Filed pursuant to Rule 424(b)(4)
Registration No. 333-267730
Registration No. 333-267766

PROSPECTUS

6,693,750 Shares

Common Stock

We are offering 6,693,750 shares of our common stock.

Our common stock is listed on the Nasdaq Global Select Stock Market, or Nasdaq, under the symbol "AMLX." On October 6, 2022, the last reported sale price of our common stock, as reported on Nasdaq, was $32.82 per share.

We are an "emerging growth company" as defined under U.S. federal securities laws and, as such, will be subject to reduced public company reporting requirements for this prospectus and future filings.

Investing in our common stock involves risks. See "Risk Factors" beginning on page 13 of this prospectus and under similar headings in documents incorporated by reference into this prospectus to read about factors you should consider before buying shares of our common stock.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities nor passed upon the accuracy or adequacy of this prospectus. Any representation to the contrary is a criminal offense.

	Per Share	Total
Public offering price	$ 32.00	$ 214,200,000
Underwriting discounts(1)	$ 1.92	$ 12,852,000
Proceeds, before expenses, to Amylyx Pharmaceuticals, Inc.	$ 30.08	$ 201,348,000

(1) See the section titled "Underwriting" for a description of the compensation payable to the underwriters.

The underwriters have the option to purchase up to an additional 1,004,062 shares from us at the price to the public less the underwriting discount.

The underwriters expect to deliver the shares against payment in New York, New York on or about October 11, 2022.

Goldman Sachs & Co. LLC **BofA Securities** **SVB Securities** **Evercore ISI**

H.C. Wainwright & Co.

Prospectus dated October 6, 2022

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We incorporate by reference important information into this prospectus. You may obtain the information incorporated by reference without charge by following the instructions under “Where You Can Find More Information.” You should carefully read this prospectus as well as additional information described under “Incorporation of Certain Information by Reference,” before deciding to invest in our common stock.

Neither we nor the underwriters have authorized anyone to provide you with any information or to make any representations other than those contained in this prospectus, any amendment or supplement to this prospectus, or in any free writing prospectus we may authorize to be delivered or made available to you. Neither we nor the underwriters take responsibility for, and can provide no assurance as to the reliability of, any other information that others may give you. We are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus is accurate only as of the date on the front cover of this prospectus, regardless of the time of delivery of this prospectus or any sale of shares of our common stock. Our business, financial condition, results of operations and prospects may have changed since that date.

For investors outside the United States: We have not, and the underwriters have not, done anything that would permit this offering or possession or distribution of this prospectus in any jurisdiction where action for that purpose is required, other than in the United States. Persons outside the United States who come into possession of this prospectus must inform themselves about, and observe any restrictions relating to, the offering of the shares of common stock and the distribution of this prospectus outside the United States.

In this prospectus, unless otherwise stated or the context otherwise requires, references to “Amylyx,” “the Company,” “we,” “us,” “our” and similar references refer to Amylyx Pharmaceuticals, Inc. Amylyx and other trademarks or service marks of Amylyx appearing in this prospectus, including RELYVRIO™ and ALBRIOZA™, are the property of Amylyx. The other trademarks, trade names and service marks appearing in this prospectus are the property of their respective owners. Solely for convenience, the trademarks and trade names in this prospectus are referred to without the ® and ™ symbols, but such references should not be construed as any indicator that their respective owners will not assert, to the fullest extent under applicable law, their rights thereto.

SUMMARY

This summary highlights, and is qualified in its entirety by, the more detailed information included elsewhere in this prospectus and the other documents incorporated by reference herein. This summary does not contain all of the information that may be important to you. You should carefully consider, among other things, the matters discussed in "Risk Factors" and "Special Note Regarding Forward-Looking Statements" in this prospectus and the information in our filings with the U.S. Securities and Exchange Commission, or the SEC, incorporated by reference in this prospectus.

Overview

Our mission is to one day end the suffering caused by neurodegenerative diseases. Unlike most other cells in the body that regularly die and are replaced as part of healthy function, mature neurons are normally resistant to cell death and generally cannot regenerate. We believe AMX0035 is the first drug candidate to show both a functional and survival benefit in a large-scale clinical trial of patients with Amyotrophic Lateral Sclerosis, or ALS. On September 29, 2022, the U.S. Food and Drug Administration, or FDA, approved AMX0035, known as RELYVRIO in the United States, for the treatment of ALS in adults, and we are preparing for commercial launch of this product. AMX0035 also received marketing authorization with conditions as ALBRIOZA by Health Canada for the treatment of ALS in June 2022, and we commenced Canadian commercial sales of ALBRIOZA in the third quarter of 2022. We submitted a Marketing Authorization Application, or MAA, to the European Medicines Agency, or EMA, in the first quarter of 2022, which was validated in the same quarter.

AMX0035 is a dual UPR-Bax apoptosis inhibitor composed of sodium phenylbutyrate, or PB, and TURSO (also known as tauroursodeoxycholic acid, or TUDCA). Through the resolution of the unfolded protein response, or UPR, and by inhibiting translocation of the Bcl-2 Associated X-protein, or Bax, to the outer mitochondrial membrane, we have shown in multiple models that AMX0035 can keep neurons alive under a variety of different conditions and stresses, including in in vitro models of neurodegeneration, endoplasmic reticulum stress, mitochondrial dysfunction, oxidative stress and disease-specific models of a variety of other conditions, as well as in vivo models of Alzheimer's Disease, or AD, and multiple sclerosis. We are pursuing ALS as our first indication as it is a disease of rapid and profound neurodegeneration, and we are focused on the development and potential commercialization of AMX0035 for ALS globally. We believe AMX0035 has the potential to be a foundational therapy, meaning that it could be used alone or in conjunction with other therapies, to change the treatment paradigm across a broad range of neurodegenerative diseases.

In November 2021, we initiated a global Phase 3 clinical trial of AMX0035 for the treatment of ALS, known as the PHOENIX trial, at clinical trial sites in the United States and Europe. Enrollment in this trial was completed in March 2022 in the United States and remains ongoing in Europe. We anticipate topline results from the PHOENIX trial in 2024. This trial is designed to provide further data evaluating the safety and efficacy of AMX0035 for the treatment of ALS and to further support our global regulatory efforts and approvals. In July 2022, we announced a planned open label extension, or OLE, for the PHOENIX trial, which will allow all participants who complete the PHOENIX trial, regardless of original treatment assignment, to receive AMX0035 following the trial. In March 2022, we announced the launch of an expanded access program, or EAP, in the United States that the FDA has authorized for people with ALS who meet eligibility criteria for participation. The EAP will be wound down alongside the commercial launch of RELYVRIO in the United States.

The FDA approval on September 29, 2022 of AMX0035 as RELYVRIO for the treatment of ALS in adults was granted following the second virtual meeting of the FDA's Peripheral and Central Nervous System Drugs Advisory Committee, or the Advisory Committee, held on September 7, 2022.

The Advisory Committee initially met on March 30, 2022 and voted 4 (yes) and 6 (no) on the question of whether the data from our randomized, controlled Phase 2 CENTAUR trial and OLE established a conclusion that AMX0035 is effective in the treatment of patients with ALS. At the second meeting of the Advisory Committee, the Advisory Committee voted 7 (yes) to 2 (no) in response to the question of whether available evidence of effectiveness is sufficient to support approval of AMX0035 for the treatment of ALS, taking into account the unmet need in ALS, the status of the ongoing PHOENIX trial and the seriousness of ALS. At this meeting and the previous Advisory Committee meeting, the FDA presented concerns regarding choices of statistical models for the prespecified primary analysis and the interpretability of the survival results. In both Advisory Committee meetings, we presented scientific arguments and analyses, together with experts in the field, which we believe sufficiently addressed these concerns. In describing its basis for approval, the FDA acknowledged this scientific debate but concluded that the data met the substantial evidence standard, noting the limitations of exploratory and post hoc analyses. As a result of the FDA's approval of AMX0035 for the treatment of ALS in adults, we are preparing for a commercial launch of RELYVRIO in the United States.

We are also developing AMX0035 for other neurodegenerative diseases by leveraging our deep knowledge of and relationships in the neurodegenerative space. We believe the approach of a dual UPR-Bax apoptosis inhibitor designed to help keep neurons alive could be clinically meaningful for the treatment of other neurodegenerative disease indications in addition to ALS. Many common and rare neurodegenerative diseases are characterized by substantial neuronal cellular loss, including AD and Wolfram syndrome, as well as Parkinson's Disease, Huntington's Disease, Progressive Supranuclear Palsy, Multi-System Atrophy, and others. We conducted a Phase 2 clinical trial in AD, known as the PEGASUS trial, to obtain safety data along with initial efficacy and biomarker data which could help us prioritize additional indications to pursue with AMX0035. We believe the topline results from the PEGASUS trial, reported in November 2021, provide further biological knowledge about AMX0035 which will help inform future clinical development of AMX0035 for the treatment of AD and in other potential indications. Based on these topline results, AMX0035 met the PEGASUS trial's primary endpoint of safety and tolerability. The 6-month trial was not powered to evaluate differences between groups in efficacy outcomes and no differences were seen in a newly developed composite outcome of cognitive, functional, and imaging measures, or in secondary efficacy endpoints of cognition, function, and imaging. In this trial, AMX0035 showed significant effects on biomarkers including neurogranin, YKL-40 or Chitinase 3-like 1 (CHI3L1), and fatty acid binding protein 3 (FABP3). These results build on previously reported findings that AMX0035 exhibited significant effects on the total tau protein, tau phosphorylated at threonine 181, 8-hydroxy-2'—deoxyguanosine, or 8-OHdG, and the amyloid beta 42 to 40 (amyloid-ß1-42, amyloid-ß1-40) ratio in cerebrospinal fluid. We will continue to evaluate these data and discuss the results of the PEGASUS trial with scientific advisors as we consider potential next steps for the development of AMX0035 for the treatment of AD within our clinical development strategy. Based on preclinical evidence, we are continuing to evaluate plans to explore the use of AMX0035 in patients with Wolfram syndrome. We intend to prioritize our development efforts around neurodegenerative diseases that result in substantial disability, and ultimately death, and where unmet medical needs are greatest. Neurodegeneration represents one of today's most significant unmet medical needs. The development of therapies that preserve neuron health has historically presented unique challenges, including an imperfect understanding of underlying biology and a lack of translation of activity observed in preclinical studies to results in clinical trials. Currently approved therapies for many neurodegenerative diseases are generally only symptom modifying and have demonstrated limited efficacy. There remains an urgent need for novel approaches to address most neurodegenerative diseases, especially for progressive and severe conditions such as ALS.

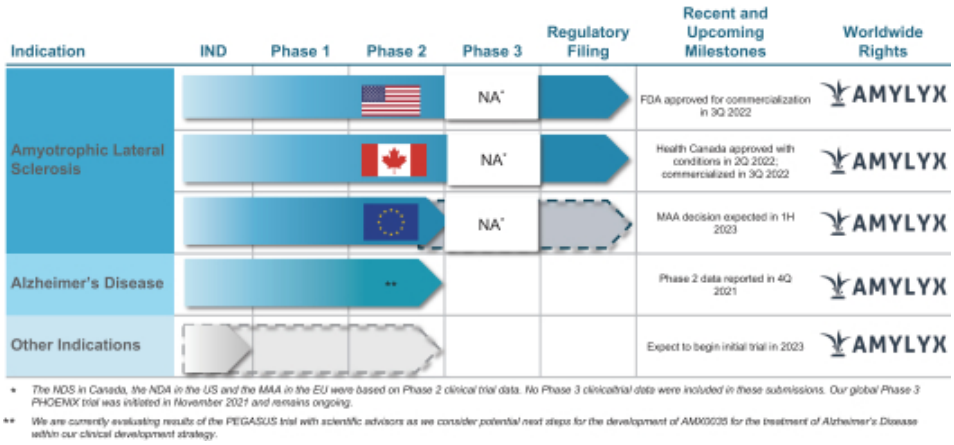
Since our founding in 2013, our goal has been to improve the quality of, and extend, life for patients suffering from neurodegenerative diseases. One of our key strategies towards achieving this goal has been to form direct relationships with patients, their families, advocacy groups, and healthcare

professionals to bring much needed innovation to patients. Throughout the development of AMX0035, we have partnered with members of the disease communities we serve, including the ALS Association, the Northeast ALS Consortium, or NEALS, ALS Finding a Cure, the Healey Center at Massachusetts General Hospital, the Cure Alzheimer's Fund, the Alzheimer's Association and the Alzheimer's Drug Discovery Foundation, to ensure our goals are aligned with patient needs. In addition, many of the key opinion leaders in the ALS community were and are investigators in our recent and ongoing trials. These relationships are a cornerstone of our culture and corporate strategy.

Pipeline Overview

AMX0035 is a proprietary oral fixed-dose combination of two small molecules: PB, which is a small molecular chaperone that reduces the UPR, preventing cell death resulting from the UPR, and TURSO, which is a Bax inhibitor that reduces cell death through apoptosis. While the PB and TURSO molecules individually are not proprietary to us, we own patents and patent applications covering AMX0035, including the fixed-dose combination of AMX0035 itself. We believe that our proprietary combination of these two molecules will allow us to target abnormal cell death to better prevent neurodegeneration than treatment with either mechanism of action alone.

Our current pipeline, including the stage of development and approvals of AMX0035 in our target indications, is represented in the table below.



* *The NDS in Canada, the NDA in the US and the MAA in the EU were based on Phase 2 clinical trial data. No Phase 3 clinicaltrial data were included in these submissions. Our global Phase 3 PHOENIX trial was initiated in November 2021 and remains ongoing.*

** *We are currently evaluating results of the PEGASUS trial with scientific advisors as we consider potential next steps for the development of AMX0035 for the treatment of Alzheimer's Disease within our clinical development strategy.*

The results of our CENTAUR trial were published in September 2020 in the New England Journal of Medicine and in October 2020 in the Journal of Muscle and Nerve. Trial results showed that patients receiving AMX0035 experienced statistically significant benefit in retention of function, as measured by the Revised ALS Functional Rating Scale, or ALSFRS-R, as well as nominally significant improvement in overall survival, or OS, when analyzing the full randomized population through the OLE trial in a post hoc analysis (July 20, 2020 and March 1, 2021 data cutoffs). AMX0035 was shown to be generally well-tolerated with the prevalence of adverse events comparable across placebo and treatment groups. We believe AMX0035 is the first drug candidate in ALS to demonstrate a statistically significant benefit in function as measured by a prespecified mean rate change in ALSFRS-R and a nominally significant benefit in a longer-term post hoc analysis of OS, which are both important outcomes for people with ALS.

Our Strategy

Our mission is to one day end the suffering caused by neurodegenerative diseases. Key elements of our strategy to achieve this mission include:

- Effectively and efficiently commercializing RELYVRIO for ALS in the United States and ALBRIOZA for ALS in Canada.
- Obtaining additional regulatory approvals of AMX0035 for ALS, with an initial focus on Europe.
- Effectively and efficiently commercializing AMX0035 in other key territories, if approved.
- Maximizing the therapeutic potential of AMX0035 by expanding into additional neurodegenerative diseases.
- Continuing to cultivate a network of patient advocacy groups, key opinion leaders, research institutions, and healthcare professionals to inform our patient-centric approach.
- Deploying a strategic approach to design, acquire and develop new therapies.

Our Company and Team

Amylyx was founded with the ambitious goal of improving the quality and length of life for patients suffering from neurodegenerative diseases. From a dorm room at Brown University in 2013, our Co-CEOs and Co-Founders, Josh Cohen and Justin Klee set out to determine why neurons die, and have ever since been working to develop AMX0035, which we believe is the first drug candidate to show a function and survival benefit in patients with ALS, and other novel therapies. To help realize our goal, we have assembled a team with deep scientific, clinical, business and leadership experience, bolstered by expertise in biotechnology. Our Chief Financial Officer, James Frates, brings over 20 years of experience as the Chief Financial Officer of Alkermes. Our Chief Commercial Officer, Margaret Olinger, brings three decades of expertise in commercial launches and operations, most recently at Alexion. Our Chief Technical Operations Officer, Tom Holmes, brings more than 25 years of leadership experience at Biogen in supply chain, pharmaceutical manufacturing and program management. Our Chief Medical Officer, Patrick D. Yeramian, brings over 30 years of medical and pharmaceutical industry experience. Our Head of Regulatory Affairs, Tammy Sarnelli, brings more than 30 years of experience from Biogen and other companies in early and late-stage neurology and rare disease development. Our Chief Human Resources Officer, Debra Canner, brings over 30 years of experience, having served as the Chief of Human Resources Officer at Akamai and as part of Genzyme. Our Chief Legal Officer and General Counsel, Gina M. Mazzariello, brings more than 20 years of corporate and commercial legal experience in the healthcare industry, including holding leadership positions at Boehringer Ingelheim USA, Inc. This team brings a diverse set of skills uniquely suited to drive successful commercialization of AMX0035 in ALS while continuing to advance AMX0035 in other indications.

Risks Associated with Our Business

Our business is subject to a number of risks of which you should be aware before making an investment decision. These risks are discussed more fully in the "Risk Factors" section of this prospectus immediately following this prospectus summary. These risks include the following:

- **Risks Related to Our Financial Position and Need for Capital**
  - We have incurred significant losses since our inception. Until we are able to generate sufficient revenue from approved products, we anticipate that we will continue to incur significant losses.
  - We have only recently obtained regulatory approval for RELYVRIO in the United States and launched ALBRIOZA in Canada and, prior to their launch, have never generated revenue from product sales. If the commercial launches of RELYVRIO in the United States and ALBRIOZA in Canada are unsuccessful, and AMX0035 is not approved in other jurisdictions or for other indications, we may never be profitable.
  - We have a limited operating history and our only product, AMX0035, has only recently been approved by the FDA in the United States and only recently received marketing authorization with conditions in Canada, which may make it difficult to evaluate the prospects for our future viability.
- **Risks Related to Commercialization of AMX0035 or Future Product Candidates**
  - We have limited experience as a commercial company and we may not be successful in commercializing AMX0035 or any future product candidates in the United States, Canada or anywhere else, if and when approved, and we may be unable to generate meaningful product revenue.
  - AMX0035 may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.
  - If the FDA, Health Canada, the EMA or other comparable foreign regulatory authorities approve generic versions of AMX0035 or any future product candidate of ours that receives regulatory approval, or such authorities do not grant our products appropriate periods of non-patent exclusivity before approving generic versions of such products, the sales of such products could be adversely affected.
  - Healthcare insurance coverage and reimbursement, both from public drug plans and private health care insurers, may be limited or unavailable for RELYVRIO in the United States and ALBRIOZA in Canada, and for AMX0035 and any future product candidates, if approved anywhere else, which could make it difficult for us to sell any product candidates or therapies profitably.
- **Risks Related to the Discovery and Development of Our Current or Future Product Candidates**
  - We currently depend on the success of AMX0035. If we are unable to maintain, or obtain additional, regulatory approvals for, and successfully commercialize, AMX0035, or experience significant delays in doing so, our business may be materially harmed.
  - The delay or denial of regulatory approval, inability to maintain regulatory approval, inability to complete post-marketing requirements, or the requirement to resubmit any marketing application with additional data or information for AMX0035 in any jurisdiction could mean that we need to delay or even cease operations, and a delay in obtaining or inability to maintain such approval would delay commercialization of AMX0035 and adversely impact our ability to generate revenue, our business and our results of operations.

- AMX0035 is a fixed-dose combination drug product and certain regulatory authorities may require a demonstration that each component makes a contribution to the claimed effects in addition to demonstrating that the combination is safe and effective for the intended population.
- We have concentrated our research and development efforts on the treatment of neurodegenerative and central nervous system, or CNS, disorders, a field that has seen very limited success in product development.
- The regulatory approval processes of the FDA, Health Canada, the EMA and other comparable foreign authorities are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain or maintain regulatory approval for AMX0035 or any future product candidates, our business will be substantially harmed. Any finding that our global Phase 3 PHOENIX trial is insufficient to support current or additional marketing authorizations in ALS could lead the FDA or Health Canada to withdraw prior regulatory approvals for RELYVRIO or ALBRIOZA, respectively, or we could decide, after consultation with regulatory authorities, to voluntarily withdraw RELYVRIO or ALBRIOZA from the marketplace.
- Competitive products may reduce or eliminate the commercial opportunity for AMX0035 for our current or future indications. If our competitors develop technologies or product candidates more rapidly than we do, or their technologies or product candidates are more effective or safer than ours, our ability to develop and successfully commercialize AMX0035 may be adversely affected.

- **Risks Related to Our Dependence on Third Parties**
  - We have entered and may in the future enter into collaborations with third parties for the development and commercialization of AMX0035 or any future product candidates, and our prospects with respect to those product candidates will depend in significant part on the success of those collaborations.
  - Our use of third parties to manufacture AMX0035 and approved products in compliance with current good manufacturing practices may increase the risk that we will not have sufficient cGMP-compliant quantities of AMX0035, products, or necessary quantities of such materials on time or at an acceptable cost.
- **Risks Related to Our Intellectual Property**
  - Our commercial success depends on our ability to protect our intellectual property and proprietary technology and to achieve data and market exclusivities in applicable markets.
- **Risks Related to Our Business Operations, Employee Matters and Managing Growth**
  - A pandemic, epidemic, or outbreak of an infectious disease, such as the ongoing and evolving COVID-19 pandemic, may materially and adversely affect our business, including our preclinical studies, clinical trials, third parties on whom we rely, our supply chain, our ability to raise capital, our ability to conduct regular business and our financial results.
  - We depend heavily on our executive officers, principal consultants and others, and the loss of their services would materially harm our business.
- **Risks Related to Our Common Stock and This Offering**
  - If you purchase shares of our common stock in this offering, you will incur immediate and substantial dilution.
  - Unstable market, economic, political and geographical conditions may have serious adverse consequences on our business, financial condition and stock price.

Our Corporate Information

We were incorporated under the laws of the State of Delaware on January 10, 2014 under the name Amylyx Pharmaceuticals, Inc. Our executive offices are located at 43 Thorndike Street, Cambridge, Massachusetts 02141, and our telephone number is (617) 682-0917. Our website address is www.amylyx.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Implications of Being an Emerging Growth Company and a Smaller Reporting Company

As a company with less than $1.235 billion of revenue during our last fiscal year, we qualify as an "emerging growth company" as defined in the Jumpstart Our Business Startups Act of 2012, or the JOBS Act. We would cease to be an emerging growth company on the date that is the earliest of (i) the last day of the fiscal year in which we have total annual gross revenues of $1.235 billion or more; (ii) the last day of our fiscal year following the fifth anniversary of the date of the completion of our initial public offering, or IPO; (iii) the date on which we have issued more than $1.0 billion in nonconvertible debt during the previous three years; or (iv) the date on which we are deemed to be a large accelerated filer under the rules of the SEC. For so long as we remain an emerging growth company, we are permitted and intend to rely on exemptions from certain disclosure and other requirements that are applicable to other public companies that are not emerging growth companies. These exemptions include:

- only two years of audited financial statements in addition to any required unaudited interim financial statements with correspondingly reduced "Management's Discussion and Analysis of Financial Condition and Results of Operations" disclosure;
- reduced disclosure about our executive compensation arrangements;
- no non-binding advisory votes on executive compensation or golden parachute arrangements; and
- exemption from the auditor attestation requirement in the assessment of our internal control over financial reporting.

In particular, we have not included or incorporated herein all of the executive compensation-related information that would be required if we were not an emerging growth company. Accordingly, the information contained or incorporated herein may be different than the information you receive from other public companies in which you hold stock. We have elected not to "opt out" of the exemption for the delayed adoption of certain accounting standards and, therefore, we will adopt new or revised accounting standards only at the time private companies adopt the new or revised accounting standard and will do so until such time that we either (i) irrevocably elect to "opt out" of such extended transition period or (ii) no longer qualify as an emerging growth company.

We are also a "smaller reporting company", meaning that the market value of our stock held by non-affiliates is less than $700 million and our annual revenue was less than $100 million during the most recently completed fiscal year. We may continue to be a smaller reporting company if either (i) the market value of our stock held by non-affiliates is less than $250 million or (ii) our annual revenue was less than $100 million during the most recently completed fiscal year and the market value of our stock held by non-affiliates is less than $700 million. If we are a smaller reporting company at the time we cease to be an emerging growth company, we may continue to rely on exemptions from certain disclosure requirements that are available to smaller reporting companies. Specifically, as a

smaller reporting company we may choose to present only the two most recent fiscal years of audited financial statements in our annual reports on Form 10-K and, similar to emerging growth companies, smaller reporting companies have reduced disclosure obligations regarding executive compensation.

THE OFFERING	
Common stock offered by us	6,693,750 shares
Option to purchase additional shares	We have granted the underwriters a 30-day option to purchase up to 1,004,062 additional shares of our common stock at the public offering price, less the underwriting discounts and commissions.
Common stock to be outstanding immediately following this offering	65,226,976 shares (66,231,038 shares if the underwriters exercise their option to purchase additional shares of common stock in full).
Use of Proceeds	We estimate that the net proceeds to us from this offering, after deducting underwriting discounts and commissions and estimated offering expenses payable by us, will be approximately $200.6 million, or approximately $230.8 million if the underwriters exercise their option to purchase additional shares from us in full, based on the public offering price of $32.00 per share. We intend to use the net proceeds from this offering, together with our existing cash, cash equivalents and investments, to fund: (i) production and commercialization activities for AMX0035 for the treatment of ALS in the United States and Canada and the regulatory approval process and market preparation in Europe for AMX0035 for the treatment of ALS; (ii) the completion of our ongoing Phase 3 PHOENIX clinical trial for the treatment of ALS; (iii) the development and expansion of our pipeline to address other neurodegenerative indications, and for formulations and derivatives of AMX0035; and (iv) working capital and other general corporate activities, including the continued build out of our organization. See the “Use of Proceeds” section in this prospectus for a more complete description of the intended use of proceeds from this offering.
Risk factors	You should read the “Risk Factors” section of this prospectus and under similar headings in

	documents incorporated by reference into this prospectus for a discussion of factors to consider carefully before deciding to invest in shares of our common stock.
Exchange symbol	“AMLX”

The number of shares of our common stock to be outstanding after this offering is based on 58,533,226 shares of our common stock outstanding as of June 30, 2022, and excludes:

- 8,528,039 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2022, at a weighted average exercise price of $12.08 per share;
- 670,013 shares of our common stock issuable upon vesting of restricted stock units outstanding as of June 30, 2022 under our 2022 Plan;
- 3,121,919 shares of our common stock that are available for future issuance as of June 30, 2022 under our 2022 Stock Option and Incentive Plan, or the 2022 Plan, as well as any future increases, including annual automatic evergreen increases, in the number of shares of common stock reserved for issuance thereunder in accordance with the terms of such plan; and
- 605,000 shares of our common stock that are available for future issuance under our 2022 Employee Stock Purchase Plan, or the 2022 ESPP.

Unless otherwise indicated, all information in this prospectus assumes no exercise of the outstanding options described above and no exercise by the underwriters of their option to purchase additional shares of our common stock.

SUMMARY CONSOLIDATED FINANCIAL DATA

You should read the following summary consolidated financial data together with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements, related notes and other financial information incorporated by reference from our Annual Report on Form 10-K for the year ended December 31, 2021 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022. The summary consolidated financial data in this section are not intended to replace the consolidated financial statements and are qualified in their entirety by the consolidated financial statements and related notes incorporated by reference in this prospectus. We have derived the consolidated statement of operations data for the years ended December 31, 2021 and 2020 from our audited consolidated financial statements, incorporated by reference into this prospectus from our Annual Report on Form 10-K for the year ended December 31, 2021. The consolidated statements of operations data for the six months ended June 30, 2022 and 2021 and the consolidated balance sheet data as of June 30, 2022 have been derived from our unaudited condensed consolidated financial statements, incorporated by reference into this prospectus from our Quarterly Report on Form 10-Q for the six months ended June 30, 2022, and have been prepared on the same basis as the audited consolidated financial statements. In the opinion of management, the unaudited data reflects all adjustments, consisting only of normal recurring adjustments, necessary for a fair statement of the financial information in those statements. Our historical results are not necessarily indicative of results that may be expected in the future.

	Six Months Ended June 30,		Year Ended December 31,	
(in thousands, except per share and per share amount)	2022	2021	2021	2020
Consolidated Statements of Operations Data:				
Grant revenue	$ —	$ —	$ 285	$ 650
Operating expenses:				
Research and development	45,723	17,793	44,040	24,594
General and administrative	56,344	13,662	38,933	15,061
Total operating expenses	102,067	31,455	82,973	39,655
Loss from operations	(102,067)	(31,455)	(82,688)	(39,005)
Other income (expense), net:				
Interest income	533	3	36	14
Interest expense	—	—	—	(2,288)
Change in fair value of derivative liability	—	—	—	(1,270)
Change in fair value of convertible notes	—	(5,228)	(5,228)	—
Other (expense) income, net	(61)	235	(51)	269
Total other income (expense), net	472	(4,990)	(5,243)	(3,275)
Loss before income taxes	(101,595)	(36,445)	(87,931)	(42,280)
Provision for income taxes	320	—	—	—
Net loss	$ (101,915)	$ (36,445)	$ (87,931)	$ (42,280)
Net loss per share attributable to common stockholders—basic and diluted (1)	$ (1.85)	$ (5.75)	$ (13.35)	$ (6.96)
Weighted-average common shares used to compute net loss per share attributable to common stockholders—basic and diluted (1)	54,958,537	6,334,813	6,586,349	6,077,758

(1) See Notes 2 and 14 to our audited consolidated financial statements, incorporated by reference into this prospectus from our Annual Report on Form 10-K for the year ended December 31, 2021,

and Note 11 to our unaudited condensed consolidated financial statements, incorporated by reference into this prospectus from our Quarterly Report on Form 10-Q for the six months ended June 30, 2022, for an explanation of the method used to calculate historical basic and diluted net loss per share attributable to common stockholders and the weighted-average common shares outstanding used in the computation of the per share amount.

	As of June 30, 2022	
	Actual	As adjusted (2)
	(in thousands)	
Consolidated balance sheet data:		
Cash, cash equivalents, and short-term investments	$ 206,681	$ 407,273
Working capital (1)	188,975	389,567
Total assets	225,240	425,832
Redeemable convertible preferred stock	—	—
Common stock	6	7
Additional paid-in capital	450,739	651,330
Accumulated deficit	(257,760)	(257,760)
Accumulated other comprehensive (loss) income	(196)	(196)
Total stockholders' equity (deficit)	192,789	393,381

(1) We define working capital as current assets less current liabilities. See our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2021 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, each of which is incorporated by reference in this prospectus, for further details regarding our current assets and current liabilities.

(2) As adjusted balance sheet data give effect to the sale of 6,693,750 shares of our common stock in this offering based on the public offering price of $32.00 per share, after deducting the underwriting discounts and commissions and estimated offering expenses payable by us.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before you decide to invest in our common stock, you should consider carefully the risks described below, together with the other information contained in this prospectus and the documents incorporated by reference into this prospectus. We believe the risks described below are the risks that are material to us as of the date of this prospectus. If any of the following risks actually occur, our business, financial condition, results of operations and future growth prospects could be materially and adversely affected. In these circumstances, the market price of our common stock could decline, and you may lose all or part of your investment.

Risks Related to Our Financial Position and Need for Capital

We have incurred significant losses since our inception. Until we are able to generate sufficient revenue from approved products, we anticipate that we will continue to incur significant losses.

Investment in pharmaceutical product development is highly speculative because it entails substantial upfront capital expenditures and significant risk that any potential product candidate will fail to demonstrate adequate effect or an acceptable safety profile, gain regulatory approval and become commercially viable. We have invested substantial resources into our product development efforts and toward the commercialization of RELYVRIO, which has been recently approved by the FDA, and ALBRIOZA, which has received marketing authorization with conditions from Health Canada, but we have not yet generated any significant revenue from product sales to date in the United States, Canada or elsewhere. We will continue to incur significant research and development and other expenses related to clinical development, commercialization, approvals in additional jurisdictions and ongoing operations. As a result, we are not profitable and have incurred losses in each period since our inception. Since our inception, we have devoted the majority of our financial resources and efforts to research and development, including preclinical studies and our clinical trials, and preparation for commercialization. Our financial condition and operating results, including our expenses and net losses, may fluctuate significantly from quarter to quarter and year to year. Accordingly, you should not rely upon the results of any quarterly or annual periods as indications of future operating performance. Additionally, net losses and negative cash flows have had, and will continue to have, an adverse effect on our stockholders' equity and working capital. Our net losses were $54.1 million and $101.9 million for the three and six months ended June 30, 2022, respectively, and $21.9 million and $36.4 million for the three and six months ended June 30, 2021, respectively. As of June 30, 2022, we had an accumulated deficit of $257.8 million. For the years ended December 31, 2021 and 2020, we incurred net losses of $87.9 million and $42.3 million, respectively. We may continue to incur significant losses and our financial results will be highly dependent upon the successful launch of RELYVRIO in the United States. We will continue to incur expenses related to our research and development activities and pre-commercialization activities in Europe, among other things.

We anticipate that our expenses will increase substantially if and as we:

- further build out our sales, marketing and distribution infrastructure and scale-up manufacturing capabilities to commercialize AMX0035 for which we obtained regulatory approval from FDA and marketing authorization with conditions from Health Canada and any product candidate for which we may obtain approval;
- continue to develop and conduct clinical trials for AMX0035 for the treatment of ALS, AD and potential additional indications;
- initiate and continue research, preclinical and clinical development efforts for any future product candidates;
- seek to identify additional product candidates;

- seek to maintain regulatory approvals in the United States and Canada and obtain regulatory approvals in the European Union, or the EU, and other geographies for AMX0035 for the treatment of ALS, AD and other indications that successfully complete clinical development;
- experience any delays or encounter any issues with any of the above, including but not limited to completion of post-marketing requirements, the potential that the EMA or other regulators require additional data to support the approval of AMX0035 for ALS, failed studies, negative or mixed clinical trial results, safety issues or other regulatory challenges, the risk of which in each case may be exacerbated by the ongoing COVID-19 pandemic;
- establish sales, marketing, distribution, manufacturing, supply chain and other commercial infrastructure to commercialize any products for which we may in the future obtain regulatory approval;
- add operational, financial and management information systems and personnel, including personnel to support our product candidate development and help us comply with our obligations as a public company;
- hire and retain additional personnel, such as clinical, quality control, scientific, commercial and administrative personnel;
- maintain, expand and protect our intellectual property portfolio;
- add equipment and physical infrastructure to support our research and development; and
- acquire or in-license other product candidates and technologies.

We are continuing to build out our infrastructure, including sales and marketing and production capabilities, for commercialization of AMX0035 in the United States and Canada. As of June 30, 2022, we had 226 full-time employees.

Our expenses could increase beyond our expectations if we are required by the FDA, Health Canada, the EMA, or other regulatory authorities to perform clinical trials or conduct other studies in addition to those that we currently expect, or if there are any delays in establishing appropriate manufacturing arrangements for or in completing our clinical trials or the development of AMX0035 or any future product candidates we may develop.

We have only recently obtained regulatory approval for RELYVRIO in the United States and launched ALBRIOZA in Canada and, prior to their launch, we have never generated revenue from product sales. If the commercial launches of RELYVRIO in the United States and ALBRIOZA in Canada are unsuccessful, and AMX0035 is not approved in other jurisdictions or for other indications, we may never be profitable.

Our ability to become and remain profitable depends on our ability to generate revenue from our approved products, RELYVRIO in the United States and ALBRIOZA in Canada. Other than ALBRIOZA in Canada, we have not yet launched any other approved products for commercial sale and have not yet generated any significant revenue from product sales. Successful commercialization will require achievement of many key milestones, which vary by jurisdiction and may include demonstrating safety and efficacy in clinical trials, obtaining and maintaining regulatory, including marketing, approval for these product candidates, manufacturing, marketing and selling those products for which we, or any of our future collaborators, may obtain regulatory approval, satisfying any post-marketing requirements and obtaining reimbursement for our products from private insurance or government payors. Even if we successfully launch and commercialize RELYVRIO in the United States and ALBRIOZA in Canada, we may be unable to achieve or maintain profitability, unless AMX0035 is approved in other jurisdictions or for additional indications. Because of the uncertainties and risks associated with these activities, we are unable to accurately and precisely predict the timing and amount of revenues, the extent of any

further losses or if or when we might achieve profitability. We and any future collaborators may never succeed in these activities and, even if we do, or any future collaborators do, we may never generate revenues that are large enough for us to achieve profitability. Even if we do achieve profitability, we may not be able to sustain or increase profitability on a quarterly or annual basis.

Our failure to become and remain profitable may depress the market price of our common stock and could impair our ability to raise capital, expand our business, diversify our product offerings or continue our operations. If we continue to suffer losses as we have in the past, investors may not receive any return on their investment and may lose their entire investment.

We have a limited operating history and our only product, AMX0035, has only recently been approved by the FDA in the United States and only recently received marketing authorization with conditions in Canada, which may make it difficult to evaluate the prospects for our future viability.

We have only recently commenced our transition from a clinical-stage to a commercial-stage company. Our operations to date have been limited to organizing, staffing and financing our company, raising capital, conducting research and development activities, including preclinical studies and clinical trials and preparing for and commencing commercialization of AMX0035. We have not yet demonstrated an ability to generate significant revenues, or clearly conduct sales and marketing activities necessary for successful product commercialization. In June 2022, AMX0035 received marketing authorization with conditions from Health Canada for the treatment of ALS. One of the conditions of the marketing authorization in Canada is the provision of data from our ongoing PHOENIX trial and other additional planned or ongoing studies. We also have a pending MAA before the EMA, and we expect a decision in the first half of 2023. Accordingly, you should consider our prospects in light of the costs, uncertainties, delays and difficulties frequently encountered by companies in the early commercial stage, especially pharmaceutical companies such as ours. Any predictions you make about our future success or viability may not be as accurate as they could be if we had a longer operating history with these activities.

At a second meeting of the FDA's Peripheral and Central Nervous System Drugs Advisory Committee, or the Advisory Committee, on September 7, 2022, relating to AMX0035 for the treatment of ALS, we stated that if our PHOENIX trial is not successful then we will do what is right for patients, which includes voluntarily removing the product from the market. We will work in consultation with regulatory authorities when the PHOENIX data are available. We could also be required by regulatory authorities to withdraw AMX0035 from the marketplace. The outcomes of the PHOENIX trial and any potential withdrawal could have a material adverse effect on our business.

We may not satisfy all of the conditions imposed by Health Canada for marketing authorization of ALBRIOZA for the treatment of ALS. If we fail to do so, we may be subject to additional conditions imposed by Health Canada or we may have to cease commercialization of ALBRIOZA, which may impact our prospectus for profitability. We may encounter unforeseen expenses, difficulties, complications, delays and other known or unknown factors in achieving our business objectives. We are transitioning from a company with a development focus to a company capable of supporting commercial activities. We may not be successful in such a transition.

We will require substantial additional funding to meet our financial needs and to pursue our business objectives. If we are unable to raise capital when needed, we could be forced to delay, reduce or eliminate our product discovery and development activities or commercialization efforts.

Our operations have consumed substantial amounts of cash since inception. We expect to continue to spend substantial amounts to commercialize AMX0035 in jurisdictions in which it has received regulatory approval and to continue the clinical development of AMX0035 and the preclinical and clinical development of any future product candidates. If we are unable to obtain and maintain

marketing approvals for AMX0035 or any future product candidates that we develop, including any indication for which we are developing or may develop AMX0035, we will require significant additional amounts of cash in order to continue to develop AMX0035 and any future product candidates and fund our operations. In addition, other unanticipated costs may arise in the course of our development and commercialization efforts. Because the design and outcome of our ongoing and anticipated clinical trials is highly uncertain, we cannot reasonably estimate the actual amounts necessary to successfully complete the development and commercialization of any product candidate we develop.

Our future capital requirements depend on many factors, including:

- the scope, progress, results and costs of researching and developing AMX0035 for the treatment of ALS, AD and potential additional indications, as well as any future product candidates we may develop;
- the timing of, and the costs involved in, obtaining and maintaining marketing approvals for AMX0035 for the treatment of ALS, AD and potential additional indications, and any future product candidates we may develop and pursue;
- the number of future product candidates that we may pursue and their development requirements;
- the costs of commercialization activities for AMX0035 for any approved indications, or any other product candidate that receives regulatory approval to the extent such costs are not the responsibility of any future collaborators, including the costs and timing of establishing sufficient product sales, marketing, distribution and manufacturing capabilities;
- subject to receipt of regulatory approval on a jurisdiction-by-jurisdiction basis, revenue, if any, received from commercial sales of AMX0035 for any approved indications or any future product candidates;
- the extent to which we in-license or acquire rights to other products, product candidates or technologies;
- our headcount growth and associated costs as we expand our research and development, increase our office space, and establish a commercial infrastructure;
- the costs of preparing, filing and prosecuting patent applications, maintaining and protecting our intellectual property rights, including enforcing and defending intellectual property related claims; and
- the ongoing costs of operating as a public company.

We cannot be certain that additional funding will be available on acceptable terms, or at all. As a result of the ongoing COVID-19 pandemic and actions taken to slow its spread, global economic instability and geopolitical events, including the conflict in Ukraine, the global credit and financial markets have experienced extreme volatility and disruptions, including diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in unemployment rates, and uncertainty about economic stability. If the equity and credit markets deteriorate, it may make any necessary debt or equity financing more difficult, more costly or more dilutive.

We have no committed source of additional capital and if we are unable to raise additional capital in sufficient amounts or on terms acceptable to us, we may have to significantly delay, scale back or discontinue the development or commercialization of AMX0035 or any future product candidates or other research and development initiatives. We may need to seek collaborators for AMX0035 and any future product candidates at an earlier stage than otherwise would be desirable or on terms that are less favorable than might otherwise be available or relinquish or license on unfavorable terms our rights to AMX0035 and any future product candidates in markets where we otherwise would seek to pursue development or commercialization ourselves. Any of the above events could significantly harm our business, prospects, financial condition, and results of operations and cause the price of our common stock to decline.

We believe that the net proceeds from this offering, together with our existing cash, cash equivalents, and short-term investments, will be sufficient to meet our anticipated operating and capital expenditure requirements for at least twelve months after the date of this prospectus. Our estimate may prove to be wrong, and we could use our available capital resources sooner than we currently expect. Further, changing circumstances, some of which may be beyond our control, could cause us to consume capital significantly faster than we currently anticipate, and we may need to seek additional funds sooner than planned.

Raising additional capital may cause dilution to our stockholders, restrict our operations or require us to relinquish rights to our technologies or product candidates.

We expect our expenses to continue to increase in connection with our planned operations. Unless and until we can generate a substantial amount of revenue from AMX0035 or any future product candidates, we expect to finance our future cash needs through public or private equity offerings, royalty-based or debt financings, collaborations, licensing arrangements or other sources, or any combination of the foregoing. In addition, we may seek additional capital due to favorable market conditions or strategic considerations, even if we believe that we have sufficient funds for our current or future operating plans.

To the extent that we raise additional capital through the sale of common stock, convertible securities or other equity securities, your ownership interest may be diluted, and the terms of these securities could include liquidation or other preferences and anti-dilution protections that could adversely affect your rights as a common stockholder. In addition, debt financing, if available, may result in fixed payment obligations and may involve agreements that include restrictive covenants that limit our ability to take specific actions, such as incurring additional debt, making capital expenditures, creating liens, redeeming stock or declaring dividends, that could adversely impact our ability to conduct our business. In addition, securing financing could require a substantial amount of time and attention from our management and may divert a disproportionate amount of their attention away from day-to-day activities, which may adversely affect our management's ability to oversee the development and commercialization of AMX0035 or any future product candidates.

If we raise additional funds through collaborations or marketing, distribution or licensing arrangements with third parties, we may have to relinquish valuable rights to our technologies, future revenue streams or product candidates or grant licenses on terms that may not be favorable to us.

Changes in tax law could adversely affect our business and financial condition.

The rules dealing with U.S. federal, state, and local income taxation are constantly under review by persons involved in the legislative process and by the Internal Revenue Service and the U.S. Treasury Department. Changes to tax laws (which changes may have retroactive application) could adversely affect us or holders of our common stock. In recent years, many such changes have been made and changes are likely to continue to occur in the future. Future changes in tax laws could have a material adverse effect on our business, cash flow, financial condition or results of operations. We urge investors to consult with their legal and tax advisers regarding the implications of potential changes in tax laws on an investment in our common stock.

Risks Related to Commercialization of AMX0035 or Future Product Candidates

We have limited experience as a commercial company and we may not be successful in commercializing AMX0035 or any future product candidates in the United States, Canada or anywhere else if and when approved, and we may be unable to generate meaningful product revenue.

We recently launched ALBRIOZA in Canada and are preparing to launch RELYVRIO, which was approved by the FDA in September 2022, in the United States, and if approved, we also intend to

commercialize AMX0035 in the EU with specialized teams, given the relative rarity of ALS and certain of the other indications we are targeting. We are currently continuing to build the global marketing and sales team for the marketing, sales and distribution of AMX0035 and any future product candidates, if approved. In order to commercialize AMX0035 for the treatment of ALS, AD and other indications, or any of our future product candidates that may be approved, we must build, on a territory-by-territory basis, marketing, sales, distribution, managerial and other capabilities or make arrangements with third parties to perform these services, and we may not be successful in doing so.

