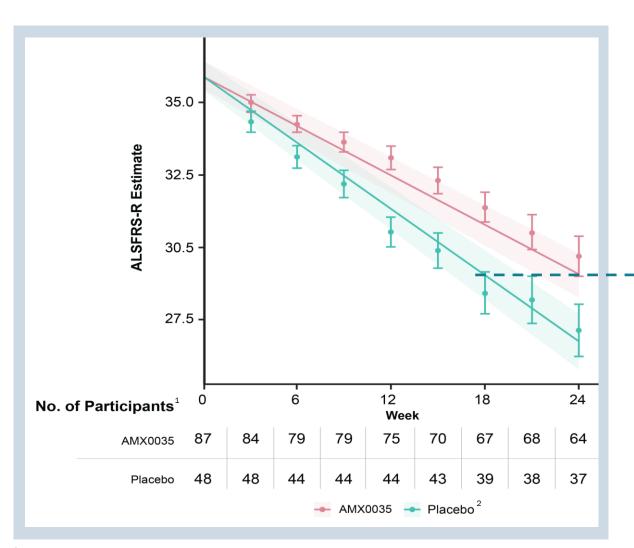
Time from symptom onset 13.5 months

Time from diagnosis 6 months

Bulbar onset 26%

On riluzole or edaravone at or prior to study entry **77%** 

## **CENTAUR Trial Results** Statistically Significant Benefit on the ALSFRS-R, the Gold Standard Clinical Scale in ALS



#### The NEW ENGLAND JOURNAL of MEDICINE

ORIGINAL ARTICLE

#### Trial of Sodium Phenylbutyrate–Taurursodiol for Amyotrophic Lateral Sclerosis

S. Paganoni, E.A. Macklin, S. Hendrix, J.D. Berry, M.A. Elliott, S. Maiser, C. Karam, J.B. Caress, M.A. Owegi, A. Quick, J. Wymer, S.A. Goutman, D. Heitzman,
T. Heiman-Patterson, C.E. Jackson, C. Quinn, J.D. Rothstein, E.J. Kasarskis, J. Katz, L. Jenkins, S. Ladha, T.M. Miller, S.N. Scelsa, T.H. Vu, C.N. Fournier, J.D. Glass,
K.M. Johnson, A. Swenson, N.A. Goyal, G.L. Pattee, P.L. Andres, S. Babu, M. Chase,
D. Dagostino, S.P. Dickson, N. Ellison, M. Hall, K. Hendrix, G. Kittle, M. McGovern,
J. Ostrow, L. Pothier, R. Randall, J.M. Shefner, A.V. Sherman, E. Tustison,
P. Vigneswaran, J. Walker, H. Yu, J. Chan, J. Wittes, J. Cohen, J. Klee, K. Leslie,
R.E. Tanzi, W. Gilbert, P.D. Yeramian, D. Schoenfeld, and M.E. Cudkowicz

#### 2.32 point difference, p=0.03

"Each category in the ALSFRS-R seems clinically important, and because each domain includes only five levels that span 0 (cannot do) to 4 (normal), prevention of even 1 unit of worsening in a single domain seems meaningful and desirable for individuals with ALS".<sup>3</sup>

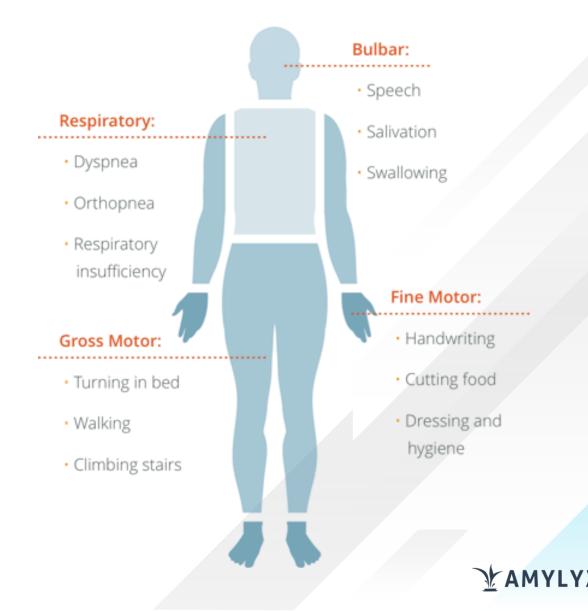
<sup>1</sup>Two participants did not have follow-up efficacy assessments and were not included in the efficacy population (modified intention to treat n=135). <sup>2</sup>77% of participants were on Riluzole or edaravone at or prior to study entry. <sup>3</sup> FDA Center for Drug Evaluation and Research, Application Number 2091760rig1s000, Office Director Memo, Ellis F. Unger, MD, May 4, 2017 Paganoni S, et al. New Eng J Med. 2020.