There are risks involved with both establishing our own sales and marketing capabilities and entering into arrangements with third parties to perform these services. For example, we have recruited and trained a U.S. commercial organization which is expensive and time-consuming. If the commercial launch of AMX0035 (RELYVRIO) in the United States is delayed or does not occur for any reason, we will have prematurely or unnecessarily incurred these commercialization expenses. If we fail to obtain or maintain approval or if for any reason a potential commercial launch is otherwise delayed, we would not realize the benefits of any pre-commercial activity expenditures made to date. This may be costly and our investment would be lost if we cannot retain or reposition our sales and marketing personnel. These same circumstances could apply globally, and to any future product candidates.

Factors that may inhibit our efforts to commercialize AMX0035 or any future product candidates, if approved, on our own include:

- the inability to recruit, train and retain adequate numbers of effective sales and marketing personnel;
- the inability of sales personnel to obtain access to physicians to prescribe AMX0035 or any future product that we may develop;
- any views or opinions expressed by ALS or AD community organizations about the safety or efficacy of AMX0035;
- the lack of complementary treatments to be offered by sales personnel, which may put us at a competitive disadvantage relative to companies with more extensive product lines;
- the availability of adequate coverage by and reimbursement from government and third-party payors; and
- unforeseen costs and expenses associated with creating an independent sales and marketing organization.

If we enter into arrangements with third parties to perform sales, marketing and distribution services, our product revenue or profitability from these revenue streams is likely to be lower than if we were to market and sell any product candidates that we develop ourselves. In addition, we may not be successful in entering into arrangements with third parties to sell and market AMX0035 or any of our future product candidates or may be unable to do so on terms that are favorable to us. We likely will have limited control over such third parties, and any of them may fail to devote the necessary resources and attention to sell and market AMX0035 or any future product candidates effectively. If we do not establish sales and marketing capabilities successfully, either on our own or in collaboration with third parties, we may not be successful in commercializing AMX0035 or any future product candidates.

Our efforts to educate the ALS, AD and other neurodegenerative disease medical communities and payors on the benefits of AMX0035 or any future product candidates may require significant resources and may never be successful. Such efforts may require more resources than are typically required due to the complexity and uniqueness of AMX0035 or any future product candidates, and the indications we are targeting. Even if AMX0035 or any future product candidates are approved in any jurisdiction, if we are unable to successfully market our products successfully, we will not be able to generate significant revenues from such products.

If we are unable to expand our marketing and distribution capabilities or enter into agreements with third parties to market and sell any of AMX0035 or future product candidates for which we obtain marketing approval, we will be unable to generate any product revenue.

To successfully commercialize any products that may result from our development activities, we need to continue to expand our marketing and distribution capabilities, either on our own or with others. The development of our own marketing and distribution effort is, and will continue to be, expensive and time-consuming and could delay any further product launch. Moreover, we cannot be certain that we will be able to develop this capability successfully. We may enter into collaborations regarding any approved product candidates with other entities to utilize their established marketing and distribution capabilities, however, we may be unable to enter into such agreements on favorable terms, if at all. If any future collaborators do not commit sufficient resources to commercialize AMX0035 or any future product candidates, or we are unable to develop the necessary capabilities on our own, we will be unable to generate sufficient product revenue to sustain our business. We compete with many companies that currently have extensive, experienced and well-funded sales, distribution and marketing operations to recruit, hire, train and retain marketing and sales personnel. We also face competition in our search for third parties to assist us with the sales and marketing efforts of AMX0035 and any future product candidates, if approved. Without an internal team or the support of a third-party to perform marketing and sales functions, we may be unable to compete successfully against these more established companies.

The market for AMX0035 for ALS, AD and other neurodegenerative diseases and for any future product candidates we may develop may be smaller than we expect.

We focus our research and product development on treatments of neurodegenerative diseases. We base our market opportunity estimates on a variety of factors, including our estimates of the number of people who have these diseases, the potential scope of our approved product labels, the subset of people with these diseases who have the potential to benefit from treatment with AMX0035 or any future product candidates, various pricing scenarios, and our understanding of reimbursement policies for rare diseases in particular countries. These estimates are based on many assumptions and may prove incorrect, and new studies may reduce the estimated incidence or prevalence of these diseases. Estimating market opportunities can be particularly challenging for rare indications, such as the ones we currently address, as epidemiological data is often more limited than for more prevalent indications and can require additional assumptions to assess potential patient populations. For example, as we begin to commercialize RELYVRIO in the United States, ALBRIOZA in Canada and AMX0035, if approved, in other jurisdictions, and learn more about market dynamics and engage with regulators on additional potential marketing approvals, our view of our products' initial potential market opportunity will become more refined. For example, we are now initially focused primarily on the annual incidence of ALS. This means the initial market opportunity for AMX0035 and any future product candidates may be smaller than the total addressable market opportunity that could be achieved over time. If we are unable to successfully commercialize AMX0035 or any future product candidates with attractive market opportunities, our future product revenues may be smaller than anticipated, and our business may suffer. Patient identification efforts also influence the ability to address a patient population. If efforts in patient identification are unsuccessful or less impactful than anticipated, for instance, because of a lack of diagnostic initiatives, inadequate disease awareness among healthcare professionals, or otherwise, we may not address the entirety of the opportunity we are seeking. As a result, patients may be difficult to identify and access, the addressable patient population in the United States, Canada, the EU and elsewhere may turn out to be lower than expected, or patients may not be otherwise amenable to treatment with our products, all of which would adversely affect our business, financial condition, results of operations and prospects.

AMX0035 may fail to achieve the degree of market acceptance by physicians, patients, third-party payors and others in the medical community necessary for commercial success, in which case we may not generate significant revenues or become profitable.

Even if AMX0035 for the treatment of any indication, or any future product candidate of ours, is approved by the appropriate regulatory authorities for marketing and sale, it may nonetheless fail to gain sufficient market acceptance by physicians, patients, third-party payors and others in the medical community. Physicians may be reluctant to add AMX0035 to their patients' treatment regimen. Further, patients often acclimate to the treatment regime they are currently taking and do not want to add additional treatments unless their physicians recommend it. Further, they may be unable to add AMX0035 to their treatment regimen due to lack of coverage and adequate reimbursement. In addition, even if we are able to demonstrate our product candidates' safety and efficacy to Health Canada, the FDA, the EMA and other regulators, safety or efficacy concerns in the medical community may hinder market acceptance. Our ability to proactively educate health care professionals and patients may be limited based on the marketing restrictions in a given jurisdiction, specifically as they relate to the particular labeling approved by the applicable health authority.

Efforts to educate the medical community and third-party payors on the benefits of our current and any future product candidates may require significant resources, including management time and financial resources, and may not be successful. If AMX0035 or any future product candidate is approved but does not achieve an adequate level of market acceptance, we may not generate significant revenues and we may not become profitable. The degree of market acceptance of AMX0035 and any future product candidates, if approved for commercial sale, will depend on a number of factors, including:

- the efficacy and safety of the product;
- the potential advantages of the product compared to competitive therapies and our ability to successfully publicize these advantages or highlight them in any marketing materials;
- the prevalence and severity of any side effects;
- whether the product is designated under physician treatment guidelines as a first-, second- or third-line therapy;
- our ability, or the ability of any future collaborators, to offer the product for sale at competitive prices;
- the product's convenience and ease of administration compared to alternative treatments;
- the willingness of the target patient population to try, and of physicians to prescribe, the product;
- limitations or warnings, including distribution or use restrictions contained in the product's approved labeling;
- the strength of sales, marketing and distribution support;
- changes in the standard of care for the targeted indications for the product; and
- availability and adequacy of coverage and reimbursement from government payors, managed care plans and other third-party payors.

Any failure by AMX0035 or any other potential product candidate of ours that obtains regulatory approval to achieve market acceptance or commercial success would adversely affect our business prospects.

Off-label use for the treatment of ALS of PB, which is available as a generic drug, along with the potential sale in some jurisdictions of TURSO, which preparations are of unknown identity and may not be legally sold for the treatment of ALS, expose us to additional risks that could reduce or eliminate the commercial opportunity for AMX0035.

We are developing and advancing AMX0035 as a combination of TURSO and PB. PB has been approved by the FDA and other regulatory authorities for the treatment of patients with certain urea cycle disorders.

TURSO is being marketed in preparations of unknown identity and without approval for the treatment of ALS in some jurisdictions, including the United States. We face the risk that healthcare professionals may prescribe PB for the treatment of ALS and recommend that patients obtain a commercial preparation of TURSO not approved, labeled, or marketed for the treatment of ALS on the belief that this combination could replicate the benefits of AMX0035. Patient-directed treatment with TURSO for ALS may also arise in certain jurisdictions if the Phase 3 clinical trial to assess the safety and efficacy of TURSO in patients with ALS conducted by Humanitas Mirasole SpA in the EU reports positive results. While these practices are not recommended by the medical community and have not been approved by any regulatory authority, they may nonetheless impact our sales of RELYVRIO in the United States, ALBRIOZA in Canada and AMX0035, if approved in other jurisdictions, and/or public perception of AMX0035 in the United States or abroad.

If the FDA, Health Canada, the EMA or other comparable foreign regulatory authorities approve generic versions of AMX0035 or any future product candidate of ours that receives regulatory approval, or such authorities do not grant our products appropriate periods of non-patent exclusivity before approving generic versions of such products, the sales of such products could be adversely affected.

In the United States, once an NDA is approved, the product covered thereby becomes a “reference listed drug” in the FDA’s publication, “Approved Drug Products with Therapeutic Equivalence Evaluations,” or the Orange Book. Manufacturers may seek approval of generic versions of reference listed drugs through submission of abbreviated new drug applications, or ANDAs, in the United States. In support of an ANDA, a generic manufacturer generally must show that its product has the same active ingredient(s), dosage form, strength, route of administration, and adequate labeling as the reference listed drug and that the generic version is bioequivalent to the reference listed drug, meaning, in part, that it is absorbed in the body at the same rate and to the same extent. Generic products may be significantly less costly to bring to market than the reference listed drug and companies that produce generic products are generally able to offer them at lower prices. Moreover, many states allow or require substitution of therapeutically equivalent generic drugs at the pharmacy level even if the branded drug is prescribed. Thus, following the introduction of a generic drug, a significant percentage of the sales of any branded product or reference listed drug may be lost to the generic product.

The FDA may not finally approve an ANDA for a generic product until any applicable period of non-patent exclusivity for the reference listed drug has expired. The FDCA provides a period of five years of non-patent exclusivity for a new drug containing a new chemical entity, or NCE. For the purposes of this provision, an NCE is a drug that contains no active moiety that has previously been approved by the FDA in any other NDA. An active moiety is the molecule or ion responsible for the physiological or pharmacological action of the drug substance. Specifically, in cases where such exclusivity has been granted, an ANDA may not be filed with the FDA until the expiration of five years unless the submission is accompanied by a Paragraph IV certification that a patent covering the listed drug is invalid, unenforceable or will not be infringed by the generic product. In that case, the applicant may submit its application four years following approval of the listed drug and seek to launch its generic product even if we still have patent protection for our product unless an infringement suit is timely filed by the NDA or patent holder in which case the FDA cannot approve the ANDA for 30 months unless a court decision in favor of the generic manufacturer is issued earlier. For fixed dose combination products, the FDA has taken the position that a combination product will be eligible for NCE exclusivity (also known as data exclusivity) if it contains a new active moiety, even if the fixed-combination also contains a drug substance with a previously approved active moiety.

While we believe, based on the applicable requirements and FDA’s designation of RELYVRIO as a “New Molecular Entity,” that RELYVRIO qualifies for NCE exclusivity, there can be no assurance until we receive official confirmation. In addition, in connection with our Health Canada marketing

authorization with conditions, ALBRIOZA was added to the Register of Innovative Drugs, which provides an eight year period of market exclusivity. The regulatory authorities in the United States and Europe may reach different conclusions from Health Canada with respect to exclusivity for AMX0035.

If any product we develop does not receive five years of NCE exclusivity, the FDA may approve generic versions of such product three years after its date of approval, subject to the requirement that the ANDA applicant certifies to the invalidity or non-infringement of any patents listed for our products in the Orange Book. If an infringement suit is timely filed by the NDA or patent holder, the FDA cannot finally approve the ANDA for 30 months unless a court decision in favor of the generic manufacturer is issued earlier. Three-year exclusivity is given to a drug if it contains an active moiety that has previously been approved, and the NDA includes reports of one or more new clinical investigations, other than bioavailability or bioequivalence studies, that were conducted by or for the applicant and are determined by the FDA to be essential to the approval of the NDA. This form of data exclusivity is known as New Clinical Investigation, or NCI, exclusivity. If AMX0035 is approved or if future candidates are approved with only NCI exclusivity, generic manufacturers may file their ANDAs anytime following approval of AMX0035 and seek to launch their generic products following the expiration of the three year market exclusivity period, even if we still have patent protection for our product.

In addition, in the United States the FDCA provides a period of seven years of orphan drug exclusivity for drugs that treat small patient populations less than 200,000 patients or for which there are more than 200,000 patients but there is no reasonable expectation that the cost of developing and making the drug for such disease or condition will be recovered from sales in the United States of such drug. AMX0035 has been granted orphan drug designation for the treatment of ALS, and with the approval of AMX0035 (RELYVRIO) by the FDA in September 2022 for the treatment of ALS in adults, the product is entitled to orphan drug exclusivity and the FDA cannot approve a generic or a brand product that contains the same active moiety for the same orphan indication as AMX0035, for a period of seven years, subject to certain exceptions. This period runs concurrent with any NCE exclusivity period awarded.

Canada’s data protection regime provides an eight year period of market exclusivity for “innovative drugs”, which is independent from patent protection. An innovative drug is a drug that contains a medicinal ingredient not previously approved by Health Canada and that is not a variation of a previously approved medicinal ingredient such as a salt, ester, enantiomer, solvate or polymorph. If a drug qualifies as an “innovative drug” in Canada, generic/and manufacturers are not permitted to seek approval for their product on the basis of a direct or indirect comparison to an innovative drug for the first six years of the data protection period, and Health Canada cannot issue a Notice of Compliance (NOC or marketing approval) for eight years. One of the components of ALBRIOZA (ursodoxicoltaurine) is an innovative drug, and therefore ALBRIOZA was added to the Register of Innovative Drugs upon its approval. The data protection period for ALBRIOZA runs until June 10, 2030 which is eight years from the date its NOC was issued.

There is no regulatory provision in Canada that provides orphan drug exclusivity to approved products for rare diseases.

In the EU, innovative medicinal products (including both small molecules and biological medicinal products), sometimes referred to as new active substances, or NAS, qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. The data exclusivity, if granted, prevents generic or biosimilar applicants from referencing the innovator’s preclinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar marketing authorization, for a period of eight years from the date on which the

reference product was first authorized in the EU. During the additional two-year period of market exclusivity, a generic or biosimilar marketing authorization can be submitted, and the innovator's data may be referenced, but no generic or biosimilar product can be marketed until the expiration of the market exclusivity period. This 10-year marketing exclusivity period may be extended to 11 years if, during the first eight of those 10 years, the marketing authorization holder obtains an approval for one or more new therapeutic indications that bring significant clinical benefits compared with existing therapies. However, even if an innovative medicinal product gains the prescribed period of data exclusivity, another company may market another version of the product if such company obtained a marketing authorization based on an application with a complete and independent data package of pharmaceutical tests, preclinical tests and clinical trials. We have applied for NAS status for AMX0035 in the EU. Irrespective of the NAS status, we expect that AMX0035 will be eligible for Regulatory Data Protection and/or Orphan Market Exclusivity if the orphan designation is maintained.

Competition that AMX0035 or any future products, if approved, may face from generic versions of such products could negatively impact our future revenue, profitability and cash flows and substantially limit our ability to obtain a return on our investments in those product candidates.

AMX0035 or any future product candidates for which we, or any future collaborators, obtain regulatory approval will be subject to ongoing obligations and continued regulatory review, which may result in significant additional expense. AMX0035 and any future product candidates, if approved, could be subject to post-marketing restrictions, requirements or withdrawal from the market and we, or any future collaborators, may be subject to substantial penalties if we, or they, fail to comply with regulatory requirements or if we, or they, experience unanticipated problems with our products following approval.

AMX0035 received approval by the FDA for the treatment of ALS in adults (known as RELYVRIO) in September 2022 and marketing authorization with conditions by Health Canada for the treatment of ALS (known as ALBRIOZA) in June 2022. We have a pending MAA before the EMA for AMX0035 for the treatment of ALS and we may seek approval of AMX0035 in additional jurisdictions and in additional indications. AMX0035 or any future product candidates for which we, or any future collaborators, obtain regulatory approval, as well as the manufacturing processes, post-approval studies, labeling, advertising and promotional activities for such product, among other things, will be subject to ongoing requirements of and review by the FDA, Health Canada, the EMA and other applicable regulatory authorities. These requirements include submissions of safety and other post-marketing information and reports, registration and listing requirements, requirements relating to manufacturing, quality control, quality assurance and corresponding maintenance of records and documents, requirements regarding the distribution of samples to physicians and recordkeeping. For certain commercial prescription drug products, manufacturers and other parties involved in the supply chain must also meet chain of distribution requirements and build electronic, interoperable systems for product tracking and tracing and for notifying the FDA of counterfeit, diverted, stolen and intentionally adulterated products or other products that are otherwise unfit for distribution in the United States. We and our contract manufacturers will also be subject to user fees and periodic inspection by regulatory authorities to monitor compliance with these requirements and the terms of any product approval we may obtain. Even if regulatory approval of a product candidate is granted, the approval may be subject to limitations on the indications or uses for which the product may be marketed or to the conditions of approval, including the requirement in the United States to implement a Risk Evaluation and Mitigation Strategy, or REMS.

The FDA, Health Canada, the EMA and other regulatory authorities may also impose requirements for costly post-marketing studies or clinical trials and surveillance to monitor the safety or efficacy of a product. For example, as part of our approval of RELYVRIO in the United States, we have post-marketing requirements to conduct carcinogenicity studies in mice and rats, drug-drug interaction studies, and studies in patients with kidney or liver impairment. Additionally, the FDA and other agencies, including the Department of Justice, closely regulate and monitor the post-approval marketing and

promotion of products to ensure that they are manufactured, marketed and distributed only for the approved indications and in accordance with the provisions of the approved labeling. Regulatory authorities impose stringent restrictions on manufacturers' communications regarding off-label use. However, companies generally may share truthful and not misleading information that is otherwise consistent with a product's approved labeling. If we, or any future collaborators, do not market AMX0035 or any of our future product candidates for which we, or they, receive regulatory approval for only their approved indications, we, or they, may be subject to warnings or enforcement action for off-label marketing if it is alleged that we are doing so. Violation of laws and regulations relating to the promotion and advertising of prescription drugs may lead to investigations or allegations of violations of federal and state health care fraud and abuse laws and state consumer protection laws, including the False Claims Act and any comparable foreign laws. In the EU, the direct-to-consumer advertising of prescription-only medicinal products is prohibited. Violations of the rules governing the promotion of medicinal products in the EU could be penalized by administrative measures, fines and imprisonment. These laws may further limit or restrict the advertising and promotion of our products to the general public, and may also impose limitations on our promotional activities with health care professionals.

Post-marketing requirements in Canada are similar to those in the United States. Following the approval of our New Drug Submission, or NDS with conditions, Health Canada requires that we submit a Risk Management Plan, or RMP. Health Canada may, as part of the RMP, require that we conduct additional clinical studies. For example, one of the conditions of the marketing authorization in Canada of AMX0035 (ALBRIOZA) is the provision of data from our ongoing PHOENIX trial and other additional planned or ongoing studies. Standard pharmacovigilance activities are also required for any marketed drug product. Any labelling changes or changes in the product supply chain would require a submission to Health Canada for approval before the change may be implemented. Our advertising may be scrutinized by competitors or by health care providers, and complaints could be made to Health Canada or other agencies. Reimbursement in Canada is complex and requires submissions to both public and private payors to gain access to prescription drug formulary lists. In addition, if there are any patents associated with AMX0035, the product will be subject to price regulation by the Patented Medicine Prices Review Board, or the PMPRB.

In addition, later discovery of previously unknown adverse events or other problems with our products or their manufacturers or manufacturing processes, or failure to comply with regulatory requirements, may yield various results, including:

- restrictions on the manufacturing of such products;
- restrictions on the labeling or marketing of such products;
- restrictions on product distribution or use;
- requirements to conduct post-marketing studies or clinical trials;
- warning letters or untitled letters;
- withdrawal of the products from the market;
- refusal to approve pending applications or supplements to approved applications that we submit;
- recall of products;
- restrictions on coverage by third-party payors;
- fines, restitution or disgorgement of profits or revenues;
- exclusion from federal health care programs such as Medicare and Medicaid;
- suspension or withdrawal of regulatory approvals;

- refusal to permit the import or export of products;
- product seizure; or
- injunctions or the imposition of civil or criminal penalties.

If we are not able to comply with post-approval regulatory requirements, we could have the marketing approvals for AMX0035 or any future approved products withdrawn by regulatory authorities, or we may voluntarily do so, and our ability to market AMX0035 or any future approved products, to develop AMX0035 in the United States, Canada or additional jurisdictions or for additional indications, and to develop and seek approval for additional product candidates could become limited, which could adversely affect our ability to achieve or sustain profitability. As a result, the cost of compliance with post-approval regulatory requirements may have a negative effect on our operating results and financial condition.

Healthcare insurance coverage and reimbursement, both from public drug plans and private health care insurers, may be limited or unavailable for RELYVRIO in the United States and ALBRIOZA in Canada, and for AMX0035 and any future product candidates, if approved anywhere else, which could make it difficult for us to sell any product candidates or therapies profitably.

The success of AMX0035 and any future product candidates, if approved, depends on the availability of adequate coverage and reimbursement from third-party payors. Because AMX0035 and any future product candidates represent new approaches to the treatment of the diseases they target, we cannot be sure that coverage and reimbursement will be available for, or accurately estimate the potential revenue from, AMX0035 and any future product candidates or for any product that we may develop. If we are unable to obtain adequate levels of reimbursement, our ability to successfully market and sell any such product candidates will be adversely affected. The manner and level at which reimbursement is provided for services related to any current or future product candidates we may develop (e.g., for the administration of our product candidate to patients) is also important. Inadequate reimbursement for such services may lead to physician and payor resistance and adversely affect our ability to market or sell AMX0035 or any future product candidates we may develop. In addition, we may need to develop new reimbursement models, in order to realize adequate value. Payors may not be able or willing to adopt such new models and patients may be unable to afford that portion of the cost that such models may require them to bear. If we determine such new models are necessary, but we are unsuccessful in developing them, or if payors do not adopt such models, our business, financial condition, results of operations and prospects could be adversely affected. For additional information on coverage and reimbursement, see the section entitled “Business—Government Regulation—Coverage and Reimbursement”.

Patients who are provided medical treatment for their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their treatment. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors, such as private health insurers and health maintenance organizations, are critical to new product acceptance. Government authorities and other third-party payors decide which drugs and treatments they will cover and the reimbursement amount. Coverage and reimbursement by a third-party payor may depend upon a number of factors.

In the United States, no uniform policy of coverage and reimbursement for products exists among third-party payors. As a result, obtaining coverage and reimbursement approval of a product from a government or other third-party payor is a time consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost-effectiveness data for the use of our products on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement from third-party payors will be obtained. There is significant uncertainty related to the insurance coverage and reimbursement of newly approved products, which uncertainty may be heightened where

the product is subject to post-marketing conditions or requirements to provide additional clinical data. In the United States, the principal decisions about reimbursement for new medicines are typically made by the Centers for Medicare & Medicaid Services, or CMS, an agency within the U.S. Department of Health and Human Services, as CMS decides whether and to what extent a new medicine will be covered and reimbursed under Medicare. Private payors tend to follow CMS to a substantial degree. Even if we obtain coverage for a given product, the resulting reimbursement payment rates might not be adequate for us to achieve or sustain profitability or may require co-payments that patients find unacceptably high. Future coverage and reimbursement may be subject to increased restrictions, such as prior authorization requirements, both in the United States and in international markets. Orphan drugs are typically placed on the highest cost-sharing tier and a substantial percentage are subject to prior authorization requirements. Reimbursement agencies in the EU may be more conservative than CMS.

Outside the United States, international operations are generally subject to extensive governmental price controls and other market regulations, and we believe the increasing emphasis on cost-containment initiatives in Canada, the EU and other countries has and will continue to put pressure on the pricing and usage of drug products such as AMX0035 and any future product candidates we may develop, if approved. We may also incur additional challenges when seeking reimbursement from public and private payers where AMX0035 or any future product candidate has been approved subject to post-marketing conditions. In many countries, particularly the countries of the EU, the prices of medical products are subject to varying price control mechanisms as part of national health systems. In these countries, pricing negotiations with governmental authorities can take considerable time after the receipt of marketing approval for a product. For example, in Canada, price negotiations with provincial authorities can take more than 18 months before there are agreed-upon pricing and reimbursement rates. Prior to these negotiations, a review by agencies known as the Canadian Agency for Drugs and Technologies in Health, or CADTH, and l'Institut national d'excellence en santé et en services sociaux, or INESSS, are conducted to assess the value that a medicine will provide to the health system. For patented medicines, the PMPRB has jurisdiction over the price at which the medicine is sold, and PMPRB's assessment of an acceptable price can impact negotiations with payors. Such negotiations may also result in additional studies and rationale required for combination products before reimbursement will be granted. As a result, we might obtain marketing approval for a product in a particular country, but then be subject to price regulations that delay or might even prevent our commercial launch of the product, possibly for lengthy periods of time. To obtain reimbursement or pricing approval in some countries, we may be required to conduct a clinical trial that compares the cost-effectiveness of our product candidate to other available therapies. In general, the prices of products under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for products but monitor and control company profits. Additional foreign price controls or other changes in pricing regulation could restrict the amount that we are able to charge for product candidates. Accordingly, in markets outside the United States, the reimbursement for AMX0035 and any future product candidates we may develop may be reduced compared with the United States and may be insufficient to generate commercially reasonable revenues and profits.

Additionally, third-party payors may not cover, or provide adequate reimbursement for, long-term follow-up evaluations required following the use of product candidates. Patients are unlikely to use AMX0035 or any future product candidates unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of AMX0035 or any future product candidates. Because AMX0035 and any future product candidates may have a higher cost of goods than conventional therapies and may require long-term follow-up evaluations, the risk that coverage and reimbursement rates may be inadequate for us to achieve profitability may be greater. While we have received a positive response from some providers in Canada following Health Canada's approval with conditions of AMX0035 for the treatment of ALS, there is significant uncertainty related to insurance coverage and reimbursement. It is difficult to predict at this time what third-party payors will decide with respect to the coverage and reimbursement for AMX0035 and any future product candidates.

Moreover, increasing efforts by governmental and other third-party payors in Canada, the EU, the United States and other foreign jurisdictions to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for AMX0035 or any future product candidates. There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. We expect to experience pricing pressures in connection with the sale of AMX0035 or any future product candidates due to the trend toward managed healthcare, the increasing influence of health maintenance organizations, cost containment initiatives and additional legislative changes.

Ongoing healthcare legislative and regulatory reform measures may have a material adverse effect on our business and results of operations.

Changes in regulations, statutes or the interpretation of existing regulations could impact our business in the future by requiring, for example: (i) changes to our manufacturing arrangements; (ii) additions or modifications to product labeling; (iii) the recall or discontinuation of our products; or (iv) additional record-keeping requirements. If any such changes were to be imposed, they could adversely affect the operation of our business. For more information, see the section entitled "Business—Government Regulation—Current and Future U.S. Healthcare Reform Legislation".

In the United States, there have been and continue to be a number of legislative initiatives to contain healthcare costs.

These laws and future state and federal healthcare reform measures that may be adopted in the future may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for AMX0035 or any future product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors. The implementation of cost containment measures or other healthcare reforms may prevent us from being able to generate revenue, attain profitability or commercialize our product candidates.

Moreover, increasing efforts by governmental and third-party payors in the United States and abroad to cap or reduce healthcare costs may cause such organizations to limit both coverage and the level of reimbursement for newly approved products and, as a result, they may not cover or provide adequate payment for our product candidates. There has been increasing legislative and enforcement interest in the United States with respect to specialty drug pricing practices. Specifically, there have been several recent U.S. Congressional inquiries and proposed and enacted federal and state legislation designed to, among other things, bring more transparency to drug pricing, reduce the cost of prescription drugs under Medicare, review the relationship between pricing and manufacturer patient programs, and reform government program reimbursement methodologies for drugs. On August 16, 2022, President Biden signed into law the Inflation Reduction Act of 2022, which among other things, allows for CMS to negotiate prices for certain single-source drugs and biologics reimbursed under Medicare Part B and Part D, beginning with ten high-cost drugs paid for by Medicare Part D starting in 2026, followed by 15 Part D drugs in 2027, 15 Part B or Part D drugs in 2028, and 20 Part B or Part D drugs in 2029 and beyond. The legislation subjects drug manufacturers to civil monetary penalties and a potential excise tax for failing to comply with the legislation by offering a price that is not equal to or less than the negotiated "maximum fair price" under the law or for taking price increases that exceed inflation. The legislation also caps Medicare beneficiaries' annual out-of-pocket drug expenses at $2,000. The effect of Inflation Reduction Act of 2022 on our business and the healthcare industry in general is not yet known.

Additional state and federal healthcare reform measures are expected to be adopted in the future, any of which could limit the amounts that federal and state governments will pay for healthcare products and services, which could result in reduced demand for certain pharmaceutical products or additional pricing pressures.

While some of these and other proposed measures may require additional authorization to become effective, Congress and the Biden administration have each indicated that it will continue to seek new legislative and/or administrative measures to control drug costs.

Governments outside the United States may impose strict price controls, which may adversely affect our revenues, if any.

In some countries, including Canada and certain Member States of the EU, the pricing of prescription drugs is, in part, subject to governmental control. Additional countries may adopt similar approaches to the pricing of prescription drugs. In such countries, pricing negotiations with governmental authorities can take considerable time after receipt of regulatory approval for a product. The EU provides options for the EU Member States to restrict the range of drug products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. EU Member States may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other EU Member States allow companies to fix their own prices for drug products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. In addition, there can be considerable pressure by governments and other stakeholders on prices and reimbursement levels, including as part of cost containment measures. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after coverage and reimbursement have been obtained. Reference pricing used by various countries and parallel distribution, or arbitrage between low-priced and high-priced countries, can further reduce prices. In some countries, we may be required to conduct a clinical study or other studies that compare the cost-effectiveness of AMX0035 or any future product candidates to other available therapies in order to obtain or maintain reimbursement or pricing approval, which is time-consuming and costly. We cannot be sure that such prices and reimbursement will be acceptable to us. Publication of discounts by third-party payors or authorities may lead to further pressure on the prices or reimbursement levels within the country of publication and other countries. If pricing is set at unsatisfactory levels or if reimbursement of our products is unavailable or limited in scope or amount, our revenues from sales by us or our strategic partners and the potential profitability of AMX0035 or any future product candidates in those countries would be negatively affected.

Our relationships with healthcare providers, physicians, patients and third-party payors may be subject to applicable anti-kickback, fraud and abuse and other healthcare laws and regulations, which could expose us to criminal sanctions, civil penalties, contractual damages, reputational harm and diminished profits and future earnings.

Healthcare providers, physicians and third-party payors in the United States and elsewhere play a primary role in the recommendation and prescription of pharmaceutical products. Arrangements with third-party payors and customers can expose pharmaceutical manufacturers to broadly applicable fraud and abuse and other healthcare laws and regulations, including, without limitation, the federal Anti-Kickback Statute and the federal False Claims Act, or FCA, which may constrain the business or financial arrangements and relationships through which such companies conduct research, sell, market and distribute pharmaceutical products. In particular, the promotion, sales and marketing of healthcare items and services, as well as certain business arrangements in the healthcare industry, are subject to extensive laws designed to prevent fraud, kickbacks, self-dealing and other abusive practices. These laws and regulations may restrict or prohibit a wide range of pricing, discounting, marketing and

promotion, structuring and commission(s), certain customer incentive programs and other business arrangements generally. Activities subject to these laws also involve the improper use of information obtained in the course of patient recruitment for clinical trials. For more information, see “Business—Government Regulation—Other U.S. Healthcare Laws”.

In the United States, to help patients afford our approved product, we may implement programs to assist them, including patient assistance programs and co-pay coupon programs for eligible patients. Government enforcement agencies have shown increased interest in pharmaceutical companies’ product and patient assistance programs, including reimbursement support services, and a number of investigations into these programs have resulted in significant civil and criminal settlements. In addition, at least one insurer has directed its network pharmacies to no longer accept co-pay coupons for certain specialty drugs the insurer identified. Our co-pay coupon programs could become the target of similar insurer actions. In September 2014, the HHS Office of Inspector General, or OIG, issued a Special Advisory Bulletin warning manufacturers that they may be subject to sanctions under the federal anti-kickback statute and/or civil monetary penalty laws if they do not take appropriate steps to exclude Part D beneficiaries from using co-pay coupons. Accordingly, companies exclude these Part D beneficiaries from using co-pay coupons and the same is true for our Amylyx Care Team. It is possible that changes in insurer policies regarding co-pay coupons and/or the introduction and enactment of new legislation or regulatory action could restrict or otherwise negatively affect these patient support programs, which could result in fewer patients using affected products, such as RELYVRIO in the United States, and therefore could have a material adverse effect on our sales, business, and financial condition.

Third party patient assistance programs that receive financial support from companies have also become the subject of enhanced government and regulatory scrutiny. The OIG has established guidelines that suggest that it is lawful for pharmaceutical manufacturers to make donations to charitable organizations who provide co-pay assistance to Medicare patients. However, donations to patient assistance programs have received some negative publicity and have been the subject of multiple government enforcement actions, related to allegations regarding their misuse to promote branded pharmaceutical products over other less costly alternatives. Specifically, in recent years, there have been multiple settlements resulting out of government claims challenging the legality of third party patient assistance programs under a variety of federal and state laws. We may, from time to time, make charitable grants to independent charitable foundations that help financially needy patients with their premium, co-pay, and co-insurance obligations. If we choose to do so, and if we or our vendors or donation recipients are deemed to fail to comply with relevant laws, regulations or evolving government guidance in the provision of charitable donations or operation of these programs, we could be subject to damages, fines, penalties, or other criminal, civil, or administrative sanctions or enforcement actions. We cannot ensure that our compliance controls, policies, and procedures will be sufficient to protect against acts of our employees, business partners, vendors or charitable foundations that may violate the laws or regulations of the jurisdictions in which we operate. Regardless of whether we have complied with the law, a government investigation, including of any business partners, vendors or charitable foundations, could impact our business practices, harm our reputation, divert the attention of management, increase our expenses, and reduce the availability of foundation support for our patients who need assistance.

The distribution of pharmaceutical products is also subject to additional requirements and regulations, including extensive recordkeeping, licensing, storage and security requirements intended to prevent the unauthorized sale of pharmaceutical products. Ensuring that our internal operations and future business arrangements with third parties comply with applicable healthcare laws and regulations will involve substantial costs. It is possible that governmental authorities will conclude that our business practices do not comply with current or future statutes, regulations, agency guidance or case law involving applicable fraud and abuse or other healthcare laws and regulations. The scope and

enforcement of each of these laws is uncertain and subject to rapid change in the current environment of healthcare reform. If our operations are found to be in violation of any of the laws described above or any other governmental laws and regulations that may apply to us, we may be subject to significant penalties, including civil, criminal and administrative penalties, damages, fines, exclusion from U.S. government-funded healthcare programs, such as Medicare and Medicaid, or similar programs in other countries or jurisdictions, disgorgement, imprisonment, contractual damages, reputational harm, diminished profits, additional reporting requirements and oversight if we become subject to a corporate integrity agreement or similar agreement to resolve allegations of non-compliance with these laws and the delay, reduction, termination or restructuring of our operations. Further, defending against any such actions can be costly and time-consuming, and may require significant financial and personnel resources. Therefore, even if we successfully defend against any such actions that may be brought against us, our business may be impaired. If any of the physicians or other providers or entities with whom we expect to do business is found to not comply with applicable laws, they may be subject to significant criminal, civil or administrative sanctions, including exclusions from government-funded healthcare programs and imprisonment. If any of the above occur, it could adversely affect our ability to operate our business and our results of operations.

Compliance with global privacy and data security requirements could result in additional costs and liabilities to us or inhibit our ability to collect and process data globally, and the failure to comply with such requirements could subject us to significant fines and penalties, which may have a material adverse effect on our business, financial condition or results of operations.

The regulatory framework for the collection, use, safeguarding, sharing, transfer and other information processing worldwide is rapidly evolving and is likely to remain uncertain for the foreseeable future. Globally, virtually every jurisdiction in which we operate has established its own data security and privacy frameworks with which we must comply. For example, the collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the EU, including personal health data, is subject to the EU General Data Protection Regulation, or the GDPR, which took effect across all member states of the EEA in May 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining the consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR increases our obligations with respect to clinical trials conducted in the EEA by expanding the definition of personal data to include coded data and requiring changes to informed consent practices and more detailed notices for clinical trial subjects and investigators. In addition, the GDPR also imposes strict rules on the transfer of personal data to countries outside the EU, including the United States, and, as a result, increases the scrutiny that clinical trial sites located in the EEA should apply to transfers of personal data from such sites to countries that are considered to lack an adequate level of data protection, such as the United States. The GDPR also permits data protection authorities to require the destruction of improperly gathered or used personal information and or impose substantial fines for violations of the GDPR, which can be up to four percent of global revenues or 20 million Euros, whichever is greater and it also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. In addition, the GDPR provides that EU member states may make their own further laws and regulations limiting the processing of personal data, including genetic, biometric or health data.

Similar actions are either in place or underway in the United States. There are a broad variety of data protection laws that are applicable to our activities, and a wide range of enforcement agencies at both the state and federal levels that can review companies for privacy and data security concerns

based on general consumer protection laws. The Federal Trade Commission and state Attorneys General are all aggressive in reviewing consumers' privacy and data security protections. New laws also are being considered at both the state and federal levels. For example, the California Consumer Privacy Act—which went into effect on January 1, 2020—is creating similar risks and obligations as those created by GDPR, though the Act does exempt certain information collected as part of a clinical trial subject to the Federal Policy for the Protection of Human Subjects, or the Common Rule. Many other states are considering similar legislation. A broad range of legislative measures also has been introduced at the federal level. Accordingly, failure to comply with federal and state laws (both those currently in effect and future legislation) regarding the privacy and security of personal information could expose us to fines and penalties under such laws. There also is the threat of consumer class actions related to these laws and the overall protection of personal data. Even if we are not determined to have violated these laws, government investigations into these issues typically require the expenditure of significant resources and generate negative publicity, which could harm our reputation and our business.

Given the breadth and depth of changes in data protection obligations, preparing for and complying with these requirements is rigorous and time-intensive and requires significant resources and a review of our technologies, systems and practices, as well as those of any third-party collaborators, service providers, contractors or consultants that process or transfer personal data collected in the EU. The GDPR and other changes in laws or regulations associated with the enhanced protection of certain types of sensitive data, such as healthcare data or other personal information from our clinical trials, could require us to change our business practices and put in place additional compliance mechanisms, may interrupt or delay our development, regulatory and commercialization activities and increase our cost of doing business, and could lead to government enforcement actions, private litigation and significant fines and penalties against us and could have a material adverse effect on our business, financial condition or results of operations.

Risks Related to the Discovery and Development of Our Current or Future Product Candidates

We currently depend on the success of AMX0035. If we are unable to maintain, or obtain additional, regulatory approvals for, and successfully commercialize, AMX0035, or experience significant delays in doing so, our business may be materially harmed.

We currently only have one product candidate, AMX0035, and our current business and future success depends entirely on our ability to develop, maintain, or obtain additional, regulatory approvals for, and then successfully commercialize, AMX0035, which we are developing for patients with ALS, AD and other neurological diseases. To date, we have obtained limited clinical trial data supporting AMX0035, having only completed a clinical trial of 137 patients with ALS and a clinical trial in 95 patients with AD. We are conducting a global Phase 3 clinical trial of AMX0035 in ALS and intend to conduct additional clinical trials for other indications in the future. This may make an investment in our company riskier than similar companies that have multiple product candidates in active development that may be able to better sustain failure of a lead product candidate.

We recently received approval from the FDA for RELYVRIO for the treatment of ALS in adults and marketing authorization with conditions from Health Canada for ALBRIOZA for the treatment of ALS and we have a MAA pending before the EMA for AMX0035. Accordingly, we are investing the majority of our efforts and financial resources in the further development and commercialization of our product candidate, AMX0035, for the treatment of ALS, AD and other diseases. Successful continued development and additional regulatory approvals of AMX0035 for our initial and potential additional indications is critical to the future success of our business. We will need to raise sufficient funds for, and successfully enroll and complete, our clinical development of AMX0035 for the treatment of ALS,

AD and other indications. The future regulatory and commercial success of AMX0035 or any future product candidates are subject to a number of risks, including the following:

- successful completion of preclinical studies and clinical trials;
- successful patient enrollment in clinical trials;
- successful data from our preclinical studies and clinical trials that supports an acceptable risk-benefit profile of AMX0035 or any future product candidates in the intended populations;
- satisfaction of applicable regulatory requirements, including to satisfy applicable rules governing fixed dose combination products;
- the interpretation of our preclinical and clinical data by regulatory authorities to support marketing approvals;
- potential unforeseen safety issues or adverse side effects;
- receipt and maintenance of marketing approvals from applicable regulatory authorities, including with any expected NCE and new clinical investigation data exclusivity and orphan drug market exclusivity;
- obtaining and maintaining patent and trade secret protection and regulatory exclusivity for AMX0035 or any future product candidates;
- making arrangements with third-party manufacturers, or establishing manufacturing capabilities, for both clinical and commercial supplies of AMX0035 or any future product candidates;
- entry into collaborations to further the development of AMX0035 or any future product candidates;
- establishing sales, marketing and distribution capabilities and launching commercial sales of our products, including of RELYVRIO in the United States, ALBRIOZA in Canada and AMX0035, if and when approved in other jurisdictions, whether alone or in collaboration with others;
- successfully launching commercial sales of RELYVRIO in the United States, ALBRIOZA in Canada and AMX0035 or any future product candidates, if and when approved in other jurisdictions;
- acceptance of AMX0035, or any other products if and when approved, by patients, the medical community and third-party payors;
- obtaining and maintaining third-party coverage and adequate reimbursement;
- maintaining a continued acceptable safety profile of the products following approval;
- effectively competing with other therapies;
- ensuring that we promote and distribute our products consistent with all applicable healthcare laws; and
- enforcing and defending intellectual property rights and claims.

Many of these risks are beyond our control, including the risks related to clinical development, the regulatory submission process, potential threats to our intellectual property rights and the manufacturing, marketing and sales efforts of any future collaborator. If we are unable to develop, obtain or maintain additional regulatory approvals for, or successfully commercialize AMX0035 for the indications we are developing it for, or if we experience delays as a result of any of these risks or otherwise, our business could be materially harmed.

In addition, of the large number of drugs in development in the pharmaceutical industry, only a small percentage result in the submission of marketing applications to regulatory authorities, and even fewer are approved for commercialization. Furthermore, even if we do receive regulatory approval for AMX0035 for any indication, any such approval may be subject to limitations on the indications or uses or the patient populations for which we may market the product. Accordingly, even if we are able to obtain the requisite financing to continue to fund our development activities, we cannot assure you that we will successfully develop or commercialize AMX0035 for any indication in any jurisdiction. If we or any of our future collaborators are unable to develop, maintain, or obtain additional, regulatory approvals for, or, if approved, successfully commercialize AMX0035 for our initial or potential additional indications, we may not be able to generate sufficient revenue to continue our business. In addition, our failure to demonstrate positive results in our clinical trials in any indication for which we are developing AMX0035, or to satisfy other regulatory requirements could adversely affect our development efforts for AMX0035 in other indications.

The delay or denial of regulatory approval, inability to maintain regulatory approval, inability to complete post-marketing requirements, or the requirement to resubmit any marketing application with additional data or information for AMX0035 in any jurisdiction could mean that we need to delay or even cease operations, and a delay in obtaining or inability to maintain such approval would delay commercialization of AMX0035 and adversely impact our ability to generate revenue, our business and our results of operations.