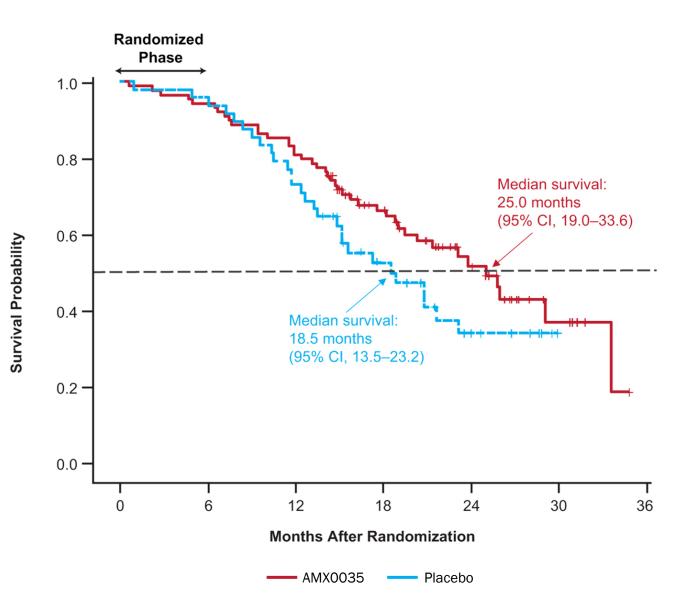
## The CENTAUR ALS Trial ALSFRS-R – The Most Widely Used ALS Endpoint

A small change of just 1-2 points in the ALSFRS-R score can indicate a significant reduction in function

The heterogeneity of disease spread and the rate of progression mean that the ALSFRS-R score remains individual in nature. Two people with similar overall scores can still exhibit very different symptoms



## CENTAUR Trial Results AMX0035 Resulted in Longer Lifespan for People with ALS





Treatment with AMX0035 starting at baseline (~6 months earlier) resulted in a 6.5 month difference in survival (HR = 0.56, p=0.02)

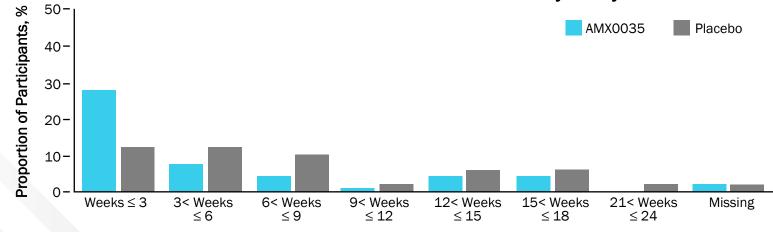
\*Note: This is an ITT (all 137 patients) analysis Survival defined as All Cause Mortality (True Overall Survival) Note: CI = Confidence Interval; HR = Hazard Ratio

### Adverse Events (AEs) – CENTAUR

- Nearly all participants (AMX0035, 97%; placebo, 96%) reported one or more AEs during the trial
  - Most did not lead to modification or interruption of study drug dosing and were not considered related to treatment

	AMX0035 (n=89)	Placebo (n=48)	Overall (n=137)
Participants with at least 1 AE — n (%)	86 (97)	46 (96)	132 (96)
Number of distinct events	618	328	946
Drug interrupted due to AE — n (%)	13 (15)	6 (12)	19 (14)
Dose reduced due to $AE - n$ (%)	4 (4)	0	4 (3)
Drug withdrawn due to AE — n (%)	17 (19)	4 (8)	21 (15)
Due to AE considered related	13 (15)	1 (2)	14 (10)
Due to AE considered unrelated	4 (4)	3 (6)	7 (5)
	• ( • )	- (•)	

#### Incidence of Gastrointestinal Adverse Events by Study Week



- Events that occurred with greater (≥2%) frequency in the AMX0035 group were primarily GI
  - GI events in the AMX0035 group were reported most frequently in the first three weeks