If we are not successful in commercializing AMX0035, or are significantly delayed in doing so, our business will be materially harmed, and we may need to curtail or cease operations. The research, testing, manufacturing, labeling, approval, sale, marketing and distribution of drug products are subject to extensive regulation by the FDA, Health Canada, the EMA, and other regulatory agencies in the United States and other countries, and such regulations differ from country to country. We are not permitted to market AMX0035 until we receive approval or marketing authorization from the relevant regulatory authority. We recently received approval from the FDA for AMX0035 (RELYVRIO) for the treatment of ALS in adults and, as part of our approval of RELYVRIO in the United States, we have post-marketing requirements to conduct carcinogenicity studies in mice and rats, drug-drug interaction studies, and studies in patients with kidney or liver impairment. We also received marketing authorization with conditions from Health Canada for AMX0035 (ALBRIOZA) for the treatment of ALS. One of the conditions of the approval in Canada is the provision of data from our ongoing PHOENIX trial and additional planned or ongoing studies. We also have a pending MAA before the EMA. The FDA, Health Canada, the EMA or any other foreign regulatory agency can delay, limit, deny or withdraw approval to market AMX0035 for many reasons, including:

- our inability to demonstrate to the satisfaction of, the FDA, Health Canada, the EMA or any other applicable foreign regulatory agency that AMX0035 is safe and effective for the requested indication;
- our inability to gain agreement from applicable foreign regulatory authorities that AMX0035 is appropriate for approval under applicable regulatory pathways;
- the FDA's, Health Canada's, the EMA's or any other applicable foreign regulatory agency's disagreement with the interpretation of data from nonclinical and clinical studies and trials, such as the FDA's differing interpretations of certain data, including sensitivity and statistical analyses, from our CENTAUR trial and OLE as presented at the meetings of the FDA's Advisory Committee on March 30, 2022 and September 7, 2022;
- our inability to demonstrate that the clinical and other benefits of AMX0035 outweigh any safety or other perceived risks;
- our ability to enroll an adequate number of patients in and successfully complete our ongoing global Phase 3 PHOENIX trial;

- the FDA's, Health Canada's, the EMA's or any other applicable foreign regulatory agency's requirement for additional nonclinical or clinical studies or trials, including studies to satisfy applicable rules governing fixed dose combination products or post-market requirements;
- the FDA's, Health Canada's, the EMA's or any other applicable foreign regulatory agency's having differing requirements for the trial protocols used in our clinical trials;
- the FDA's, Health Canada's, the EMA's or any other applicable foreign regulatory agency's non-approval of the formulation, labeling and/or the specifications of AMX0035;
- the FDA's, Health Canada's, the EMA's or any other applicable foreign regulatory agency's failure to accept the manufacturing processes or third-party manufacturers with which we contract; or
- the potential for approval policies or regulations the FDA, of Health Canada, the EMA or any other applicable foreign regulatory agencies to significantly change in a manner rendering our clinical data insufficient for approval.

Of the large number of drugs in development, only a small percentage successfully complete the FDA, Health Canada, the EMA or other regulatory approval processes and are commercialized.

Even when we complete clinical testing and receive any regulatory approvals for AMX0035, the FDA or the applicable foreign regulatory agency may grant approval contingent on the performance of costly additional preclinical studies and clinical trials, which may be required after approval. The FDA or the applicable foreign regulatory agency may also approve AMX0035 for a more limited indication and/or a narrower patient population than we originally request, and the FDA, Health Canada, the EMA or any other applicable foreign regulatory agency may not approve the labeling that we believe is necessary or desirable for the successful commercialization of AMX0035. Any delay in obtaining, or inability to obtain, applicable regulatory approval would delay or prevent commercialization of AMX0035 and would materially adversely impact our business and prospects.

AMX0035 is a fixed-dose combination drug product and certain regulatory authorities may require a demonstration that each component makes a contribution to the claimed effects in addition to demonstrating that the combination is safe and effective for the intended population.

Under the FDA's combination rule, the FDA may not file or approve an NDA for a fixed-dose combination product unless each component of a proposed drug product is shown to make a contribution to the claimed effects and the dosage of each component (amount, frequency, duration) is safe and effective for the intended population. To satisfy these requirements, the FDA typically requires a clinical factorial study, designed to assess the effects attributable to each drug in the combination product. This is particularly true when the ingredients are directed at the same sign or symptom of the disease or condition.

The FDA has accepted a variety of approaches to satisfy the combination rule. In December 2015, the FDA proposed regulations that would allow the agency to waive the requirements of the combination rule for certain drug products under particular circumstances. The FDA has not, to date, finalized these regulations, but the FDA has stated that factorial studies may be unethical (e.g., omitting a drug known to improve survival) or impractical (there may be too many components to conduct a factorial study, meaning the trial cannot be conducted). The FDA has also stated that it may be possible to use other types of clinical and nonclinical data and mechanistic information available to demonstrate the contributions of the individual active ingredients to the effect of the combination.

Similar requirements may be imposed on us by the EMA in the EU and comparable regulatory authorities in other jurisdictions where we intend to seek regulatory approval. In the EU, we have only

submitted preclinical data to demonstrate the clinical effects of each component in AMX0035, PB and TURSO (also known as TUDCA), in our MAA. There can be no assurance that the EMA will conclude that our preclinical data are sufficient for these purposes or, even if they are, that the results from our preclinical studies demonstrate the clinical effects of each component in AMX0035 for the treatment of ALS.

While the FDA has approved AMX0035 (known as RELYVRIO) as a fixed-dose combination product for the treatment of ALS in adults, we may be required by the FDA and comparable foreign regulatory authorities to satisfy the fixed-dose combination rule for AMX0035 or any other fixed-dose combination products we may develop for the treatment of any other indications we may pursue in advance of approval.

If the FDA, the EMA or other comparable foreign regulatory authorities require us to conduct one or more clinical trials to support such a demonstration, such as a factorial study, the design, duration, and scope of such clinical trials will be decided upon after further discussions with those agencies and other comparable foreign regulatory authorities. As a result, we are unable to predict with certainty the estimated timing or scope of any future clinical trials of AMX0035 we may be required to conduct to satisfy these requirements governing fixed dose combination products in various jurisdictions. Ongoing third-party data in neurology, specifically within ALS, on our products or other products may influence regulatory decision making, including for fixed-dose combinations.

We have concentrated our research and development efforts on the treatment of neurodegenerative and CNS disorders, a field that has seen very limited success in product development.

We have focused our research and development efforts on addressing neurodegenerative and CNS disorders. Historically, efforts by pharmaceutical companies in the field of neurodegenerative and CNS disorders have experienced limited successes in product development. The development of neurodegenerative and CNS therapies presents unique challenges, including an imperfect understanding of the biology, the presence of the blood brain barrier that can restrict the flow of drugs to the brain, a frequent lack of translatability of preclinical study results in subsequent clinical trials and dose selection, and the product candidate having an effect that may be too small to be detected using the outcome measures selected in clinical trials or if the outcomes measured do not reach statistical significance. There are few approved therapeutic options available for patients with ALS, AD and other neurodegenerative disorders. Our future success is highly dependent on the successful development and commercialization of AMX0035 and any future product candidates for treating neurodegenerative and CNS disorders. Developing and commercializing AMX0035 and any future product candidates for treatment of neurodegenerative and CNS disorders subjects us to a number of challenges, including ensuring that we have selected the optimal doses, executing an appropriate clinical trial to test for efficacy and obtaining and maintaining regulatory approval from Health Canada, the FDA, the EMA and other comparable foreign regulatory authorities.

The regulatory approval processes of the FDA, Health Canada, the EMA and other comparable foreign authorities are lengthy, time-consuming and inherently unpredictable, and if we are ultimately unable to obtain or maintain regulatory approval for AMX0035 or any future product candidates, our business will be substantially harmed. Any finding that our global Phase 3 PHOENIX trial is insufficient to support current or additional marketing authorizations in ALS could lead the FDA or Health Canada to withdraw prior regulatory approvals for RELYVRIO or ALBRIOZA, respectively, or we could decide, after consultation with regulatory authorities, to voluntarily withdraw RELYVRIO or ALBRIOZA from the marketplace.

We, and any future collaborators, are not permitted to commercialize, market, promote or sell any product candidate in the United States, Canada, or the EU without obtaining regulatory approval from

the FDA, Health Canada, or the EMA, respectively. Regulatory authorities in other jurisdictions may have similar requirements. The time required to obtain approval by the FDA, Health Canada, the EMA and other comparable foreign regulatory authorities is unpredictable, and typically takes many years following the commencement of clinical trials and depends upon numerous factors, including substantial discretion of such regulatory authorities. In addition, approval policies, regulations, or the type and amount of clinical data necessary to gain approval may change during the course of a product candidate's clinical development and may vary among jurisdictions. The FDA in any approval needs to determine that there is substantial evidence of effectiveness. This finding can be substantiated based on two adequate and well-controlled studies, or in certain circumstances on a single, large, multicenter, adequate and well-controlled study that is very persuasive or from a single adequate and well-controlled study together with confirmatory evidence. FDA regulations and guidance also allow for greater flexibility and tolerance for uncertainty in the context of rare and fatal diseases. In June 2022, we obtained marketing authorization with conditions for AMX0035 (ALBRIOZA) in Canada and in September 2022, we received approval from the FDA for AMX0035 (RELYVRIO) in the United States. While we have received approval from the FDA and marketing authorization with conditions from Health Canada, and have submitted an MAA to the EMA, to date, we have not submitted any other similar drug approval submissions to comparable foreign regulatory authorities for AMX0035 or any other product candidate. We have not obtained approval of our MAA from the EMA, and there can be no assurance that we will receive such approval.

One of the conditions of the marketing authorization in Canada is the provision of data from our ongoing PHOENIX trial. There is no guarantee that Health Canada will accept the data from our PHOENIX trial as satisfying the conditions and grant a marketing authorization without conditions for ALBRIOZA for the treatment of ALS. Health Canada could require us to make further undertakings with respect to confirmatory clinical trials if it is not satisfied with the data from the PHOENIX trial, in order for AMX0035 to continue to be marketed in Canada.

Our approval of RELYVRIO by the FDA was granted following a positive recommendation for approval at the second virtual meeting of the Advisory Committee held on September 7, 2022. The Advisory Committee initially met on March 30, 2022 and voted 4 (yes) and 6 (no) on the question of whether the data from our randomized, controlled Phase 2 CENTAUR trial and OLE established a conclusion that AMX0035 is effective in the treatment of patients with ALS. At the second meeting of the Advisory Committee, the Advisory Committee voted 7 (yes) to 2 (no) in response to the question of whether available evidence of effectiveness is sufficient to support approval of AMX0035 for the treatment of ALS, taking into account the unmet need in ALS, the status of the ongoing PHOENIX trial and the seriousness of ALS. Although the FDA subsequently approved RELYVRIO for the treatment of ALS in adults, at this meeting and the previous Advisory Committee meeting, the FDA presented concerns regarding choices of statistical models for the prespecified primarily analysis and the interpretability of the survival results included in our marketing application. Other regulatory authorities may present similar concerns regarding our data when reviewed to support marketing applications for AMX0035 for the treatment of ALS. If we experience delays in obtaining and maintaining regulatory approval or if we fail to obtain or maintain such approvals, the commercial prospects for AMX0035 may be harmed and our ability to generate revenues and the value of our common stock will be materially impaired.

Clinical testing is expensive, difficult to design and implement, can take many years to complete and is inherently uncertain as to outcome. We cannot guarantee that any clinical trials will be conducted as planned or completed on schedule, if at all. The clinical development of AMX0035 for our initial and potential additional indications or any future product candidates is susceptible to the risk of failure inherent at any stage of development, including failure to demonstrate efficacy in a clinical trial or across a broad population of patients, the occurrence of adverse events that are severe or medically or commercially unacceptable, failure to comply with protocols or applicable regulatory requirements,

and determination by the FDA, Health Canada, the EMA or any other comparable foreign regulatory authority that a product candidate may not continue development or is not approvable. Additionally, our expenses could increase if we are required by the FDA, Health Canada, the EMA or any other comparable foreign regulatory authority to perform clinical trials in addition to those currently expected, or if there are any delays in completing our clinical trials or the development of AMX0035 in additional indications. It is possible that even if AMX0035 or any future product candidate has a beneficial effect, that effect will not be detected during clinical evaluation as a result of one or more of a variety of factors, including the size, duration, design, measurements, conduct or analysis of our clinical trials. Conversely, as a result of the same factors, our clinical trials may indicate an apparent positive effect of AMX0035 or any future product candidate that is greater than the actual positive effect, if any. Similarly, in our clinical trials we may fail to detect toxicity of or intolerability caused by AMX0035 or any future product candidate, or mistakenly believe that AMX0035 or any future product candidates are toxic or not well-tolerated when that is not in fact the case.

AMX0035 could fail to obtain additional regulatory approvals, and any of our future product candidates could fail to obtain regulatory approvals, for many reasons, including the following:

- the FDA, Health Canada, the EMA or other comparable foreign regulatory authorities may disagree as to the design or implementation of our clinical trials and may require additional data to support regulatory approval;
- we may be unable to demonstrate to the satisfaction of the FDA, Health Canada, the EMA or other comparable foreign regulatory authorities that a product candidate is safe and effective for its proposed indication and, if necessary, that a product candidate and any active components thereof are safe and effective for the proposed indication;
- the results of clinical trials may not meet the level of statistical significance required by the FDA, Health Canada, the EMA or other comparable foreign regulatory authorities for approval;
- we may be unable to demonstrate that a product candidate's clinical and other benefits outweigh its safety risks;
- the FDA, Health Canada, the EMA and comparable authorities in other countries may disagree with our interpretation of data from clinical trials or preclinical studies and may require additional trials or studies to support marketing approval;
- the data collected from clinical trials of AMX0035 or any future product candidates may not be sufficient to support the submission of an NDA or other submission to the FDA or other comparable foreign regulatory authority to obtain regulatory approval in the United States, Canada, the EU or elsewhere;
- the FDA, Health Canada, the EMA or other comparable foreign regulatory authorities may find deficiencies with clinical trial sites or fail to approve the manufacturing processes or facilities of third-party manufacturers with which we contract for clinical and commercial supplies; and
- the approval policies or regulations of the FDA, Health Canada, the EMA or other comparable foreign regulatory authorities may significantly change in a manner rendering our clinical data insufficient for approval.

This lengthy approval process as well as the unpredictability of clinical trial results may result in our failing to obtain regulatory approval to market AMX0035 or any future product candidate we develop, which would significantly harm our business, results of operations and prospects. There is no assurance that the endpoints and trial designs used for the approval of currently approved drugs for the treatment of neurodegenerative diseases will be acceptable for future approvals, including for AMX0035. The FDA, Health Canada, the EMA and other comparable foreign authorities have substantial discretion in the approval process and determining when or whether regulatory approval will

be obtained for any product candidate that we develop. Even if we believe the data collected from past or future clinical trials of AMX0035 or any future product candidates are promising, such data may not be sufficient to support approval by the FDA or any other regulatory authority.

The FDA reviews an NDA to determine whether the product is safe and effective for its intended use(s), with the latter determination being made on the basis of substantial evidence. This finding can be substantiated based on two adequate and well-controlled studies, or in certain circumstances on a single, large, multicenter, adequate and well-controlled study that is very persuasive or from a single adequate and well-controlled study together with confirmatory evidence. The FDA may not agree that this standard is met. Accordingly, there can be no assurance that for AMX0035 or future product candidates the FDA and other regulatory agencies, including Health Canada and the EMA, will not require additional clinical trials beyond what we may plan to conduct. This may be the case particularly as these regulatory authorities may consult with one another or as we may be required to apprise the respective agencies of studies we are conducting of AMX0035 for ALS in conjunction with our requests for marketing approval or in response to post-marketing requirements from the respective agency. In September 2022, we received approval for AMX0035 from the FDA for the treatment of ALS in adults, and as a part of our approval, we have post-marketing requirements to conduct carcinogenicity studies in mice and rats, drug-drug interaction studies, and studies in patients with kidney or liver impairment. In July 2022, we received marketing authorization for AMX0035 from Health Canada, with conditions, for the treatment of ALS. One of the conditions of the approval is the provision of data from our ongoing PHOENIX trial. There is no guarantee that Health Canada will accept the data from our PHOENIX trial and grant authorization without conditions for AMX0035 for the treatment of ALS. Additionally, the EMA may also find that our CENTAUR trial, together with any data from our global Phase 3 PHOENIX trial that may be provided during or after the review period for these applications, is not sufficient to support our request for marketing authorization in the EU. It is typically the case not just in the United States, but also in Canada and Europe, that marketing approvals are based on two Phase 3 clinical studies. Moreover, any finding by another regulatory authority that our global Phase 3 PHOENIX trial is insufficient to support additional marketing authorizations in ALS could lead the FDA or Health Canada to withdraw prior regulatory approvals for RELYVRIO and ALBRIOZA, respectively. At the second meeting of the Advisory Committee on September 7, 2022, we stated that if our PHOENIX trial is not successful then we will do what is right for patients, which includes voluntarily removing the product from the market. Any such findings by a regulatory authority or decision to voluntarily withdraw AMX0035 from the marketplace would materially harm our ability to generate revenue and become profitable.

In addition, disruptions caused by the COVID-19 pandemic may increase the likelihood that we encounter difficulties or delays in initiating, screening, enrolling, conducting, or completing our ongoing and planned preclinical studies and clinical trials. Clinical site initiation and patient screening and enrollment may be delayed due to prioritization of hospital resources toward the COVID-19 pandemic. Investigators and patients may not be able to comply with clinical trial protocols if quarantines impede patient movement or interrupt healthcare services. Similarly, our ability to recruit and retain patients and principal investigators and site staff who, as healthcare providers, may have heightened exposure to COVID-19, could be limited, which in turn could adversely impact our clinical trial operations. Additionally, we may experience interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel, quarantines or social distancing protocols imposed or recommended by federal or state governments, employers and others in connection with the ongoing COVID-19 pandemic. As a result of the COVID-19 pandemic, we may face delays in meeting our anticipated timelines for our ongoing and planned clinical trials.

The FDA has noted it is continuing to ensure timely reviews of applications for medical products during the ongoing COVID-19 pandemic in line with its user fee performance goals and conducting mission critical domestic and foreign inspections to ensure compliance of manufacturing facilities with

FDA quality standards. However, the FDA may not be able to continue its current pace and approval timelines could be extended, including where a pre-approval inspection or an inspection of clinical sites is required and due to the ongoing COVID-19 pandemic and travel restrictions the FDA is unable to complete such required inspections during the review period. Since March 2020, when foreign and domestic inspections were largely placed on hold due to the COVID-19 pandemic, the FDA has been working to resume pre-pandemic levels of inspection activities, including routine surveillance, bioresearch monitoring and pre-approval inspections on a prioritized basis. Should the FDA determine that an inspection is necessary for approval and an inspection cannot be completed during the review cycle due to restrictions on travel, and the FDA does not determine a remote interactive evaluation to be adequate, the agency has stated that it generally intends to issue, depending on the circumstances, a complete response letter or defer action on the application until an inspection can be completed. Further, if there is inadequate information to make a determination on the acceptability of a facility, the FDA may defer action on the application until an inspection can be completed. During the COVID-19 pandemic, a number of companies announced receipt of complete response letters due to the FDA's inability to complete required inspections for their applications. Regulatory authorities outside the United States may adopt similar restrictions or other policy measures in response to the COVID-19 pandemic and may experience delays in their regulatory activities. For example, with respect to new sites or facilities in the European Economic Area, or EEA, which have never had a current Good Manufacturing Practices, or cGMP, inspection or authorization, the EMA has stated that a distant assessment may be conducted in order to evaluate if the site could be authorized without an on-site pre-approval inspection. If an approval is granted, it should be indicated that the certificate has been granted on the basis of a distant assessment and an on-site inspection should be conducted when circumstances permit. If a cGMP certificate cannot be granted as a result of the distant assessment, a clock-stop in the regulatory approval process will be imposed until an on-site inspection is possible. In addition, even if we were to obtain approval, regulatory authorities may approve AMX0035 or any future product candidates for fewer or more limited indications than we request, may not approve the price we intend to charge for our products, may grant approval contingent on the performance of costly post-marketing preclinical studies and clinical trials, or may approve a product candidate with a label that does not include the labeling claims necessary or desirable for the successful commercialization of that product candidate. Any of the foregoing scenarios could materially harm the commercial prospects for AMX0035 or any future product candidates.

In Canada, pre-approval GMP inspections are not performed in association with the NDS. Instead, Health Canada relies on a Drug Establishment License, or DEL, to determine the site's compliance with GMP. DELs can only be held by companies in Canada, and that company becomes the importer of record for the drug. To import, the sites of manufacture, testing and packaging of the Drug Substance and Drug Product are required to be listed on the DEL. Listing is dependent on having an inspection report from a recognized sister regulatory agency such as the EMA or the FDA. As a result of the COVID-19 pandemic, inspection reports can now be up to three years old. The site of manufacture of the drug product for AMX0035 is in Canada and is subject to routine inspections from Health Canada. These Canadian inspections are currently being performed remotely as a result of the COVID-19 pandemic.

We may incur unexpected costs or experience delays in completing, or ultimately be unable to complete, the development and commercialization of AMX0035 or any future product candidates.

To obtain regulatory approval to commercialize AMX0035 and any future product candidates, we must demonstrate through extensive preclinical studies and clinical trials that such product candidates are safe and effective in humans. Preclinical and clinical testing are expensive and can take many years to complete, and their outcome is inherently uncertain. Failure can occur at any time during the clinical trial process and our future clinical trial results may not be successful, which could impact our ability to obtain additional regulatory approvals for AMX0035, to satisfy any applicable post-market

conditions or requirements or to continue marketing AMX0035 in the United States and Canada. We could also be required by regulatory authorities to withdraw AMX0035 from the marketplace. This could impact our development plans for AMX0035 for other indications and future product candidates and could impact our results of operations.

We may experience delays in completing our clinical trials or preclinical studies and initiating or completing additional clinical trials. We may also experience numerous unforeseen events during our clinical trials that could delay or prevent our ability to receive marketing approval or commercialize AMX0035 or any future product candidates we develop, including:

- regulators, or institutional review boards, or IRBs, or other reviewing bodies may not authorize us or our investigators to commence a clinical trial, or to conduct or continue a clinical trial at a prospective or specific trial site;
- we may not reach agreement on acceptable terms with prospective contract research organizations, or CROs, and clinical trial sites, the terms of which can be subject to extensive negotiation and may vary significantly among different CROs and trial sites;
- the number of subjects or patients required for clinical trials of AMX0035 in an indication or any future product candidate may be larger than we anticipate, enrollment in these clinical trials may be insufficient or slower than we anticipate, and the number of clinical trials being conducted at any given time may be high and result in fewer available patients for any given clinical trial, or patients may drop out of these clinical trials at a higher rate than we anticipate;
- our third-party contractors, including those manufacturing AMX0035 or any future product candidates or conducting clinical trials on our behalf, may fail to comply with regulatory requirements or meet their contractual obligations to us in a timely manner, or at all;
- we may have to amend clinical trial protocol submitted to regulatory authorities or conduct additional studies to reflect changes in regulatory requirements or guidance, which we may be required to resubmit to an IRB and regulatory authorities for re-examination;
- unforeseen safety events may occur during the course of a clinical trial and these events may result in the temporary suspension or termination of a clinical trial, or require urgent safety measures or restrictions to protect human subjects during the conduct of a clinical trial;
- regulators, IRBs or other reviewing bodies may fail to approve or subsequently find fault with the manufacturing processes or facilities of third-party manufacturers with which we enter into agreement for clinical and commercial supplies, or the supply or quality of AMX0035 or any future product candidate or other materials necessary to conduct clinical trials of AMX0035 or any future product candidates may be insufficient, inadequate or not available at an acceptable cost, or we may experience interruptions in supply; and
- the potential for approval policies or regulations of Health Canada, the FDA, the EMA or any other applicable foreign regulatory agencies to significantly change in a manner rendering our clinical data insufficient for approval.

Regulators, IRBs of the institutions in which clinical trials are being conducted or data monitoring committees may suspend or terminate a clinical trial due to a number of factors, including failure to conduct the clinical trial in accordance with regulatory requirements or our clinical protocols, inspection of the clinical trial operations or trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold, unforeseen safety issues or adverse side effects, failure to demonstrate a benefit from using a drug, changes in governmental regulations or administrative actions or lack of adequate funding to continue the clinical trial.

Negative or inconclusive impressions of the results from our earlier clinical trials of AMX0035 for the treatment of ALS or AD, or any other clinical trial or preclinical studies in animals that we have

conducted, could mandate repeated or additional preclinical studies or clinical trials and could delay marketing approvals or result in changes to or delays in preclinical studies or clinical trials of AMX0035 in other indications. We do not know whether any clinical trials that we may conduct will demonstrate adequate efficacy and safety to result in regulatory approval to market AMX0035 for our initial or potential additional indications, or any future product candidate. If later stage clinical trials, including our ongoing global Phase 3 PHOENIX trial in ALS, do not produce favorable results with very strong statistical significance, our ability to obtain or maintain any prior-issued regulatory approval for AMX0035 for ALS (including our FDA approval and our marketing authorization with conditions from Health Canada) or potential additional indications, or any future product candidate, may be adversely impacted.

Our failure to successfully initiate and complete clinical trials of AMX0035 for ALS, AD or potential additional indications and to demonstrate the efficacy and safety of AMX0035, including each component thereof, necessary to obtain and maintain regulatory approval to market AMX0035, including if our global Phase 3 PHOENIX trial is not successful, would significantly harm our business and ability to continue developing and marketing AMX0035 for any indications. Our product candidate development costs will also increase if we experience delays in testing or obtaining and maintaining regulatory approvals and we may be required to obtain additional funds to complete clinical trials. We cannot assure you that our clinical trials will begin as planned or be completed on schedule, if at all, or that we will not need to restructure our trials after they have begun. Significant clinical trial delays or the need for additional data from our clinical trials also could shorten any periods during which we may have the exclusive right to commercialize AMX0035 or any future product candidates or allow our competitors to bring products to market before we do and impair our ability to successfully commercialize such product candidates, which may harm our business and results of operations. In addition, many of the factors that cause, or lead to, delays of clinical trials may ultimately lead to the denial of regulatory approval of AMX0035 or any future product candidate.

Even if we complete the necessary preclinical studies and clinical trials, the marketing approval process is expensive, time-consuming and uncertain and may prevent us or any future collaboration partners from obtaining or maintaining approvals for the commercialization of AMX0035 for our initial or potential additional indications as well as for any future product candidate we develop.

Any product candidate we may develop and the activities associated with its development and commercialization, including its design, testing, manufacture, safety, efficacy, recordkeeping, labeling, storage, approval, advertising, promotion, sale, and distribution, are subject to comprehensive regulation by Health Canada, the FDA, the EMA and other regulatory authorities in the United States and in other countries. Failure to obtain marketing approval for a product candidate will prevent us from commercializing that product candidate in a given jurisdiction. Although we have invested substantial time and resources to date in pursuit of regulatory approval and toward potential commercialization, we have only received regulatory approval for AMX0035 (RELYVRIO) in the United States and marketing authorization with conditions for AMX0035 (ALBRIOZA) in Canada and have not received any other regulatory approvals to market any product candidates from regulatory authorities in any jurisdiction and it is possible that none of the product candidates we may seek to develop in the future will ever obtain regulatory approval. We have no experience in filing and supporting the applications necessary to gain marketing approvals and rely on third-party CROs or regulatory consultants to assist us in this process. Securing regulatory approval requires the submission of extensive preclinical and clinical data and supporting information to the various regulatory authorities for each therapeutic indication to establish the biologic product candidate’s safety, purity, efficacy and potency. Securing regulatory approval also requires the submission of information about the product manufacturing process to, and inspection of manufacturing facilities by, the relevant regulatory authority. Any product candidates we develop may not be effective, may be only moderately effective, or may prove to have undesirable or

unintended side effects, toxicities or other characteristics that may preclude our obtaining marketing approval or prevent or limit commercial use.

The process of obtaining marketing approvals, in the United States, Canada, EU and other foreign jurisdictions, is expensive, may take many years if additional clinical trials are required, if approval is obtained at all, and can vary substantially based upon a variety of factors, including the type, complexity, and novelty of the product candidates involved. Changes in marketing approval policies during the development period, changes in or the enactment of additional statutes or regulations, or changes in regulatory review for each submitted product application, may cause delays in the approval or rejection of an application. The FDA, Health Canada, the EMA and comparable authorities in other countries have substantial discretion in the approval process and may refuse to accept any application or may decide during the review process that our data are insufficient for approval and require additional preclinical, clinical or other studies. For example, during the review of our NDA for AMX0035 for the treatment of ALS, the FDA requested clarifying information regarding our preclinical and clinical data and during the Advisory Committee meetings noted certain concerns with interpretation of our clinical data. In addition, varying interpretations of the data obtained from preclinical and clinical testing could delay, limit, or prevent marketing approval of, or limit the approved labeling for, a product candidate. For example, while we have conducted preclinical studies in various models of neurodegenerative diseases, it is the view of the FDA that the mechanism by which RELYVRIO exerts its therapeutic effects in patients with ALS is unknown. In addition, in the approved labeling for RELYVRIO, the FDA noted that the post hoc, long-term exploratory survival analysis should be interpreted with caution given the limitations of data collected outside of a controlled study. Additionally, the FDA has discretion to refer an application for a novel drug or a drug that presents difficult questions of safety or efficacy to an advisory committee. For example, our approval of RELYVRIO by the FDA was granted following the second virtual meeting of the Advisory Committee held on September 7, 2022. The Advisory Committee initially met on March 30, 2022 and voted 4 (yes) and 6 (no) on the question of whether the data from our randomized, controlled Phase 2 CENTAUR trial and OLE established a conclusion that AMX0035 is effective in the treatment of patients with ALS. At the second meeting of the Advisory Committee, the Advisory Committee voted 7 (yes) to 2 (no) in response to the question of whether available evidence of effectiveness is sufficient to support approval of AMX0035 for the treatment of ALS, taking into account the unmet need in ALS, the status of the ongoing PHOENIX trial and the seriousness of ALS. At this meeting and the previous Advisory Committee meeting, the FDA presented concerns regarding choices of statistical models for the prespecified primarily analysis and the interpretability of the survival results. Additionally, in July 2022 we received marketing authorization with conditions of AMX0035 (ALBRIOZA) from Health Canada for the treatment of ALS. One of the conditions of the marketing authorization in Canada is the provision of data from our ongoing PHOENIX trial. There is no guarantee that Health Canada will accept the data from our PHOENIX trial as satisfying the conditions and grant a marketing authorization without conditions for ALBRIOZA for the treatment of ALS or that the PHOENIX trial will be successful. Health Canada could require us to make further undertakings with respect to confirmatory clinical trials if it is not satisfied with the data from the PHOENIX trial, in order for AMX0035 to continue to be marketed in Canada. As such, we may be unable to obtain or to maintain the marketing approvals we are pursuing and any marketing approvals we ultimately obtain, including any conditional approvals, may be denied, limited, withdrawn, or subject to restrictions or post-approval commitments that could render the approved product not commercially viable.

If we experience delays in obtaining and maintaining approval or if we fail to obtain approval of any product candidates we may develop, the commercial prospects for those product candidates, including for AMX0035 in other indications, may be harmed, and our ability to generate revenues will be materially impaired.

The results of early-stage clinical trials and preclinical studies may not be predictive of future results. Initial data in our clinical trials may not be indicative of results obtained when these trials are completed or in later stage trials.

The results of preclinical studies may not be predictive of the results of clinical trials, and the results of any early-stage clinical trials we commence may not be predictive of the results of the later-stage clinical trials. In addition, initial data in clinical trials may not be indicative of results obtained when such trials are completed. There can be no assurance that any of our clinical trials will ultimately be successful or support further clinical development of AMX0035 or any future product candidates. In addition, the clinical results seen in the CENTAUR trial may not be repeated in our global Phase 3 PHOENIX clinical trial, which may materially impact our ability to obtain authorization without conditions for ALBRIOZA in Canada, to maintain our approval for RELYVRIO in the United States, and to continue development of AMX0035 for additional indications or of future product candidates. There is a high failure rate for drugs and biologics proceeding through clinical trials. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in clinical development even after achieving promising results in earlier studies, and any such setbacks in our clinical development could have a material adverse effect on our business and operating results.

Additionally, we have in the past utilized and may in the future utilize an “open-label” clinical trial design. An “open-label” clinical trial is one where both the patient and investigator know whether the patient is receiving the investigational product candidate or either an existing approved drug or placebo. Most open-label clinical trials test only the investigational product candidate and sometimes may do so at different dose levels. Open-label clinical trials are subject to various limitations that may exaggerate any therapeutic effect as patients in open-label clinical trials are aware when they are receiving treatment. Open-label clinical trials may be subject to a “patient bias” where patients perceive their symptoms to have improved merely due to their awareness of receiving an experimental treatment. In addition, open-label clinical trials may be subject to an “investigator bias” where those assessing and reviewing the physiological outcomes of the clinical trials are aware of which patients have received treatment and may interpret the information of the treated group more favorably given this knowledge. The results from an open-label trial may not be predictive of future clinical trial results with AMX0035 or any future product candidates when studied in a controlled environment with a placebo or active control.

Interim topline and preliminary data from our clinical trials that we announce or publish from time to time may change as more patient data become available and are subject to audit and verification procedures that could result in material changes in the final data.

From time to time, we may publish interim topline or preliminary data from our clinical trials. Interim data from clinical trials that we may complete are subject to the risk that one or more of the clinical outcomes may materially change as patient enrollment continues and more patient data become available. Preliminary or topline results also remain subject to audit and verification procedures that may result in the final data being materially different from the preliminary data we previously published. As a result, interim and preliminary data should be viewed with caution until the final data are available. Adverse differences between preliminary or interim data and final data could significantly harm our reputation and business prospects.

Enrollment and retention of patients in clinical trials is an expensive and time-consuming process and could be made more difficult or rendered impossible by multiple factors outside our control.

Patient enrollment is a significant factor in the timing of clinical trials, and the timing of our clinical trials depends, in part, on the speed at which we can recruit patients to participate in our trials, as well

as completion of required follow-up periods. We may not be able to initiate or continue clinical trials for AMX0035 or any future product candidates if we are unable to locate and enroll a sufficient number of eligible patients to participate in these trials to such trial's conclusion as required by Health Canada, the FDA, the EMA or other comparable foreign regulatory authorities. Additionally, certain clinical trials for AMX0035 and any future product candidates may be focused on indications with relatively small patient populations, which may further limit enrollment of eligible patients or may result in slower enrollment than we anticipate. The eligibility criteria of our clinical trials, once established, may further limit the pool of available trial participants. For example the number of patients suffering from ALS, is small and, in some cases, has not been established with precision. If the actual number of patients with these diseases is smaller than we anticipate, we may encounter difficulties in enrolling patients in our clinical trials, thereby delaying or preventing development and approval of AMX0035 or any future product candidates. Even once enrolled, we may be unable to retain a sufficient number of patients to complete any of our trials. For example, ALS patients have significant mobility issues, morbidities and other complications that have historically made retention in ALS trials, more challenging. These challenges are also present with many other neurodegenerative indications, including indications for which we may run clinical trials in the future. In the past, we have had discontinuations in our clinical trials, including in our CENTAUR trial and CENTAUR OLE trial. Discontinuations may occur in the future and could result in delays of our clinical trials and affect our ability to enroll additional patients in our clinical trials and impact the integrity of data from our clinical trials.

Patient enrollment and retention in clinical trials depends on many factors, including the size of the patient population, the severity of the disease under investigation, the nature of the trial protocol, the existing body of safety and efficacy data for the product candidate, the number and nature of competing treatments and ongoing clinical trials of or expanded access to competing therapies for the same indication, the proximity of patients to clinical sites, the eligibility criteria for the trial, the ability to adequately monitor patients during a trial, clinicians' and patients' perceptions as to the potential advantages of the product candidate being studied, and the risk that patients will drop out of a trial before completing all site visits. There are limited patient pools from which to draw in order to complete our clinical trials in a timely and cost-effective manner, including due to the fact that the neurological diseases we target are rare.

Furthermore, our efforts to build relationships with patient communities may not succeed, which could result in delays in patient enrollment in our clinical trials.

Any negative results we may report in clinical trials of AMX0035 or any future product candidate may also make it difficult or impossible to recruit and retain patients in other clinical trials of that same product candidate. Delays or failures in planned patient enrollment or retention may result in increased costs, program delays or both, which could have a harmful effect on our ability to develop AMX0035 in ALS, AD and additional indications and any future product candidates, or could render further development impossible. For example, the impact of public health epidemics, such as the ongoing COVID-19 pandemic, may delay or prevent patients from enrolling or from receiving treatment in accordance with the protocol and the required timelines, which could delay our clinical trials, or prevent us or our partners from completing our clinical trials at all, and harm our ability to obtain and maintain approval for such product candidate. Further, if patients drop out of our clinical trials, miss scheduled doses or follow-up visits, or otherwise fail to follow clinical trial protocols, whether as a result of the COVID-19 pandemic and related illness or actions taken to slow the spread of COVID-19 or otherwise, the integrity of data from our clinical trials may be compromised or not accepted by Health Canada, the FDA, the EMA or other regulatory authorities, which would represent a significant setback for the applicable program. In addition, we may rely on CROs and clinical trial sites to ensure proper and timely conduct of our future clinical trials and, while we intend to enter into agreements governing their services, we will be limited in our ability to compel their actual performance.

Changes in methods of product candidate manufacturing or formulation may result in additional costs or delay.

As product candidates proceed through preclinical studies to late-stage clinical trials towards potential approval and commercialization, it is common that various aspects of the development activities, such as manufacturing methods and formulation, are altered along the way in an effort to optimize processes and results. Any of these changes could cause AMX0035 or any future product candidates to perform differently and affect the results of ongoing clinical trials or other future clinical trials conducted with the materials manufactured using altered processes. For example, in seeking approval of AMX0035 in Europe, we submitted data supporting a different formulation of AMX0035 from the formulation evaluated in the CENTAUR trial. Changes to commercial formulations from those studied clinically could lead regulatory authorities to delay the approval of our marketing applications until we can demonstrate through additional clinical data that there is comparability in the bioavailability of the two different formulations or may require us to revert to the prior formulation evaluated clinically. Should we have to conduct comparability testing to bridge earlier clinical data obtained from product candidates produced under earlier manufacturing methods or formulations with the planned commercial formulation, regulatory authorities may disagree on the interpretation of results from this testing. This could delay completion of clinical trials, require the repetition of one or more clinical trials, increase clinical trial costs, delay approval of AMX0035 or any future product candidates and jeopardize our ability to commence sales and generate revenue.

AMX0035 or any future product candidate may cause undesirable side effects or have other properties that could delay or prevent its regulatory approval, limit the commercial profile of an approved label, or result in significant negative consequences following regulatory approval, if obtained.

Undesirable side effects caused by AMX0035, or any future product candidate, could cause us or regulatory authorities to interrupt, delay or halt clinical trials and could result in a more restrictive label or the delay, denial or withdrawal of regulatory approval by the FDA, Health Canada, the EMA or comparable foreign regulatory authorities. Results of our preclinical studies or clinical trials could reveal a high and unacceptable severity and prevalence of side effects or unexpected characteristics. In clinical trials of AMX0035 to date, AMX0035 has been generally well-tolerated, with most common treatment-emergent adverse events including diarrhea, abdominal pain, nausea, upper respiratory infection, constipation, headache, fatigue, proteinuria, and decreased appetite. In animal studies, administration of AMX0035 to rats throughout pregnancy and lactation resulted in increased offspring mortality at all doses tested, which were less than or similar to the clinical doses tested in our clinical trials. However, there can be no guarantee that we would observe a similar tolerability profile of AMX0035 in our ongoing global Phase 3 PHOENIX clinical trial or in other future clinical trials. Many compounds that initially showed promise in clinical or earlier stage testing are later found to cause undesirable or unexpected side effects that prevented further development of the compound.

If unacceptable side effects arise in the development of AMX0035 or any future product candidates, we, the FDA, Health Canada, the EMA or comparable foreign regulatory authorities, the IRBs, or independent ethics committees at the institutions in which our trials are conducted, or the independent safety monitoring committee could suspend or terminate our clinical trials or regulatory authorities could order us to cease clinical trials or deny approval of AMX0035 or any future product candidates for any or all targeted indications. Treatment-emergent side effects that are deemed to be drug-related could also affect subject recruitment or the ability of enrolled subjects to complete the trial or result in potential product liability claims. Undesirable side effects in one of our clinical trials for AMX0035 in one indication could adversely affect enrollment in clinical trials, regulatory approval and commercialization of AMX0035 in other indications. Additionally, there may be negative findings regarding components of AMX0035 or future product candidates by other parties. For example,

Humanitas Mirasole SpA, or Humanitas, is conducting a Phase 3 clinical trial in the EU to assess the safety and efficacy of TURSO in patients with ALS which may lead to additional findings as to the safety profile of TURSO. Any negative findings by third parties may impact the future approvability or labeling of AMX0035 or other product candidates we may develop. In addition, side effects may not be appropriately recognized or managed by the treating medical staff. We have no relationship with Humanitas. If their Phase 3 clinical trial is successful and TURSO is approved by the FDA or any other regulatory agency, TURSO may become a commercialized product competitive with AMX0035, unless our intellectual property protections and any regulatory exclusivities we possess or may possess in the future prevent such commercialization. Inadequate training in recognizing or managing the potential side effects of AMX0035 or any future product candidates could result in patient injury or death. Any of these occurrences may harm our business, financial condition and prospects significantly.

Bitter taste was frequently observed in our clinical trials of AMX0035. While bitter taste, by itself, does not present a safety risk for patients, it may lead to higher levels of patient non-compliance, which could have the effect of reducing the observed efficacy of AMX0035 in our clinical trials, including our ongoing global Phase 3 PHOENIX trial, or limit its commercial adoption.

Moreover, clinical trials of AMX0035 are conducted in carefully defined sets of patients who have agreed to enter into clinical trials. Consequently, it is possible that our clinical trials, or those of any future collaborator, may indicate an apparent positive effect of AMX0035 or a future product candidate that is greater than the actual positive effect, if any, or alternatively fail to identify undesirable side effects.

Finally, AMX0035 is a combination of TURSO and PB. PB has been approved by the FDA and other regulatory authorities for the treatment of patients with certain urea cycle disorders and TURSO has been approved in Italy for diseases of cirrhotic liver disorders such as primary biliary cirrhosis. It is possible that one or more of the active moieties in AMX0035 has also been approved by FDA or other regulatory authorities. Even if AMX0035 receives marketing approval and is commercialized in a jurisdiction, we would continue to be subject to the risks that the applicable regulatory authorities could revoke approval of PB or TURSO or any active moiety in AMX0035, if applicable, or that efficacy, manufacturing or supply issues could arise with PB or TURSO or any active moiety in AMX0035, if applicable. This could result in our own products being removed from the market or being less commercially successful.

Increasing demand for expanded access to AMX0035 could negatively affect our reputation and harm our business.

We are developing AMX0035 for the treatment of ALS, AD and other potential future indications for which there are currently limited or no available therapeutic options. It is possible for individuals or groups to target companies with disruptive social media campaigns related to a request for access to unapproved drugs for patients with significant unmet medical need. If we experience a similar social media campaign regarding our decision to provide or not provide access to AMX0035 or any of our future product candidates under an expanded access policy, our reputation may be negatively affected and our business may be harmed. On March 18, 2022, we launched an FDA-authorized expanded access program in the United States for AMX0035 for certain adults with ALS and this program will be wound down alongside the commercial launch of RELYVRIO in the United States. We may launch additional expanded access programs of AMX0035 in the EU.

In the past, media attention to individual patients' expanded access requests has resulted in the introduction and enactment of legislation at the local and national level, including the Accelerating Access to Critical Therapies for ALS Act and prior "Right to Try" laws, such as the federal Right to Try Act of 2017, which are intended to allow patients access to unapproved therapies earlier than

traditional expanded access programs and the former of which is intended to support research and development related to ALS, specifically. A possible consequence of both activism and legislation in this area may be the need for us to initiate an expanded access program beyond that which we have submitted to the FDA or to make AMX0035 or any future product candidates more widely available sooner than anticipated.

In addition, some patients who receive access to drugs prior to their commercial approval through compassionate use, expanded access programs or right to try access have life-threatening illnesses and have exhausted all other available therapies. The risk for SAEs in this patient population is high, which could have a negative impact on the safety profile of AMX0035 or future product candidates, which could cause significant delays or an inability to successfully commercialize AMX0035 or future product candidates, which could materially harm our business. We may in the future need to restructure or pause any future compassionate use and/or expanded access program we initiate in order to perform the controlled clinical trials required for regulatory approval and successful commercialization of AMX0035 or future product candidates, which could prompt adverse publicity or other disruptions related to current or potential participants in such programs.

The increasing use of social media platforms presents new risks and challenges.

Social media is increasingly being used to communicate about our clinical development activities and the diseases AMX0035 is being developed to treat, and we intend to continue to utilize appropriate social media in connection with our commercialization efforts for RELYVRIO in the United States and ALBRIOZA in Canada, and in any other jurisdictions where we obtain regulatory approvals. Social media practices in the biotechnology and pharmaceutical industries continue to evolve and regulations and regulatory guidance relating to such use are evolving and not always clear. This evolution creates uncertainty and risk of noncompliance with regulations applicable to our business, resulting in potential regulatory actions against us, along with the potential for litigation related to off-label marketing or other prohibited activities and heightened scrutiny by the FDA, the SEC and other regulators. For example, patients may use social media channels to comment on their experience on treatment with AMX0035 or their experience in an ongoing blinded clinical trial or to report an alleged adverse event. If such disclosures occur, there is a risk that trial enrollment may be adversely impacted, that we may fail to monitor and comply with applicable adverse event reporting obligations or that we may not be able to defend our business or the public's legitimate interests in the face of the political and market pressures generated by social media due to restrictions on what we may say about our product candidates. There is also a risk of inappropriate disclosure of sensitive or confidential information or negative or inaccurate posts or comments about us on any social networking website. In addition, we may encounter attacks on social media regarding our company, management, AMX0035 or future product candidates. If any of these events were to occur or we otherwise fail to comply with applicable regulations, we could incur liability, face regulatory actions or incur other harm to our business.