## American Academy of Neurology (AAN) 2021

### Long-Term Survival of Participants in the CENTAUR Trial of AMX0035 for ALS

#### **Received Merit of Distinction Award**

Distinction is awarded to the abstract deemed to be the top in its topic category in quality of study and interest to the neurologic community

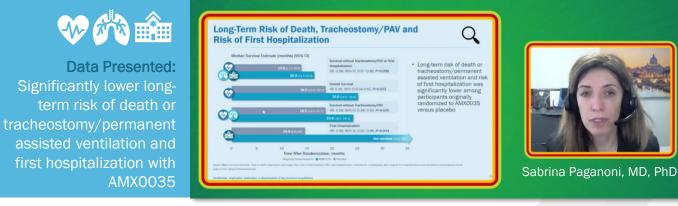
#### **Plenary Session Presentation**

Session highlights issues most critical to practicing neurologists, including abstracts related to new therapeutic developments. Amylyx presentation focused on long-term survival benefit of AMX0035

#### **Top Science Press Conference**

Selected by the Chair of AAN's Science Committee to be featured at the Top Science Press Conference held prior to the meeting **13,000+** virtual attendees from the United States, Canada, Europe, Asia, South America and more





Top Science Press Conference generated additional coverage

#### Meeting Coverage > AAN

Novel ALS Drug Continues to Show Survival Benefit

- Median time to first hospitalization not yet reached with AMX0035 in CENTAUR trial

by Ed Susman, Contributing Writer, MedPage Today April 19, 2021

VIDEO: Retained physical function in patients with ALS taking AMX0035 spurs 'excitement'



## **Path to Patients**

"The CENTAUR study was designed and run through NEALS, was supported by a partnership between The ALS Association and ALS Finding a Cure, and is a phenomenal example of what can happen when a community works closely together."

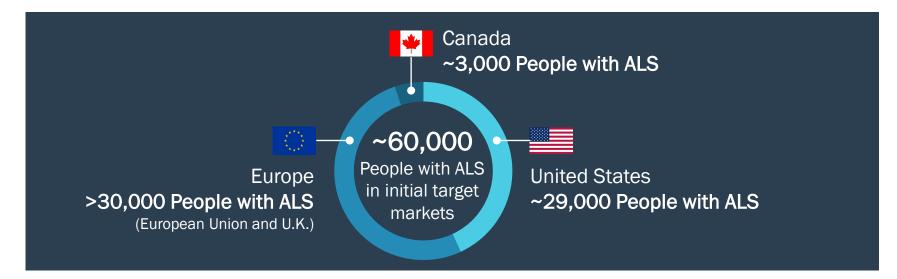
Dr. Merit Cudkowicz, M.D., Chief Medical Officer of ALS Finding a Cure®, Director of the Sean M. Healey & AMG Center for ALS, Chief of Neurology at Mass General, and the Julianne Dorn Professor of Neurology at Harvard Medical School.

Note: NEALS is the Northeast ALS Consortium



**₩**AMYLYX

## The ALS MarketA Large, Global Orphan Disease Market with Significant<br/>Unmet Needs





ALS is a global disease that affects at least 200,000 people worldwide



Affects people globally regardless of ethnic, geographic, or racial background

Chiò /Logroscino /Traynor /Collins / Simeone /Goldstein /Nelson LM, et al. Neuroepidemiology. 2021 Dec 20. doi: 10.1159/000521591

**Regulatory Update** Approved in Canada as ALBRIOZA<sup>TM</sup> NDA under review for approval by FDA; MAA under review by EMA





## Canada Path to Commercialization





#### First Regulatory Approval for Amylyx Worldwide

Moving with urgency to bring ALBRIOZA<sup>™</sup> to Canadians living with ALS as quickly as possible. Approximately 1,000 people die from ALS in Canada every year, with a similar number of diagnoses annually.



#### New Treatment Option Available for Canadians ALBRIOZA is only the third product candidate to be approved for the treatment of ALS in Canada in the past 30 years. Unmet need remains high, with approximately 3,000 Canadians living with ALS.

#### Navigating Complex Reimbursement System



Reimbursement pathway is determined by Health Technology Assessment recommendations from CADTH and INESS. Reimbursement process, which is central to a full product launch, can take 6-12 months or longer to complete, depending on payer. Amylyx Care Team (ACT) is ready to assist with eligibility and enrollment support.

#### Well Prepared and Ready to Launch

Staffed by a team with considerable experience with new therapy launches in Canada

#### **Chris Aiello**

Head of Canada and **SONOFI Bioverativ** = Biogen General Manager

#### Julie Girodat

Head of Patient Services & Distribution

Tracey Jason, PhD Head of Medical Affairs



AMCEN (<sup>III</sup>) Bristol Myers Squibb"

Jason Lee Head of Market Access

BAYER Bioger



#### Blaine MacNeil Head of Sales, Marketing and Commercial Operations

sanofi



## Deeply Experienced Executive Team to Oversee Global Growth, Clinical Development, Approvals, and Commercial Execution

#### Joshua Cohen BSE

#### Co-CEO, Co-Founder, and Director

Invented AMX0035, dedicated to ALS/neurodegenerative research since 2013, co-designed CENTAUR study, co-led development of AMX0035 as 3 person company for AMX0035 as 3 person company for 6 years, then built Amylyx team

#### **Tammy Sarnelli**

#### **Regulatory Affairs**

30+ years in Regulatory, including at Biogen leading approvals of Tysabri and Tecfidera Former Head of Global Regulatory Affairs, Neurology & Immunology at EMD Serono

#### **Keith White**

#### Head of Global Market Access

20+ years in Market Access, including at Genentech, Intermune, and Intercept

#### Justin Klee ScB

#### Co-CEO. Co-Founder. and Director

Co-invented AMX0035, dedicated to ALS/neurodegenerative research since 2013, co-designed CENTAUR study, co-led development of 6 years, then built Amylyx team

#### Debra Canner

#### **Chief HR Officer**

Former CHRO at Akamai. Juniper, several others; VP HR at Genzyme

#### **Timothy Lee**

#### Head of Account Management and Training

20+ years of sales, marketing and product commercialization experience, including at Alexion Pharmaceuticals. Novartis, and Pfizer

#### **Jim Frates**

#### **Chief Financial Officer**

22-year CFO at Alkermes; grew to >\$1B in annual revenue and >2,000 employees worldwide

#### Tom Holmes

#### **Global Head of Supply Chain**

Former Head of Global External Manufacturing at Biogen

#### Maryellen Garrett

#### Head of Accounting and Finance **Operations**

CPA with 20+ years of finance and accounting experience, including at Entasis Therapeutics. **Cubist Pharmaceuticals and PWC** 

#### Gina M. Mazzariello

#### **Chief Legal Officer and General** Counsel

20+ years of corporate and commercial legal experience within the healthcare industry. including at Boehringer Ingelheim

#### Margaret Olinger, MBA

#### **Chief Commercial Officer**

2<sup>nd</sup> commercial employee at Alexion; helped oversee launch of Soliris and Strensig at Alexion. 30+ years in commercial

#### John Landry

#### Head of Commercial Planning and Operations

25+ years of sales and operations experience, including at Akcea Therapeutics, Alexion Pharmaceuticals and Novartis

#### Shauna Horvath

#### Head of Global Marketing

15+ years of marketing experience, including at Cambridge BioMarketing

#### Patrick Yeramian, MD. MSC, MBA

#### **Chief Medical Officer**

Over 25 years as clinical trialist, CMO, and clinical consultant including as CMO of Viragen

#### Machelle Manuel, PhD

#### Head of Global Medical Affairs

Former Head of Global Medical Scientific Affairs at Ironwood 20+ years in medical affairs

#### Dave MacLeod

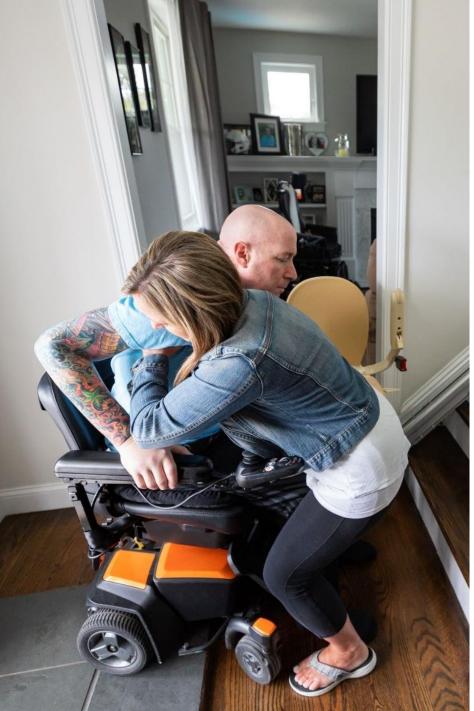
#### Head of Patient Services and **Commercial Distribution**