If we fail to develop and commercialize AMX0035 for additional indications or fail to discover, develop and commercialize other product candidates, we may be unable to grow our business and our ability to achieve our strategic objectives would be impaired.

Although the development and commercialization of AMX0035 for the treatment of ALS is our current primary focus, as part of our longer-term growth strategy, we plan to evaluate AMX0035 in other indications and develop other product candidates. We intend to evaluate internal opportunities from AMX0035 or other potential product candidates, and also may choose to in-license or acquire other product candidates as well as commercial products to treat patients suffering from neurodegenerative diseases and CNS or other disorders with significant unmet medical needs and limited treatment options. These other potential product candidates will require additional, time-consuming development efforts prior to commercial sale, including preclinical studies, clinical trials and

approval by the FDA, Health Canada, the EMA and/or other applicable foreign regulatory authorities. All product candidates are prone to the risks of failure that are inherent in pharmaceutical product development, including the possibility that the product candidate will not be shown to be sufficiently safe and effective for approval by regulatory authorities. In addition, we cannot assure you that any such products that are approved will be manufactured or produced economically, successfully commercialized or widely accepted in the marketplace or be more effective than other commercially available alternatives.

Research activities to identify product candidates require substantial technical, financial and human resources, whether or not any product candidates are ultimately identified. Our research activities may initially show promise in identifying potential product candidates, yet fail to yield product candidates for clinical development for many reasons, including the following:

- the research methodology used may not be successful in identifying potential product candidates;
- competitors may develop alternatives that render our potential product candidates obsolete;
- product candidates that we develop may nevertheless be covered by third parties' patents or other exclusive rights;
- a product candidate may, on further study, be shown to have harmful side effects or other characteristics that indicate it is unlikely to be effective or otherwise does not meet applicable regulatory criteria;
- a product candidate may not be capable of being produced in commercial quantities at an acceptable cost, or at all; and
- a product candidate may not be accepted as safe and effective by patients, the medical community or third-party payors.

If we are unsuccessful in identifying and developing additional product candidates, our potential for growth and achieving our strategic objectives may be impaired.

We may not be successful in our efforts to expand our pipeline by identifying additional indications and modifications for which to investigate AMX0035 in the future. We may expend our limited resources to pursue a particular indication or formulation for AMX0035 and fail to capitalize on product candidates, indications or formulations that may be more profitable or for which there is a greater likelihood of success.

Because we have limited financial and managerial resources, we are focused on specific indications and modifications for AMX0035. As a result, we may fail to generate additional clinical development opportunities for AMX0035 for a number of reasons, including, that AMX0035 may in certain indications, on further study, be shown to have harmful side effects, limited to no efficacy, or other characteristics that suggest it is unlikely to receive marketing approval and achieve market acceptance in such additional indications.

We plan to conduct several clinical trials for AMX0035 in parallel over the next several years, including multiple clinical trials in patients with ALS and other indications, which may make our decision as to which indication to focus on more difficult. As a result, we may forgo or delay pursuit of opportunities with other indications that could have had greater commercial potential or likelihood of success. In addition, we are continuing to evaluate plans to explore the use of AMX0035 in patients with AD, Wolfram syndrome and other indications. However, we may focus on or pursue one or more of our target indications over other potential indications and such development efforts may not be successful, which would cause us to delay the clinical development and approval of AMX0035.

Furthermore, research activities to identify additional indications for AMX0035 require substantial technical, financial, and human resources. We may not successfully develop these additional modifications for chemistry-related, stability-related, or other reasons. Our resource allocation decisions may cause us to fail to capitalize on viable commercial products or profitable market opportunities. Our spending on current and future research and development activities for specific indications may not yield any commercially viable products.

Additionally, we may pursue in-licenses or acquisitions of development-stage assets or programs, which entails additional risk to us. Identifying, selecting and acquiring promising product candidates requires substantial technical, financial, and human resources expertise. Efforts to do so may not result in the actual acquisition or license of a particular product candidate, potentially resulting in a diversion of our management's time and the expenditure of our resources with no resulting benefit. For example, if we are unable to identify programs that ultimately result in approved products, we may spend material amounts of our capital and other resources evaluating, acquiring and developing products that ultimately do not provide a return on our investment.

Competitive products may reduce or eliminate the commercial opportunity for AMX0035 for our current or future indications. If our competitors develop technologies or product candidates more rapidly than we do, or their technologies or product candidates are more effective or safer than ours, our ability to develop and successfully commercialize AMX0035 may be adversely affected.

The clinical and commercial landscape for the treatment of ALS and other neurodegenerative diseases, including AD is highly competitive and subject to rapid and significant technological change. We face competition with respect to our current indications for AMX0035 and will face competition with respect to any future indications of AMX0035 or other drug candidates that we may seek to develop or commercialize in the future, from major pharmaceutical companies, specialty pharmaceutical companies and biotechnology companies worldwide. For example, Humanitas Mirasole SpA is currently conducting a Phase 3 clinical trial in the EU to assess the safety and efficacy of TURSO in patients with ALS, which, if approved, may be commercialized as a competitor to AMX0035. If this study meets its clinical endpoints, this monotherapy treatment could be approved by the FDA, the EMA and other regulatory authorities, and TURSO may become a commercialized product competitive with AMX0035, unless our intellectual property protections and any regulatory exclusivities we possess or may possess in the future prevent such commercialization. There are also a number of large pharmaceutical and biotechnology companies that currently market and sell drugs or are pursuing the development of drug candidates for the treatment of the indications that we are pursuing. Potential competitors also include academic institutions, government agencies and other public and private research organizations that conduct research, seek patent protection and establish collaborative arrangements for research, development, manufacturing and commercialization.

Several large pharmaceutical companies market FDA-approved drugs for the treatment of ALS. These drugs include: Riluzole, marketed by Sanofi-Aventis U.S. LLC, and Radicava, marketed by Mitsubishi Tanabe Pharma America, Inc. Additionally, Mitsubishi Tanabe Pharma America, Inc., or MTPA, is developing an oral alternative to Radicava. In the first quarter of 2022, the FDA accepted MTPA's application for priority review of its oral alternative to Radicava and in May 2022, the FDA approved its oral alternative to Radicava. Our potential competitors include pharmaceutical and biotechnology companies, such as Biogen, Inc., Orphazyme A/S, Biohaven Pharmaceutical Holding Co Ltd., UCB S.A., Alexion Pharmaceuticals, Inc. and Apellis Pharmaceuticals, Inc., specialty pharmaceutical and generic drug companies, academic institutions, government agencies and research institutions. In the third quarter of 2022, the FDA accepted Biogen, Inc.'s NDA for toferson, an investigational drug for superoxide dismutase 1 (SOD1) ALS.

Many of our competitors have significantly greater financial resources, established presence in the market, expertise in research and development, manufacturing, preclinical and clinical testing, obtaining regulatory approvals and reimbursement and marketing approved products than we do. Accordingly, our competitors may be more successful than we may be in obtaining regulatory approval for therapies and achieving widespread market acceptance. Our competitors' products may be more effective, or more effectively marketed and sold, than any product candidate we may commercialize and may render AMX0035 or any future product candidates obsolete or non-competitive before we can recover development and commercialization expenses. If AMX0035 is approved for the indications we are currently pursuing, it could compete with a range of therapeutic treatments that are in development. In addition, our competitors may succeed in developing, acquiring or licensing technologies and drug products that are more effective or less costly than AMX0035 or any future product candidates that we may develop, which could render such product candidates obsolete and noncompetitive.

Following approval for AMX0035 or any other future product candidate, we may face competition based on many different factors, including the efficacy, safety and tolerability of our products, the ease with which our products can be administered, the timing and scope of regulatory approvals for these products, the availability and cost of manufacturing, marketing and sales capabilities, price, reimbursement coverage and patent position. Existing and future competing products could present superior treatment alternatives, including being more effective, safer, less expensive or marketed and sold more effectively than any products we commercialize. Competitive products may make any products we commercialize obsolete or noncompetitive before we recover the expense of developing and commercializing our product candidates. Such competitors could also recruit our employees, which could negatively impact our level of expertise and our ability to execute our business plan.

In addition, our competitors may obtain patent protection, regulatory exclusivities or regulatory approval and commercialize products more rapidly than we do, which may impact future approvals or sales of any of our product candidates that receive regulatory approval. We expect to face competition with respect to our commercialization of RELYVRIO in the United States and ALBRIOZA in Canada and any future product candidates, if approved. Following approval by Health Canada, the FDA or the EMA for the commercial sale of AMX0035 or any future product candidates, we will also be competing with respect to marketing capabilities and manufacturing efficiency. We expect competition among products will be based on product efficacy and safety, the timing and scope of regulatory approvals, availability of supply, marketing and sales capabilities, product price, reimbursement coverage by government and private third-party payors, regulatory exclusivities and patent position. Our profitability and financial position will suffer if our product candidates receive regulatory approval, but cannot compete effectively in the marketplace.

Mergers and acquisitions in the pharmaceutical and biotechnology industries may result in even more resources being concentrated among a smaller number of our competitors. Smaller and other early stage companies may also prove to be significant competitors, particularly through collaborative arrangements with large and established companies. These third parties compete with us in recruiting and retaining qualified scientific and management personnel and establishing clinical trial sites, as well as in acquiring technologies complementary to, or necessary for, our activities.

Obtaining and maintaining regulatory approval of AMX0035 or any future product candidates in one jurisdiction does not mean that we will be successful in obtaining regulatory approval of those product candidates in other jurisdictions.

Obtaining and maintaining regulatory approval of AMX0035 and any future product candidates in one jurisdiction does not guarantee that we will be able to obtain or maintain regulatory approval in any other jurisdiction, while a failure or delay in obtaining regulatory approval in one jurisdiction may have a negative effect on the regulatory approval process in others. For example, even though the FDA has

approved AMX0035 (RELYVRIO) and Health Canada has granted marketing authorization with conditions of AMX0035 (ALBRIOZA), comparable regulatory authorities in the EU and other foreign jurisdictions must also approve the manufacturing, marketing and promotion of AMX0035 in those countries. Approval procedures vary among jurisdictions and can involve requirements and administrative review periods different from, and greater than, those in the United States, Canada or the EU, including additional preclinical studies or clinical trials, as clinical trials conducted in one jurisdiction may not be accepted by regulatory authorities in other jurisdictions. In many jurisdictions outside the United States, including Canada, and certain jurisdictions in the EU, a product candidate must be approved for reimbursement before it can be approved for sale in that jurisdiction. In some cases, the price that we intend to charge for our products is also subject to approval.

We have received approval for AMX0035 (RELYVRIO) in the United States and marketing authorization with conditions for AMX0035 (ALBRIOZA) in Canada and have submitted a marketing application in the EU. Regulatory authorities in jurisdictions outside of the United States have requirements for approval of product candidates with which we must comply prior to marketing in those jurisdictions and such regulatory requirements can vary widely from country to country. Obtaining other regulatory approvals and compliance with other regulatory requirements could result in significant delays, difficulties and costs for us and could require additional preclinical studies or clinical trials, which could be costly and time-consuming and could delay or prevent the introduction of our products in certain countries. The foreign regulatory approval process involves all of the risks associated with FDA approval. We do not have any product candidates approved for sale in any jurisdiction except the United States and Canada, and we do not have experience in obtaining regulatory approval in international markets outside of Canada. If we fail to comply with the regulatory requirements in international markets and/or obtain and maintain applicable marketing approvals, our target market will be reduced and our ability to realize the full market potential of AMX0035 or any future product candidates will be harmed.

Even though we have obtained orphan drug designation for AMX0035 for the treatment of ALS in the United States and the EU and for the treatment of Wolfram syndrome in the United States, we may not be able to obtain or maintain the benefits associated with orphan drug status, including market exclusivity.

Regulatory authorities in some jurisdictions, including the United States and the EU, may designate drugs for relatively small patient populations as orphan drugs. Under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 people in the United States, or a patient population of greater than 200,000 people in the United States, but for which there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. In the EU, the EMA Committee for Orphan Medicinal Products grants orphan drug designation to promote the development of products that are intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition affecting not more than five in 10,000 people in the EU. Additionally, designation is granted for products intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition when, without incentives, it is unlikely that sales of the drug in the EU would be sufficient to justify the necessary investment in developing the drug or biologic product. In either case, the applicant for orphan designation must also demonstrate that no satisfactory method of diagnosis, prevention, or treatment for the condition has been authorized (or, if such a method exists, the new product would be a significant benefit to those affected compared to the product available).

In September 2017, the FDA granted orphan drug status to AMX0035 for the treatment of patients with ALS in the United States, and with the approval of AMX0035 (RELYVRIO) by the FDA in September 2022 for the treatment of ALS in adults, the product is entitled to orphan drug exclusivity

and the FDA cannot approve a generic or a brand product that contains the same active moiety for the same orphan indication as AMX0035 for a period of seven years, subject to certain exceptions. In addition, in June 2020, the EMA granted orphan drug status to AMX0035 for the treatment of patients with ALS in the EU. We also received orphan drug status for AMX0035 for the treatment of patients with Wolfram syndrome in the United States in November 2020. Generally, if a drug with an orphan drug designation subsequently receives the first marketing approval for the indication for which it has such designation, the drug may be entitled to a period of marketing exclusivity, which precludes the FDA or the EMA from approving another marketing application for the same drug for that time period. Another drug may receive marketing approval prior to AMX0035. The applicable period is seven years in the United States and ten years in the EU, which may be extended by six months and two years, respectively, in the case of product candidates that have complied with the respective regulatory agency's agreed upon pediatric investigation plan. The exclusivity period in the EU can be reduced to six years if a drug no longer meets the criteria for orphan drug designation or if the drug is sufficiently profitable so that market exclusivity is no longer justified. In the EU, during the ten-year period of orphan marketing exclusivity, neither the competent authorities of the EU Member States, the EMA, or the European Commission are permitted to accept applications or grant marketing authorization for other similar medicinal products. A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. Orphan drug exclusivity may be lost if the FDA or the EMA determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantity of the drug to meet the needs of patients with the rare disease or condition. In addition, even after a drug is granted orphan exclusivity and approved, the FDA and the EMA can subsequently approve another drug for the same condition before the expiration of the seven-year (or ten-year in the EU) exclusivity period if the FDA or the EMA concludes that the later drug is clinically superior in that it is shown to be safer, more effective or makes a major contribution to patient care. In addition, if an orphan designated product receives marketing approval for an indication broader than or different from what is designated, such product may not be entitled to orphan exclusivity. Even though the FDA has granted orphan drug designation to AMX0035 for the treatment of Wolfram syndrome, if we receive approval for AMX0035 for a modified or different indication, our current orphan designation may not provide us with exclusivity.

Orphan drug designation does not convey any advantage in, or shorten the duration of, the regulatory review or approval process. Also, regulatory approval for any product candidate may be withdrawn, and other product candidates may obtain approval before us and receive orphan drug exclusivity, which could block us from entering the market.

Even if we obtain orphan drug exclusivity for AMX0035, that exclusivity may not effectively protect us from competition because different drugs can be approved for the same condition before the expiration of the orphan drug exclusivity period. For example, even though AMX0035 is entitled to orphan drug exclusivity, that exclusivity may not prevent the approval of TURSO by the FDA, the EMA or other regulatory authorities as a monotherapy treatment for ALS if those regulatory agencies determine that TURSO is a different drug product from AMX0035. In addition, the regulatory authorities may find that this monotherapy treatment is clinically superior to our fixed dose product and approve it even if we are granted orphan drug exclusivity. U.S. lawmakers have also recently raised the possibility that regulatory or legislative changes might need to be made to the Orphan Drug Act to foster competition. This includes the introduction of legislation that, if adopted into law, would require us to demonstrate to the FDA that AMX0035 would be economically unviable when facing competition to maintain our exclusivity.

We may pursue orphan drug designation for AMX0035 for the treatment of additional indications. The incidence and prevalence of the target patient populations for these indications will be based on our estimates and third-party data. If the market opportunity for these target populations is larger than we estimate, we may be unable to receive orphan drug designation. Additionally, if orphan drug designation is granted, we may be unable to maintain any benefits associated with orphan drug designation, including market exclusivity.

Periodically, we make estimates regarding the incidence and prevalence of target patient populations based on various third-party sources and internally generated analysis. Our estimates may be inaccurate or based on imprecise data. As described above, under the Orphan Drug Act, the FDA may designate a drug as an orphan drug if it is intended to treat a rare disease or condition, which is generally defined as a patient population of fewer than 200,000 people in the United States, or a patient population of greater than 200,000 people in the United States, but for which there is no reasonable expectation that the cost of developing the drug will be recovered from sales in the United States. If our incidence or prevalence estimates for future indications for which we may seek orphan drug designation are incorrect, we may be unable to receive orphan drug designation.

Even if the FDA grants orphan drug designation for AMX0035 for other indications, exclusive marketing rights in the United States may be limited if we seek FDA marketing approval for an indication broader than the orphan designated indication. Additionally, any product candidate that initially receives orphan drug status designation, may lose such designation if the FDA later determines that the request for designation was materially defective or if the manufacturer is unable to assure sufficient quantities of the product to meet the needs of patients with the rare disease or condition. In addition, others may obtain orphan drug status for products addressing the same diseases or conditions as products we are developing, thus limiting our ability to compete in the markets addressing such diseases or conditions for a significant period of time. As a result, our business and prospects could suffer.

We may pursue priority review designation for product candidates that we may develop, but we might not receive such designations, and priority review designations may not lead to a faster development or regulatory review or approval process.

If the FDA determines that a product candidate offers a treatment for a serious condition and, if approved, the product would provide a significant improvement in safety or effectiveness, the FDA may designate the product candidate for priority review. A priority review designation means that the goal for the FDA to review an application is six months, rather than the standard review period of ten months. For example, we received priority review for AMX0035 for the treatment of ALS, and we may in the future request priority review designation for any future product candidates, however, we cannot assume that any application for future indications of AMX0035 or any other product candidate we may develop will meet the criteria for that designation. The FDA has broad discretion with respect to whether or not to grant priority review status to a product candidate, so even if we believe a particular product candidate is eligible for such designation or status, the FDA may decide not to grant it. Moreover, a priority review designation does not necessarily mean a faster development or regulatory review or approval process or necessarily confer any advantage with respect to approval compared to standard FDA review and approval. For example, the FDA originally set the PDUFA date for AMX0035 for the treatment of ALS, for June 29, 2022, and then extended the review timeline for our NDA to September 2022. Receiving priority review from the FDA does not guarantee approval within the six-month review cycle or at all.

We may seek Fast Track Designation by the FDA for a product candidate that we develop, and we may be unsuccessful. If we are successful, the designation may not actually lead to a faster development or regulatory review or approval process.

We may seek Fast Track Designation for future product candidates we develop. If a product is intended for the treatment of a serious or life-threatening condition and preclinical or clinical data demonstrate the potential to address an unmet medical need for this condition, the product sponsor may apply for Fast Track Designation. The FDA has broad discretion whether or not to grant this designation, so even if we believe a particular product candidate is eligible for this designation, we cannot assure you that the FDA would decide to grant it. Even if we do receive Fast Track Designation, we may not experience a faster development process, review or approval compared to conventional FDA procedures. The FDA may rescind the Fast Track Designation if it believes that the designation is no longer supported by data from our clinical development activities.

We may seek Breakthrough Therapy Designation by the FDA for a product candidate that we develop, and we may be unsuccessful. If we are successful, the designation may not lead to a faster development or regulatory review or approval process, and it does not increase the likelihood that our product candidates will receive marketing approval.

We may seek Breakthrough Therapy Designation for any product candidate that we develop. A breakthrough therapy is defined as a drug that is intended, alone or in combination with one or more other drugs, to treat a serious or life-threatening disease or condition, and preliminary clinical evidence indicates that the drug may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints, such as substantial treatment effects observed early in clinical development. For drugs that have been designated as breakthrough therapies, interaction and communication between the FDA and the sponsor of the trial can help to identify the most efficient path for clinical development while minimizing the number of patients placed in ineffective control regimens. Drugs designated as breakthrough therapies by the FDA are also eligible for accelerated approval and priority review.

Designation as a breakthrough therapy is within the discretion of the FDA. Accordingly, even if we believe a product candidate we develop meets the criteria for designation as a breakthrough therapy, the FDA may disagree and instead determine not to make such designation. In any event, the receipt of Breakthrough Therapy Designation for a product candidate may not result in a faster development process, review or approval compared to drugs considered for approval under conventional FDA procedures and does not assure ultimate approval by the FDA. In addition, even if any product candidate we develop qualifies as a breakthrough therapy, the FDA may later decide that the drug no longer meets the conditions for qualification and rescind the designation.

Product liability lawsuits against us or any of our future collaborators could divert our resources and attention, cause us to incur substantial liabilities and limit commercialization of AMX0035 or any future product candidates.

We are exposed to potential product liability and professional indemnity risks that are inherent in the research, development, manufacturing, marketing and use of pharmaceutical products. The use of AMX0035 by us and any collaborators in clinical trials, and the sale of AMX0035 in the United States, Canada and in other jurisdictions, if approved, in the future, may expose us to liability claims. Product liability claims may be brought against us or our partners by participants enrolled in our clinical trials, patients, health care providers, pharmaceutical companies, our collaborators or others using, administering or selling any of our future approved products. If we cannot successfully defend ourselves against any such claims, we may incur substantial liabilities or be required to limit commercialization of AMX0035 or any future product candidates. Regardless of the merits or eventual outcome, liability claims may result in:

- decreased demand for any of our future approved products;

- injury to our reputation;
- withdrawal of clinical trial participants;
- termination of clinical trial sites or entire trial programs;
- significant litigation costs, including with respect to potential class action lawsuits;
- substantial monetary awards to, or costly settlements with, patients or other claimants;
- product recalls or a change in the indications for which they may be used;
- loss of revenue;
- diversion of management and scientific resources from our business operations; and
- the inability to commercialize AMX0035 or any future product candidates.

Although the clinical trial process is designed to identify and assess potential side effects, clinical development does not always fully characterize the safety and efficacy profile of a new drug, and it is always possible that a drug, even after regulatory approval, may exhibit unforeseen side effects. If AMX0035 was to cause adverse side effects during clinical trials or after approval, we may be exposed to substantial liabilities. Physicians and patients may not comply with any warnings that identify known potential adverse effects and patients who should not use AMX0035 or any of our future product candidates. If any of our current or future product candidates are approved for commercial sale, we will be highly dependent upon consumer perceptions of us and the safety and quality of our products. We could be adversely affected if we are subject to negative publicity associated with illness or other adverse effects resulting from patients' use or misuse of our products or any similar products distributed by other companies.

Although we maintain product liability insurance coverage in the amount of up to $5.0 million in the aggregate, including clinical trial liability, this insurance may not fully cover potential liabilities that we may incur. The cost of any product liability litigation or other proceeding, even if resolved in our favor, could be substantial. We will need to increase our insurance coverage as we commercialize AMX0035 in the United States, Canada and other jurisdictions, if approved, or any future product candidate that receives regulatory approval. In addition, insurance coverage is becoming increasingly expensive. If we are unable to maintain sufficient insurance coverage at an acceptable cost or to otherwise protect against potential product liability claims, it could prevent or inhibit the development and commercial production and sale of AMX0035 or any future product candidates, which could harm our business, financial condition, results of operations and prospects.

Even if we, or any future collaborators, obtain and maintain regulatory approvals for AMX0035 or any future product candidate, the terms of approvals and ongoing regulation of our products may limit how we manufacture and market our products, which could impair our ability to generate revenue.

Once regulatory approval has been granted, an approved product and its manufacturer and marketer are subject to ongoing review and extensive regulation. We, and any future collaborators, must therefore comply with requirements concerning advertising and promotion for AMX0035 or any future product candidate for which we or they obtain regulatory approval. Promotional communications with respect to prescription drugs are subject to a variety of legal and regulatory restrictions and must be consistent with the information in the product's approved labeling. Thus, we and any future collaborators will not be able to promote any products we develop for indications or uses for which they are not approved.

In addition, manufacturers of approved products and those manufacturers' facilities are required to comply with extensive FDA, Health Canada and EMA requirements, including ensuring that quality

control and manufacturing procedures conform to cGMPs, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation and reporting requirements. We, our contract manufacturers, any future collaborators and their contract manufacturers could fail to conform to cGMPs and be subject to periodic unannounced inspections by the FDA, Health Canada and the EMA to monitor and ensure compliance with cGMPs. Despite our efforts to inspect and verify regulatory compliance, one or more of our third-party manufacturing vendors may be found on regulatory inspection by the FDA, Health Canada, the EMA or other authorities to be not in compliance with cGMP regulations, which may result in shutdown of the third-party vendor or invalidation of drug product lots or processes. In some cases, a product recall may be warranted or required, which would materially affect our ability to supply and market our drug products.

Accordingly, in any jurisdiction where we or any future collaborators, receive regulatory approval for AMX0035 or one or more future product candidates, we, and any future collaborators, and our and their contract manufacturers will continue to expend time, money and effort in all areas of regulatory compliance, including manufacturing, production, product surveillance and quality control.

If we, and any future collaborators, are not able to comply with post-approval regulatory requirements, we, and any future collaborators, could have the regulatory approvals for AMX0035 or any future products withdrawn by regulatory authorities and our, or any future collaborators', ability to market any future products could be limited, which could adversely affect our ability to achieve or sustain profitability. Further, the cost of compliance with post-approval regulations may have a negative effect on our operating results and financial condition.

Laws and regulations governing any international operations we expect to have in the future may preclude us from developing, manufacturing and selling certain products outside of the United States and will require us to develop and implement costly compliance programs.

We have operations in the United States and Canada and expect to engage in operations in other jurisdictions, including the EU, as well as other potential jurisdictions, and we must dedicate additional resources to comply with numerous laws and regulations in each jurisdiction in which we currently or plan to operate. The Foreign Corrupt Practices Act, or FCPA, prohibits any U.S. individual or business from paying, offering, authorizing payment or offering of anything of value, directly or indirectly, to any foreign official, political party or candidate for the purpose of influencing any act or decision of the foreign entity in order to assist the individual or business in obtaining or retaining business. The FCPA also obligates companies whose securities are listed in the United States to comply with certain accounting provisions requiring us to maintain books and records that accurately and fairly reflect all transactions of the corporation, including international subsidiaries, and to devise and maintain an adequate system of internal accounting controls for international operations.

Compliance with the FCPA is expensive and difficult, particularly in countries in which corruption is a recognized problem. In addition, the FCPA presents particular challenges in the pharmaceutical industry, because, in many countries, hospitals are operated by the government, and doctors and other hospital employees are considered foreign officials. Certain payments to hospitals in connection with clinical trials and other work have been deemed to be improper payments to government officials and have led to FCPA enforcement actions.

Various laws, regulations and executive orders, including export control and trade sanctions laws, also restrict the use and dissemination outside of the United States, or the sharing with certain non-U.S. nationals, of information classified for national security purposes, as well as certain products and technical data relating to those products. If we expand our presence outside of the United States, it will require us to dedicate additional resources to comply with these laws, and these laws may

preclude us from developing, manufacturing, or selling certain products and product candidates outside of the United States, which could limit our growth potential and increase our development costs.

The failure to comply with laws governing international business practices may result in substantial civil and criminal penalties and suspension or debarment from government contracting. The SEC also may suspend or bar issuers from trading securities on U.S. exchanges for violations of the FCPA's accounting provisions.

If we fail to comply with environmental, health and safety laws and regulations, we could become subject to fines or penalties or incur costs that could harm our business.

We are subject to numerous environmental, health and safety laws and regulations, including those governing laboratory procedures and the handling, use, storage, treatment and disposal of hazardous materials and wastes. From time to time and in the future, our operations may involve the use of hazardous and flammable materials, including chemicals and biological materials, and may also produce hazardous waste products. Even if we contract with third parties for the disposal of these materials and waste products, we cannot completely eliminate the risk of contamination or injury resulting from these materials. In the event of contamination or injury resulting from the use or disposal of our hazardous materials, we could be held liable for any resulting damages, and any liability could exceed our resources. We also could incur significant costs associated with civil or criminal fines and penalties for failure to comply with such laws and regulations.

We maintain workers' compensation insurance to cover us for costs and expenses we may incur due to injuries to our employees, but this insurance may not provide adequate coverage against potential liabilities. However, we do not maintain insurance for environmental liability or toxic tort claims that may be asserted against us.

In addition, we may incur substantial costs in order to comply with current or future environmental, health and safety laws and regulations. Environmental laws and regulations may impair our research, development or production efforts. In addition, failure to comply with these laws and regulations may result in substantial fines, penalties or other sanctions.

Risks Related to Our Dependence on Third Parties

We may seek to establish collaborations and, if we are not able to establish them on commercially reasonable terms, we may have to alter our development and commercialization plans.

The advancement of AMX0035, and any future product candidates and development programs or activities, as well as the commercialization of RELYVRIO in the United States and ALBRIOZA in Canada and the potential commercialization of AMX0035 in other jurisdictions and of any future product candidates will require substantial additional cash to fund expenses. For some indications of AMX0035 or future product candidates, we may decide to collaborate with additional pharmaceutical and biotechnology companies with respect to development and potential commercialization. Likely collaborators may include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. In addition, if we are able to obtain regulatory approval for product candidates from foreign regulatory authorities, we may enter into collaborations with international biotechnology or pharmaceutical companies for the commercialization of such product candidates.

We face significant competition in seeking appropriate collaborators. Whether we reach a definitive agreement for a collaboration will depend, among other things, upon our assessment of the

collaborator's resources and expertise, the terms and conditions of the proposed collaboration and the proposed collaborator's evaluation of a number of factors. Those factors may include the potential differentiation of our product candidate from competing product candidates, design or results of clinical trials, the likelihood of approval by Health Canada, the FDA, the EMA or other comparable foreign regulatory authorities and the regulatory pathway for any such approval, the potential market for the product candidate, the costs and complexities of manufacturing and delivering the product to patients and the potential of competing products. The collaborator may also consider alternative product candidates or technologies for similar indications that may be available for collaboration and whether such a collaboration could be more attractive than the one with us for our product candidate. If we elect to increase our expenditures to fund development or commercialization activities on our own, we may need to obtain additional capital, which may not be available to us on acceptable terms or at all. If we do not have sufficient funds, we may not be able to further develop AMX0035 or any future product candidates or bring them to market and generate product revenue.

Collaborations are complex and time-consuming to negotiate and document. Further, there have been a significant number of recent business combinations among large pharmaceutical companies that have resulted in a reduced number of potential future collaborators. Any collaboration agreements that we enter into in the future may contain restrictions on our ability to enter into potential collaborations or to otherwise develop specified product candidates. We may not be able to negotiate collaborations on a timely basis, on acceptable terms, or at all. If we are unable to do so, we may have to curtail the development of the product candidate for which we are seeking to collaborate, reduce or delay its development program or one or more of our other development programs or activities, delay its potential commercialization or reduce the scope of any sales or marketing activities, or increase our expenditures and undertake development or commercialization activities at our own expense.

We have entered and may in the future enter into collaborations with third parties for the development and commercialization of AMX0035 or any future product candidates, and our prospects with respect to those product candidates will depend in significant part on the success of those collaborations.

We may rely on collaborations for the development and commercialization of AMX0035 and any future product candidates. For example, we may utilize a variety of distribution, collaboration and other marketing arrangements with one or more third parties to facilitate commercialization of AMX0035 or to identify novel drug candidates for neurodegenerative diseases as with our partnership with Sunnybrook Research Institute. Our likely collaborators for any distribution, development, sales, marketing, licensing or broader collaboration arrangements include large and mid-size pharmaceutical companies, regional and national pharmaceutical companies and biotechnology companies. If we enter into such collaborations, we may have limited control over the amount and timing of resources that our collaborators dedicate to the development or commercialization of AMX0035 or any future product candidates. Our ability to generate revenues from these arrangements will depend on any future collaborators' abilities to successfully perform the functions assigned to them in these arrangements. In addition, any future collaborators may have the right to abandon research or development projects and terminate applicable agreements, including funding obligations, prior to or upon the expiration of the agreed upon terms.

Collaborations involving AMX0035 and any future product candidates pose a number of risks, including the following:

- collaborators have significant discretion in determining the efforts and resources that they will apply to these collaborations;
- collaborators may not perform their obligations as expected;

- collaborators may not pursue development and commercialization of AMX0035 or any future product candidates or may elect not to continue or renew development or commercialization programs, based on clinical trial results, changes in the collaborators' strategic focus or available funding or external factors, such as an acquisition, that divert resources or create competing priorities;
- collaborators may delay clinical trials, provide insufficient funding for a clinical trial program, stop a clinical trial or abandon a product candidate, repeat or conduct new clinical trials or require a new formulation of a product candidate for clinical testing;
- collaborators could independently develop, or develop with third parties, products that compete directly or indirectly with AMX0035 or any of our future product candidates;
- a collaborator with marketing and distribution rights to one or more products may not commit sufficient resources to the marketing and distribution of such product or products;
- disagreements with collaborators, including disagreements over proprietary rights, including trade secrets and intellectual property rights, contract interpretation, or the preferred course of development might cause delays or termination of the research, development or commercialization of product candidates, might lead to additional responsibilities for us with respect to product candidates, or might result in litigation or arbitration, any of which would be time-consuming and expensive;
- collaborators may not properly maintain or defend our intellectual property rights or may use our proprietary information in such a way as to invite litigation that could jeopardize or invalidate our intellectual property or proprietary information or expose us to potential litigation;
- collaborators may infringe the intellectual property rights of third parties, which may expose us to litigation and potential liability; and
- collaborations may be terminated and, if terminated, may result in a need for additional capital to pursue further development or commercialization of the applicable product candidates.

Collaboration agreements may not lead to development or commercialization of product candidates in the most efficient manner or at all. If any future collaborator of ours is involved in a business combination, it could decide to delay, diminish or terminate the development or commercialization of any product candidate licensed to it by us.

We rely on third parties to assist in conducting our clinical trials. If they do not perform satisfactorily, we may not be able to obtain or maintain regulatory approval or successfully commercialize AMX0035 or any future product candidates, or such approval or commercialization may be delayed, and our business could be substantially harmed.

We have relied upon and plan to continue to rely on third parties, such as CROs, clinical data management organizations, medical institutions and clinical investigators, to conduct our clinical trials and expect to rely on these third parties to conduct clinical trials of any future product candidate that we develop. Any of these third parties may terminate their engagements with us under certain circumstances. We may not be able to enter into alternative arrangements or do so on commercially reasonable terms. In addition, there is a natural transition period when a new CRO begins work. As a result, delays may occur, which could negatively impact our ability to meet our expected clinical development timelines and harm our business, financial condition and prospects. Clinical trials involve multiple clinical sites, vendors and other third parties and we are dependent on these vendors to ensure appropriate study conduct, statistical analysis and randomization. Errors or deviations they make in any of these activities could impact the usefulness and interpretability of clinical trial results by regulatory authorities. For example, at the Advisory Committee meetings on March 30, 2022 and

September 7, 2022, the FDA noted a number of concerns that, in the FDA's view, impacted the interpretability of the results from the CENTAUR trial. Clinical trials from time to time have deviations where a protocol or standard operating procedure is not perfectly carried out and where corrective actions are taken. While we may perceive these events as low risk, our perception of risk and appropriate corrective actions may differ from that of the regulators' view. Deviations from protocols or standard operating procedures during studies could result in negative regulatory opinions and outcomes.

Further, although our reliance on these third parties for clinical development activities limits our control over these activities, we remain responsible for ensuring that each of our trials is conducted in accordance with the applicable protocol, legal and regulatory requirements and scientific standards. Moreover, the FDA, the EMA and competent authorities of the EU Member States require us to comply with Good Clinical Practices, or GCPs, for conducting, recording and reporting the results of clinical trials to assure that data and reported results are credible and accurate and that the rights, integrity and confidentiality of trial participants are protected. The FDA enforces these GCPs through periodic inspections of trial sponsors, principal investigators, clinical trial sites and IRBs. If we or our third-party contractors fail to comply with applicable GCPs, the clinical data generated in our clinical trials may be deemed unreliable and the FDA or the EMA may require us to perform additional clinical trials before approving AMX0035, including for additional indications, or any future product candidates, which would delay the regulatory approval process. We cannot be certain that, upon inspection, the FDA or the EMA will determine that any of our clinical trials comply with GCPs. For example, our clinical trial sites and investigators have in the past and may in the future engage in protocol deviations which could impact the overall interpretability of the outcomes of our clinical trials. We are also required to register certain clinical trials and post the results of completed clinical trials on a government-sponsored database, ClinicalTrials.gov, within certain timeframes. Failure to do so can result in fines, adverse publicity and civil and criminal sanctions.

Furthermore, the third parties conducting clinical trials on our behalf are not our employees, and except for remedies available to us under our agreements with such contractors, we cannot control whether or not they devote sufficient time, skill and resources to our ongoing development activities. These contractors may also have relationships with other commercial entities, including our competitors, for whom they may also be conducting clinical trials or other drug development activities, which could impede their ability to devote appropriate time to our clinical activities. If these third parties, including clinical investigators, do not successfully carry out their contractual duties, meet expected deadlines or conduct our clinical trials in accordance with regulatory requirements or our stated protocols, we may not be able to obtain, or may be delayed in obtaining, clinical data necessary for regulatory approvals for AMX0035 or any future product candidates. If that occurs, we will not be able to, or may be delayed in our efforts to, successfully commercialize AMX0035 or any future product candidates. In such an event, our financial results and the commercial prospects for AMX0035 or any future product candidates that we seek to develop could be harmed, our costs could increase and our ability to generate revenues could be delayed, impaired or foreclosed.

In addition, quarantines, shelter-in-place, and similar government orders, or the perception that such orders, shutdowns or other restrictions on the conduct of business operations could occur, related to the COVID-19 pandemic or other infectious diseases could impact personnel at our CROs, which could disrupt our clinical timelines, which could have a material adverse impact on our business, prospects, financial condition, and results of operations.

We also rely on other third parties to store and distribute drug supplies for our clinical trials. Any performance failure on the part of our distributors could delay clinical development or regulatory approval of AMX0035 or any future product candidates or commercialization of any resulting products, producing additional losses and depriving us of potential product revenue.

Our use of third parties to manufacture AMX0035 and approved products in compliance with current good manufacturing practices may increase the risk that we will not have sufficient cGMP-compliant quantities of AMX0035, products, or necessary quantities of such materials on time or at an acceptable cost.

We do not own or operate manufacturing facilities for the production of clinical or commercial quantities of AMX0035, and we currently lack the resources and the capabilities to do so. As a result, we currently rely on third parties for the manufacture and supply of the active pharmaceutical ingredients, or APIs, in AMX0035, and for the blending and packaging of AMX0035. Our current strategy is to outsource all manufacturing of AMX0035 and any future product candidates to third parties.

We currently engage third-party manufacturers to provide the APIs of AMX0035 and for the final drug product formulation of AMX0035 that is being used in our clinical trials and for expanded access and commercial supply, and we engage separate third-parties for the blending and packaging of finished clinical materials. We must be able to demonstrate comparability of drug substance across suppliers along with stability data across suppliers. We currently rely on a single manufacturer to supply one of our APIs and a separate manufacturer to supply the other. Although we believe that there are several potential alternative manufacturers who could manufacture each of the APIs in AMX0035, we may incur added costs and delays in identifying and qualifying any such replacement. In addition, we typically order raw materials and services on a purchase order basis and do not enter into long-term dedicated capacity or minimum supply arrangements with any commercial manufacturer. Moreover, the extent to which the COVID-19 pandemic impacts our ability to procure sufficient supplies for the development of AMX0035, and any future products and product candidates will depend on the severity and duration of the spread of the virus, and the actions undertaken to contain COVID-19 or treat its effects. There is no assurance that we will be able to timely secure needed supply arrangements on satisfactory terms, or at all. Our failure to secure these arrangements as needed could have a material adverse effect on our ability to complete the development of AMX0035 or any future product candidates or, to commercialize them, if approved. We may be unable to conclude agreements for commercial supply with third-party manufacturers, or may be unable to do so on acceptable terms. There may be difficulties in scaling up to commercial quantities and formulation of AMX0035, and the costs of manufacturing could be prohibitive.

Even if we are able to establish and maintain arrangements with third-party manufacturers, reliance on third-party manufacturers entails additional risks, including:

- the failure of the third-party manufacturer to comply with applicable regulatory requirements, including cGMPs, and reliance on third-parties for manufacturing process development, regulatory compliance and quality assurance;
- manufacturing delays if our third-party manufacturers give greater priority to the supply of other products over AMX0035 or any future product candidates or otherwise do not satisfactorily perform according to the terms of the agreement between us;
- limitations on supply availability resulting from capacity and scheduling constraints of third-parties, or as a result of economic or political developments, including the ongoing conflict in Ukraine and global economic instability;
- the possible breach of manufacturing agreements by third-parties because of factors beyond our control;
- the possible termination or non-renewal of the manufacturing agreements by a third-party, at a time that is costly or inconvenient to us; and
- the possible misappropriation of our proprietary information, including our trade secrets and know-how.

If we do not maintain our key manufacturing relationships, or if any of our contract manufacturers fail to perform their obligations, we may fail to find replacement manufacturers or develop our own manufacturing capabilities, which could adversely impact our ability to commercialize AMX0035 in the United States and Canada, and delay or impair our ability to obtain regulatory approval for our products. If we do find replacement manufacturers, we may not be able to enter into agreements with them on terms and conditions favorable to us and there could be a substantial delay before new facilities could be qualified and registered with the FDA, Health Canada, the EMA and other foreign regulatory authorities.

Any change in manufacturer may also involve changes in manufacturing procedures and processes, which could require that we conduct bridging studies between our prior clinical supply used in our clinical trials and that of any new manufacturer. In addition, we will need to verify that any new manufacturing process will produce our product candidate according to the specifications previously submitted to the FDA, Health Canada, the EMA or another regulatory authority. We may be unsuccessful in demonstrating the comparability of clinical supplies which could require the conduct of additional clinical trials.

In some cases, the technical skills required to manufacture AMX0035, or any future products or product candidates may be unique or proprietary to the original contract manufacturer and we may have difficulty, or there may be contractual restrictions prohibiting us from, transferring such skills to a back-up or alternate supplier, or we may be unable to transfer such skills at all. Furthermore, a contract manufacturer may possess or acquire technology related to the manufacture of AMX0035 or any future product candidate that such contract manufacturer owns independently. This would increase our reliance on such contract manufacturer or require us to obtain a license from such contract manufacturer in order to have another contract manufacturer manufacture AMX0035 or any future product candidates. If AMX0035 for any of our initial or potential additional indications or any future product candidate is approved by any regulatory agency, we intend to utilize arrangements with third-party contract manufacturers for the commercial production of those products. This process is difficult and time consuming and we may face competition for access to manufacturing facilities as there are a limited number of contract manufacturers operating under cGMPs that are capable of manufacturing AMX0035 or any future product candidates. Consequently, we may not be able to reach agreement with third-party manufacturers on satisfactory terms, which could delay our commercialization.

Our failure, or the failure of our third-party manufacturers, to comply with applicable regulations could result in sanctions being imposed on us, including clinical holds, fines, injunctions, civil penalties, delays, suspension or withdrawal of approvals, seizures or voluntary recalls of AMX0035 or any future product candidates, operating restrictions and criminal prosecutions, any of which could significantly affect supplies of AMX0035 or any future product candidates. The facilities used by our contract manufacturers to manufacture AMX0035 or any future product candidates must be evaluated by the FDA, Health Canada, the EMA and certain other foreign regulatory authorities. We do not control the manufacturing process of, and are completely dependent on, our contract manufacturing partners for compliance with cGMPs. If our contract manufacturers cannot successfully manufacture material that conforms to our specifications and the strict regulatory requirements of the FDA, Health Canada, the EMA or others, we may not be able to secure and/or maintain regulatory approval for our product manufactured at these facilities. In addition, we have no control over the ability of our contract manufacturers to maintain adequate quality control, quality assurance and qualified personnel. If the FDA, Health Canada, the EMA or other comparable foreign regulatory authority finds deficiencies or does not approve these facilities for the manufacture of AMX0035 or any future product candidates, or if it withdraws any such approval in the future, we may need to find alternative manufacturing facilities, which would significantly impact our ability to develop, obtain regulatory approval for or market AMX0035 or any future product candidates, if approved. Furthermore, if we are required to change contract manufacturers, we will be required to verify that the new contract manufacturer maintains

facilities and procedures that comply with quality standards and with all applicable regulations, which could result in further costs and delays. Contract manufacturers may face manufacturing or quality control problems causing drug substance production and shipment delays or a situation where the contractor may not be able to maintain compliance with the applicable cGMP requirements. Any failure to comply with cGMP requirements or other FDA, Health Canada, EMA and comparable foreign regulatory requirements could adversely affect our clinical research activities and our ability to develop AMX0035 or any future product candidates and market our products, if approved.