20+ years of biotech and pharma experience, including at Intercept Pharmaceuticals, inVentiv Health, EMD Serono, Express Scrips and Genzyme

## **PHOENIX Phase 3 Trial**

Designed to provide additional safety and efficacy data on AMX0035 for the treatment of ALS to further support our global regulatory efforts

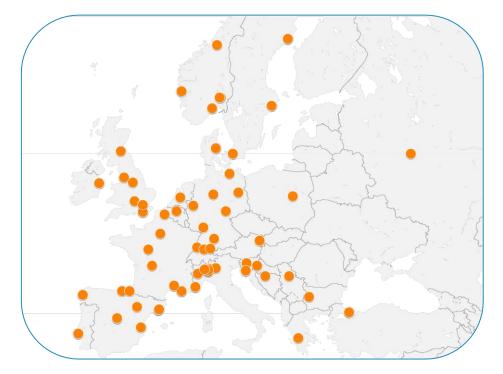




**MANATAX** 

## PHOENIX is a Large, Global Phase 3 Clinical Trial in ALS

Designed to Support Global Regulatory Efforts and Continue to Provide Data on AMX0035



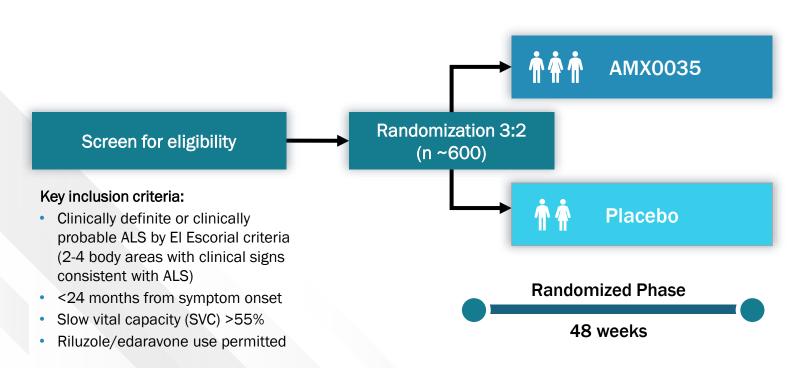
## ENCALS



AMYLYX

## **PHOENIX Trial Design for AMX0035**

Similar inclusion-exclusion criteria as CENTAUR; substantially greater statistical power



#### **Primary Efficacy Outcomes**

- Joint assessment of function and survival
- Safety and tolerability

#### Key Secondary Efficacy Outcomes

- Assessment of Function (ALSFRS-R)
- Survival
- Slow vital capacity (SVC)
- ALSAQ-40\*
- EQ5D-5L (QOL)\*\*
- Decline in King's and MiToS Stages

\*40 item assessment questionnaire which provides a subjective health measure to specifically assess quality of life for patients with ALS.

\*\*Standard quality of life measure





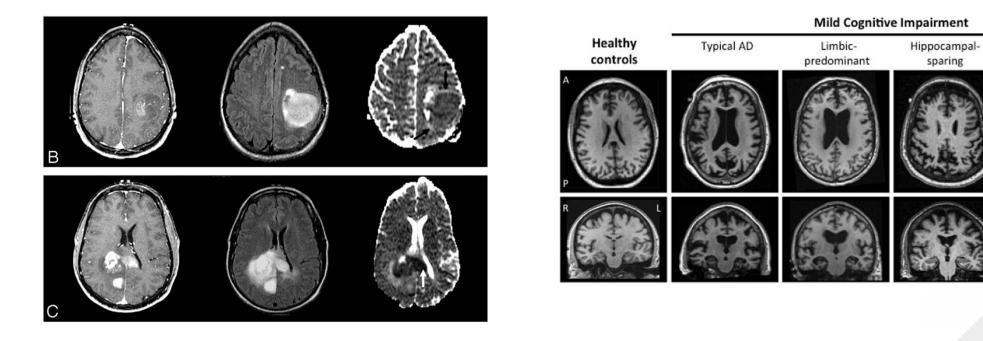
## AMX0035

A Broad Therapy to Treat Diseases of Neurodegeneration



### Neurodegenerative Diseases are the Biological Opposite of Cancer

Cancer is Characterized by Abnormal Cellular Growth; Neurodegenerative Diseases are Characterized by Abnormal Cellular Death



WHO grade III (*top row*) and grade IV (*bottom row*) astrocytomas.