The FDA, Health Canada, the EMA and other foreign regulatory authorities require manufacturers to register manufacturing facilities. The FDA, Health Canada, the EMA and corresponding foreign regulators also inspect these facilities to confirm compliance with cGMPs. Contract manufacturers may face manufacturing or quality control problems causing drug substance production and shipment delays or a situation where the contractor may not be able to maintain compliance with the applicable cGMP requirements. Any failure to comply with cGMP requirements or other FDA, Health Canada, EMA and comparable foreign regulatory requirements could adversely affect our clinical research activities and our ability to develop AMX0035 or any future product candidates and market our products following approval.

If any third-party manufacturer of AMX0035 or any future product candidates is unable to increase the scale of its production of such product candidates, and/or increase the product yield of its manufacturing, then our costs to manufacture the product may increase and commercialization may be delayed.

In order to produce sufficient quantities to meet the demand for clinical trials, expanded access and, commercialization of AMX0035 in the United States and Canada, and any subsequent commercialization of AMX0035 in other jurisdictions, if approved, or any future product candidates that we may develop, our third-party manufacturers will be required to increase their production and optimize their manufacturing processes while maintaining the quality of the product. The transition to larger scale production could prove difficult. In addition, if our third party manufacturers are not able to optimize their manufacturing processes to increase the product yield for AMX0035 or any future product candidates, or if they are unable to produce increased amounts of such product candidates while maintaining the quality of the product and compliance with cGMPs, then we may not be able to meet the demands of clinical trials or market demands, which could decrease our ability to generate profits and have a material adverse impact on our business and results of operation.

Since the beginning of the COVID-19 pandemic, several vaccines for COVID-19 have received Emergency Use Authorization by the FDA and a number of those later received marketing approval. Additional vaccines may be authorized or approved in the future. The resultant demand for vaccines and potential for manufacturing facilities and materials to be commandeered under the Defense Production Act of 1950, or equivalent foreign legislation, is having rippling effects across the contract manufacturing industry, which may make it more difficult to obtain materials or manufacturing slots for the production needed for our clinical trials and, if approved, our future commercial supply, which could lead to delays in our trials and commercial distribution.

We may need to maintain licenses for active ingredients from third parties to develop and commercialize AMX0035 or a future product candidate, which could increase our development costs and delay our ability to commercialize such product candidate.

Should we decide to use API in any of AMX0035 or any future product candidates that are proprietary to one or more third parties, we would need to maintain licenses to those active ingredients from those third parties. If we are unable to gain or continue to access rights to these active ingredients prior to conducting preclinical toxicology studies intended to support clinical trials, we may need to

develop alternate product candidates from these programs by either accessing or developing alternate active ingredients, resulting in increased development costs and delays in commercialization of these product candidates. If we are unable to gain or maintain continued access rights to the desired active ingredients on commercially reasonable terms or develop suitable alternate active ingredients, we may not be able to commercialize product candidates from these programs.

Risks Related to Our Intellectual Property

Our commercial success depends on our ability to protect our intellectual property and proprietary technology.

Our commercial success depends in large part on our ability to obtain and maintain intellectual property rights protection through patents, trademarks and trade secrets in the United States and other countries with respect to our proprietary product candidate, AMX0035, and any future proprietary product candidates. If we do not adequately protect our intellectual property rights, competitors may be able to erode, negate or preempt any competitive advantage we may have, which could harm our business and ability to achieve profitability. To protect our proprietary position, we have filed patent applications and may file other patent applications in the United States or abroad related to AMX0035 or any future product candidates that are important to our business; we may also license or purchase patents or patent applications filed by others. The patent application process is expensive and time-consuming. We may not be able to file and prosecute all necessary or desirable patent applications at a reasonable cost or in a timely manner.

If the scope of the patent protection we obtain is not sufficiently broad, we may not be able to prevent others from developing and commercializing technology and products similar or identical to ours. The degree of patent protection we require to successfully compete in the marketplace may be unavailable or severely limited in some cases and may not adequately protect our rights or permit us to gain or keep any competitive advantage. We cannot provide any assurances that any of our patents have, or that any of our pending owned patent applications that mature into issued patents will include claims with a scope sufficient to protect our proprietary therapeutics or otherwise provide any competitive advantage. Other parties have developed or may develop technologies that may be related or competitive with our approach, and may have filed or may file patent applications and may have been issued or may be issued patents with claims that overlap or conflict with our patent applications, either by claiming the same compounds, formulations or methods or by claiming subject matter that could dominate our patent position. In addition, the laws of foreign countries may not protect our rights to the same extent as the laws of the United States. Furthermore, patents have a limited lifespan. In the United States, the natural expiration of a patent is generally twenty years after it is filed. Various extensions may be available; however, the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized. As a result, our patent portfolio may not provide us with adequate and continuing patent protection sufficient to exclude others from commercializing products similar to AMX0035 or any future product candidates. In the event that an alternative combination, or TURSO as a single drug product, is developed and approved for use in indications for which we may seek approval and falls outside the scope of our patent claims, the marketability and commercial success of AMX0035 could be materially harmed.

Even if they are unchallenged, our owned patents and pending patent applications, if issued, may not provide us with any meaningful protection or prevent competitors from designing around our patent claims to circumvent our patents by developing similar or alternative therapeutics in a non-infringing manner. For example, a third party may develop a competitive therapy that provides benefits similar to our product candidate but falls outside the scope of our patent protection or license rights. If the patent

protection provided by the patent and patent applications we hold or pursue with respect to AMX0035 or any future product candidates is not sufficiently broad to impede such competition, our ability to successfully commercialize our product candidate could be negatively affected, which would harm our business.

We, or any future partners, collaborators, or licensees, may fail to identify patentable aspects of inventions made in the course of development and commercialization activities before it is too late to obtain patent protection on them. Therefore, we may miss potential opportunities to strengthen our patent position.

It is possible that defects of form in the preparation or filing of our patent or patent applications may exist, or may arise in the future, for example with respect to proper priority claims, inventorship, claim scope, or requests for patent term adjustments. If we or our partners, collaborators, or licensees whether current or future, fail to establish, maintain or protect such patents and other intellectual property rights, such rights may be reduced or eliminated. If our partners, collaborators, or licensees are not fully cooperative or disagree with us as to the prosecution, maintenance or enforcement of any patent rights, such patent rights could be compromised. If there are material defects in the form, preparation, prosecution, or enforcement of our patents or patent applications, such patents may be invalid and/or unenforceable, and such applications may never result in valid, enforceable patents. Any of these outcomes could impair our ability to prevent competition from third parties, which may have an adverse impact on our business.

The patent position of biotechnology and pharmaceutical companies carries uncertainty. In addition, the determination of patent rights with respect to pharmaceutical compounds commonly involves complex legal and factual questions, which are dependent upon the current legal and intellectual property context, extant legal precedent and interpretations of the law by individuals. As a result, the issuance, scope, validity, enforceability and commercial value of our patent rights are characterized by uncertainty.

Pending patent applications cannot be enforced against third parties practicing the technology claimed in such applications unless and until a patent issues from such applications. Assuming the other requirements for patentability are met, currently, the first to file a patent application is generally entitled to the patent. However, prior to March 16, 2013, in the United States, the first to invent was entitled to the patent. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are not published until 18 months after filing, or in some cases not at all. Therefore, we cannot be certain that we were the first to make the inventions claimed in our patent or pending patent applications, or that we were the first to file for patent protection of such inventions. If third parties have filed prior patent applications on inventions claimed in our patents or applications that were filed on or before March 15, 2013, an interference proceeding in the United States can be initiated by such third parties to determine who was the first to invent any of the subject matter covered by the patent claims of our applications. If third parties have filed such prior applications after March 15, 2013, a derivation proceeding in the United States can be initiated by such third parties to determine whether our invention was derived from theirs.

Moreover, because the issuance of a patent is not conclusive as to its inventorship, scope, validity or enforceability, our patents may be challenged in the courts or patent offices in the United States and abroad. Also, while we believe that we have disclosed all potentially relevant prior art relating to our patents and patent applications, there is no assurance that we have found all such prior art or disclosed it in every relevant jurisdiction. Publications of discoveries in the scientific literature often lag behind the actual discoveries, and patent applications in the United States and other jurisdictions are typically not published until 18 months after filing or, in some cases, not at all.

Therefore, we cannot know with certainty whether we were the first to make the inventions claimed in our patents or pending patent applications, or that we were the first to file for patent protection of such inventions. If such prior art exists, it may be used to invalidate a patent, or may prevent a patent from issuing from a pending patent application. For example, such patent filings may be subject to a third-party submission of prior art to the U.S. Patent and Trademark Office, or USPTO, or to other patent offices around the world. Alternately or additionally, we may become involved in post-grant review procedures, oppositions, derivation proceedings, ex parte reexaminations, inter partes review, supplemental examinations, or interference proceedings or challenges in district court, in the United States or in various foreign patent offices, including both national and regional, challenging patents or patent applications in which we have rights, including patents on which we rely to protect our business. An adverse determination in any such challenges may result in loss of the patent or in patent or patent application claims being narrowed, invalidated or held unenforceable, in whole or in part, or in denial of the patent application or loss or reduction in the scope of one or more claims of the patent or patent application, any of which could limit our ability to stop others from using or commercializing similar or identical technology and products, or limit the duration of the patent protection of our technology and products.

Pending and future patent applications may not result in patents being issued that protect our business, in whole or in part, or which effectively prevent others from commercializing competitive products. Competitors may also be able to design around our patents. Changes in either the patent laws or interpretation of the patent laws in the United States and other countries may diminish the value of our patents or narrow the scope of our patent protection. In addition, the laws of foreign countries may not protect our rights to the same extent or in the same manner as the laws of the United States. For example, patent laws in various jurisdictions, including jurisdictions covering significant commercial markets, such as the European Patent Office, or EPO, China and Japan, restrict the patentability of methods of treatment of the human body more than United States law does. If these developments were to occur, they could have a material adverse effect on our ability to generate revenue.

The patent application process is subject to numerous risks and uncertainties, and there can be no assurance that we or any of our future development partners will be successful in protecting AMX0035 or any future product candidates by obtaining and defending patents. These risks and uncertainties include the following:

- the USPTO and various foreign governmental patent agencies require compliance with a number of procedural, documentary, fee payment and other provisions during the patent process. There are situations in which noncompliance, whether intentional or not, can result in abandonment or lapse of a patent or patent application, resulting in partial or complete loss of patent rights in the relevant jurisdiction. In such an event, competitors might be able to enter the market earlier than would otherwise have been the case;
- patent applications may not result in any patents being issued;
- patents that may be issued or in-licensed may be challenged, invalidated, modified, revoked, circumvented, found to be unenforceable or otherwise may not provide any competitive advantage;
- our competitors, many of whom have substantially greater resources and many of whom have made significant investments in competing technologies, may seek or may have already obtained patents that will limit, interfere with or eliminate our ability to make, use, and sell AMX0035;
- there may be significant pressure on the U.S. government and international governmental bodies to limit the scope of patent protection both inside and outside the United States for

disease treatments that prove successful, as a matter of public policy regarding worldwide health concerns;

- countries other than the United States may have patent laws less favorable to patentees than those upheld by U.S. courts, allowing foreign competitors a better opportunity to create, develop and market competing product candidates; and
- countries other than the United States may, under certain circumstances, force us to grant a license under our patents to a competitor, thus allowing the competitor to compete with us in that jurisdiction or forcing us to lower the price of our drug in that jurisdiction.

Issued patents that we have or may obtain or license may not provide us with any meaningful protection, prevent competitors from competing with us or otherwise provide us with any competitive advantage. Our competitors may be able to circumvent our patents by developing similar or alternative technologies or products in a non-infringing manner. Our competitors may also seek approval to market their own products similar to or otherwise competitive with our products. Alternatively, our competitors may seek to market generic versions of any approved products by submitting ANDAs to the FDA in which they claim that patents owned or licensed by us are invalid, unenforceable or not infringed. In these circumstances, we may need to defend or assert our patents, or both, including by filing lawsuits alleging patent infringement. In any of these types of proceedings, a court or other agency with jurisdiction may find our patents invalid or unenforceable, or that our competitors do not infringe our patents. Thus, even if we have valid and enforceable patents, these patents still may not provide protection against competing products or processes sufficient to achieve our business objectives.

In addition, we rely on the protection of our trade secrets and proprietary, unpatented know-how. Although we have taken steps to protect our trade secrets and unpatented know-how, including entering into confidentiality agreements with third parties, and confidential information and invention assignment agreements with employees, consultants, collaborators, vendors, and advisors, we cannot provide any assurances that all such agreements have been duly executed, and third parties may still obtain this information or may come upon this or similar information independently. It is possible that technology relevant to our business will be independently developed by a person who is not a party to such a confidentiality or invention assignment agreement. We may not be able to prevent the unauthorized disclosure or use of our technical knowledge or trade secrets by consultants, collaborators, vendors, advisors, former employees and current employees. Furthermore, if the parties to our confidentiality agreements breach or violate the terms of these agreements, we may not have adequate remedies for any such breach or violation, and we could lose our trade secrets as a consequence of such breaches or violations. Our trade secrets could otherwise become known or be independently discovered by our competitors. Additionally, if the steps taken to maintain our trade secrets are deemed inadequate, we may have insufficient recourse against third parties for misappropriating our trade secrets. If any of these events occurs or if we otherwise lose protection for our trade secrets or proprietary know-how, our business may be harmed.

It is difficult and costly to protect our intellectual property and our proprietary technologies, and we may not be able to ensure their protection.

Our commercial success will depend in part on obtaining and maintaining patent protection and trade secret protection for our proprietary product candidate, AMX0035, as well as on successfully defending these patents against potential third-party challenges. Our ability to protect our product candidate from unauthorized making, using, selling, offering to sell or importing by third parties is dependent on the extent to which we have rights under valid and enforceable patents that cover these activities.

The patent positions of pharmaceutical, biotechnology and other life sciences companies can be highly uncertain and involve complex legal and factual questions for which important legal principles remain unresolved and have in recent years been the subject of much litigation. Changes in either the patent laws or in interpretations of patent laws in the United States and other countries may diminish the value of our intellectual property. Over the past decade, U.S. federal courts have increasingly invalidated pharmaceutical and biotechnology patents during litigation often based on changing interpretations of patent law. Further, the determination that a patent application or patent claim meets all of the requirements for patentability is a subjective determination based on the application of law and jurisprudence. The ultimate determination by the U.S. Patent and Trademark Office, or USPTO, or by a court or other trier of fact in the United States, or corresponding foreign national patent offices or courts, on whether a claim meets all requirements of patentability cannot be assured. Accordingly, we cannot predict the breadth of claims that may be allowed or enforced in our owned patents or patent applications.

We cannot provide assurances that any of our patent applications will be found to be patentable, including over our own prior art publications or patent literature, or will issue as patents. Neither can we make assurances as to the scope of any claims that may issue from our pending and future patent applications nor to the outcome of any proceedings by any potential third parties that could challenge the patentability, validity or enforceability of our patents and patent applications in the United States or foreign jurisdictions. Any such challenge, if successful, could limit patent protection for our products and current or future product candidates and/or materially harm our business.

In addition to challenges during litigation, third parties can challenge the validity of our patents in the United States using post-grant review and inter partes review proceedings, which some third parties have been using to cause the cancellation of selected or all claims of issued patents of competitors. For a patent filed March 16, 2013 or later, a petition for post-grant review can be filed by a third party in a nine-month window from issuance of the patent. A petition for inter partes review can be filed immediately following the issuance of a patent if the patent has an effective filing date prior to March 16, 2013. A petition for inter partes review can be filed after the nine-month period for filing a post-grant review petition has expired for a patent with an effective filing date of March 16, 2013 or later. Post-grant review proceedings can be brought on any ground of invalidity, whereas inter partes review proceedings can only raise an invalidity challenge based on published prior art and patents. These adversarial actions at the USPTO review patent claims without the presumption of validity afforded to U.S. patents in lawsuits in U.S. federal courts, and use a lower burden of proof than used in litigation in U.S. federal courts. Therefore, it is generally considered easier for a competitor or third party to have a U.S. patent invalidated in a USPTO post-grant review or inter partes review proceeding than invalidated in a litigation in a U.S. federal court. If any of our patents are challenged by a third party in such a USPTO proceeding, there is no guarantee that we will be successful in defending the patent, which may result in a loss of the challenged patent right to us.

In the EU, third parties can challenge the validity of our patents by filing an Opposition before the EPO. An adverse determination by the Opposition Board can result in the narrowing or invalidation of a European patent. If any of our European patents are challenged by a third party in such an opposition proceeding, there is no guarantee that we will be successful in defending the patent, which may result in a loss of the challenged patent right to us.

The degree of future protection for our proprietary rights is uncertain because legal means afford only limited protection and may not adequately protect our rights or permit us to gain or keep our competitive advantage. For example:

- we may not be able to generate sufficient data to support full patent applications that protect the entire breadth of developments in one or more of our programs;

- it is possible that one or more of our pending patent applications will not become an issued patent or, if issued, that the patent(s) claims will have sufficient scope to protect our technology, provide us with commercially viable patent protection or provide us with any competitive advantages;
- if our pending applications issue as patents, they may be challenged by third parties as invalid or unenforceable under United States or foreign laws;
- we may not successfully commercialize AMX0035 before our relevant patents expire;
- we may not be the first to make the inventions covered by each of our patents and pending patent applications; or
- we may not develop additional proprietary technologies or product candidates that are separately patentable.

In addition, to the extent that we are unable to obtain and maintain patent protection for AMX0035 or any future product candidates or in the event that such patent protection expires, it may no longer be cost-effective to extend our portfolio by pursuing additional development of a product or product candidate for follow-on indications.

If we are unable to protect the confidentiality of our trade secrets, the value of our technology could be materially adversely affected and our business would be harmed.

In addition to patents, we also may rely on trade secrets to protect our proprietary product candidate, especially where we do not believe patent protection is appropriate or obtainable. Trade secrets are difficult to protect. We seek to protect our confidential proprietary information, in part, by confidentiality agreements and invention assignment agreements with our employees, consultants, scientific advisors, contractors and collaborators. These agreements are designed to protect our proprietary information. However, we cannot be certain that such agreements have been entered into with all relevant parties, and we cannot be certain that our trade secrets and other confidential proprietary information will not be disclosed or that competitors will not otherwise gain access to our trade secrets or independently develop substantially equivalent information and techniques. For example, our employees, consultants, contractors, outside scientific collaborators and other advisers may unintentionally or willfully disclose our information to competitors. Enforcing a claim that a third-party entity illegally obtained and is using any of our trade secrets is expensive and time-consuming, and the outcome is unpredictable, and we may not be able to obtain adequate remedies for such breaches. We also seek to preserve the integrity and confidentiality of our confidential proprietary information by maintaining physical security of our premises and physical and electronic security of our information technology systems, but it is possible that these security measures could be breached. In addition, courts outside the United States are sometimes less willing to protect trade secrets. Moreover, our competitors may independently develop equivalent knowledge, methods and know-how. Notably, proprietary technology protected by a trade secret does not preempt the patenting of independently developed equivalent technology, even if such equivalent technology is invented subsequent to the technology protected by a trade secret. If any of our confidential proprietary information were to be lawfully obtained or independently developed by a competitor, we would have no right to prevent such competitor from using that technology or information to compete with us, which could harm our competitive position.

Patent terms may be inadequate to protect our competitive position on our products for an adequate amount of time.

Patents have a limited lifespan. In the United States, if all maintenance fees are timely paid, the natural expiration of a patent is generally 20 years from its earliest U.S. non-provisional filing date. The

patent term of a U.S. patent may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the United States Patent and Trademark Office in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent.

Various extensions may be available, but the life of a patent, and the protection it affords, is limited. Given the amount of time required for the development, testing and regulatory review of new product candidates, patents protecting such candidates might expire before or shortly after such candidates are commercialized.

In the United States, the Drug Price Competition and Patent Term Restoration Act of 1984 permits a Patent Term Extension, or PTE, of up to five years beyond the normal expiration of the patent to compensate patent owners for loss of enforceable patent term due to the lengthy regulatory approval process. PTE is limited to the approved indication (or any additional indications approved during the period of extension). We anticipate applying for PTE in the United States. Similar extensions may be available in other countries where we are prosecuting patents and we likewise anticipate applying for such extensions.

The granting of such patent term extensions is not guaranteed and is subject to numerous requirements. We might not be granted an extension because of, for example, failure to apply within applicable periods, failure to apply prior to the expiration of relevant patents or failure to otherwise satisfy any of the numerous applicable requirements. Moreover, the applicable authorities, including the FDA and the USPTO in the United States, and any equivalent regulatory authority in other countries, may not agree with our assessment of whether such extensions are available, and may refuse to grant extensions to our patents, or may grant more limited extensions than we request. If this occurs, our competitors may be able to obtain approval of competing products following our patent expiration by referencing our clinical and preclinical data and launch their product earlier than might otherwise be the case. If this were to occur, it could have a material adverse effect on our ability to generate revenue.

Changes in the interpretation of patent law in the United States and other jurisdictions could diminish the value of patents in general, thereby impairing our ability to protect our products.

The United States Congress is responsible for passing laws establishing patentability standards. As with any laws, implementation is left to federal agencies and the federal courts based on their interpretations of the laws. Interpretation of patent standards can vary significantly within the U.S. Patent and Trademark Office, and across the various federal courts, including the Supreme Court. Recently, the Supreme Court has ruled on several patent cases, generally limiting the types of inventions that can be patented. Further, there are open questions regarding interpretation of patentability standards that the Supreme Court has yet to decisively address. Absent clear guidance from the Supreme Court, the USPTO has become increasingly conservative in its interpretation of patent laws and standards.

In addition to increasing uncertainty with regard to our ability to obtain patents in the future, the legal landscape in the United States has created uncertainty with respect to the value of patents. Depending on any actions by Congress, and future decisions by the lower federal courts and the Supreme Court, along with interpretations by the USPTO, the laws and regulations governing patents could change in unpredictable ways and could weaken our ability to obtain new patents or to enforce our existing patents and patents that we might obtain in the future.

We may not be able to enforce our intellectual property rights throughout the world.

Filing, prosecuting, enforcing and defending patents on our product candidate in all countries throughout the world would be prohibitively expensive, and our intellectual property rights in some

countries outside the United States can be less extensive than those in the United States. The requirements for patentability may differ in certain countries, particularly in developing countries; thus, even in countries where we do pursue patent protection, there can be no assurance that any patents will issue with claims that cover our products.

Moreover, our ability to protect and enforce our intellectual property rights may be adversely affected by unforeseen changes in foreign intellectual property laws. Additionally, laws of some countries outside of the United States and the EU do not afford intellectual property protection to the same extent as the laws of the United States and the EU. Many companies have encountered significant problems in protecting and defending intellectual property rights in certain foreign jurisdictions. This could make it difficult for us to stop the infringement of our patents or the misappropriation of our other intellectual property rights. For example, many foreign countries have compulsory licensing laws under which a patent owner must grant licenses to third parties. Consequently, we may not be able to prevent third parties from practicing our inventions in certain countries outside the United States and the EU or from selling or importing products made from our inventions in and into the United States or other jurisdictions. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop and market their own products and, further, may export otherwise infringing products to territories where we have patent protection if our ability to enforce our patents to stop infringing activities is inadequate. These products may compete with our products, and our patents or other intellectual property rights may not be effective or sufficient to prevent them from competing.

Proceedings to enforce our patent rights, whether or not successful, could result in substantial costs and divert our efforts and resources from other aspects of our business. Moreover, such proceedings could put our patents at risk of being invalidated or held unenforceable, or interpreted narrowly, and our pending patent applications at risk of not issuing, and could provoke third parties to assert claims against us. We may not prevail in any lawsuits that we initiate and the damages or other remedies awarded, if any, may not be commercially meaningful. Furthermore, while we intend to protect our intellectual property rights in major markets for our products, we cannot ensure that we will be able to initiate or maintain similar efforts in all jurisdictions in which we may wish to market our products, if approved. Accordingly, our efforts to protect our intellectual property rights in such countries may be inadequate.

Others may challenge inventorship or claim an ownership interest in our intellectual property which could expose it to litigation and have a significant adverse effect on its prospects.

A third party or former employee or collaborator may claim an inventorship or ownership interest in one or more of our or our licensors' patents or other proprietary or intellectual property rights. A third party could bring legal actions against us and seek monetary damages and/or enjoin clinical testing, manufacturing and marketing of the affected product or products. While we are presently unaware of any claims or assertions by third-parties with respect to inventorship or ownership of our patents or other intellectual property, we cannot guarantee that a third party will not assert a claim or an interest in any of such patents or intellectual property. If we fail in defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights, such as exclusive ownership of, or right to use, intellectual property that is important to AMX0035 or any future product candidates. Further, regardless of the outcome, if we become involved in any litigation, it could consume a substantial portion of our resources, and cause a significant diversion of effort by our technical and management personnel.

If we are sued for infringing intellectual property rights of third parties, such litigation could be costly and time consuming and could prevent or delay us from developing or commercializing AMX0035 or any future product candidates.

Our commercial success depends, in part, on our ability to develop, manufacture, market and sell our product candidate without infringing the intellectual property and other proprietary rights of third parties. However, our research, development and commercialization activities may be subject to claims that we infringe or otherwise violate patents or other intellectual property rights owned or controlled by third parties. Third parties may have U.S. and non-U.S. issued patents and pending patent applications relating to compounds, methods of manufacturing compounds and/or methods of use for the treatment of the disease indications for which we are developing AMX0035 or any future product candidates. If any third-party patents or patent applications are found to cover AMX0035 or any future product candidates or their methods of use or manufacture, we may not be free to manufacture or market such product candidates as planned without obtaining a license, which may not be available on commercially reasonable terms, or at all.

There is a substantial amount of intellectual property litigation in the biotechnology and pharmaceutical industries, and we may become party to, or threatened with, litigation or other adversarial proceedings regarding intellectual property rights with respect to our products candidates, including patent infringement lawsuits in the United States or abroad. There may be third-party patents or patent applications with claims to materials, formulations, methods of manufacture or methods for treatment related to the composition, use or manufacture of AMX0035 or any future product candidates. While we perform periodic searches for relevant patents and patent applications with respect to our proprietary drug candidate, AMX0035, we cannot guarantee that any of our patent searches or analyses including, but not limited to, the identification of relevant patents, the scope of patent claims or the expiration of relevant patents are complete or thorough, nor can we be certain that we have identified each and every patent and pending application in the United States and abroad that is relevant to or necessary for the commercialization of AMX0035 or any future product candidates in any jurisdiction. Because patent applications can take many years to issue, there may be currently pending patent applications which may later result in issued patents that AMX0035 or any future product candidates may be accused of infringing. In addition, third parties may obtain patents in the future and claim that use of our technologies infringes upon these patents. Accordingly, third parties may assert infringement claims against us based on intellectual property rights that exist now or arise in the future. The outcome of intellectual property litigation is subject to uncertainties that cannot be adequately quantified in advance. The pharmaceutical and biotechnology industries have produced a significant number of patents, and it may not always be clear to industry participants, including us, which patents cover various types of products or methods of use or manufacture. The scope of protection afforded by a patent is subject to interpretation by the courts, and the interpretation is not always uniform. If we were sued for patent infringement, we would need to demonstrate that our product candidate, product or method either do not infringe the patent claims of the relevant patent or that the patent claims are invalid or unenforceable, and we may not be able to do this. Proving invalidity is difficult. For example, in the United States, proving invalidity requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Even if we are successful in these proceedings, we may incur substantial costs and the time and attention of our management and scientific personnel could be diverted in pursuing these proceedings, which could significantly harm our business and operating results. In addition, parties making claims against us may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources, and we may not have sufficient resources to bring these actions to a successful conclusion.

If we are found to infringe a third party's intellectual property rights, we could be forced, including by court order, to cease developing, manufacturing or commercializing the infringing product candidate

or product. Alternatively, we may be required to obtain a license from such third party in order to use the infringing technology and continue developing, manufacturing or marketing the infringing product candidate or product. If we were required to obtain a license to continue to manufacture or market the affected product, we may be required to pay substantial royalties or grant cross-licenses to our patents. We cannot, however, assure you that any such license will be available on acceptable terms, if at all. Ultimately, we could be prevented from commercializing a product, or be forced to cease some aspect of our business operations as a result of claims of patent infringement or violation of other intellectual property rights. Further, the outcome of intellectual property litigation is subject to uncertainties that cannot be adequately quantified in advance, including the demeanor and credibility of witnesses and the identity of any adverse party. This is especially true in intellectual property cases that may turn on the testimony of experts as to technical facts upon which experts may reasonably disagree. Furthermore, we may not be able to obtain any required license on commercially reasonable terms or at all. Even if we were able to obtain a license, it could be non-exclusive, thereby giving our competitors access to the same technologies licensed to us; alternatively or additionally it could include terms that impede or destroy our ability to compete successfully in the commercial marketplace. In addition, we could be found liable for significant monetary damages, including treble damages and attorneys' fees if we are found to have willfully infringed a patent. A finding of infringement could prevent us from commercializing AMX0035 or any future product candidates or force us to cease some of our business operations, which could harm our business. Claims that we have misappropriated the confidential information or trade secrets of third parties could have a similar negative impact on our business. Furthermore, because of the substantial amount of discovery required in connection with intellectual property litigation or administrative proceedings, there is a risk that some of our confidential information could be compromised by disclosure. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to raise additional funds or otherwise have a material adverse effect on our business, results of operations, financial condition and prospects.

We may be subject to claims by third parties asserting that our employees or we have misappropriated their intellectual property, or claiming ownership of what we regard as our own intellectual property.

Many of our current and former employees and our licensors' current and former employees, including our senior management, were previously employed at universities or at other biotechnology or pharmaceutical companies, including some which may be competitors or potential competitors. Some of these employees, including members of our senior management, may have executed proprietary rights, non-disclosure and non-competition agreements, or similar agreements, in connection with such previous employment. Although we try to ensure that our employees do not use the proprietary information or know-how of others in their work for us, we may be subject to claims that we or these employees have used or disclosed intellectual property, including trade secrets or other proprietary information, of any such third party. Litigation may be necessary to defend against such claims. If we fail in defending any such claims, in addition to paying monetary damages, we may sustain damages or lose key personnel, valuable intellectual property rights or the personnel's work product, which could hamper or prevent commercialization of our technology, which in turn could materially affect our commercial development efforts. Such intellectual property rights could be awarded to a third party, and we could be required to obtain a license from such third party to commercialize our technology or products. Such a license may not be available on commercially reasonable terms or at all. Even if we are successful in defending against such claims, litigation could result in substantial costs and be a distraction to management.

In addition, while we typically require our employees, consultants and contractors who may be involved in the development of intellectual property to execute agreements assigning such intellectual property to us, we may be unsuccessful in executing such an agreement with each party who in fact

develops intellectual property that we regard as our own, which may result in claims by or against us related to the ownership of such intellectual property. If we fail in prosecuting or defending any such claims, in addition to paying monetary damages, we may lose valuable intellectual property rights. Even if we are successful in prosecuting or defending against such claims, litigation could result in substantial costs and be a distraction to our senior management and scientific personnel.

If our trademarks and trade names are not adequately protected, then we may not be able to build name recognition in our trademarks and our business may be adversely affected.

Our trademarks or trade names may be challenged, infringed, circumvented or declared generic or determined to be infringing on other marks. We rely on both registration and common law protection for our trademarks. We may not be able to protect our rights to these trademarks and trade names or may be forced to stop using these names, which we need for name recognition by potential partners or customers in our markets of interest. During trademark registration proceedings, we may receive rejections. Although we would be given an opportunity to respond to those rejections, we may be unable to overcome such rejections. In addition, in the USPTO and in comparable agencies in many foreign jurisdictions, third parties are given an opportunity to oppose pending trademark applications and to seek to cancel registered trademarks. Opposition or cancellation proceedings may be filed against our trademarks, and our trademarks may not survive such proceedings. Moreover, any name we propose to use for our products in the United States must be approved by the FDA, regardless of whether we have registered it, or applied to register it, as a trademark. The FDA typically conducts a review of proposed product names, including an evaluation of potential for confusion with other product names. If the FDA objects to any of our proposed product names, we may be required to expend significant additional resources in an effort to identify a usable substitute name that would qualify under applicable trademark laws, not infringe the existing rights of third parties and be acceptable to the FDA. If we are unable to establish name recognition based on our trademarks and trade names, we may not be able to compete effectively and our business may be adversely affected.

Intellectual property rights do not necessarily address all potential threats to our business.

The degree of future protection afforded by our intellectual property rights is uncertain because intellectual property rights have limitations, and may not adequately protect our business, or permit us to maintain our competitive advantage. The following examples are illustrative:

- others may be able to make products that are competitive to AMX0035, for example a TURSO monotherapy, or any of our future product candidates but that are not covered by the claims of the patents that we own;
- others may independently develop similar or alternative technologies or otherwise circumvent any of our technologies without infringing our intellectual property rights;
- we or any of our collaborators might not have been the first to invent the inventions covered by the patents or patent applications that we own;
- we or any of our collaborators might not have been the first to file patent applications covering certain of the patents or patent applications that we or they own or have obtained a license, or will own or will have obtained a license;
- it is possible that our pending patent applications will not lead to issued patents;
- issued patents that we own may not provide us with any competitive advantage, or may be held invalid or unenforceable, as a result of legal challenges by our competitors;
- our competitors might conduct research and development activities in countries where we do not have patent rights, or in countries where research and development safe harbor laws exist, and then use the information learned from such activities to develop competitive products for sale in our major commercial markets;

- ownership of our patents or patent applications may be challenged by third parties;
- the patents of third parties or pending or future applications of third parties, if issued, may have an adverse effect on our business; and
- patent enforcement is expensive and time-consuming and difficult to predict; thus we may not be able to enforce any of our patents against a competitor.

Our reliance on third parties for research and development and manufacturing requires us to share our trade secrets, which increases the possibility that our trade secrets will be misappropriated or disclosed, and confidentiality agreements with employees and third parties may not adequately prevent disclosure of trade secrets and protect other proprietary information.

We consider proprietary trade secrets or confidential know-how and unpatented know-how to be important to our business. We may rely on trade secrets or confidential know-how to protect our technology, especially where patent protection is believed by us to be of limited value. We rely on third parties for research and development work, and expect to rely on third parties for future manufacturing of our proprietary product candidate, AMX0035, and any future product candidates. We also expect to collaborate with third parties on the development of AMX0035 and any future product candidates. As a result of the aforementioned collaborations, we must, at times, share trade secrets with our collaborators.

Trade secrets or confidential know-how can be difficult to maintain as confidential. To protect this type of information against disclosure or appropriation by competitors, our policy is to require our employees, consultants, contractors and advisors to enter into confidentiality agreements and, if applicable, material transfer agreements, consulting agreements or other similar agreements with us prior to beginning research or disclosing proprietary information. These agreements typically limit the rights of the third parties to use or disclose our confidential information, including our trade secrets. However, current or former employees, consultants, contractors and advisers may unintentionally or willfully disclose our confidential information to competitors, and confidentiality agreements may not provide an adequate remedy in the event of unauthorized disclosure of confidential information. The need to share trade secrets and other confidential information increases the risk that such trade secrets become known by our competitors, are inadvertently incorporated into the technology of others, or are disclosed or used in violation of these agreements. Given that our proprietary position is based, in part, on our know-how and trade secrets, a competitor's discovery of our trade secrets or other unauthorized use or disclosure would impair our competitive position and may have an adverse effect on our business and results of operations. Enforcing a claim that a third party obtained illegally and is using trade secrets or confidential know-how is expensive, time consuming and unpredictable. Moreover, the enforceability of confidentiality agreements may vary from jurisdiction to jurisdiction.

In addition, these agreements typically restrict the ability of our advisors, employees, third-party contractors and consultants to publish data potentially relating to our trade secrets, although our agreements may contain certain limited publication rights. Despite our efforts to protect our trade secrets, our competitors may discover our trade secrets, either through breach of our agreements with third parties, independent development or publication of information by any of our third-party collaborators. A competitor's discovery of our trade secrets would impair our competitive position and have an adverse impact on our business.

We may need to acquire or license intellectual property from third parties, and such licenses may not be available or may not be available on commercially reasonable terms.

A third party may hold intellectual property, including patent rights that are important or necessary to the development of additional future product candidates. It may be necessary for us to use the

patented or proprietary technology of one or more third parties to commercialize our current and future product candidates. If we are unable to acquire such intellectual property outright, or obtain licenses to such intellectual property from such third parties when needed or on commercially reasonable terms, our ability to commercialize additional future product candidates, if approved, would likely be delayed.

The risks described elsewhere pertaining to our intellectual property rights also apply to the intellectual property rights that we may in-license, and any failure by us or our licensors to obtain, maintain, defend and enforce these rights could have an adverse effect on our business. In some cases we may not have control over the prosecution, maintenance or enforcement of the patents that we license, and may not have sufficient ability to provide input into the patent prosecution, maintenance and defense process with respect to such patents, and potential future licensors may fail to take the steps that we believe are necessary or desirable in order to obtain, maintain, defend and enforce the licensed patents.

Risks Related to Our Business Operations, Employee Matters and Managing Growth

A pandemic, epidemic, or outbreak of an infectious disease, such as the ongoing and evolving COVID-19 pandemic, may materially and adversely affect our business, including our preclinical studies, clinical trials, third parties on whom we rely, our supply chain, our ability to raise capital, our ability to conduct regular business and our financial results.

We are subject to risks related to public health crises such as the ongoing and evolving COVID-19 pandemic. The pandemic and policies and regulations implemented by governments in response to the pandemic, often directing businesses and governmental agencies to cease non-essential operations at physical locations, prohibiting certain nonessential gatherings and ceasing non-essential travel have also had a significant impact, both direct and indirect, on businesses and commerce, as worker shortages have occurred, supply chains have been disrupted, facilities and production have been suspended, and demand for certain goods and services, such as medical service and supplies, has spiked. We have experienced certain impacts of the COVID-19 pandemic to date, including having to make certain alterations to our preclinical and clinical trial activities, such as scheduling certain work off-site and performing off-site assessments. For example, we had to amend our CENTAUR trial protocol to allow for remote visits by patients, instead of patients making site visits. In addition, in some cases we were forced to delay enrollment at certain sites in our recently completed Phase 2 clinical trial for AMX0035 in AD. There can be no guarantee we will not experience other impacts, such as being forced to further delay or pause enrollment, experiencing potential interruptions to our supply chain, facing difficulties or additional costs in enrolling patients in future clinical trials or being able to achieve full enrollment of our studies within the timeframes we anticipate, or at all.

The impact of the COVID-19 pandemic has been and may continue to be extensive in many aspects of society and could continue to result in significant disruptions to the global economy, as well as businesses and capital markets around the world. Although many of the government imposed COVID-19 restrictions have eased, the full extent to which the COVID-19 pandemic could ultimately impact our business, preclinical studies, clinical trials and financial results will depend on future developments, which are highly uncertain and cannot be accurately predicted, including the emergence of new variants and subvariants of the virus that causes COVID-19, such as the Omicron variants and subvariants, for which current vaccinations may be less effective or ineffective, among others. Other global health concerns could also result in social, economic, and labor instability in the countries in which we or the third parties with whom we engage operate.

In response to the COVID-19 pandemic, we have continued to take precautionary measures intended to help minimize the risk of the virus to our employees, including closing or reducing access to our executive offices and temporarily requiring employees to work remotely, suspending all

non-essential travel for our employees and discouraging employee attendance at industry events and in-person work-related meetings, all of which could negatively affect our business.

While we have been working closely with our third-party manufacturers, distributors and other partners to manage our supply chain activities and mitigate potential disruptions to the production of AMX0035 as a result of the COVID-19 pandemic, if, despite vaccination efforts, the COVID-19 pandemic continues to cause societal and commercial disruption for an extended period of time, there could be significant and material disruptions to our supply chain and operations, and associated delays in the manufacturing and supply of AMX0035 and any future product candidates. Any such supply disruptions, including disruptions in procuring items that are essential for our research and development activities and securing manufacturing slots for the products needed for such activities, could adversely impact our ability to initiate and complete preclinical studies or clinical trials and generate sales of and revenue from our product candidates, if approved, which could have a material adverse effect on our business, financial condition, results of operations and growth prospects.

The COVID-19 pandemic has affected and may in the future affect employees of third-party CROs located in affected geographies that we rely upon to carry out our clinical trials. If current efforts to control the COVID-19 pandemic are not successful, if the spread of the virus or any variant of the virus increases, or if a new variant, virus or pandemic emerges, we may experience additional disruptions that could severely impact our business and clinical trials, including:

- delays or difficulties in our commercialization efforts;
- delays or difficulties in enrolling patients in our clinical trials;
- delays or difficulties in clinical site initiation, including difficulties in recruiting clinical site investigators and clinical site staff;
- diversion of healthcare resources away from the conduct of clinical trials, including the diversion of sites or facilities serving as our clinical trial sites and staff supporting the conduct of our clinical trials, including our trained therapists, or absenteeism that reduces site resources;
- interruption of key clinical trial activities, such as clinical trial site monitoring, due to limitations on travel imposed or recommended by federal, state or national governments, employers and others or interruption of clinical trial subject visits and study procedures, the occurrence of which could affect the integrity of clinical trial data;
- risk that participants enrolled in our clinical trials will acquire COVID-19 or another virus or illness while the clinical trial is ongoing, which could impact the results of the clinical trial, including by increasing the number of observed adverse events or patient withdrawals from our trials;
- limitations in employee resources that would otherwise be focused on conducting our clinical trials, including because of sickness of employees or their families or the desire of employees to avoid contact with large groups of people;
- delays in receiving authorizations from regulatory authorities to initiate our future clinical trials;
- delays in clinical sites receiving the supplies and materials needed to conduct our clinical trials;
- interruption in global shipping that may affect the transport of clinical trial materials, such as the AMX0035 used in our clinical trials;
- changes in local regulations as part of a response to the COVID-19 pandemic or other pandemic which may require us to change the ways in which our clinical trials are conducted, which may result in unexpected costs, or the discontinuation of the clinical trials altogether;
- interruptions or delays in preclinical studies due to restricted or limited operations at research and development laboratory facilities;

- delays in necessary interactions with local regulators, ethics committees and other important agencies and contractors due to limitations in employee resources or forced furlough of government employees; and
- refusal of the FDA, Health Canada, the EMA or the other regulatory bodies to accept data from clinical trials in affected geographies outside the United States, Canada or the EU or other relevant local geographies.

Any negative impact the COVID-19 pandemic or any future pandemic or similar disruption has on patient enrollment or treatment, or the development of AMX0035 and any future product candidates, could cause costly delays to clinical trial activities, which could adversely affect our ability to obtain regulatory approval for and to commercialize AMX0035 and any future product candidates, if approved, increase our operating expenses, which could have a material adverse effect on our financial results. The COVID-19 pandemic has also in the past caused significant volatility in public equity markets and disruptions to the United States and global economies and any future pandemic or similar disruption could lead to further market dislocation. Any such increased volatility and economic dislocation may make it more difficult for us to raise capital on favorable terms, or at all. If we or any of the third parties with whom we engage were to experience renewed shutdowns or other business disruptions, our ability to conduct our business in the manner and on the timelines presently planned could be materially and negatively affected, which could have a material adverse impact on our business and our results of operations and financial conditions. To the extent the COVID-19 pandemic or any future pandemic or similar disruption adversely affects our business and financial results, it may also heighten many of the other risks described in this "Risk Factors" section, such as those relating to the timing and completion of our clinical trials and our ability to obtain future financing.

We are currently operating in a period of economic uncertainty and capital markets disruption, which has been significantly impacted by geopolitical instability, an ongoing military conflict between Russia and Ukraine, and record inflation, any of which could have a material adverse effect on our business, financial condition and results of operations.

U.S. and global markets are experiencing volatility and disruption following the escalation of geopolitical tensions and the military conflict between Russia and Ukraine. In February 2022, a full-scale military invasion of Ukraine by Russian troops began. Although the length and impact of the ongoing military conflict is highly unpredictable, the conflict in Ukraine has led to market disruptions, including significant volatility in commodity prices, credit and capital markets, as well as supply chain interruptions, which has contributed to record inflation globally. We are continuing to monitor inflation, the situation in Ukraine and global capital markets and assessing its potential impact on our business, including the impact on the supply chains we rely on for the manufacture of AMX0035 or other future product candidates.

Although, to date, our business has not been materially impacted by the ongoing military conflict between Russian and Ukraine, geopolitical tensions, or record inflation, it is impossible to predict the extent to which our operations will be impacted in the short and long term, or the ways in which such matters may impact our business. The extent and duration of the conflict in Ukraine, geopolitical tensions, record inflation and resulting market disruptions are impossible to predict but could be substantial. Any such disruptions may also magnify the impact of other risks we face.

Inadequate funding for the FDA, the SEC and other government agencies, including from government shutdowns, or other disruptions to these agencies' operations, could hinder their ability to hire and retain key leadership and other personnel, prevent new products and services from being developed or commercialized in a timely manner or otherwise prevent

those agencies from performing normal business functions on which the operation of our business may rely, which could negatively impact our business.