Subtypes of brain atrophy patterns in MCI from visual rating scales

Update on Brain Tumor Imaging: From Anatomy to Physiology S. Cha American Journal of Neuroradiology Mar 2006, 27 (3) 475-487

Ekman, U., Ferreira, D. & Westman, E. The A/T/N biomarker scheme and patterns of brain atrophy assessed in mild cognitive impairment. Sci Rep 8, 8431 (2018). https://doi.org/10.1038/s41598-018-26151-8



Minimal

atrophy

23

### The 2002 Nobel Prize in Physiology or Medicine was for **Discoveries in the Field of Programmed Cell Death**

Since this seminal work, the endoplasmic reticulum unfolded protein response (UPR) and the mitochondrial Bax pathway have been identified as key mediators of cell death

#### The Nobel Prize in Physiology or Medicine 2002





Aviat shares 115

H. Robert Norvits JOHN E. SLAN Print Martin 115

The Nobel Prize in Physiology or Medicine 2002 was awarded jointly to Sydney Brenner, H. Robert Horvitz and John E. Sulston "for their discoveries concerning genetic regulation of organ development and programmed cell death'."

Price share 178

Proc. Natl. Acad. Sci. USA Vol. 95, pp. 4997-5002, April 1998 Cell Biolog

#### Bax directly induces release of cytochrome c from isolated mitochondria

JULIANE M. JÜRGENSMEIER, ZHIHUA XIE, QUINN DEVERAUX, LISA ELLERBY, DALE BREDESEN, AND JOHN C. REED Program on Apoptosis and Cell Death Research, The Burnham Institute, 10901 North Torrey Pines Road, La Jolla, CA 9203'

Edited by Lewis T. Williams, Chiron Technologies, Emeryville, CA, and approved February 23, 1998 (received for review October 10, 1997)

#### nature reviews molecular cell biology

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Review Article Published: 21 October 2019

Mitochondria as multifaceted regulators of cell death

Florian J. Bock & Stephen W. G. Tait 🖂

Nature Reviews Molecular Cell Biology 21, 85-100 (2020) Cite this article 21k Accesses | 256 Citations | 131 Altmetric | Metrics

#### The Journal of Clinical Investigation



Review Series Free access | 10.1172/JCl26373

#### Endoplasmic reticulum stress: cell life and death decisions

Chunyan Xu, Beatrice Bailly-Maitre, and John C. Reed

#### nature reviews drug discovery

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#### Published: December 2008

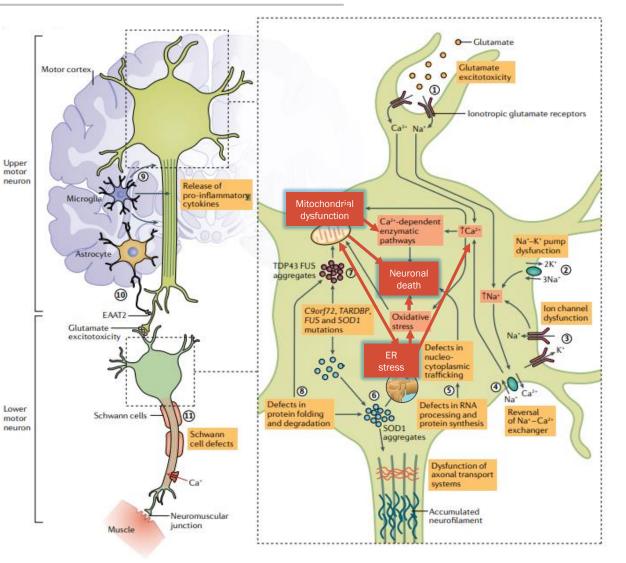
Cell death and endoplasmic reticulum stress: disease relevance and therapeutic opportunities

Inki Kim, Wenjie Xu & John C. Reed 🖂



### In ALS, Multiple Pathways Converge on ER and Mitochondrial Dysfunction to Cause Neuron Death

- Kiernan et al., Nature Reviews Neurology (2021) highlights ER and mitochondrial dysfunction as key convergence points in the neuron death that drives ALS
- Mitochondrial death proteins, including BAX, are upregulated in post-mortem ALS spinal cord samples, as are UPR related proteins
- Genetic causes of familial ALS including the most well-known genes SOD1, C9orf72 and TDP43 – are mechanistically linked to mitochondria and ER dysfunction



Mu, X Annals of Neurology 1996, Israelson A et al., 2010; Pickles S and Van de Velde C., 2012; Nishitoh H et al., 2008; Kiskinis E et al., 2014; Farg et al., 2012 Archana P et al., 2019; Huang C et al., 2020; Tan W et al., 2014; Choi SY et al., 2019; Mehta AR et al., 2021; Tsai Y-L et al., 2020; Nakaya T et al., 2018, Montibeller, L. Cell Stress Chaperones. 2018

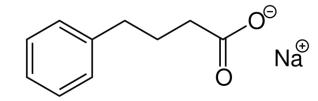
Adapted from Kiernan, M.C., Vucic, S., Talbot, K. *et al.* Improving clinical trial outcomes in amyotrophic lateral sclerosis. *Nat Reviews Neurology* **17**, **104–118** (2021). https://doi.org/10.1038/s41582-020-00434-z



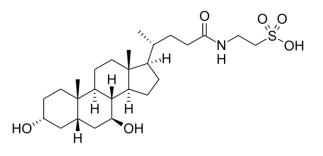
## AMX0035 — Targets Key Pathways of Cellular Death

AMX0035: Dual UPR, Bax/Mitochondrial Apoptosis Inhibitor

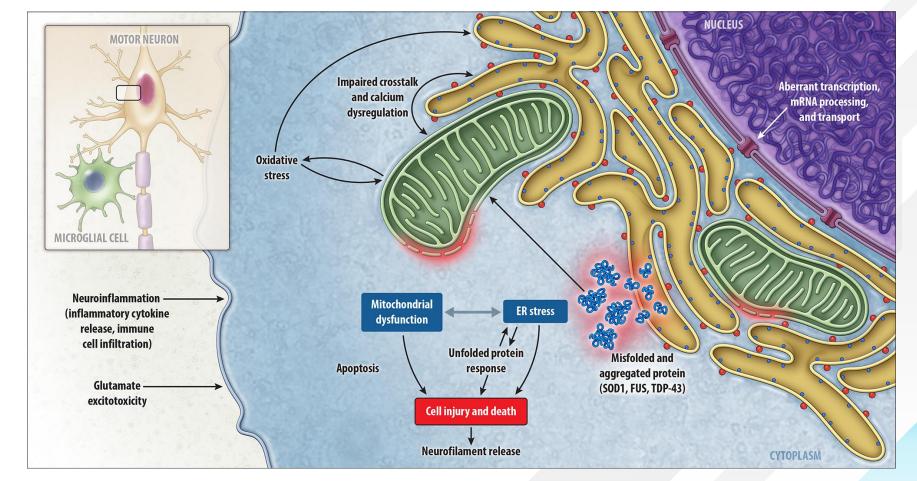
AMX0035 is a combination of PB and TURS0



**PB: Small Molecular Chaperone** Resolves UPR, reduces ER dependent death



TURSO: Bax Inhibitor Reduces Mito Dependent Death



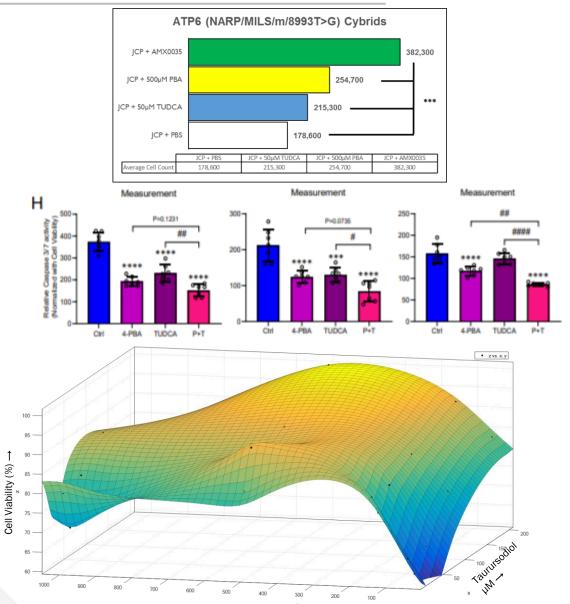


#### MANATAX

## AMX0035 Targets Both Pathways Simultaneously to Prevent or Slow Cell Death

### **Across Many Insult Models**

- AMX0035 has demonstrated synergistic benefit in mitochondrial cybrid model of mitochondria induced cellular death
- AMX0035 has demonstrated synergistic benefit in models of Wolfram syndrome considered a model of ER stress related cell death
- AMX0035 observed to prevent nearly 100% neuron death in oxidation induced neuronal death in preclinical studies
- Combination also demonstrated efficacy in additional models of cell death