The ability of the FDA to review and approve new products can be affected by a variety of factors, including government budget and funding levels, the ability to hire and retain key personnel and accept the payment of user fees, and statutory, regulatory and policy changes. Average review times at the agency have fluctuated in recent years as a result. In addition, government funding of the SEC and other government agencies on which our operations may rely, including those that fund research and development activities, is subject to the political process, which is inherently fluid and unpredictable.

Disruptions at the FDA and other agencies may also slow the time necessary for new product candidates to be reviewed and/or approved by necessary government agencies, which would adversely affect our business. If a prolonged government shutdown occurs, it could significantly impact the ability of the FDA to timely review and process our regulatory submissions, which could have a material adverse effect on our business. Further, future government shutdowns could impact our ability to access the public markets and obtain necessary capital in order to properly capitalize and continue our operations.

We depend heavily on our executive officers, principal consultants and others, and the loss of their services would materially harm our business.

Our success depends, and will likely continue to depend, upon our ability to hire and retain the services of our current executive officers, principal consultants and others, including Josh Cohen and Justin Klee, our Co-Chief Executive Officers, James Frates, our Chief Financial Officer, Margaret Olinger, our Global Head of Commercial and Chief Commercial Officer, and Patrick Yeramian, our Global Head of Clinical Research & Development and Chief Medical Officer. We have entered into employment agreements with Mr. Cohen, Mr. Klee, Mr. Frates, Ms. Olinger and Dr. Yeramian, but they may terminate their employment with us at any time. The loss of their services might impede the achievement of our research, development and commercialization objectives.

Our ability to compete in the biotechnology and pharmaceuticals industries depends upon our ability to attract and retain highly qualified managerial, scientific and medical personnel. Our industry has experienced a high rate of turnover of management personnel in recent years. Replacing executive officers or other key employees may be difficult and may take an extended period of time because of the limited number of individuals in our industry with the breadth of skills and experience required to develop, gain regulatory approval of and commercialize products successfully.

Competition to hire from this limited pool is intense, and we may be unable to hire, train, retain or motivate these additional key employees on acceptable terms given the competition among numerous pharmaceutical and biotechnology companies for similar personnel. We also experience competition for the hiring of scientific and clinical personnel from universities and research institutions.

We rely on consultants and advisors, including scientific and clinical advisors, to assist us in formulating our research and development and commercialization strategy. Our consultants and advisors may be employed by other entities and may have commitments under consulting or advisory contracts with those entities that may limit their availability to us. If we are unable to continue to attract and retain highly qualified personnel, our ability to develop and commercialize AMX0035 or any future product candidates will be limited.

We only have a limited number of employees to manage and operate our business.

As of June 30, 2022, we had 226 full-time employees. Our focus on the development of AMX0035 requires us to optimize cash utilization and to manage and operate our business in a highly

efficient manner. We cannot assure you that we will be able to hire and/or retain adequate staffing levels to develop AMX0035 or to run our operations and/or to accomplish all of the objectives that we otherwise would seek to accomplish.

Our employees, independent contractors, consultants, collaborators and CROs may engage in misconduct or other improper activities, including non-compliance with regulatory standards and requirements, which could cause significant liability for us and harm our reputation.

We are exposed to the risk that our employees, independent contractors, consultants, collaborators and CROs may engage in fraudulent conduct or other illegal activity. Misconduct by those parties could include intentional, reckless and/or negligent conduct or disclosure of unauthorized activities to us that violates:

- FDA regulations or similar regulations of comparable non-U.S. regulatory authorities, including those laws requiring the reporting of true, complete and accurate information to such authorities;
- manufacturing standards;
- federal and state healthcare fraud and abuse laws and regulations and similar laws and regulations established and enforced by comparable non-U.S. regulatory authorities; and
- laws that require the reporting of financial information or data accurately.

Activities subject to these laws also involve the improper marketing, use or misrepresentation of information obtained in the course of clinical trials, creating fraudulent data in our preclinical studies or clinical trials or illegal misappropriation of product materials, which could result in regulatory sanctions and serious harm to our reputation. It is not always possible to identify and deter misconduct, and the precautions we take to detect and prevent this activity may not be effective in controlling unknown or unmanaged risks or losses or in protecting us from governmental investigations or other actions or lawsuits stemming from a failure to be in compliance with such laws, standards or regulations. Additionally, we are subject to the risk that a person or government could allege such fraud or other misconduct, even if none occurred. If any such actions are instituted against us, and we are not successful in defending ourselves or asserting our rights, those actions could have a significant impact on our business and results of operations, including the imposition of civil, criminal and administrative penalties, damages, monetary fines, disgorgement, integrity oversight and reporting obligations, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of our operations, any of which could have a material adverse effect on our ability to operate our business and our results of operations.

We expect to expand our organization, and as a result, we may encounter difficulties in managing our growth, which could disrupt our operations.

We currently expect to continue to significantly increase the number of our employees and the scope of our operations, particularly in the areas of regulatory affairs and sales, marketing and distribution, as well as to support our public company operations. To manage these growth activities, we must continue to implement and improve our managerial, operational and financial systems, expand our facilities and continue to recruit and train additional qualified personnel. Our management may need to devote a significant amount of its attention to managing these growth activities. Moreover, our expected growth could require us to relocate to a different geographic area of the country. Due to our limited financial resources and the limited experience of our management team in managing a company with such anticipated growth, we may not be able to effectively manage the expansion or relocation of our operations, retain key employees, or identify, recruit and train additional qualified

personnel. Our inability to manage the expansion or relocation of our operations effectively may result in weaknesses in our infrastructure, give rise to operational mistakes, loss of business opportunities, loss of employees and reduced productivity among remaining employees. Our expected growth could also require significant capital expenditures and may divert financial resources from other projects, such as the development of additional product candidates. If we are unable to effectively manage our expected growth, our expenses may increase more than expected, our ability to generate revenues could be reduced and we may not be able to implement our business strategy, including the successful commercialization of AMX0035 or any future product candidates.

Risks Related to Our Common Stock and This Offering

If you purchase shares of our common stock in this offering, you will incur immediate and substantial dilution.

The offering price of our common stock is substantially higher than the net tangible book value per share of our common stock, which on a pro forma basis was $3.29 per share as of June 30, 2022. Based on the public offering price of $32.00 per share, you will experience immediate dilution of $25.97 per share, representing the difference between our pro forma net tangible book value per share after giving effect to this offering and the public offering price per share of common stock. This means that you will pay a higher price per share than the amount of our total tangible assets, less our total liabilities, divided by the number of shares of common stock outstanding. Furthermore, if the underwriters exercise their option to purchase additional shares or our previously issued options and other rights to acquire common stock at prices below the public offering price are exercised, you will experience further dilution. In addition, you may also experience additional dilution if options or other rights to purchase our common stock that we may issue in the future are exercised or converted or we issue additional shares of our common stock at prices lower than our net tangible book value at such time. For more information, see “Dilution.”

The price of our stock may be volatile, and you could lose all or part of your investment.

The trading price of our common stock may be highly volatile and could be subject to wide fluctuations in response to various factors, some of which are beyond our control, including limited trading volume. In addition to the factors discussed in this “Risk Factors” section and elsewhere in this prospectus, these factors include:

- the commencement, enrollment or results of our ongoing and future preclinical studies and clinical trials, or any future preclinical studies or clinical trials, we may conduct of AMX0035 and any future product candidates, or changes in the development status of our current and any future product candidates;
- any additional regulatory submissions for AMX0035 or any future product candidates and any adverse development or perceived adverse development with respect to the applicable regulatory authority’s review of such submissions, including without limitation the FDA’s issuance of a “refusal to file” letter or a request for additional information;
- adverse results or delays in our preclinical studies and clinical trials;
- our decision to initiate a clinical trial, not to initiate a clinical trial, or to terminate an existing clinical trial;
- adverse regulatory decisions, including failure to receive regulatory approvals for AMX0035 and any future product candidates;
- changes in laws or regulations applicable to AMX0035 and any future product candidates, including but not limited to clinical trial requirements for approvals;

- the failure to obtain coverage and adequate reimbursement of AMX0035 and any future product candidates, if approved;
- changes on the structure of healthcare payment systems;
- any changes to our relationship with any manufacturers, suppliers, licensors, future collaborators or other strategic partners;
- our inability to obtain adequate product supply for any approved drug product or inability to do so at acceptable prices;
- our inability to establish collaborations, if needed;
- our failure to successfully commercialize AMX0035 and any future product candidates;
- additions or departures of key scientific or management personnel;
- unanticipated serious safety concerns related to the use of AMX0035 and any future product candidates;
- introduction of new products or services offered by us or our competitors, or the release or publication of clinical trial results from competing product candidates;
- announcements of significant acquisitions, strategic partnerships, joint ventures, or capital commitments by us or our competitors;
- our ability to effectively manage our growth;
- actual or anticipated variations in quarterly operating results;
- our cash position and rate of expenditures;
- our failure to meet the estimates and projections of the investment community or that we may otherwise provide to the public;
- publication of research reports about us or our industry or positive or negative recommendations or withdrawal of research coverage by securities analysts;
- changes in the market valuations of similar companies;
- overall performance of the equity markets;
- issuances of debt or equity securities;
- sales of our common stock by us or our stockholders in the future or the perception that such sales may occur;
- trading volume of our common stock;
- changes in accounting practices;
- ineffectiveness of our internal controls;
- disputes or other developments relating to proprietary rights, including patents, litigation matters, and our ability to obtain patent protection for our technologies;
- significant lawsuits, including patent or stockholder litigation;
- general political, geographical, and economic conditions, including the impact of the COVID-19 pandemic, historically high inflation, rising interest rates and the evolving conflict in Ukraine; and
- other events or factors, many of which are beyond our control.

In addition, the stock market in general, and pharmaceutical companies in particular, have experienced extreme price and volume fluctuations that have often been unrelated or disproportionate to the operating performance of these companies. Broad market and industry factors may negatively affect the market price of our common stock, regardless of our actual operating performance.

Unstable market, economic, political and geographical conditions may have serious adverse consequences on our business, financial condition and stock price.

As widely reported, global credit and financial markets have experienced extreme volatility and disruptions in the past several years, including severely diminished liquidity and credit availability, declines in consumer confidence, declines in economic growth, increases in the rate of inflation, increases in unemployment rates and uncertainty about economic stability, including most recently in connection with the ongoing and evolving COVID-19 pandemic and the conflict in Ukraine. There can be no assurance that further deterioration in credit and financial markets and confidence in economic conditions will not occur. Our general business strategy may be adversely affected by any such economic downturn, volatile business environment or continued unpredictable and unstable market conditions. Our business could also be impacted by volatility caused by geopolitical events such as the situation in the Ukraine. If the current equity and credit markets deteriorate, or do not improve, it may make any necessary debt or equity financing more difficult, more costly, and more dilutive. Furthermore, our stock price may decline due in part to the volatility of the stock market and the general economic downturn.

Failure to secure any necessary financing in a timely manner and on favorable terms could have a material adverse effect on our growth strategy, financial performance and stock price and could require us to delay, scale back or discontinue the development and commercialization of one or more of our product candidates or delay our pursuit of potential in-licenses or acquisitions. In addition, there is a risk that one or more of our current service providers, manufacturers and other partners may not survive these difficult economic times, which could directly affect our ability to attain our operating goals on schedule and on budget.

We are an emerging growth company and a smaller reporting company, and the reduced reporting requirements applicable to emerging growth companies and smaller reporting companies may make our common stock less attractive to investors.

We are an emerging growth company, as defined in the JOBS Act. For as long as we continue to be an emerging growth company, we may take advantage of exemptions from various reporting requirements that are applicable to other public companies that are not emerging growth companies, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act of 2022, or the Sarbanes-Oxley Act, reduced disclosure obligations regarding executive compensation in our periodic reports and proxy statements and exemptions from the requirements of holding nonbinding advisory votes on executive compensation and stockholder approval of any golden parachute payments not previously approved. We could be an emerging growth company until December 31, 2027, although circumstances could cause us to lose that status earlier, including if we become a “large accelerated filer” as defined in Rule 12b-2 under the Securities Exchange Act of 1934, as amended, or the Exchange Act, or if we have total annual gross revenue of $1.235 billion or more during any fiscal year before that time, in which cases we would no longer be an emerging growth company as of the following December 31 or, if we issue more than $1.0 billion in non-convertible debt during any three year period before that time, in which case we would cease to be an emerging growth company immediately. Even after we no longer qualify as an emerging growth company, we may still qualify as a “smaller reporting company”, which would allow us to take advantage of many of the same exemptions from disclosure requirements, including not being required to comply with the auditor attestation requirements of Section 404 of the Sarbanes-Oxley Act and reduced disclosure obligations regarding executive compensation in our periodic reports and proxy

statements. Investors may find our common stock less attractive because we may rely on these exemptions. We may take advantage of certain of the scaled disclosures available to smaller reporting companies and will be able to take advantage of these scaled disclosures for so long as our voting and non-voting common stock held by non-affiliates is less than $250.0 million measured on the last business day of our second fiscal quarter, or our annual revenue is less than $100.0 million during the most recently completed fiscal year and our voting and non-voting common stock held by non-affiliates is less than $700.0 million measured on the last business day of our second fiscal quarter. If some investors find our common stock less attractive as a result, there may be a less active trading market for our common stock and our stock price may be more volatile.

In addition, the JOBS Act provides that an emerging growth company can take advantage of an extended transition period for complying with new or revised accounting standards. This provision allows an emerging growth company to delay the adoption of accounting standards that have different effective dates for public and private companies until those standards would otherwise apply to private companies. We have elected to avail ourselves of this exemption from new or revised accounting standards, and therefore we will not be subject to the same requirements to adopt new or revised accounting standards as other public companies that are not emerging growth companies.

We have broad discretion in the use of the net proceeds from this offering and may invest or spend the proceeds in ways with which you do not agree and in ways that may not yield a return on your investment.

Although we currently intend to use the net proceeds from this offering in the manner described in the section titled “Use of Proceeds” in this prospectus, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. You will not have the opportunity to influence our decisions on how to use the net proceeds from this offering. The failure by our management to apply these funds effectively could result in financial losses that could harm our business, cause the price of our common stock to decline and delay the development of AMX0035 or any future product candidates. Pending their use, we may invest the net proceeds from this offering in a manner that does not produce income or that loses value.

A significant portion of our total outstanding shares may be sold into the market, which could cause the market price of our common stock to decline significantly, even if our business is doing well.

Sales of a substantial number of shares of our common stock in the public market could occur at any time. These sales, or the perception in the market that the holders of a large number of shares intend to sell shares, could reduce the market price of our common stock. As of June 30, 2022, we had outstanding 58,533,226 shares of common stock, which may be resold in the public market immediately without restriction, unless held by our affiliates or existing stockholders subject to a lock-up agreement. Moreover, holders of an aggregate of approximately 17.3 million shares of our common stock have rights, subject to specified conditions, to require us to file registration statements covering their shares or to include their shares in registration statements that we may file for ourselves or other stockholders.

We do not anticipate paying any cash dividends on our capital stock in the foreseeable future. Accordingly, stockholders must rely on capital appreciation, if any, for any return on their investment.

We have never declared nor paid cash dividends on our capital stock. We currently plan to retain all of our future earnings, if any, to finance the operation, development and growth of our business. In addition, the terms of any future debt or credit agreements may preclude us from paying dividends. As a result, capital appreciation, if any, of our common stock will be your sole source of gain for the foreseeable future.

Concentration of ownership of our common stock among our existing executive officers, directors and principal stockholders may prevent new investors from influencing significant corporate decisions.

Our executive officers and directors, combined with our stockholders who own more than 5% of our outstanding common stock, own a significant portion of our common stock. As a result, these stockholders acting together, would be able to significantly influence all matters submitted to our stockholders for approval, as well as our management and affairs. For example, these stockholders, if they choose to act together, would significantly influence the election of directors and approval of any merger, consolidation or sale of all or substantially all of our assets. This may prevent or discourage unsolicited acquisition proposals or offers for our common stock that our stockholders may feel are in their best interest.

Delaware law and provisions in our amended and restated certificate of incorporation, or our certificate of incorporation, and amended and restated bylaws, or our bylaws, could make a merger, tender offer or proxy contest difficult, thereby depressing the trading price of our common stock.

Provisions of our certificate of incorporation and bylaws may delay or discourage transactions involving an actual or potential change in our control or change in our management, including transactions in which stockholders might otherwise receive a premium for their shares or transactions that our stockholders might otherwise deem to be in their best interests. Therefore, these provisions could adversely affect the price of our common stock. Among other things, our certificate of incorporation and bylaws:

- permit our board of directors to issue up to 10,000,000 shares of preferred stock, with any rights, preferences and privileges as they may designate (including the right to approve an acquisition or other change in our control);
- provide that the authorized number of directors may be changed only by resolution of the board of directors;
- provide that our board of directors or any individual director may only be removed with cause and the affirmative vote of the holders of at least 66-2/3% of the voting power of all of our then-outstanding common stock;
- provide that all vacancies, including newly created directorships, may, except as otherwise required by law, be filled by the affirmative vote of a majority of directors then in office, even if less than a quorum;
- divide our board of directors into three classes;
- require that any action to be taken by our stockholders must be effected at a duly called annual or special meeting of stockholders and not be taken by written consent;
- provide that stockholders seeking to present proposals before a meeting of stockholders or to nominate candidates for election as directors at a meeting of stockholders must provide notice in writing in a timely manner and also specify requirements as to the form and content of a stockholder's notice;
- do not provide for cumulative voting rights (therefore allowing the holders of a majority of the shares of common stock entitled to vote in any election of directors to elect all of the directors standing for election, if they should so choose);
- provide that special meetings of our stockholders may be called only by the board of directors pursuant to a resolution adopted by a majority of the total number of authorized directors; and

- provide that the Court of Chancery of the State of Delaware is the sole and exclusive forum for the following types of actions or proceedings under state, statutory and common law: (i) any derivative action or proceeding brought on our behalf; (ii) any action or proceeding asserting a claim of breach of a fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders; (iii) any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees, arising out of or pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws; (iv) any action or proceeding to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws; (v) any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and (vi) any action asserting a claim against us or any of our directors, officers or other employees governed by the internal affairs doctrine, in all cases to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants; provided these provisions of our certificate of incorporation and bylaws will not apply to suits brought to enforce a duty or liability created by the Exchange Act, or any other claim for which the federal courts have exclusive jurisdiction; and provided that, unless we consent in writing to the selection of an alternative forum, to the fullest extent permitted by law, the federal district courts of the United States of America shall be the exclusive forum for the resolution of any complaint asserting a cause of action arising under the Securities Act of 1933, as amended, or the Securities Act.

The amendment of any of these provisions, with the exception of the ability of our board of directors to issue shares of preferred stock and designate any rights, preferences and privileges thereto, would require approval by the holders of at least 66-2/3% of our then-outstanding common stock.

In addition, as a Delaware corporation, we are subject to Section 203 of the Delaware General Corporation Law. These provisions may prohibit large stockholders, in particular those owning 15% or more of our outstanding voting stock, from merging or combining with us for a certain period of time. A Delaware corporation may opt out of this provision by express provision in its original certificate of incorporation or by amendment to its certificate of incorporation or bylaws approved by its stockholders. However, we have not opted out of this provision.

These and other provisions in our certificate of incorporation, bylaws and Delaware law could make it more difficult for stockholders or potential acquirors to obtain control of our board of directors or initiate actions that are opposed by our then-current board of directors, including delay or impede a merger, tender offer or proxy contest involving our company. The existence of these provisions could negatively affect the price of our common stock and limit opportunities for you to realize value in a corporate transaction.

For information regarding these and other provisions, see "Description of Capital Stock."

We are obligated to develop and maintain proper and effective internal controls over financial reporting and any failure to maintain the adequacy of these internal controls may adversely affect investor confidence in our company and, as a result, the value of our common shares.

We will be required, pursuant to Section 404 of the Sarbanes Oxley Act, or Section 404, to furnish a report by management on, among other things, the effectiveness of our internal controls over financial reporting for the fiscal year ending December 31, 2023. This assessment will need to include disclosure of any material weaknesses identified by our management in our internal controls over financial reporting. Our independent registered public accounting firm will not be required to attest to the effectiveness of our internal controls over financial reporting until our first annual report required to

be filed with the SEC following the date we are no longer an emerging growth company, as defined in the JOBS Act, and are not a smaller reporting company with less than $100 million in annual revenue. At such time as we are required to obtain auditor attestation, if we then have a material weakness, we would receive an adverse opinion regarding our internal control over financial reporting from our independent registered public accounting firm. We are required to disclose significant changes made in our internal controls procedures on a quarterly basis.

We continue the costly and challenging process of enhancing our financial reporting systems and processes as necessary to allow for the operation of effective internal controls over financial reporting to comply with the requirements of Section 404. We may not be able to complete our assessment, testing and any required remediation of internal controls over financial reporting in a timely fashion. Our compliance with Section 404 will require that we incur substantial legal, accounting and other compliance expense and expend significant management efforts. We currently do not have an internal audit group. We will need to hire additional accounting and finance personnel and consultants with appropriate public company experience and technical accounting knowledge to develop and maintain the internal controls over financial reporting necessary to comply with Section 404.

We have identified past material weaknesses in our internal controls over financial reporting. If during the evaluation and testing of our internal controls over financial reporting, we identify one or more additional material weaknesses in future periods, we will be unable to assert that our internal controls over financial reporting are effective. We cannot assure you that there will not be additional material weaknesses in our internal controls over financial reporting in the future. Any failure to maintain effective internal controls over financial reporting could severely inhibit our ability to accurately report our financial condition or results of operations. If we are unable to conclude that our internal controls over financial reporting are effective, we could lose investor confidence in the accuracy and completeness of our financial reports, the market price of our common shares could decline, and we could be subject to sanctions or investigations by the SEC or other regulatory authorities. Failure to remedy any material weakness in our internal controls over financial reporting, or to implement or maintain other effective control systems required of public companies, could also negatively impact our ability to access to the capital markets.

In addition, effective disclosure controls and procedures enable us to make timely and accurate disclosure of financial and non-financial information that we are required to disclose. As a public company, if our disclosure controls and procedures are ineffective, we may be unable to report our financial results or make other disclosures accurately and on a timely basis, which could cause our reported financial results or other disclosures to be materially misstated and result in the loss of investor confidence and cause the market price of our common shares to decline.

Our bylaws provide that the Court of Chancery of the State of Delaware and the federal district courts of the United States of America will be the exclusive forums for substantially all disputes between us and our stockholders, which could limit our stockholders' ability to obtain a favorable judicial forum for disputes with us or our directors, officers, or employees.

Our bylaws provide that, to the fullest extent permitted by law and subject to the court's having personal jurisdiction over the indispensable parties named as defendants, the Court of Chancery of the State of Delaware is the exclusive forum for the following types of actions or proceedings under Delaware statutory or common law:

- any derivative action or proceeding brought on our behalf;
- any action or proceeding asserting a breach of fiduciary duty owed by any of our current or former directors, officers or other employees to us or our stockholders;

- any action or proceeding asserting a claim against us or any of our current or former directors, officers or other employees arising out of or pursuant to any provision of the Delaware General Corporation Law, our amended and restated certificate of incorporation or bylaws;
- any action or proceeding to interpret, apply, enforce or determine the validity of our certificate of incorporation or our bylaws;
- any action or proceeding as to which the Delaware General Corporation Law confers jurisdiction to the Court of Chancery of the State of Delaware; and
- any action asserting a claim against us or any of our directors, officers or other employees that is governed by the internal affairs doctrine.

This provision would not apply to suits brought to enforce a duty or liability created by the Exchange Act. Furthermore, Section 22 of the Securities Act creates concurrent jurisdiction for federal and state courts over all such Securities Act actions. Accordingly, both state and federal courts have jurisdiction to entertain such claims. To prevent having to litigate claims in multiple jurisdictions and the threat of inconsistent or contrary rulings by different courts, among other considerations, our certificate of incorporation further provides that the federal district courts of the United States of America will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act. While the Delaware courts have determined that such choice of forum provisions are facially valid, a stockholder may nevertheless seek to bring a claim in a venue other than those designated in the exclusive forum provisions. In such instance, we would expect to vigorously assert the validity and enforceability of the exclusive forum provisions of our certificate of incorporation. This may require significant additional costs associated with resolving such action in other jurisdictions and there can be no assurance that the provisions will be enforced by a court in those other jurisdictions.

These exclusive forum provisions may limit a stockholder's ability to bring a claim in a judicial forum that it finds favorable for disputes with us or our directors, officers, or other employees, which may discourage lawsuits against us and our directors, officers and other employees. If a court were to find either exclusive forum provision in our certificate of incorporation to be inapplicable or unenforceable in an action, we may incur further significant additional costs associated with resolving the dispute in other jurisdictions, all of which could seriously harm our business.

Future sales and issuances of our common stock or rights to purchase common stock, including pursuant to our equity incentive plans, could result in additional dilution of the percentage ownership of our stockholders and could cause our stock price to fall.

We expect that we will need significant additional capital in the future to continue our planned operations, including conducting clinical trials, commercialization efforts if we are able to obtain marketing approval of any of AMX0035 or any future product candidates, research and development activities, and costs associated with operating a public company. To raise capital, we may sell common stock, convertible securities or other equity securities in one or more transactions at prices and in a manner we determine from time to time. If we sell common stock, convertible securities or other equity securities, investors may be materially diluted by subsequent sales. Such sales may also result in material dilution to our existing stockholders, and new investors could gain rights, preferences and privileges senior to the holders of our common stock, including shares of common stock sold in this offering.

Pursuant to our 2022 Plan, our management is authorized to grant stock options to our employees, directors and consultants. Additionally, the number of shares of our common stock reserved for issuance under our 2022 Plan will automatically increase on January 1 of each year, beginning on January 1, 2023 and continuing through and including January 1, 2032, by 5.0% of the

total number of shares of our capital stock outstanding on December 31 of the preceding calendar year, or a lesser number of shares determined by our board of directors. In addition, pursuant to our ESPP, the number of shares of our common stock reserved for issuance will automatically increase on January 1 of each calendar year, beginning on January 1, 2023 (through January 1, 2032), by the lesser of (i) 1.0% of the total number of shares of our common stock outstanding on the last day of the calendar month before the date of the automatic increase, and (ii) 1,210,000 shares; provided that before the date of any such increase, our board of directors may determine that such increase will be less than the amount set forth in clauses (i) and (ii). Unless our board of directors elects not to increase the number of shares available for future grant each year, our stockholders may experience additional dilution, which could cause our stock price to fall.

General Risk Factors

We incur significant costs as a result of operating as a public company, and our management is required to devote substantial time to compliance initiatives.

As a public company, we incur significant and ongoing legal, accounting, and other expenses that we did not incur as a private company. We are subject to the reporting requirements of the Exchange Act, which require, among other things, that we file with the SEC annual, quarterly, and current reports with respect to our business and financial condition. In addition, the Sarbanes-Oxley Act, as well as rules subsequently adopted by the SEC and the Nasdaq Global Select Market to implement provisions of the Sarbanes-Oxley Act, impose significant requirements on public companies, including requiring establishment and maintenance of effective disclosure and financial controls and changes in corporate governance practices. Further, in July 2010, the Dodd-Frank Wall Street Reform and Consumer Protection Act, or the Dodd-Frank Act, was enacted. There are significant corporate governance and executive compensation related provisions in the Dodd-Frank Act that require the SEC to adopt additional rules and regulations in these areas such as “say on pay” and proxy access. Emerging growth companies and smaller reporting companies are exempted from certain of these requirements, but we may be required to implement these requirements sooner than budgeted or planned and thereby incur unexpected expenses. Stockholder activism, the current political environment and the current high level of government intervention and regulatory reform may lead to substantial new regulations and disclosure obligations, which may lead to additional compliance costs and impact the manner in which we operate our business in ways we cannot currently anticipate.

We expect the rules and regulations applicable to public companies to substantially increase our legal and financial compliance costs and to make some activities more time-consuming and costly. If these requirements divert the attention of our management and personnel from other business concerns, they could have a material adverse effect on our business, financial condition, and results of operations. The increased costs will decrease our net income or increase our net loss, and may require us to reduce costs in other areas of our business or increase the prices of our products or services. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these requirements. The impact of these requirements could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, our board committees or as executive officers.

Cyber-attacks or other failures in our telecommunications or information technology systems, or those of our collaborators, CROs, third-party logistics providers, distributors or other contractors or consultants, could result in information theft, data corruption and significant disruption of our business operations.

We, our collaborators, our CROs, third-party logistics providers, distributors and other contractors and consultants utilize information technology, or IT, systems and networks to process, transmit and

store electronic information in connection with our business activities. As use of digital technologies has increased, cyber incidents, including third parties gaining access to employee accounts using stolen or inferred credentials, computer malware, viruses, spamming or other means, and deliberate attacks and attempts to gain unauthorized access to computer systems and networks, have increased in frequency and sophistication. Cyber-attacks also could include phishing attempts or e-mail fraud to cause payments or information to be transmitted to an unintended recipient. These threats pose a risk to the security of our, our collaborators', our CROs', third-party logistics providers', distributors' and other contractors' and consultants' systems and networks, and the confidentiality, availability and integrity of our data. There can be no assurance that we will be successful in preventing cyber-attacks or successfully mitigating their effects. Similarly, there can be no assurance that our collaborators, CROs, third-party logistics providers, distributors and other contractors and consultants will be successful in protecting our clinical and other data that is stored on their systems. Any cyber-attack, data breach or destruction or loss of data could result in a violation of applicable U.S. and international privacy, data protection and other laws, and subject us to litigation and governmental investigations and proceedings by federal, state and local regulatory entities in the United States and by international regulatory entities, resulting in exposure to material civil and/or criminal liability. Further, our general liability insurance and corporate risk program may not cover all potential claims to which we are exposed and may not be adequate to indemnify us for all liability that maybe imposed; and could have a material adverse effect on our business and prospects. For example, the loss of clinical trial data from completed, ongoing or future clinical trials for AMX0035 or any of our future product candidates could result in delays in our development and regulatory approval efforts and significantly increase our costs to recover or reproduce the data. In addition, we may suffer reputational harm or face litigation or adverse regulatory action as a result of cyber-attacks or other data security breaches and may incur significant additional expense to implement further data protection measures.

Our ability to use net operating losses and research and development credits to offset future taxable income may be subject to certain limitations.

As of December 31, 2021, we had U.S. federal and state net operating loss carryforwards of $115.7 million and $102.9 million, respectively, some of which begin to expire in 2034. As of December 31, 2021 and 2020, we also had U.S. federal research and development tax credit carryforwards of $2.7 million and $1.6 million, respectively, which begin to expire in 2029. These net operating loss and tax credit carryforwards could expire unused and be unavailable to offset future taxable income or tax liabilities, respectively. U.S. federal and certain state net operating losses generated in taxable years beginning after December 31, 2017 are not subject to expiration. Federal net operating losses generally may not be carried back to prior taxable years except that, under the Coronavirus Aid, Relief and Economic Security Act, federal net operating losses generated in 2018, 2019 and 2020 may be carried back to each of the five taxable years preceding the taxable year in which the loss arises. Additionally, for taxable years beginning after December 31, 2020, the deductibility of federal net operating losses generated in taxable years beginning after December 31, 2017 is limited to 80% of our taxable income in such taxable year.

In general, under Sections 382 and 383 of the Internal Revenue Code of 1986, as amended, or the Code, and corresponding provisions of state law, a corporation that undergoes an "ownership change" is subject to limitations on its ability to utilize its pre-change net operating loss carryforwards or tax credits, or NOLs or credits, to offset future taxable income. For these purposes, an ownership change generally occurs where the aggregate stock ownership of one or more stockholders or groups of stockholders who owns at least five percent of a corporation's stock increases its ownership by more than 50 percentage points over its lowest ownership percentage within a specified testing period. Our existing federal and state NOLs and our existing research and development credits may be subject to limitations arising from previous ownership changes and, if we undergo an ownership change, our ability to utilize NOLs or credits could be further limited by Sections 382 and 383 of the Code. We have

not yet completed a Section 382 analysis. In addition, this offering or future changes in our stock ownership, many of which are outside of our control, could result in an ownership change under Sections 382 and 383 of the Code. Our NOLs or credits may also be impaired under state law. Accordingly, we may not be able to utilize a material portion of our NOLs or credits. Furthermore, our ability to utilize our NOLs or credits is conditioned upon our attaining profitability and generating U.S. federal and state taxable income. As described above, we have incurred significant net losses since our inception and anticipate that we will continue to incur significant losses for the foreseeable future; and therefore, we do not know whether or when we will generate the U.S. federal or state taxable income necessary to utilize our NOLs or credits that are subject to limitation by Sections 382 and 383 of the Code.

We could be subject to securities class action litigation.

In the past, securities class action litigation has often been brought against a company following a decline in the market price of its securities. This risk is especially relevant for us because pharmaceutical companies have experienced significant stock price volatility in recent years. If we face such litigation, it could result in substantial costs and a diversion of management's attention and resources, which could harm our business.

Our failure to meet Nasdaq's continued listing requirements could result in a delisting of our common stock.

If we fail to satisfy the continued listing requirements of the Nasdaq Global Select Market, such as the corporate governance requirements or the minimum closing bid price requirement, Nasdaq may take steps to delist our common stock. Such a delisting would likely have a negative effect on the price of our common stock and would impair your ability to sell or purchase our common stock when you wish to do so. In the event of a delisting, we can provide no assurance that any action taken by us to restore compliance with listing requirements would allow our common stock to become listed again, stabilize the market price or improve the liquidity of our common stock, prevent our common stock from dropping below the minimum bid price requirement or prevent future non-compliance with the listing requirements of the Nasdaq Global Select Market.

If securities analysts publish negative evaluations of our stock, the price of our stock could decline.

The trading market for our common stock depends in part on the research and reports that industry or securities analysts publish about us or our business. If one or more of the analysts who may cover us issues an adverse opinion about our company, our stock price would likely decline. If one or more of these analysts ceases research coverage of us or fails to regularly publish reports on us, we could lose visibility in the financial markets, which in turn could cause our stock price or trading volume to decline.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into this prospectus contain forward-looking statements that involve substantial risks and uncertainties. We make such forward-looking statements pursuant to the safe harbor provisions of the Private Securities Litigation Reform Act of 1995 and other federal securities laws. All statements, other than statements of historical facts, contained in this prospectus and the documents incorporated by reference into this prospectus, are forward-looking statements. These include statements regarding our strategy, future operations, future financial position, future revenue, projected costs, prospects, plans and objectives of management and expected market growth are forward-looking statements. The words “anticipate,” “believe,” “continue,” “could,” “estimate,” “expect,” “intend,” “may,” “plan,” “potential,” “predict,” “project,” “should,” “target,” “would” and similar expressions are intended to identify forward-looking statements, although not all forward-looking statements contain these identifying words.

These forward-looking statements include, among other things, statements about:

- our use of the net proceeds from this offering;
- our ability to obtain and maintain regulatory approval of AMX0035 and any future product candidates;
- our ability to successfully commercialize and market AMX0035 and any future product candidates, if approved, and the timing of any commercialization and marketing efforts;
- our ability to contract with third-party suppliers, manufacturers and other service providers and their ability to perform adequately and to produce sufficient quantities of clinical and commercial supplies;
- the potential market size, opportunity and growth potential for AMX0035 and any future product candidates, if approved;
- our ability to build our own sales and marketing capabilities, or seek collaborative partners, to commercialize AMX0035 and any future product candidates, if approved;
- our ability to obtain funding for our operations;
- the initiation, timing, progress and results of our preclinical studies and clinical trials, including our Phase 3 clinical trial of AMX0035 for the treatment of ALS, known as the PHOENIX trial, and our research and development activities;
- our ability to retain the continued service of our key professionals and to identify, hire and retain additional qualified professionals;
- our ability to advance AMX0035 and any future product candidates into, and successfully complete, clinical trials;
- our ability to successfully recruit and enroll suitable patients in our clinical trials;
- the timing or likelihood of the accomplishment of various scientific, clinical, regulatory filings and approvals and other product development objectives;
- the pricing and reimbursement of AMX0035 in the United States and Canada and in any other jurisdictions in which AMX0035 is approved, if any, and of any other product candidates, if approved;
- the rate and degree of market acceptance AMX0035 and any future product candidates by physicians, patients, third-party payors and others in the medical community;
- the implementation of our business model, strategic plans for our business, product candidates and technology;

- the scope of protection we are able to establish and maintain for intellectual property rights covering our product candidates and technology;
- developments relating to our competitors and our industry, including any regulatory developments;
- our estimates regarding expenses, capital requirements, cash runway and future and needs for additional financing;
- our financial performance; and
- other risks and uncertainties, including those listed under the section titled “Risk Factors” and those listed in the documents incorporated by reference in this prospectus.

We may not actually achieve the plans, intentions or expectations disclosed in our forward-looking statements, and you should not place undue reliance on our forward-looking statements. Actual results or events could differ materially from the plans, intentions and expectations disclosed in the forward-looking statements we make. We have included important factors in the cautionary statements included in this prospectus and the documents incorporated by reference in this prospectus, particularly in the “Risk Factors” section in this prospectus, that could cause actual results or events to differ materially from the forward-looking statements that we make. Our forward-looking statements do not reflect the potential impact of any future acquisitions, mergers, dispositions, collaborations, joint ventures or investments that we may make or enter into.

You should read this prospectus, the documents incorporated by reference into this prospectus and the documents that we have filed as exhibits to the registration statement of which this prospectus is a part completely and with the understanding that our actual future results may be materially different from what we expect. We do not assume any obligation to update any forward-looking statements, whether as a result of new information, future events or otherwise, except as required by law.

USE OF PROCEEDS

We estimate that the net proceeds to us from our issuance and sale of 6,693,750 shares of our common stock in this offering will be approximately $200.6 million, based on the public offering price of $32.00 per share, after deducting underwriting discounts and commissions and estimated offering expenses payable by us. If the underwriters exercise in full their option to purchase additional shares, we estimate that the net proceeds from this offering will be approximately $230.8 million, after deducting underwriting discounts and commissions and estimated offering expenses payable by us.

We currently estimate that we will use the net proceeds from this offering, together with our existing cash, cash equivalents, and short-term investments, as follows:

- approximately $100.0 million to fund production and commercialization activities – for AMX0035 for the treatment of ALS in the United States and Canada and the regulatory approval process and market preparation in Europe for AMX0035 for the treatment of ALS;
- approximately $30.0 million to fund the completion of our ongoing Phase 3 PHOENIX clinical trial for the treatment of ALS, including the open label extension phase, and the completion of post-marketing requirements;
- approximately $20.0 million to fund the development and expansion of our pipeline to address other neurodegenerative indications, and for formulations and derivatives of AMX0035; and
- the remainder for working capital and other general corporate activities, which may include funding for the costs of operating as a public company.

This expected use of the net proceeds from this offering along with our existing cash, cash equivalents, and short-term investments represents our intentions based upon our current plans and business conditions, which could change in the future as our plans and business conditions evolve. For example, we may use a portion of the net proceeds for the acquisition of businesses, products or technologies to continue to build our pipeline, our research and development capabilities and our intellectual property position, although we currently have no agreements, commitments or understandings with respect to any such transaction. The amounts and timing of our actual expenditures may vary significantly depending on numerous factors, including the progress of our development and our sales and marketing and commercialization efforts, demand for AMX0035 in the United States and Canada or any future products, if approved, our operating costs, the status of and results from clinical trials, any collaborations that we may enter into with third parties for AMX0035 or any future product candidates and any unforeseen cash needs. Moreover, our estimates of the costs to fund our current and future trials are based on the designs of the trials. If we were to modify the design of any of these trials, for instance, to increase the number of patients in the trials, our costs to fund the trials could increase. As a result, our management will retain broad discretion over the allocation of the net proceeds from this offering.

Based on our current plans, we believe that our existing cash, cash equivalents and short-term investments, together with the net proceeds from this offering, will be sufficient to meet our anticipated operating and capital expenditure requirements for at least the next twelve months. We have based this estimate on assumptions that may prove to be wrong, and we could use our available capital resources sooner than we currently expect. We do not have any committed external source of funds.

Pending our use of the net proceeds from this offering, we intend to invest the net proceeds in a variety of capital preservation investments, including short-term, investment-grade, interest-bearing instruments and U.S. government securities.

DIVIDEND POLICY

We have never declared nor paid cash dividends on our common stock. We currently intend to retain all of our future earnings, if any, to finance the growth and development of our business. We do not intend to pay cash dividends in respect of our common stock in the foreseeable future.

CAPITALIZATION

The following table sets forth our cash, cash equivalents, and short-term investments and our capitalization as of June 30, 2022:

- on an actual basis; and
- on an as adjusted basis to give effect to our issuance and sale of 6,693,750 shares of our common stock in this offering at the public offering price of $32.00 per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us as of June 30, 2022.

Cash, cash equivalents, and short-term investments are not components of our total capitalization. You should read this table together with the section titled “Management’s Discussion and Analysis of Financial Condition and Results of Operations” and our consolidated financial statements and related notes included in our Annual Report on Form 10-K for the year ended December 31, 2021 and our Quarterly Report on Form 10-Q for the quarter ended June 30, 2022, each of which is incorporated by reference in this prospectus.

	As of June 30, 2022	
	Actual	As Adjusted
	(in thousands, except share and per share data)	
Cash, cash equivalents, and short-term investments	$ 206,681	$ 407,273
Stockholders’ (deficit) equity:		
Common stock, $0.0001 par value; 300,000,000 shares authorized, 58,533,226 shares issued and outstanding, actual; 300,000,000 shares authorized, 65,226,976 shares issued and outstanding, as adjusted	6	7
Additional paid-in capital	450,739	651,330
Accumulated deficit	(257,760)	(257,760)
Accumulated other comprehensive loss	(196)	(196)
Total stockholders’ equity	192,789	393,381
Total capitalization	$ 192,789	$ 393,381

The table above excludes:

- 8,528,039 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2022, at a weighted average exercise price of $12.08 per share;
- 670,013 shares of our common stock issuable upon vesting of restricted stock units outstanding as of June 30, 2022 under our 2022 Plan;
- 3,121,919 shares of our common stock that are available for future issuance as of June 30, 2022 under our 2022 Plan, as well as any future increases, including annual automatic evergreen increases, in the number of shares of common stock reserved for issuance thereunder in accordance with the terms of such plan; and
- 605,000 shares of our common stock that are available for future issuance under our 2022 ESPP.

DILUTION

If you invest in our common stock in this offering, your ownership interest will be diluted immediately to the extent of the difference between the public offering price per share of our common stock and the as adjusted net tangible book value per share of our common stock after this offering.

Our historical net tangible book value as of June 30, 2022 was $192.8 million, or $3.29 per share of our common stock. Our historical net tangible book value is the amount of our total tangible assets less our total liabilities, which is not included within stockholders' equity. Historical net tangible book value per share represents our historical net tangible book value divided by the 58,533,226 shares of our common stock outstanding as of June 30, 2022.

After giving effect to our issuance and sale of 6,693,750 shares of our common stock in this offering at the public offering price of $32.00 per share, and after deducting underwriting discounts and commissions and estimated offering expenses payable by us, our as adjusted net tangible book value as of June 30, 2022 would have been $393.4 million, or $6.03 per share. This represents an immediate increase in as adjusted net tangible book value per share of $2.74 to existing stockholders and immediate dilution of $25.97 in as adjusted net tangible book value per share to new investors purchasing common stock in this offering. Dilution per share to new investors is determined by subtracting as adjusted net tangible book value per share after this offering from the public offering price per share paid by new investors. The following table illustrates this dilution on a per share basis:

Public offering price per share		$32.00
Historical net tangible book value per share as of June 30, 2022	$3.29	
Increase in as adjusted net tangible book value per share attributable to new investors purchasing shares in this offering	2.74	
As adjusted net tangible book value per share after this offering		6.03
Dilution per share to new investors purchasing shares in this offering		$25.97

If the underwriters exercise their option to purchase additional shares in full, our as adjusted net tangible book value per share after this offering would be $6.40 per share, representing an immediate increase in as adjusted net tangible book value per share of $3.11 to existing stockholders and immediate dilution in as adjusted net tangible book value per share of $25.60 to new investors purchasing common stock in this offering after deducting underwriting discounts and commissions and estimated offering expenses payable by us. If any shares are issued upon exercise of outstanding options, you will experience further dilution.

The discussion and table (other than the historical net tangible book value calculation) above are based on 58,533,226 shares of our common stock outstanding as of June 30, 2022, and exclude:

- 8,528,039 shares of our common stock issuable upon the exercise of stock options outstanding as of June 30, 2022, at a weighted average exercise price of $12.08 per share;
- 670,013 shares of our common stock issuable upon vesting of restricted stock units outstanding as of June 30, 2022 under our 2022 Plan;
- 3,121,919 shares of our common stock that are available for future issuance as of June, 2022 under our 2022 Plan, as well as any future increases, including annual automatic evergreen increases, in the number of shares of common stock reserved for issuance thereunder in accordance with the terms of such plan; and
- 605,000 shares of our common stock that are available for future issuance under our 2022 ESPP.