←Phenylbutyrate µM

### **Strong Global IP Position**

Portfolio Provides Robust Protection of AMX0035 and Related Combinations

- 51 issued patents worldwide
- 28 additional patents pending
- Many additional filings planned

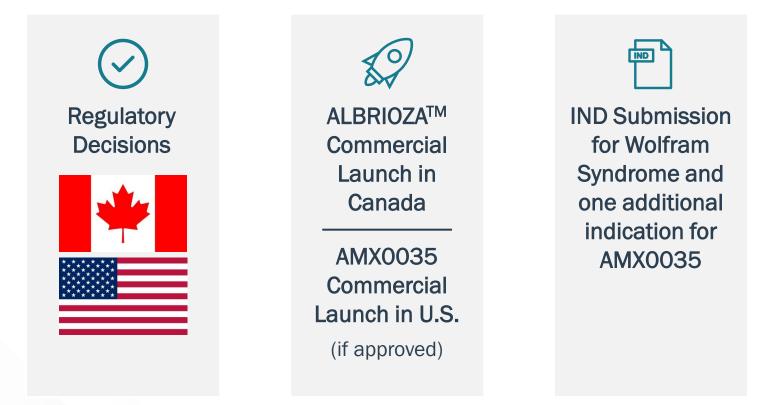


Patents protect:

- Composition of matter of the combination of PB and TURSO, including in the US – through 2033
  - And in some territories, the combination of related compounds
- Method of use of the combination and related combinations for treating neurodegenerative disease
- Formulation of the combination and manufacturing process
- Methods of treating ALS based on clinical trial results through 2040
- NCE/NAS AND Orphan Exclusivity Protect Against Generics (7 years in US, 10 in EU, 8 in Canada)

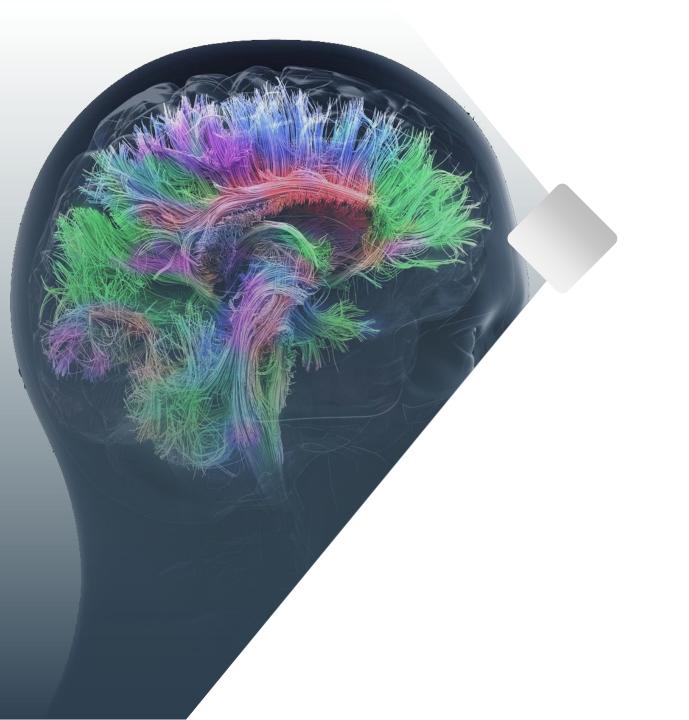


### Milestones



Focus in 2022 will also be placed on developing or in-licensing additional drugs focused on neuronal death and degeneration in ALS, and additional neurodegenerative diseases





## **Financial Overview**



Cash, cash equivalents, and short-term investments at 3/31/22: \$255.2M

1Q22 Expenses: \$47.5M





# AMYLYX

## Thank you

Our mission is to end the suffering caused by neurodegenerative diseases. Every day, we strive to bring new treatments to people who deserve better.

NASDAQ: AMLX June 2022