BUSINESS

Introduction

Our mission is to one day end the suffering caused by neurodegenerative diseases. Unlike most other cells in the body that regularly die and are replaced as part of healthy function, mature neurons are normally resistant to cell death and generally cannot regenerate. We believe AMX0035 is the first drug candidate to show both a functional and survival benefit in a large-scale clinical trial of patients with ALS. On September 29, 2022, the U.S. Food and Drug Administration, or FDA, approved AMX0035, known as RELYVRIO in the United States, for the treatment of ALS in adults, and we are preparing for commercial launch of this product. AMX0035 received marketing authorization with conditions as ALBRIOZA by Health Canada for the treatment of ALS in June 2022, and we commenced Canadian commercial sales of ALBRIOZA in the third quarter of 2022. We submitted a Marketing Authorization Application, or MAA, to the European Medicines Agency, or EMA in Europe in the first quarter of 2022, which was validated in the same quarter. The results of our Phase 2 clinical trial of AMX0035, known as the CENTAUR trial, were published in September 2020 in the *New England Journal of Medicine* and in October 2020 in the *Journal of Muscle and Nerve* and demonstrated functional and survival benefits for ALS patients. We believe AMX0035 has the potential to be a foundational therapy, meaning that it could be used alone or in conjunction with other therapies to change the treatment paradigm across a broad range of neurodegenerative diseases.

AMX0035 is a dual UPR-Bax apoptosis inhibitor composed of PB and TURSO (also known as TUDCA). Through the resolution of the UPR and by inhibiting translocation of the Bax to the outer mitochondrial membrane, we have shown in multiple models that AMX0035 can keep neurons alive under a variety of different conditions and stresses, including in in vitro models of neurodegeneration, endoplasmic reticulum stress, mitochondrial dysfunction, oxidative stress and disease-specific models of a variety of other conditions, as well as in vivo models of ALS, AD and multiple sclerosis. We are pursuing ALS as our first indication as it is a disease of rapid and profound neurodegeneration, and we are focused on the development and potential commercialization of AMX0035 for ALS globally.

We have received marketing authorization with conditions by Health Canada for ALBRIOZA for the treatment of ALS. We announced commercial availability of the product in July 2022. We have submitted to the national reimbursement authorities, CADTH and INESSS, to seek recommendation of reimbursement for ALBRIOZA by the Canadian provincial governments, and are actively working with private payers in Canada to obtain reimbursement coverage.

We are also actively pursuing regulatory approvals of AMX0035 for the treatment of ALS Europe. Our MAA also remains under review by the Committee for Medicinal Products for Human Use, or CHMP, of the EMA. The review process is proceeding as expected, with receipt of the Day 120 List of Questions following the CHMP meeting in June 2022. We intend to continue to work with the EMA through its review process, and we expect a decision in the first half of 2023.

In November 2021, we initiated a Phase 3 clinical trial of AMX0035 for the treatment of ALS, known as PHOENIX trial, at clinical trial sites in the United States and Europe. Enrollment in the PHOENIX trial was completed in March 2022 in the United States and remains ongoing in Europe. We anticipate topline results from the PHOENIX trial in 2024. This trial is designed to provide further data evaluating the safety and efficacy of AMX0035 for the treatment of ALS to further support our global regulatory efforts. In July 2022, we announced a planned OLE for the PHOENIX trial. In March 2022, we announced the launch of an EAP in the United States that the FDA has authorized for people with ALS who meet eligibility criteria for participation. The United States EAP for AMX0035 is running parallel with the PHOENIX trial. People living with ALS who are eligible for PHOENIX are not eligible for the United States EAP as the criteria for entry do not overlap. However, the EAP will be wound down alongside the commercial launch of RELYVRIO in the United States.

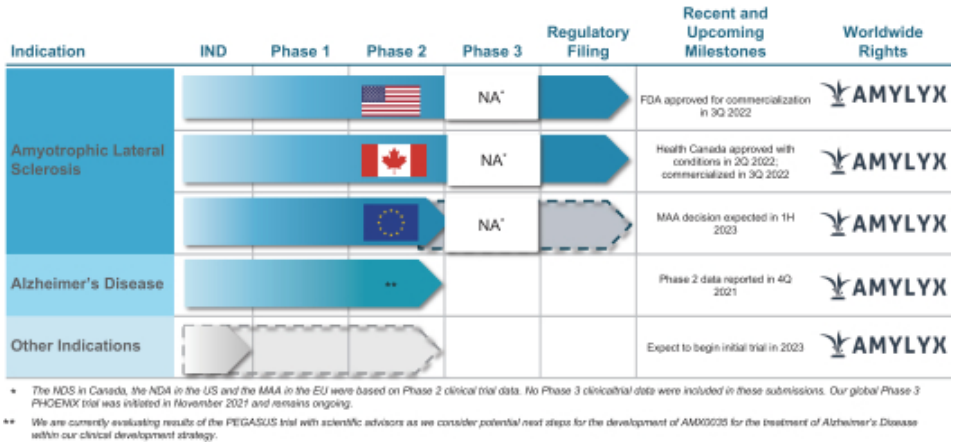
The FDA approval on September 29, 2022 of AMX0035 as RELYVRIO for the treatment of ALS in adults was granted following the second virtual meeting of the FDA's Peripheral and Central Nervous System Drugs Advisory Committee, or the Advisory Committee, held on September 7, 2022. The Advisory Committee initially met on March 30, 2022 and voted 4 (yes) and 6 (no) on the question of whether the data from our randomized, controlled Phase 2 CENTAUR trial and OLE established a conclusion that AMX0035 is effective in the treatment of patients with ALS. At the second meeting of the Advisory Committee, the Advisory Committee voted 7 (yes) to 2 (no) in response to the question of whether available evidence of effectiveness is sufficient to support approval of AMX0035 for the treatment of ALS, taking into account the unmet need in ALS, the status of the ongoing PHOENIX trial and the seriousness of ALS. At this meeting and the previous Advisory Committee meeting, the FDA presented concerns regarding choices of statistical models for the prespecified primarily analysis and the interpretability of the survival results. In both Advisory Committee meetings, we presented scientific arguments and analyses, together with experts in the field, which we believe sufficiently addressed these concerns. At the second meeting of the Advisory Committee, we stated that if our PHOENIX trial is not successful then we will do what is right for patients, which includes voluntarily removing the product from the market. We will work in consultation with regulatory authorities when the PHOENIX data are available. We could also be required by regulatory authorities to withdraw AMX0035 from the marketplace. As a result of the FDA's approval of AMX0035, we are preparing for a commercial launch of RELYVRIO in the United States.

We are also developing AMX0035 for other neurodegenerative diseases by leveraging our deep knowledge of and relationships in the neurodegenerative space. We believe the approach of a dual UPR-Bax apoptosis inhibitor designed to help keep neurons alive could be clinically meaningful for the treatment of other neurodegenerative disease indications in addition to ALS. Many common and rare neurodegenerative diseases are characterized by substantial neuronal cellular loss, including AD and Wolfram syndrome, as well as Parkinson's Disease, Huntington's Disease, Progressive Supranuclear Palsy, Multi-System Atrophy, and others. We conducted a Phase 2 clinical trial in AD, known as the PEGASUS trial, to obtain safety data along with initial efficacy and biomarker data which could help us prioritize additional indications to pursue with AMX0035. We believe the topline results from the PEGASUS trial, reported in November 2021, provide further biological knowledge about AMX0035 which will help inform future clinical development of AMX0035 for the treatment of AD and in other potential indications. Based on these topline results, AMX0035 met the PEGASUS trial's primary endpoint of safety and tolerability. The 6-month trial was not powered to evaluate differences between groups in efficacy outcomes and no differences were seen in a newly developed composite outcome of cognitive, functional, and imaging measures, or secondary efficacy endpoints of cognition, function, and imaging. In this trial, AMX0035 showed significant effects on biomarkers including neurogranin, YKL-40 or Chitinase 3-like 1 (CHI3L1), and fatty acid binding protein 3 (FABP3). These results build on previously reported findings that AMX0035 exhibited significant effects on the tau protein, tau phosphorylated at threonine 181, 8-hydroxy-2'—deoxyguanosine, or 8-OHdG, and the amyloid beta 42 to 40 (amyloid-ß1-42, amyloid-ß1-40) ratio in cerebrospinal fluid. We will continue to evaluate these data and discuss the results of the PEGASUS trial with scientific advisors as we consider potential next steps for the development of AMX0035 for the treatment of AD within our clinical development strategy. Based on preclinical evidence, we are continuing to evaluate plans to explore the use of AMX0035 in patients with Wolfram syndrome. We intend to prioritize our development efforts around neurodegenerative diseases that result in substantial disability, and ultimately death, and where unmet medical needs are greatest.

Since our founding in 2013, our goal has been to improve the quality of, and extend, life for patients suffering from neurodegenerative diseases. One of our key strategies towards achieving this goal has been to form direct relationships with patients, their families, advocacy groups, and healthcare professionals to bring much needed innovation to patients. Throughout the development of AMX0035, we have partnered with members of the disease communities we serve, including the ALS Association, the Northeast ALS Consortium, or NEALS, ALS Finding a Cure, the Healey Center at Massachusetts General Hospital, the Cure Alzheimer's Fund, the Alzheimer's Association and the Alzheimer's Drug

Discovery Foundation, to ensure our goals are aligned with patient needs. In addition, many of the key opinion leaders in the ALS community were and are investigators in our recent and ongoing trials. These relationships are a cornerstone of our culture and corporate strategy.

Our current pipeline, including the stage of development and approvals of AMX0035 in our target indications, is represented in the table below.



* *The NDS in Canada, the NDA in the US and the MAA in the EU were based on Phase 2 clinical trial data. No Phase 3 clinical trial data were included in these submissions. Our global Phase 3 PHOENIX trial was initiated in November 2021 and remains ongoing.*

** *We are currently evaluating results of the PEGASUS trial with scientific advisors as we consider potential next steps for the development of AMX0035 for the treatment of Alzheimer's Disease within our clinical development strategy.*

AMX0035 is a proprietary oral fixed-dose combination of two small molecules: PB, which is a small molecular chaperone that reduces the UPR, preventing cell death resulting from the UPR, and TURSO, (also known as TUDCA), which is a Bax inhibitor that reduces cell death through apoptosis. While the PB and TURSO molecules individually are not proprietary to us, we own patents and patent applications covering AMX0035, including the fixed-dose combination of AMX0035 itself. We believe that our proprietary combination of these two molecules will allow us to target abnormal cell death to better prevent neurodegeneration than treatment with either mechanism of action alone. In *in vitro* studies, PB and TURSO were observed in combination to prevent nearly 100% of neuron death. However, PB and TURSO alone only prevented a moderate percentage of neuron death in *in vitro* studies.

The results of our CENTAUR trial were published in September 2020 in the *New England Journal of Medicine* and in October 2020 in the *Journal of Muscle and Nerve.* Trial results showed that patients receiving AMX0035 experienced statistically significant benefit in function, as measured by the ALSFRS-R, as well as nominally significant improvement in overall survival, or OS, when analyzing the full randomized population through the OLE trial in a post hoc analysis (July 20, 2020 and March 1, 2021 data cutoffs). The data were further evaluated in the following post hoc analyses providing consistent support for an observed survival benefit: a new analysis utilizing a statistical method to adjust for the effect of treatment crossover; a new analysis comparing observed survival in the CENTAUR trial to predicted survival using the European Network for the Cure of ALS survival prediction model derived from an ALS natural history database; and a new analysis comparing observed survival from the CENTAUR treatment group to survival of matched treatment nalve participants from historical clinical trials of ALS. AMX0035 was shown to be generally well-tolerated with the prevalence of adverse events comparable across placebo and treatment groups. We believe AMX0035 is the first drug candidate in ALS to demonstrate a statistically significant benefit in function as measured by a prespecified mean rate change in ALSFRS-R and a nominally significant benefit in a longer-term post hoc analysis of OS, which are both important outcomes for people with ALS.

Our Company and Team

Amylyx was founded with the ambitious goal of improving the quality and length of life for patients suffering from neurodegenerative diseases. From a dorm room at Brown University in 2013, our Co-CEOs and Co-Founders, Josh Cohen and Justin Klee set out to determine why neurons die, and have ever since been working to develop AMX0035, which we believe is the first drug candidate to show function and survival benefits in patients with ALS, and other novel therapies. To help realize our goal, we have assembled a team with deep scientific, clinical, business and leadership experience, bolstered by expertise in biotechnology. Our Chief Financial Officer, James Frates, brings over 20 years of experience as the Chief Financial Officer of Alkermes. Our Chief Commercial Officer, Margaret Olinger, brings three decades of expertise in commercial launches and operations, most recently at Alexion. Our Chief Technical Operations Officer, Tom Holmes, brings more than 25 years of leadership experience at Biogen in supply chain, pharmaceutical manufacturing and program management. Our Global Head of Clinical Research & Development and Chief Medical Officer, Patrick D. Yeramian, brings over 30 years of medical and pharmaceutical industry experience. Our Head of Regulatory Affairs, Tammy Sarnelli, brings more than 30 years of experience from Biogen and other companies in early and late-stage neurology and rare disease development. Our Global Head of Human Resources, Debra Canner, brings over 20 years of experience, having served as the Chief of Human Resources Officer at Akamai and as part of Genzyme. Our Chief Legal Officer and General Counsel, Gina M. Mazzariello, brings more than 20 years of corporate and commercial legal experience in the healthcare industry, including holding leadership positions at Boehringer Ingelheim USA, Inc. This team brings a diverse set of skills uniquely suited to drive successful commercialization of AMX0035 in ALS while continuing to advance AMX0035 in other indications.

Our Strategy

Our mission is to one day end the suffering caused by neurodegenerative diseases. Key elements of our strategy to achieve this mission include:

- ***Effectively and efficiently commercializing RELYVRIO for ALS in adults in the United States and ALBRIOZA for ALS in Canada.*** We received FDA approval in the United States for AMX0035 as RELYVRIO for the treatment of ALS in adults in September 2022. We received marketing authorization with conditions in Canada for ALBRIOZA for the treatment of ALS in June 2022 and launched ALBRIOZA commercially in Canada in July 2022. We believe our commercial capabilities, coupled with our understanding of the ALS patient and medical community, will enable us to successfully commercialize RELYVRIO for ALS in the United States and ALBRIOZA for ALS in Canada and to launch AMX0035 for the treatment of ALS successfully in other key territories, if approved.
- ***Obtaining additional regulatory approvals of AMX0035 for ALS, with an initial focus on Europe.*** In June 2022, AMX0035 received marketing authorization with conditions as ALBRIOZA in Canada for the treatment of ALS and in September 2022, AMX0035 received approval in the United States as RELYVRIO for the treatment of ALS in adults. Based on the results from our CENTAUR trial, we have been exploring pathways towards regulatory approval in several additional territories, including Europe. We believe that the CENTAUR trial may be also able to support marketing authorization in Europe and other jurisdictions. We submitted an MAA in Europe in the first quarter of 2022, and we expect a decision by in the first half of 2023.
- ***Effectively and efficiently commercializing AMX0035 in other key territories, if approved***. We are continuing to build our sales team, internal capabilities and outside vendor network to support commercialization in the United States and Canada. We will continue to build our capabilities in Europe and other jurisdictions to support commercialization, if approved. We

anticipate that our commercial infrastructure will be scalable for subsequent launches in other key markets if we receive marketing approval in these territories as well.

- ***Maximizing the therapeutic potential of AMX0035 by expanding into additional neurodegenerative diseases.*** We believe the data from the CENTAUR trial showing a functional and survival benefit for ALS patients treated with AMX0035 support its potential mechanism of targeting endoplasmic reticulum, or ER, stress and mitochondrial dysfunction. Based on our extensive understanding of disease pathways, we believe AMX0035 may provide benefit across multiple diseases characterized by neurodegeneration. As we select the next indications for AMX0035 we will prioritize those indications which we believe, if successful, will most rapidly lead to marketed products and to patient benefit. We conducted our Phase 2 PEGASUS clinical trial in AD to obtain safety data along with initial efficacy and biomarker data which will help us evaluate the development of AMX0035 for the treatment of AD within our clinical development strategy. We are also continuing to evaluate plans to explore the use of AMX0035 in patients with Wolfram syndrome. We are also planning to submit an IND for two additional indications in 2022.
- ***Continuing to cultivate a network of patient advocacy groups, key opinion leaders, research institutions, and healthcare professionals to inform our patient-centric approach.*** We have cultivated a network of key constituents, which we believe will continue to help us to develop therapies in an efficient and impactful manner. Integrating the experiences and insights from these parties, which include patients, their families, and organizations such as the ALS Association, NEALS, ALS Finding a Cure, the Healey Center at Massachusetts General Hospital, the Cure Alzheimer's Fund, the Alzheimer's Association and the Alzheimer's Drug Discovery Foundation, continues to inform our approach to developing therapies that can potentially transform the lives of patients and their families. We intend to continue to engage with each of these constituents through conferences, clinical trials and informal communications as we further develop and pursue commercialization of AMX0035.
- ***Deploying a strategic approach to design, acquire and develop new therapies.*** We follow a scientifically rigorous approach to evaluating new opportunities to broaden our portfolio. We plan to target assets that allow us to leverage our experience with neurodegenerative pathways and AMX0035's mechanism of action, focusing primarily on preventing neuron death. When evaluating assets, we consider not only our ability to apply our experience with AMX0035 but also a variety of factors, including unmet medical need, biological rationale, feasibility of clinical development, potential for regulatory approval, costs of development, competitive landscape and commercial potential. For example, in July 2022, we announced that we entered into a two-year sponsored research agreement with Sunnybrook Research Institute to expedite the identification of novel drug candidates that inhibit Bax and Bak for the development of therapeutics for neurodegenerative diseases, specifically ALS.

Neurodegenerative Disease

The prevention of neurodegeneration represents one of today's most significant unmet medical needs. The development of therapies that preserve neuron health has historically presented unique challenges, including an imperfect understanding of underlying biology and a lack of translation of activity observed in preclinical studies to results in clinical trials. Currently approved therapies for many neurodegenerative diseases are generally only symptom modifying and have demonstrated limited efficacy. There remains an urgent need for novel approaches to address most neurodegenerative diseases, especially for progressive and severe conditions such as ALS.

The Role of the Endoplasmic Reticulum and Mitochondria in Neurodegenerative Disease

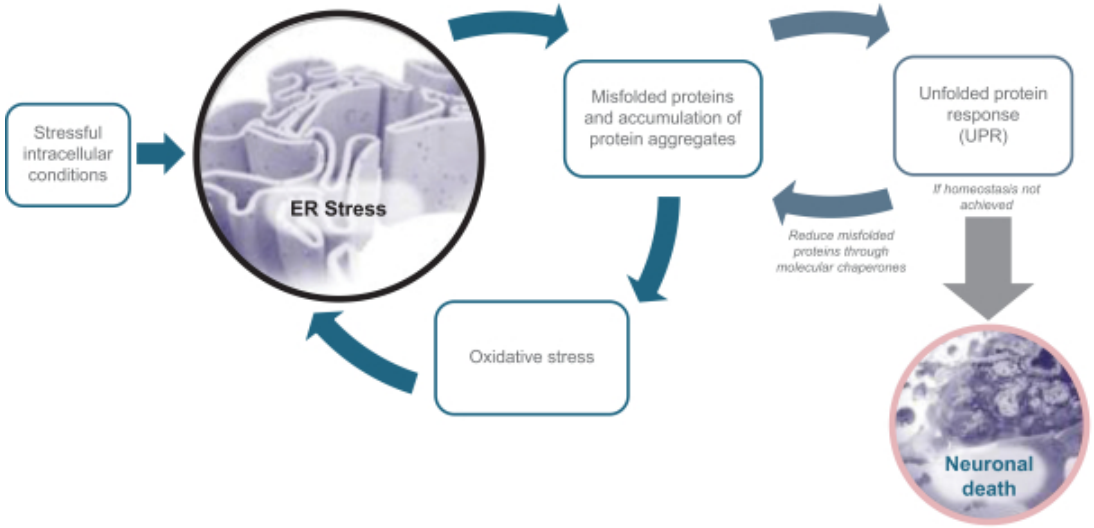
Unlike most other cells in the body that regularly die and are replaced as part of healthy function, mature neurons are normally resistant to cell death and generally cannot regenerate. Neuron death is only triggered when multiple stress factors are activated beyond the neuron's recovery capacity, a circumstance commonly seen in neurodegenerative disorders. Most neurodegenerative disorders have complex pathophysiology, with multiple pathways contributing and converging to eventually cause neuron death. A large fraction of these pathological changes in neurons can be linked to dysfunction in the ER and mitochondria that affect metabolism and secretion of lipids and proteins, calcium homeostasis, and energy production. Dysfunction in these two essential cellular structures is implicated across many neurodegenerative disorders, highlighting the central role they play in maintaining neuron health and survival and providing the rationale for our focus, which is to rescue ER and mitochondrial function, and to protect and preserve neurons.

ER Stress

The ER is responsible for protein and lipid synthesis, folding and quality control of proteins, and storing calcium for cellular energy production by the mitochondria. The ER is also a primary sensor of stressful intracellular conditions, activating a wide number of molecular pathways that belong to a specific process, referred to as the ER stress response, that controls protein homeostasis. ER stress, or dysfunction associated with protein misfolding and aggregation, has been implicated in the pathogenesis of neurodegenerative disease. In neurodegenerative disorders, misfolded proteins and accumulations of protein aggregates can cause oxidative stress and a feedback loop resulting in ER stress. When the ER stress response is activated due to misfolded and aggregated proteins, the UPR, is engaged as a regulatory mechanism to reduce the load of misfolded proteins and restore a healthy cellular state. Molecular chaperones are the critical regulators of protein homeostasis under ER stress. Pathological conditions such as neurodegenerative diseases that disturb protein folding and maturation

can trigger ER stress and engage the UPR. When the natural protein homeostasis in the cell cannot be achieved, the UPR triggers cellular death, or apoptosis, as illustrated in the graphic below.

The Role of the ER in Neurodegenerative Disease



Mitochondrial Dysfunction

The mitochondria are a central regulatory point for the control of cell death. When mitochondria detect sufficient cell damage, they signal for the cell to initiate a cell death cascade. Among other steps, this cascade includes the recruitment of a series of apoptotic proteins including Bcl-2-associated X protein, or BAX, the release of cytochrome c from a pore in the mitochondrial membrane called the mitochondrial permeability transition pore, and finally the activation of caspase 3, an executioner protein for apoptosis.

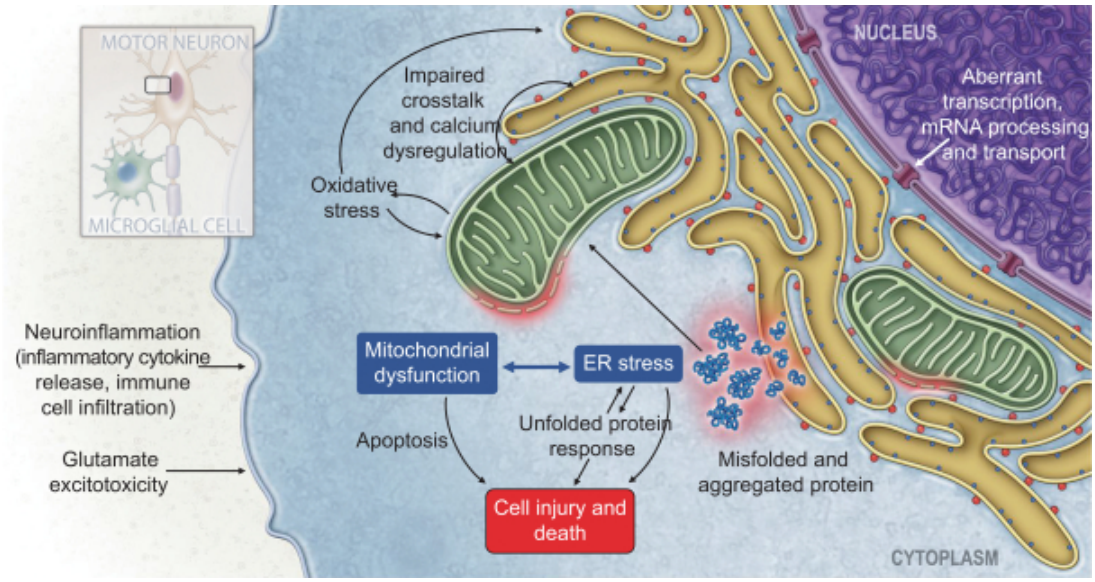
In neurodegenerative diseases, triggers such as altered calcium homeostasis, glutamate excitation of the cell, damage to the mitochondria or mitochondrial DNA and detection of aberrant double-stranded DNA and accumulation of unfolded proteins at the mitochondria all lead to mitochondrially mediated cell death. Inhibition of proteins such as BAX could result in a greater threshold for cell death and longer survival of key neurons implicated in the progression of neurodegenerative disease.

Linkage Between Mitochondria and ER

The mitochondria and the ER are often physically linked by a membrane called the mitochondrial associated ER membrane, or MAM. Through this linkage, calcium and molecules are shuttled between the two organelles. It is our belief that this connection, or crosstalk, allows the cell to integrate responses between the two organelles and that activation of mitochondrial damage pathways will activate the UPR and *vice versa*.

Both the mitochondria and the UPR in the ER can trigger cell death. As such, we believe both pathways are crucial to the pathogenesis of neurodegenerative diseases and both need to be addressed simultaneously to effect a substantial change in survival of neurons undergoing neurodegenerative processes.

The Role of the ER and Mitochondria in Neuron Death



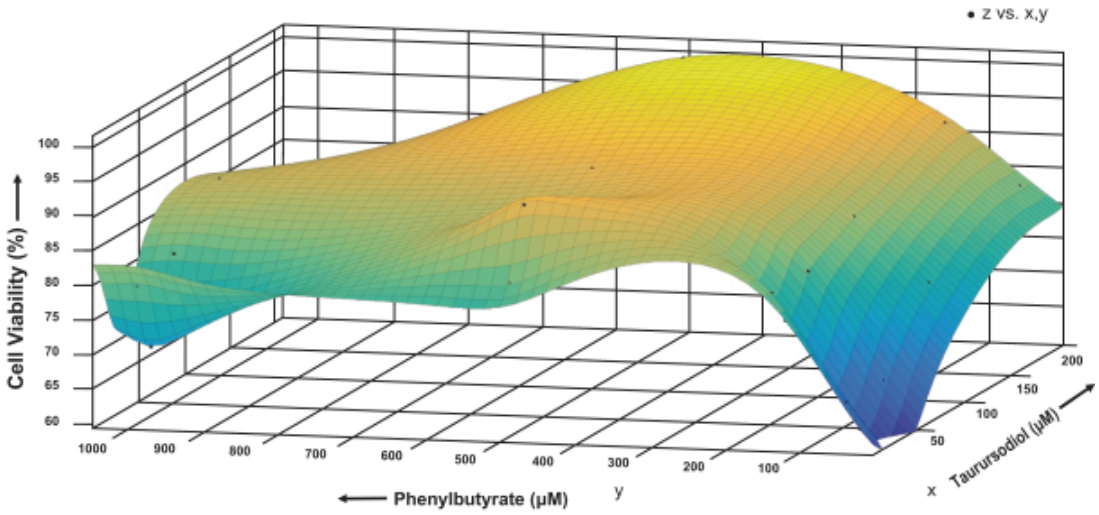
The figure above depicts events of ER stress and mitochondrial dysfunction associated with eventual cell injury and death.

Background and Rationale for AMX0035

We have designed AMX0035 to reduce neuron death through simultaneous mitigation of ER stress and mitochondrial dysfunction. AMX0035 is a coformulation of two small molecules, PB and TURSO. PB has been shown to reduce ER stress through upregulation of a protein known as DJ-1 that is a master chaperone regulator, recruitment of other chaperone proteins, and as a small molecular chaperone. TURSO is a bile acid that has been shown to recover mitochondrial bioenergetic deficits through incorporation into the mitochondrial membrane, reducing BAX translocation to the mitochondrial membrane, reducing mitochondrial permeability, and increasing the apoptotic threshold of the cell. Through our research, we identified the specific ratios at which the combination of PB and TURSO target these critical, connected pathways and show synergistic activity in improving neuronal cell viability *in vitro*. We then developed AMX0035 as an optimized oral formulation to be tested *in vivo* and clinically.

Our preclinical studies have shown that PB and TURSO, in combination, can inhibit a number of pathological pathways associated with neurodegenerative diseases in cell culture and animal models. For example, in an *in vitro* model of neurodegeneration, we tested the potential abilities of PB and TURSO individually and in combination to prevent oxidative-induced neuronal death, or cell viability, which was measured using a PrestoBlue reagent. In this experiment, hydrogen peroxide was applied to rat primary cortical neurons in a concentration sufficient to kill approximately 40% of the neurons. Particular doses of PB and TURSO individually protected against some of the neuron death, and cell viability reached approximately 80%. However, when these rat primary cortical neurons were dosed

with particular ratios of PB and TURSO in combination, nearly 100% of oxidative-induced neuron death was prevented. The results of this *in vitro* model are shown in the graphic below.



Additionally, we have observed benefit from the administration of particular ratios of PB and TURSO across *in vitro* models of ER stress, mitochondrial dysfunction, oxidative stress, and disease specific models of ALS, AD, Parkinson's disease, multiple sclerosis, or MS, Friedreich's Ataxia, primary mitochondrial myopathies and a variety of other conditions. We have also conducted *in vivo* models of PB and TURSO, in combination, including models of ALS, AD and MS. Additionally, academic groups have conducted studies with monotherapy treatment with TURSO and/or PB in models of ALS, AD, MS, Parkinson's Disease, Huntington's Disease, Progressive Supranuclear Palsy, Multi-System Atrophy, X-linked adrenoleukodystrophy, and a variety of other models. We believe this body of evidence collectively supports the use of this combination to treat neurodegenerative indications and led us to pursue the development of our proprietary drug candidate, AMX0035.

AMX0035 for the Treatment of ALS

Overview of ALS

We are initially developing AMX0035 for the treatment of ALS, an adult-onset, progressive, and fatal neurodegenerative disorder of the neuromuscular system resulting in muscle weakness and paralysis leading to death. ALS involves the progressive degeneration of motor neurons in the spinal cord and brain that are responsible for controlling voluntary muscle movement. This progressive loss of motor neurons leads to muscle weakness, loss of muscle mass, and inability to control movement. ALS remains universally fatal with a median survival of less than three years from symptom onset and less than two years from diagnosis. Despite being classified as a rare disease by the FDA and the EMA, ALS is considered one of the more common adult-onset neuromuscular diseases worldwide. We estimate based on public sources that there are approximately 29,000 ALS patients in the United States. More than 30,000 ALS patients are estimated to be located in the EU and the United Kingdom and about 3,000 ALS patients are located in Canada. Over 90% of patients have no family history of ALS, known as "sporadic" ALS. While other development approaches seek to address genetic instances of ALS, AMX0035 is designed to target all instances of ALS, regardless of whether it is sporadic or genetic. Due to the two-year median survival of patients diagnosed with ALS, a high proportion of the patient population has been recently diagnosed and a therapy that is able to improve the survival of patients with ALS has the potential to increase the number of patients who are able to continue living with their disease.

Medical costs for patients newly diagnosed with ALS in the United States are substantial and increase rapidly with each disability milestone. Care of patients with ALS is intensive and requires a team of medical professionals, special equipment, and assistance with daily activities. Caregivers are often forced to miss work or give up employment opportunities to provide care, leading to increased financial strain. The disease also impacts the patient's family, who generally provide the bulk of caregiving, which often entails the provision of 24-hour care. The constant adaptation of caregivers to the demands of the ALS disease progression requires significant physical effort and mental exhaustion particularly during the advanced stages of the disease.

Significant Unmet Need in ALS

ALS is a heterogeneous disease that arises from multiple mechanistic underpinnings, leading patients to experience variable onset and delayed diagnosis, persistent progression and loss of muscle function, and shortened survival.

There is a significant unmet need for ALS therapies that target multiple pathogenic pathways, are disease-modifying, and can provide both functional and survival benefit to patients. Only two FDA-approved therapeutic agents for ALS, riluzole, an anti-glutamatergic agent, and edaravone, a free-radical scavenger, have been shown to modulate the course of ALS. In pivotal clinical trials, riluzole demonstrated longer time to tracheostomy or death compared to placebo and edaravone demonstrated longer retention of function compared to placebo. However, a need remains for ALS therapies that demonstrate both retention of function and longer survival, allowing patients to maintain greater independence for longer.

Due to the multi-pathway pathophysiology of ALS, experts agree that successful treatment will likely require concurrent targeting of multiple key neuronal death pathways. There is a strong rationale for treatments that target identified convergence points of these critical pathways, including in the ER and mitochondria, and we believe that a therapy that targets multiple pathways at once, like AMX0035, aligns with the emerging ALS treatment paradigm.

Clinical Development of AMX0035 for ALS

We designed our Phase 2 CENTAUR trial with input from leading ALS experts from NEALS to detect a significant difference between AMX0035 and placebo. The study also provided the option for participants to continue with available approved therapies, riluzole and edaravone, for the duration of the trial. The FDA granted Orphan Drug Designation for AMX0035 for the treatment of patients with ALS in September 2017. The EMA granted orphan designation to AMX0035 for the treatment of patients with ALS in April 2020. In December 2019, we announced positive topline results from our CENTAUR trial. The trial met its primary endpoint, and we published detailed trial data in the *New England Journal of Medicine* in September 2020 and in the *Journal of Muscle and Nerve* in October 2020. We submitted an NDS in Canada in the second quarter of 2021, an NDA in the United States in the fourth quarter of 2021 and an MAA in Europe in the first quarter of 2022.

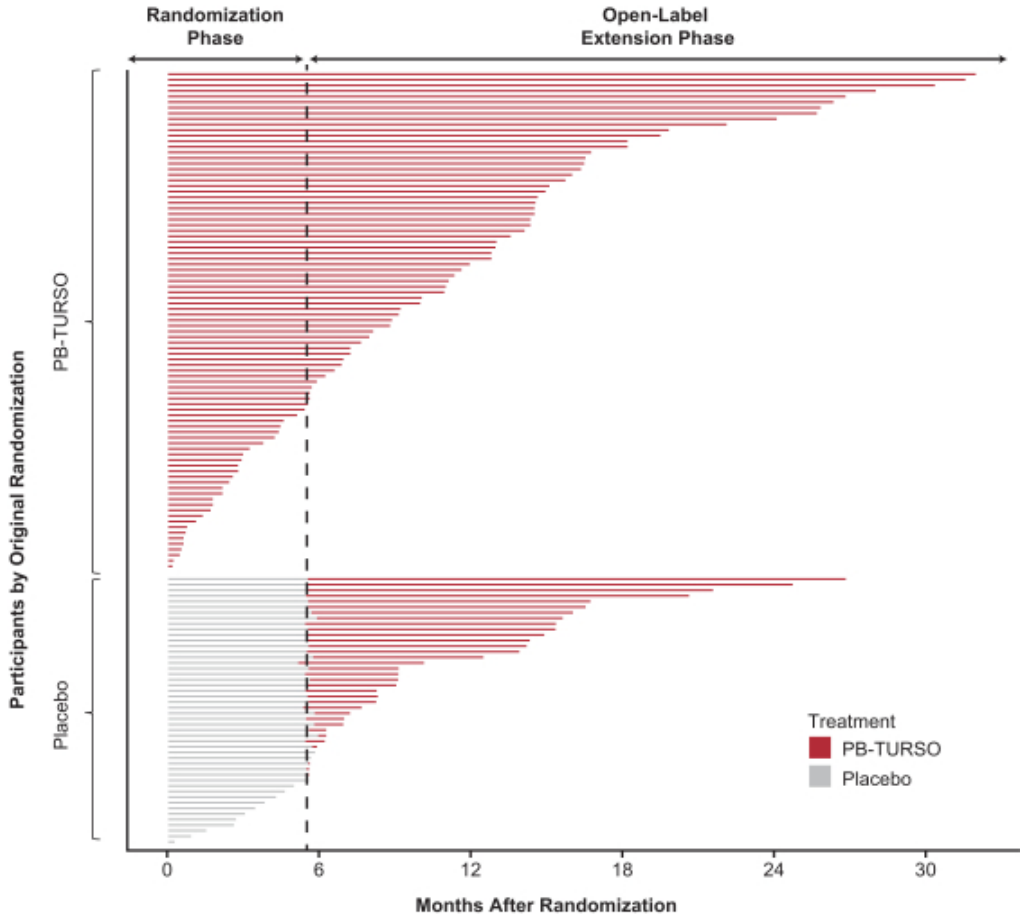
In June 2022, AMX0035 received marketing authorization with conditions as ALBRIOZA by Health Canada for the treatment of ALS. In September 2022, AMX0035 received approval by the FDA for the treatment of ALS in adults following the second virtual meeting of the FDA's Advisory Committee held on September 7, 2022. The Advisory Committee initially met on March 30, 2022 and voted 4 (yes) and 6 (no) on the question of whether the data from our randomized, controlled Phase 2 CENTAUR trial and OLE established a conclusion that AMX0035 is effective in the treatment of patients with ALS. At the second meeting of the Advisory Committee, the Advisory Committee voted 7 (yes) to 2 (no) in response to the question of whether available evidence of effectiveness is sufficient to support approval of AMX0035 for the treatment of ALS, taking into account the unmet need in ALS, the

status of the ongoing PHOENIX trial and the seriousness of ALS. At this meeting and the previous Advisory Committee meeting, the FDA presented concerns regarding choices of statistical models for the prespecified primarily analysis and the interpretability of the survival results. In both Advisory Committee meetings, we presented scientific arguments and analyses, together with experts in the field, which we believe sufficiently addressed these concerns. In describing its basis for approval, the FDA acknowledged this scientific debate but concluded that the data met the substantial evidence standard, noting the limitations of exploratory and post hoc analyses. As a result of the FDA's approval of AMX0035, we are preparing for a commercial launch of RELYVRIO in the United States. In Europe, our MAA also remains under review by CHMP. The review process is proceeding as expected, and we have received and responded to the Day 120 List of Questions following the June CHMP meeting. We intend to continue to work with EMA through its review process, and we expect a decision in the first half of 2023.

CENTAUR, Our Phase 2 Trial of AMX0035 in ALS

In September 2020, we published detailed results from the Phase 2, randomized, double-blind, placebo-controlled CENTAUR trial. The CENTAUR trial was conducted at 25 centers of the NEALS, and evaluated adult patients with ALS. Key inclusion criteria were definite ALS defined by the revised El Escorial criteria, which entails having various clinical signs and symptoms, defined as upper and lower motor neuron signs, in at least three defined body regions, less than 18 months from symptom onset and slow vital capacity, or SVC, greater than 60%. These criteria were chosen to select a homogenous, rapidly progressing patient population to potentially increase the likelihood of observing a treatment effect. Participants were allowed to continue on their selected standard of care, including treatment with riluzole and/or edaravone. Eligible participants (n=137) were randomized two-to-one to treatment with AMX0035, one sachet (each containing one gram of TURSO and three grams of PB) given once daily for the first three weeks, and if tolerated, the dose was then increased to twice-daily for the remainder of a 24 week treatment period, or matching placebo. Two participants did not have follow-up efficacy assessments and were not included in the efficacy population (modified intention to treat, or mITT, n=135). These two participants were included in the safety population (intention to treat, or ITT, n=137). Upon completion of the 24-week, parallel group phase of the trial, participants were eligible to enroll in the OLE trial in which all participants were followed up to 35 months while participants and physicians remained blinded to the original treatment group. Of participants completing the CENTAUR trial randomization phase, 92% elected to enroll in the OLE. The first

protocol of the OLE was completed in March 2021. Actual duration of patient treatments across the randomization phase and the OLE, both with the PB-TURSO combination and via placebo, are shown in the graphic below:

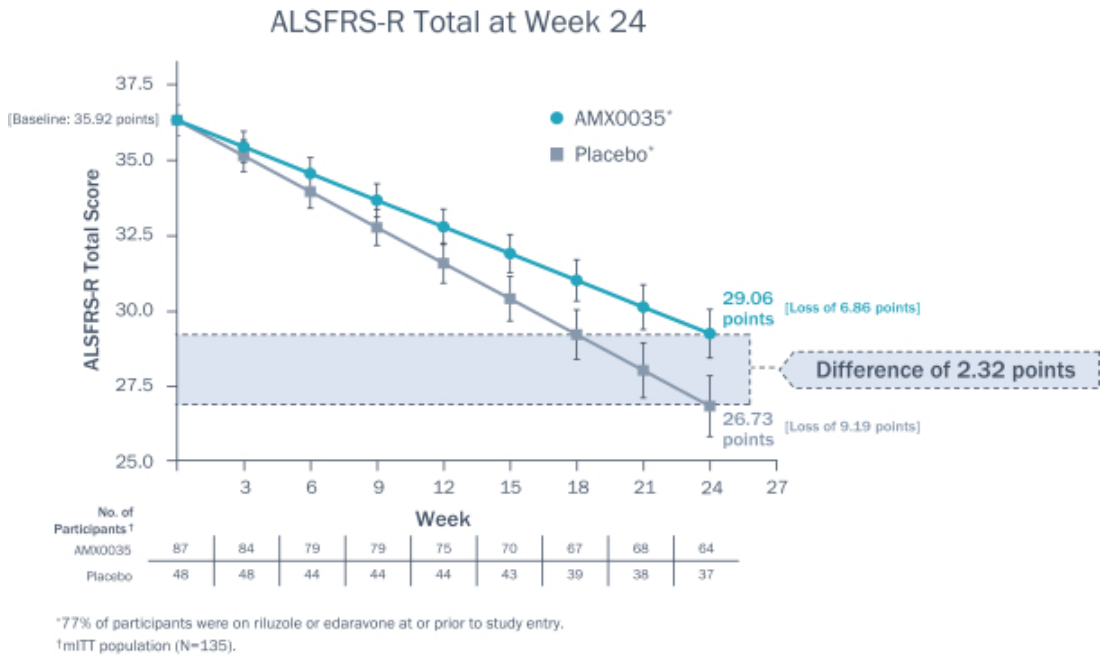


The primary efficacy outcome measure for the CENTAUR trial was the rate of decline in the ALSFRS-R total score. The ALSFRS-R scale is the most widely used ALS rating scale in ALS clinical practice and in ALS clinical trials. It measures patient's functional ability and is broken down into four domains: bulbar (which includes speech, salivation and swallowing), fine motor (which includes handwriting, cutting food/handling utensils, dressing and hygiene), gross motor (which includes turning in bed, walking, and climbing stairs) and breathing (which includes dyspnea, orthopnea and respiratory insufficiency). A decrease of one point on the ALSFRS-R scale can reflect severe limitations in a patient's independence, and a two-point increase on the ALSFRS-R scale would be associated with:

- eating successfully with some difficulty instead of needing a feeding tube;
- being short of breath only while walking instead of having difficulty breathing while sitting or lying down; and
- being able to dress independently instead of needing assistance.

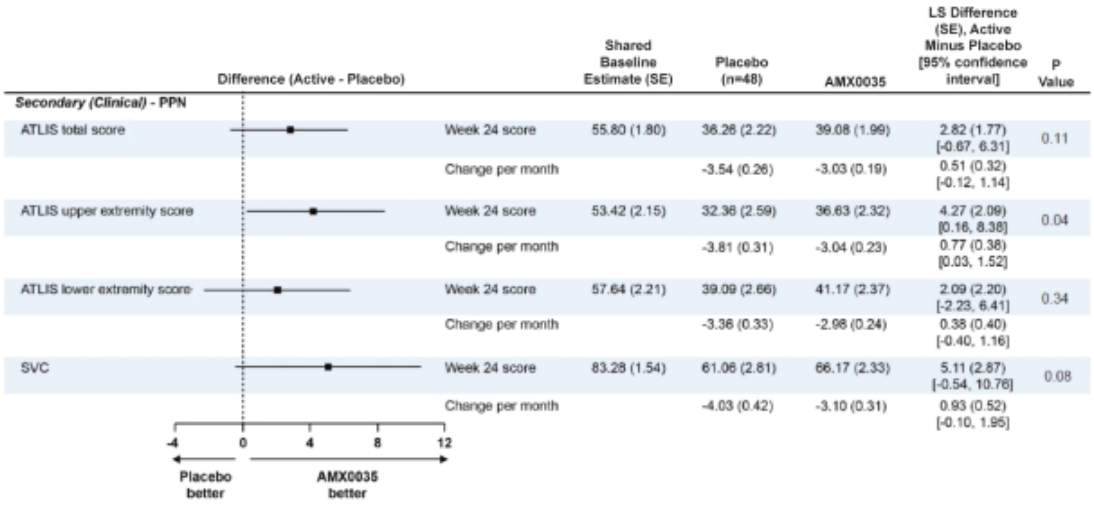
The CENTAUR trial met its primary endpoint with a statistically significant reduction in clinical decline among participants randomized to AMX0035 (n=87) compared to placebo (n=48) (p-value of

0.03) over 24 weeks. These results showed that patients receiving AMX0035 scored an average of 2.32 points higher on the ALSFRS-R as compared to patients receiving placebo after 24 weeks, a difference of 25%, as shown in the graph below. In a survey of ALS clinicians and researchers conducted and sponsored by NEALS, with the objective of determining what percentage reduction in ALSFRS-R would be considered clinically meaningful, a difference of greater than or equal to 20% in ALSFRS-R total score was considered clinically meaningful by a majority of clinicians and researchers surveyed.



Secondary efficacy outcomes measuring disease free progression were the decline in muscle strength as measured by Accurate Test of Limb Isometric Strength, or ATLIS, testing and lung function measured by SVC, both expressed as percent of predicted values and key study events including death, permanent ventilation and hospitalization. Neurofilament was also measured as a biologic measure. The analysis also indicated statistically significant preservation of upper limb strength with AMX0035 treatment measured on ATLIS (p=0.042), while the lower limb measure did not reach statistical significance (p=0.34). An average of these two, referred to as the total ATLIS score, trended in favor of AMX0035 (p=0.11). There was also a trend in favor of AMX0035 therapy preserving lung function as measured by SVC, with a numerical difference of 5.11% although this was not statistically significant (p=0.076). These efficacy data are summarized in the table below. In addition, a time-to-event analysis was conducted on key study events including death, permanent ventilation and hospitalization events over the 24-week randomized phase of the trial. Because enrollment of patients in the CENTAUR trial was limited to patients who, in the investigator's opinion, would be able to complete 6-month follow up, few events of this nature were expected during the initial, 24-week randomized phase of the trial. As a result, we observed a positive, but not statistically significant, difference between the trial's treatment and control groups during the 24-week randomized phase of the study. There was no statistically significant difference between the rate of decline in plasma levels

of the neurofilament observed in the trial's treatment and control groups during the 24-week randomized phase of the study.

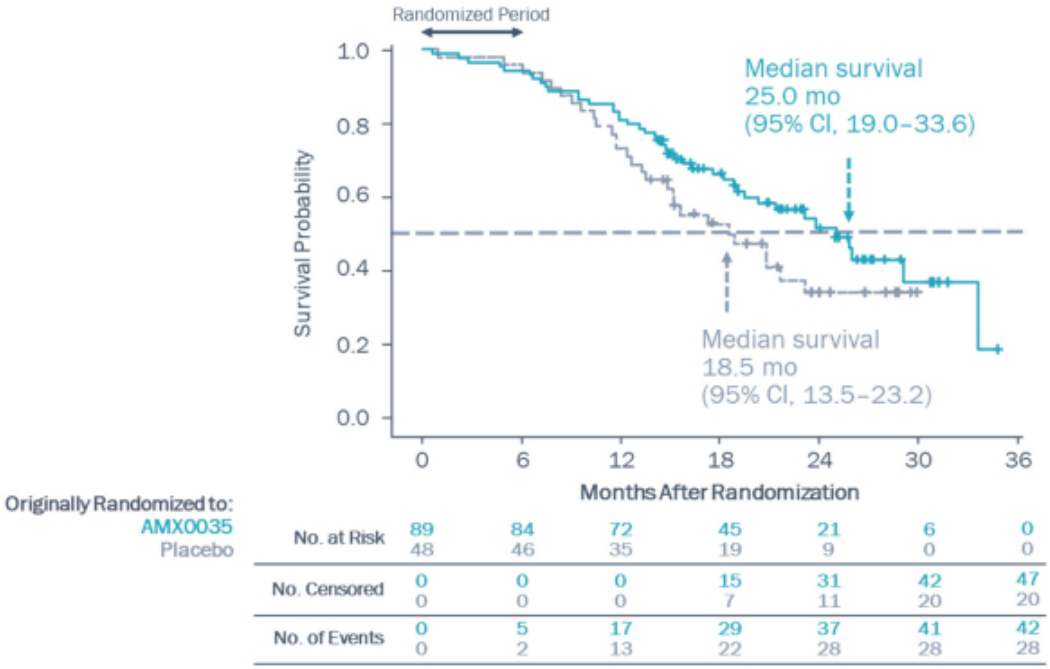


Phosphorylated neurofilament heavy chain was measured in plasma in the CENTAUR trial. There were no statistically significant differences between groups in this outcome. A limitation of this outcome is that it was measured in plasma rather than cerebrospinal fluid and the ultimate relevance of this outcome in ALS is still under investigation by the field.

It is important to note that most (77%) participants were receiving riluzole or edaravone at or before study entry, with a greater proportion receiving edaravone in the placebo group (50%) compared with the AMX0035 group (25%). Pre-specified analyses were conducted to determine if the use of concomitant medications impacted results. These analyses found that AMX0035's effect on the primary outcome was consistent regardless of baseline use of concomitant medications (riluzole and/or edaravone).

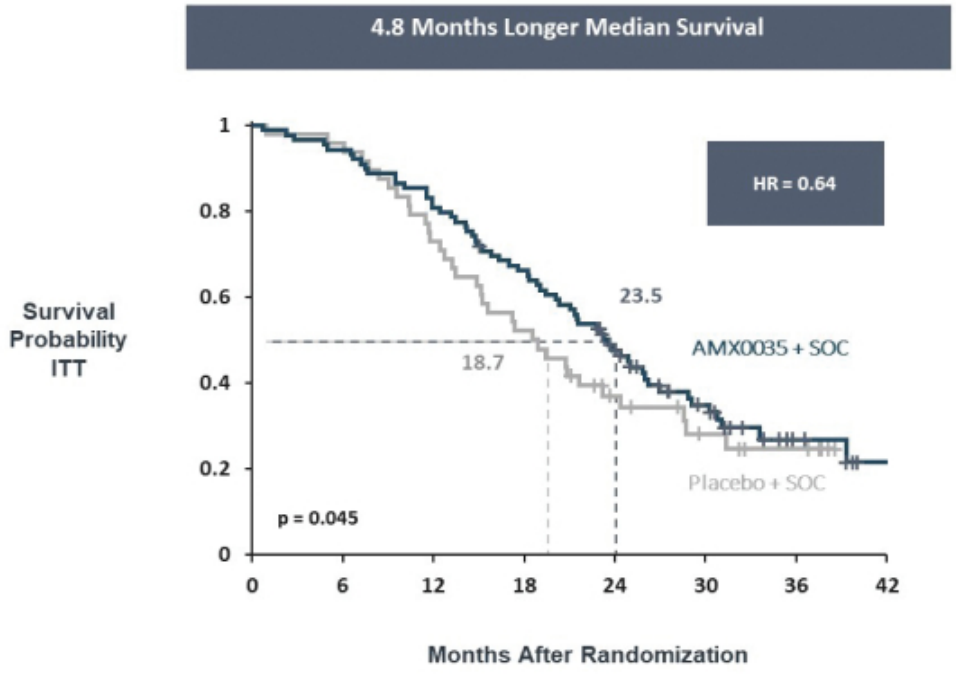
OS was analyzed for all subjects randomized in the CENTAUR trial (ITT analysis) and compared patients originally randomized to AMX0035 (n=89) with those randomized to placebo (n=48). In this post hoc analysis, the vital status of each participant was measured by a participant locating service which used sources such as the U.S. social security death index up to July 20, 2020 even if he or she did not continue into the OLE, stopped study drug, dropped out of the study or was lost to follow-up. Over the duration of follow up, the risk of death was 44% lower among those originally randomized to AMX0035 compared with those originally randomized to placebo (hazard ratio, or HR, of 0.56; a 95% confidence interval, or CI, ranging from 0.34 to 0.92; and a p-value of 0.023). Median survival duration was 25.0 months (95% CI of 19.0 to 33.6 months) in the group previously randomized to AMX0035 and 18.5 months (95% CI of 13.5 to 23.2 months) in the group previously randomized to placebo as seen in the graph below. As reflected in the data tables below, participants originally randomized to AMX0035 showed a longer median survival of 6.5 months (data cutoff July 20, 2020) and 4.8 months (data cutoff March 1, 2021) than those originally randomized to placebo. The FDA considers that the survival data available for RELYVRIO are exploratory and should be interpreted cautiously given the limitations of data collected outside of a controlled study.

Post Hoc Survival Analysis (July 20, 2020 Data Cutoff)



Originally Randomized to:							
AMX0035	No. at Risk	89	84	72	45	21	6	0
Placebo		48	46	35	19	9	0	0
	No. Censored	0	0	0	15	31	42	47
		0	0	0	7	11	20	20
	No. of Events	0	5	17	29	37	41	42
		0	2	13	22	28	28	28

Post Hoc Survival Analysis (March 1, 2021 Data Cutoff)



We also conducted three additional post hoc analyses of AMX0035 survival data which we provided as confirmatory evidence of our findings in the CENTAUR trial and which were provided to the FDA in support of our marketing application for AMX0035. These analyses consisted of the following: a new analysis utilizing a statistical method to adjust for the effect of treatment crossover; a new analysis comparing observed survival in the CENTAUR trial to predicted survival using the European Network for the Cure of ALS survival prediction model derived from an ALS natural history database; and a new analysis comparing observed survival from the CENTAUR treatment group to survival of matched treatment nalve participants from historical clinical trials of ALS.

We also performed sensitivity analyses on the CENTAUR trial data, including a joint rank test, which showed no bias in the estimate of the primary functional outcome by loss of data due to participant death. Sensitivity analyses were also performed to account for missing data and death or death-equivalent events. These sensitivity analyses yielded results similar to the primary analysis. In sensitivity analyses designed to account for concomitant medication use, the treatment effect size was consistent between primary analysis and analyses corrected for concomitant medication use.

AMX0035 was generally well-tolerated with an adverse event rate substantially similar to placebo. Adverse events, or AEs, were reported in 97% (86 out of 89) of participants receiving AMX0035 and 96% (46 out of 48) of participants receiving placebo, with the nature of the AEs being substantially similar in both groups. The most commonly occurring (greater than or equal to 5%) AEs in either treatment group are shown in the table below. Because of the progressive neurodegenerative nature of ALS, many of these AEs (*e.g.*, muscle weakness, falls, dyspnea, fatigue) were likely attributable to the underlying ALS disease. Events occurring in greater than or equal to 5% of patients in either treatment group and more frequently (greater than or equal to 2% of patients) in patients who received AMX0035 compared with those who received placebo were predominantly gastrointestinal events, which were non-serious and mostly mild in intensity and declined considerably in occurrence after three weeks on treatment. A total of 19% of the patients in the AMX0035 treatment group and 8% of the patients in the placebo group discontinued their participation in the trial due to AEs.

The most commonly occurring AEs were diarrhea, abdominal pain, nausea, upper respiratory tract infection, constipation, muscular weakness, fall, headache, dizziness and viral upper respiratory tract infection. Health Canada also noted the occurrence of hypersalivation. Consistent with the known safety profile of TURSO, diarrhea and nausea occurred more frequently in patients who received AMX0035 compared with those who received placebo. In contrast, muscular weakness, fall, constipation and headache occurred more frequently in patients who received placebo. The observed AEs from the CENTAUR trial are summarized in the chart below.

Adverse Events (AEs)[1] Occurring in ≥5% of Patients in either Treatment Group (Safety Population, n=137)

MedDRA System Organ Class Preferred Term	Placebo + SOC (n=48)	AMX0035 + SOC (n=89)	Overall (n=137)
Gastrointestinal disorders	29 (60.4%)	60 (67.4%)	89 (65.0%)
Musculoskeletal and connective tissue disorders	21 (43.8%)	38 (42.7%)	59 (43.1%)
Injury, poisoning and procedural complications	23 (47.9%)	35 (39.3%)	58 (42.3%)
Nervous system disorders	19 (39.6%)	33 (37.1%)	52 (38.0%)
Infections and infestations	21 (43.8%)	28 (31.5%)	49 (35.8%)
Respiratory, thoracic and mediastinal disorders	10 (20.8%)	29 (32.6%)	39 (28.5%)
Investigations	10 (20.8%)	26 (29.2%)	36 (26.3%)
General disorders and administration site conditions	13 (27.1%)	20 (22.5%)	33 (24.1%)
Skin and subcutaneous tissue disorders	8 (16.7%)	16 (18.0%)	24 (17.5%)
Psychiatric disorders	9 (18.8%)	14 (15.7%)	23 (16.8%)
Renal and urinary disorders	8 (16.7%)	10 (11.2%)	18 (13.1%)
Metabolism and nutrition disorders	4 (8.3%)	10 (11.2%)	14 (10.2%)
Cardiac disorders	0 (0.0%)	7 (7.9%)	7 (5.1%)
Eye disorders	1 (2.1%)	5 (5.6%)	6 (4.4%)

(1) Includes serious adverse events.

SAEs occurred less frequently in the AMX0035 treatment group (12.4% of patients) compared with the placebo treatment group (18.8% of patients). This difference was largely driven by a higher incidence of respiratory events, including respiratory failure in the placebo treatment group (8.3% of patients), compared with the AMX0035 treatment group (3.4% of patients). ALS disease progression often leads to respiratory failure, and it is the most common cause of death in patients with ALS. The observed SAEs from the CENTAUR trial are summarized in the chart below.

Serious Adverse Events (SAEs)

	AMX0035 + SOC (n=89)	Placebo + SOC (n=48)	Overall (N=137)
At least 1 serious AE – n (%)	11 (12)	9 (19)	20 (15)
Number of distinct events	14	10	24
At least 1 fatal AE – n (%)	5 (6)	2 (4)	7 (5)
At least 1 serious AE considered related to treatment – n (%)	1 (1)	1 (2)	2 (2)
Drug withdrawn due to serious AE – n (%)	1 (1)	3 (6)	4 (3)
Due to serious AE considered related	0	0	0
Due to serious AE considered unrelated	1 (1)	3 (6)	4 (3)

Overall, a total of seven patients (two (4% of patients) who received placebo and five (6% of total patients) who received AMX0035) died during the conduct of the 24-week, double-blind study. None of the deaths was considered by the investigator to be related to AMX0035. Consistent with the most common cause of death in patients with ALS, the majority (four of seven patients) of deaths during the study were from respiratory failure (two patients in each group). Other causes of death (in the AMX0035 group) included post-extubational supraglottic and infraglottic aspiration (attributed to aspiration pneumonia), diverticulitis, and subdural hematoma secondary to a fall. Death equivalent was defined as either tracheostomy or permanent assisted ventilation, or PAV. PAV was defined as more than 22 hours daily of non-invasive mechanical ventilation for more than one week (seven days). One patient in the placebo group (2% of patients) and none in the AMX0035 group experienced a death equivalent event (i.e., tracheostomy) during the 24-week study.

We believe AMX0035 is the first drug candidate in ALS to demonstrate a statistically significant benefit both in function as measured by a prespecified mean rate change in ALSFRS-R and in a longer-term analysis of OS, both important outcomes for people with ALS. In summary, patients in our CENTAUR trial showed a statistically significant improvement in function and a statistically significant improvement in overall survival and AMX0035 was shown to be generally well-tolerated.

Clinical Development Plan of AMX0035 in ALS

We submitted an NDA to the FDA in the fourth quarter of 2021 and, on September 29, 2022, the FDA approved AMX0035 as RELYVRIO for the treatment of ALS in adults. We submitted an NDS for AMX0035 for the treatment of ALS to Health Canada in the second quarter of 2021, and in June 2022, AMX0035 received marketing authorization with conditions as ALBRIOZA in Canada. We also submitted an MAA for approval of AMX0035 for the treatment of ALS to the EMA CHMP in the first quarter of 2022, and we expect a decision in the first half of 2023.

In November 2021, we initiated our global 48-week PHOENIX, randomized, double-blind, placebo-controlled trial at clinical sites in the United States and Europe. Enrollment in this trial was

completed in March 2022 in the United States and remains ongoing in Europe. We anticipate topline results from the PHOENIX trial in 2024. The primary endpoints in our PHOENIX trial will be a composite measure of survival and ALSFRS-R total score progression over 48 weeks and safety and tolerability over 48 weeks. The secondary endpoints of our PHOENIX trial will be SVC, ALSAQ-40 (a questionnaire which provides a subjective health measure to specifically assess quality of life for patients with ALS), EQ5D-5L (a standard qualify of life measure), decline in King's (a staging measurement in ALS based on the number of central nervous system (CNS) regions involved and requirement for gastrostomy or noninvasive ventilation) and MiToS stages (a functional staging measure that can be derived prospectively from the ALSFRS-R subscore using standard methods), ventilation free survival, and long-term survival. Key inclusion criteria for the PHOENIX trial include ALS patients with clinically definite or clinically probable ALS by El Escorial criteria (2-4 body areas with clinical signs consistent with ALS), <24 months from symptom onset, SVC >55%, and riluzole/edaravone use permitted. In July 2022, we announced a planned OLE for the PHOENIX trial and in March 2022, we announced the launch of a United States EAP that the FDA authorized for people with ALS who meet certain eligibility criteria for participation. The EAP will be wound down alongside the commercial launch of RELYVRIO in the United States. The PHOENIX trial is designed to provide further data evaluating the safety and efficacy of AMX0035 for the treatment of ALS to further support our global regulatory efforts. Because marketing approvals we have obtained may be limited, subject to restrictions or post-approval requirements, we may need to provide post-marketing support in those jurisdictions. For example, as part of our approval for RELYVRIO in the United States, we have post-marketing requirements to conduct carcinogenicity studies in mice and rats, drug-drug interaction studies, and studies in patients with kidney or liver impairment. In addition, one of the conditions of the marketing authorization in Canada for AMX0035 (ALBRIOZA) for the treatment of ALS is the provision of data from our ongoing PHOENIX trial and other additional planned or ongoing studies. The outcomes of the PHOENIX trial and any potential withdrawal could have a material effect on our business.

Any additional regulatory approvals we may receive may be limited or subject to restrictions or postapproval commitments.

AMX0035 for the Treatment of Other Potential Indications

Based on our extensive understanding of disease pathways, we believe AMX0035 may provide benefit across multiple diseases, including AD, Wolfram syndrome, Parkinson's Disease, Huntington's Disease, Progressive Supranuclear Palsy, Multi-System Atrophy, primary lateral sclerosis, ischemic stroke, MS, Friedreich's ataxia, Leigh's syndrome and Leber's hereditary optic neuropathy.

We are prioritizing these conditions on an indication-by-indication basis, based on the strength of the data supporting AMX0035's potential, including the data from our recently completed PEGASUS trial; the urgency of the unmet need; the practicality of conducting clinical trials in these conditions; the efficiency of clinical development activities; and the commercial potential. For some of these indications, given the data already produced by the company on AMX0035, we believe it may be possible to move directly into Phase 3 evaluations of safety and efficacy which could allow for a rapid development pathway. We will prioritize those indications which we believe have the greatest chance of providing patients with benefit and the most rapid pathway to market.

We continue to evaluate plans to explore the use of AMX0035 in patients with Wolfram syndrome. Additionally, we are also evaluating plans to submit potential additional INDs for AMX0035 in other indications in the 2022.

Clinical Development of AMX0035 for AD

We designed our multicenter, randomized, double-blind, placebo-controlled Phase 2 PEGASUS trial with AD experts to evaluate the safety, tolerability and activity of AMX0035 in patients with late mild cognitive impairment, or MCI, or early-to-moderate dementia. The PEGASUS trial was designed to have broad entry criteria to include participants at different stages of AD to allow us to assess the biological effect of AMX0035 across the spectrum of disease and determine if there are any patients who might see a greater benefit from therapy. Eligible participants (n=95), adults ages 55 to 89 years old, were randomized three-to-two to treatment with AMX0035, one sachet (each containing one gram of TURSO and three grams of PB) given twice-daily over 24 weeks, or matching placebo.

The primary investigator for the PEGASUS trial, Dr. Steven Arnold, presented topline results from the PEGASUS trial at the Clinical Trials on Alzheimer's Disease conference, or CTAD, which was held during the fourth quarter of 2021. Based on these topline results, AMX0035 was generally well-tolerated with approximately 80% of patients completing dosing in the trial in the AMX0035 arm. Safety results are depicted in the figure below. As in the CENTAUR trial, a higher percentage of patients in the AMX0035 arm had gastrointestinal adverse events. However, no SAEs were attributed to AMX0035 in the PEGASUS trial.

	PB/TURSO (n=51)	Placebo (n=44)	Overall (N=95)
TEAEs, No. (%)	34 (67)	26 (59)	60 (63)
GI disorders	20 (39.2)	6 (13.6)	26 (27.3)
Drug withdrawn due to AE, No. (%)	4 (8)	1 (2)	5 (5)
Serious TEAEs	3 (6)	1 (2)	4 (4)
Treatment-related serious	0	0	0
Deaths	0	0	0

The 6-month trial was not powered to evaluate differences between the AMX0035 and placebo arms in cognition, function or imaging.

The primary endpoint of the trial was to compare the safety and tolerability of a fixed-dose combination of AMX0035 versus placebo in subjects with MCI (high or intermediate likelihood due to AD) or dementia due to AD over a 24-week treatment period.

The secondary endpoints of the trial were to:

- determine the effects of AMX0035 treatment on whole brain and regional brain atrophy, as assessed by volumetric MRI;
- assess the impact of AMX0035 treatment on clinical symptoms as measured by the Alzheimer's Disease Assessment Scale-Cognitive Subscale, or ADAS-Cog, the Dementia Severity Rating Scale, or DSRS, and the FAQ;
- assess the effect of AMX0035 treatment on measures of neuropsychiatric symptoms, as assessed by the Neuropsychiatric Inventory Questionnaire; and
- measure the effects of AMX0035 treatment on functional MRI measures including connectivity with resting state Blood Oxygenation Level Dependent imaging.

Additionally, the trial evaluated differences between the AMX0035 and placebo arms as measured by GST, a newly developed composite outcome of cognitive, functional, and imaging

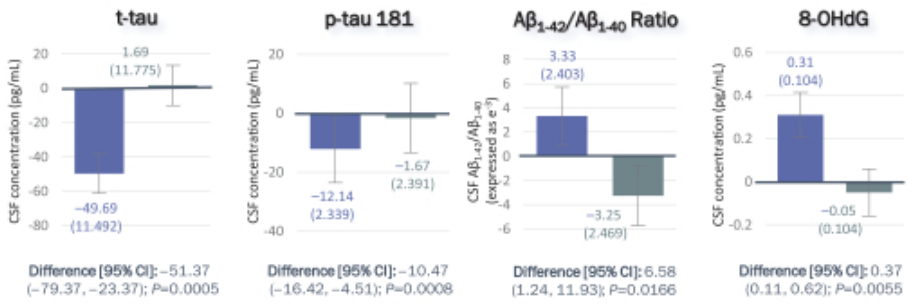
measures named the Global Statistical Test, or GST, over the 24-week treatment period. The GST is a combination of three change-from-baseline to end-of-study endpoints: Cognition (Modified Alzheimer's Disease Composite Score, or MADCOMS), Function (Functional Activities Questionnaire, or FAQ) and Total Hippocampal Brain Volume (Magnetic Resonance Imaging, or MRI). The GST is calculated for each subject as a mean score across the above three component endpoints for each subject in the trial. This mean score was then analyzed as an efficacy variable.

Finally, the exploratory objectives of the trial were to measure the effect of AMX0035 treatment on biochemical markers of amyloid-ß1-42, amyloid-ß1-40, total tau (t-tau), tau phosphorylated at threonine 181 (ptau 181), neuronal injury markers, mitochondrial redox and function markers, and neuroinflammation, as assessed in cerebrospinal fluid (CSF) from all volunteers.

While functional MRI analyses remain ongoing, no significant differences between dosing groups were observed for any efficacy endpoints in this trial (p>0.05). Key efficacy results are included in the figure below:

Outcome, LS mean (SE)	Week 24 change from baseline		Difference	Difference 95% Confidence index
	PB/TURSO	Placebo		
GST	0.24 (0.06)	0.17 (0.06)	0.07 (0.08)	(–0.09, 0.23)
MADCOMS	0.91 (0.29)	1.03 (0.30)	–0.12 (0.41)	(–0.93, 0.69)
FAQ	3.22 (0.73)	1.71 (0.79)	1.50 (0.98)	(–0.44, 3.45)
Hippocampal volume[a], mm	-59.6 (23.6)	-53.5 (24.6)	-6.17 (34.5)	(-74.8, 62.4)

[a] Hippocampal volume component is based on standard ADNI MRI algorithm but was also assessed via additional MRI algorithms included in the Statistical Analysis Plan and yielded similar findings.



Significant impacts on multiple biomarkers of interest in AD were observed in the trial. In CSF, the AMX0035-group showed significant reductions of tau protein 181 (p<0.001) and phosphorylated tau protein (p<0.001) compared with the placebo group, modulation of the amyloid beta 42/40 ratio (p<0.05) and increase of 8-hydroxy-2' -deoxyguanosine, (p<0.01). These topline results from the PEGASUS trial are still subject to further audit and verification procedures and additional biomarker results are not yet available.

We believe the biomarker and imaging outcomes from the trial have substantially improved and will continue to inform our knowledge of the impact of AMX0035 on the neurodegenerative pathways

relevant to the progression of AD, which have been and will be informative as we continue clinical development of AMX0035 in AD and other potential indications. We believe these insights will help us to examine any effects of AMX0035 on AD's progression, which could inform future work in AD as well as clinical trial design for other indications. We will continue to evaluate these data and discuss the results of the PEGASUS trial with scientific advisors as we consider potential next steps for the development of AMX0035 for the treatment of AD within our clinical development strategy.

Clinical Development of AMX0035 for Wolfram Syndrome

Wolfram syndrome is a rare, pediatric, life-threatening disease thought to be caused by variants in the Wolfram syndrome WFS1 gene, or WFS1, and, in a small fraction of patients, pathogenic variants in the CDGSH iron sulfur domain protein 2 CISD2 gene, or CISD2. Wolfram syndrome results in deafness, blindness, ataxia, neurodegeneration and ultimately death. There are currently no drugs approved for Wolfram syndrome.

Wolfram syndrome appears to be a disease of ER stress. WFS1 encodes and produces the vital wolframin protein, which appears to be involved in ER regulatory processes. WFS1 deficiency leads to chronic ER stress and the UPR. WFS1 also negatively regulates activating transcription factor 6 (ATF6), a UPR molecule, resulting in cell death. Furthermore, a recent study suggested that WFS1 impacts mitochondrial function by transporting Ca2+ from the ER to the mitochondria through the MAM.

AMX0035 targets pathways central to Wolfram syndrome, including the UPR, and has shown beneficial effects in a variety of models of Wolfram syndrome, including cellular models and patient-derived cell line models. For example, to test the potential effects of AMX0035 in the modulation of ER stress in the context of Wolfram syndrome, the effects of PB, TURSO and AMX0035 were tested in an *in vitro* model of wild-type and WFS1-deficient pancreatic beta cell lines. In these cells, when compared with the control group, only AMX0035, but not PB or TURSO alone, was able to significantly prevent tunicamycin-induced cell death in WFS1-deficient pancreatic beta cell lines as measured by caspase 3 / 7 activity (p equal to 0.017). Additionally, a combination of PB and TURSO was studied *in vitro* in human patient-derived neural progenitor cells harboring mutations in WFS1, which cause Wolfram Syndrome. Both PB and TURSO, when applied alone, were observed to inhibit cell death in each of three different human cell lines as compared to control conditions, and the application of PB and TURSO in combination was observed to result in significantly lower levels of cell death in three separate patient-derived Wolfram syndrome cell lines differentiated to produce patient-derived neural progenitor cells, as compared to either the control or treatment with PB or TURSO alone. In each of these models of Wolfram syndrome, use of AMX0035 was observed to have significant synergistic effects lowering cell death as compared to either the control group or treatment with PB or TURSO alone. For these reasons, we believe AMX0035 is a promising clinical candidate for Wolfram syndrome and we are continuing to evaluate plans to explore the use of AMX0035 in patients with this disease.

Patient Advocacy

The patient advocacy landscapes for ALS, AD and other neurodegenerative diseases are large, and encompass groups at the international, multiregional and country-specific level. We have built strong medical and commercial relationships at the international level, with our current emphasis being on ALS advocacy groups in the United States, Canada and Europe. We plan to engage country-specific groups in Europe based on clinical trial results, as well as our medical and commercial priorities.

Working with key advocacy groups is critical to our mission, as patients are at the center of everything we do. This starts with transparent communication and awareness about our science, data

and development plans. We seek ensure that these advocacy groups are informed and able to answer questions from their members about PB, TURSO and AMX0035.

We engaged with patient advocacy groups in the United States and Europe for feedback on the design of our ongoing global Phase 3 PHOENIX trial of AMX0035 for the treatment of ALS, which is emblematic of the partnerships we are building with the community. In addition, we treat patient advocacy groups as important stakeholders as we address access to AMX0035 outside ongoing clinical trials, such as expanded access and compassionate use programs. We have sought and will continue to seek guidance and insights from as many patient advocacy groups as possible and have plans in place to engage groups on an ongoing basis. These groups have also reviewed messaging and press releases from the company to ensure they take into account the patient voice.

Commercialization

We believe the global commercial opportunity for AMX0035 in ALS is driven by its being the first and only treatment for ALS of which we are aware that potentially provides a combination of longer retention of function, improved survival, a generally well-tolerated side effect profile and convenient oral administration. AMX0035 has been shown to have a significant impact on clinically meaningful endpoints, including reducing time to first hospitalization and permanent ventilation in ALS patients. AMX0035 is also being considered for other neurodegenerative disorders.

ALS is a rare disease, but public sources estimate that ALS affects at least 200,000 people worldwide, and we estimate that there are approximately 29,000 ALS patients in the United States. More than 30,000 ALS patients are estimated to be living with ALS in the EU and the United Kingdom and about 3,000 ALS patients are estimated to be living with ALS in Canada. In the United States, ALS is treated by neurologists at certified ALS Centers or by other neurologists. In Canada and in Europe, most ALS patients are treated at ALS Centers. The vast majority of people with ALS (over 90%) have sporadic disease, showing no clear family history. Most people who develop ALS are between the ages of 40 and 70, with a median age of 55 at the time of diagnosis. However, cases of the disease do occur in people in their twenties and thirties. People with ALS spend approximately one-third of their disease course searching for a diagnosis and, once diagnosed, there are few approved therapies available. ALS is a relentlessly progressive and highly heterogenous disease that arises from multiple mechanistic underpinnings, leading patients to experience variable onset, persistent progression, and shortened survival. The disease remains universally fatal with median survival of less than three years from symptom onset and less than two years from diagnosis.

We have conducted market research with physicians, patients, caregivers, nurses, and payors in the United States, Western Europe and Canada to understand the unmet need and potential of AMX0035 in ALS. Clinicians universally report dissatisfaction with currently approved therapies and state the need for additional options for their ALS patients. When shown a target product profile for AMX0035, the majority of ALS specialists and neurologists with whom we spoke are open to utilizing it in early-to-mid-stage patients, with some also stating the potential for use in late-stage patients.

We submitted an NDA to the FDA in the fourth quarter of 2021 and, on September 29, 2022, the FDA approved AMX0035 as RELYVRIO for the treatment of ALS in adults. We submitted an NDS for AMX0035 in ALS with Health Canada in the second quarter of 2021, which received marketing authorization with conditions as ALBRIOZA by Health Canada in June 2022. We also submitted an MAA in Europe in the first quarter of 2022, and we expect a decision in the first half of 2023. We also plan to discuss AMX0035 with other health authorities around the world to determine the most appropriate path forward in their respective territories. We also initiated our ongoing Phase 3 PHOENIX trial in the fourth quarter of 2021 to further support the safety and efficacy of AMX0035 for the treatment of ALS and our global regulatory efforts.

Our pre-launch activities in other key jurisdictions include building awareness of and education regarding the disease severity and pathophysiology of ALS, increasing understanding of the clinical impact of a change in a patient's ALSFRS-R score, and building general awareness of our company through active participation in key neurology conferences, patient meetings, partnerships with patient advocacy groups, targeted omnichannel initiatives and payor education in each of the key territories. In addition, we intend to continue to pursue an active public relations strategy. For example, the double-blind results of our CENTAUR trial have already been published in the *New England Journal of Medicine*, while the long-term survival study results appeared in the *Journal of Muscle & Nerve*.

Our initial plans are to continue to build out our commercial operations in the United States and Canada and to build commercial operations in Europe to be prepared for potential approval of AMX0035 in the EU. There are approximately 186 ALS Association certified, recognized, or affiliated centers in the United States, 17 Canadian ALS Research Network Clinics in Canada, and less than 11 ALS Centers of Excellence per country in the major EU countries, which we plan to target with a specialty key account management team. We will continue to evaluate market entry opportunities beyond these geographies either on our own or with a partner.

Competition

Overview

The biotechnology and pharmaceutical industries are characterized by rapid technological advancement, significant competition and an emphasis on proprietary products. We face potential competition from many different sources, including major and specialty pharmaceutical and biotechnology companies, academic research institutions, governmental agencies and public and private research institutions. Any product candidates that we successfully develop and commercialize, including AMX0035, may compete with current therapies and new therapies that may become available in the future. We believe that the key competitive factors affecting the success of any of our product candidates will include efficacy, safety profile, dosing, cost, effectiveness of promotional support and intellectual property protection.

Many of our competitors, either alone or with their collaboration partners, have significantly greater financial resources and expertise in research and development, preclinical testing, clinical trials, manufacturing, and marketing than we do. Future collaborations and mergers and acquisitions may result in further resource concentration among a smaller number of competitors. Our competitors also may obtain FDA or other regulatory approval for their products more rapidly than we may obtain approval for ours, which could result in our competitors establishing a strong market position before we are able to enter the market or make our development more complicated. These competitors may also vie for a similar pool of qualified scientific and management talent, sites and patient populations for clinical trials, as well as for technologies complementary to, or necessary for, our programs.

AMX0035 for the Treatment of ALS

Prior to AMX0035, in the past 30 years, only two product candidates had been approved for the treatment of ALS in the United States and Canada, and only one product candidate had been approved for the treatment of ALS in Europe. These two previously approved drugs, riluzole (marketed under the name Rilutek) and edaravone (marketed under name Radicava in the United States and Radicut in Japan), are often used in combination. We expect that further therapies and drugs which may be approved in the future will also be used in combination with existing drugs, absent incompatibility or other barriers to combination. For example, in May 2022, Mitsubishi Tanabe Pharma America, Inc. announced that the FDA has approved an oral alternative to Radicava for the treatment of ALS.

We believe there are currently no other approved treatments for ALS which show both a functional and survival benefit for ALS patients. Patients with ALS are commonly treated with riluzole and edaravone, which are palliative in nature. We believe that these two drugs will not directly compete with AMX0035, as we believe that successful treatment will likely require concurrent targeting of multiple key neuron death pathways. However, we are aware of several product candidates in clinical development that may compete with AMX0035 for the treatment of ALS, including product candidates being developed by Biogen, Biohaven and UCB. To date, we believe none of the above product candidates has shown statistically significant clinical results on prespecified outcomes in any prior trials. We anticipate that ALS will continue to be an area of research in the healthcare sector and that drug candidates will continue to be developed and studied for treatment of the disease.

While we anticipate the general practice in ALS will continue to be the combination of approved agents, our commercial potential could be reduced or eliminated if our competitors develop and commercialize products that are safer, more effective, have fewer or less severe side effects, are more convenient or are less expensive than products that we may develop. In addition, we are aware of one ongoing clinical study in Europe which is evaluating the effects on ALS of TURSO, one of the two components in AMX0035. The outcome of this study could have an impact on the commercial potential of AMX0035.

A large number of trials and studies are ongoing in the many additional neurodegenerative diseases which we are evaluating for future clinical work for AMX0035 including AD, Wolfram syndrome, Parkinson's Disease, Huntington's Disease, Progressive Supranuclear Palsy, Multi-System Atrophy, primary lateral sclerosis, ischemic stroke, MS, Friedreich's ataxia, Leigh's syndrome and Leber's hereditary optic neuropathy. Some of these diseases also have therapies approved which impact disease progression. The competitive landscape in these diseases will affect the potential opportunity for AMX0035.

Supply and Manufacturing

We rely, and expect to continue to rely for the foreseeable future, on third-party contract manufacturing organizations, or CMOs, for the production of AMX0035 in compliance with current Good Manufacturing Process, or cGMP, requirements, for commercial supply as well as for use in clinical trials under the guidance of members of our organization. For AMX0035, we utilize two active pharmaceutical ingredients, or APIs, PB and TURSO, which are manufactured and released to us from third-party manufacturers. We have long term, single-source supply agreements in place for these APIs, including authorization to reference the relevant drug master files with these vendors. We have single-source arrangements for the manufacturing and packaging of bulk drug at established CMOs for commercial supply and for our clinical trials. We manufacture AMX0035 bulk drug at Patheon Inc., or Patheon, a subsidiary of Thermo Fisher Scientific Inc., located in Whitby, Canada. We have scaled-up our third-party manufacturing capabilities in a manner that we believe will support commercial demand and have entered into agreements covering the manufacture of AMX0035 through 2025. Following manufacturing, bulk drug is then sent to PCI Pharma Services in Rockford, IL, for primary and secondary packaging. As we look to markets outside of the United States, we plan to add additional manufacturing and distribution sites to support local market demand. In addition, we utilize a risk-based approach to bring on additional manufacturing sites as needed.

We have built a team of pharmaceutical industry technical operations leaders. This team has significant technical, manufacturing, analytical, quality, regulatory, including cGMP, and project management experience to oversee our third-party manufacturers and maintain quality and regulatory compliance. In addition, members of this team have been involved in commercializing and launching rare disease products across the globe. We plan to continue to build our technical operations team as we move towards commercialization.

Manufacturing Agreement with Patheon

In November 2019, we entered into a master manufacturing services agreement, or the Manufacturing Agreement, with Patheon, pursuant to which Patheon provides cGMP manufacturing, quality control, quality assurance, stability testing, packaging and related services to us. We have executed an initial product agreement under the Manufacturing Agreement, which covers AMX0035. The Manufacturing Agreement has an initial term ending in December 2025, and will automatically renew if there is a product agreement in effect, with the renewal period ending upon the termination of the last product agreement in effect. The product agreement covering AMX0035 has an initial term ending in December 2025 and automatically renews for successive terms of two years, unless either party gives prior notice of its intent not to review.

We may terminate the Manufacturing Agreement or any product agreement: upon 30 days' prior written notice if any government or regulatory authority permanently prevents us from selling AMX0035 in Canada, the EU or the United States, if approved, or upon 90 days' prior written notice, if we no longer intend to order manufacturing services due to AMX035's discontinuance in the market. Patheon may terminate any product agreement under the Manufacturing Agreement upon 30 days' prior written notice, if we project zero volume for twelve successive months during the term of such product agreement. Additionally, Patheon may terminate the Manufacturing Agreement or any product agreement if payment in full of any overdue, undisputed invoice is not received within 30 days of Patheon's suspension of manufacturing services for nonpayment or, in certain circumstances, upon nine months' prior written notice if we assign any rights under the Manufacturing Agreement or a product agreement. In addition, either party may terminate the Manufacturing Agreement or any product agreement for cause, including the other party's uncured material breach and upon written notice, in the case of the other party's insolvency or bankruptcy.

Supply Agreement with CU Chemie

In October 2019, we entered into a supply agreement with CU Chemie Uetikon, GmbH, or CU Chemie, a division of the SEQENS group, pursuant to which CU Chemie agreed to supply to us, on a non-exclusive basis, bulk drug substance of PB, for use in the manufacture of AMX0035. The agreement has an initial term of five years and will automatically renew for successive terms of two years, unless earlier terminated. After the expiration of the initial term, either party may terminate the agreement for convenience upon three months' prior written notice. Additionally, either party may terminate the agreement in the case of the other party's uncured material breach or upon the insolvency or bankruptcy of the other party.

Supply Agreement with ICE

In December 2019, we entered into a supply agreement with Prodotti Chimici e Alimentari S.p.A. (now ICE S.p.A., or ICE), as amended in July 2021, pursuant to which ICE agreed to supply to us, on a non-exclusive basis, bulk drug substance of TURSO, which we use in the manufacture of AMX0035. The agreement has an initial term of five years and will automatically renew for successive terms of five years, unless earlier terminated. ICE may terminate the agreement upon three months written notice. Additionally, either party may terminate the agreement in the case of the other party's insolvency or bankruptcy, or in case of the other party's uncured breach.

Intellectual Property

Intellectual property is of vital importance in our field and to pharmaceuticals generally. Our commercial success depends in part on our ability to obtain intellectual property that protects AMX0035 and its uses, and any future product candidates. We seek to protect and enhance

proprietary technology, inventions and improvements that are commercially important to the development of our business and AMX0035, in particular, by seeking, maintaining and defending U.S. and foreign patent rights.

We are actively building our intellectual property portfolio in our therapeutic area, including around AMX0035. Our current patent portfolio as of the date of this prospectus includes three patent families. In those three families, we currently own a total of 99 issued patents and pending patent applications directed to our technologies, including AMX0035. Currently, our patent portfolio includes four issued U.S. patents, 50 issued foreign patents, 13 pending U.S. patent applications and 32 pending foreign patent applications. Our issued patents and pending applications cover the relative amounts of a phenylbutyrate compound and a bile acid (such as TUDCA) and some of our issued and pending claims cover the specific ratio of those two drugs.

Our earliest in time patent family relates to compositions of a bile acid and a phenylbutyrate compound (including TURSO and 4-PBA) and methods of treating neurodegenerative disease, and its associated causes at a cellular level, using those compositions. This family includes four issued U.S. patents and 50 issued foreign patents (including rights in countries in which our issued European patent was validated). The foreign jurisdictions in which we have been issued patents include Albania, Austria, Australia, Bosnia and Herzegovina, Belgium, Bulgaria, China, Croatia, Cyprus, Czech Republic, Denmark, Estonia, the EU, Finland, France, Germany, Greece, Hong Kong, Hungary, Ireland, Iceland, Italy, Japan, Lithuania, Latvia, Macao, Macedonia, Malta, Monaco, Montenegro, Netherlands, Norway, Poland, Portugal, Romania, San Marino, Serbia, Slovenia, Slovakia, South Korea, Spain, Sweden, Switzerland, Turkey, and United Kingdom. We also have patent applications pending in Australia, China, the EU, Hong Kong, Japan, South Korea, the United States and other jurisdictions. In this family, we have composition of matter claims issued in the United States (U.S. Patent No. 11,071,742, which was issued on July 27, 2021) and Australia, and pending in applications filed in China and Hong Kong. These issued patents and others that issue from this family may first begin to expire as early as December 2033.

Our second patent family is directed to specific compositions of a phenylbutyrate compound and a bile acid (including TURSO and 4-PBA) and methods of manufacturing those compositions. We have patent applications pending in this family in the United States, EU, and other jurisdictions, as well as a Patent Cooperation Treaty, or PCT, application. In this family, we have composition of matter claims pending in applications filed in the United States, Argentina, Australia, Brazil, Canada, China, the EU, Israel, Japan, South Korea, Mexico, and Taiwan, as well as in the PCT application. Although no patents have yet issued from this family, we expect the term on patents issuing from this family to extend until at least July 2040.

Our third patent family is directed to methods of treating particular symptoms of ALS and/or reducing the associated adverse events with combinations of a phenylbutyrate compound and a bile acid (including TURSO and 4-PBA). We have patent applications pending in this family in the United States, EU, and other jurisdictions, as well as a PCT application. Currently, we do not have any composition of matter claims pending in this family. Although no patents have yet issued from this family, we expect the term on patents issuing from this family to extend until at least August 2040.

We cannot be sure that patents will be granted with respect to any of our pending patent applications nor with respect to any patent applications that may be filed by us in the future. Further, we cannot be sure that any of our existing patents or any patents that may be granted to us in the future will be commercially useful in protecting our commercial products. Finally, we cannot be sure that our granted patents, and any future patents granted to us, will be found valid and/or enforceable following a litigation or administrative procedure.

In January 2021, Bruschettini S.r.l. and Lederer & Keller Patentanwälte Partnerschaft mbB each filed oppositions at the European Patent Office to our issued European Patent, EP2978419. At a high level, this patent claims various methods of treating neurodegenerative disease (and or the causes or conditions thereof) with a bile acid and a phenylbutyrate compound. The opponents contended that the patent should be revoked in its entirety on various grounds, including for allegedly having an insufficient disclosure and for lack of inventive step. The EPO issued a preliminary opinion dated October 13, 2021, and a summons to attend oral proceedings (also dated October 13, 2021) that set a date of June 2, 2022 for the oral proceedings. At the oral proceedings on June 2, 2022, the Opposition Division maintained European Patent, EP2978419 as granted. The scope of the issued claims was not limited. On June 17, 2022, the Opposition Division handed down the written decision providing detailed legal reasoning for the outcome of the oral proceedings. On August 4, 2022, Bruschettini S.r.l. filed a notice of appeal. The other opponent did not file a notice of appeal. On September 29, 2022, Bruschettini S.r.l filed a request to withdraw the appeal. As the sole appellant has withdrawn their appeal, the Board of Appeal may now close the appeal proceedings. The decision of the Opposition Division would as a result become final and EP2978419 would be maintained as granted.

The term of individual patents depends upon the legal term of the patents in the countries in which they are obtained. In most countries in which we file, the patent term is 20 years from the date of filing of the first non-provisional application to which priority is claimed. In the United States, patent term may be lengthened by patent term adjustment, which compensates a patentee for administrative delays by the United States Patent and Trademark Office in granting a patent, or may be shortened if a patent is terminally disclaimed over an earlier-filed patent. In the United States, the term of a patent that covers an FDA-approved drug may also be eligible for a patent term extension of up to five years under the Hatch-Waxman Act, which is designed to compensate for the patent term lost during the FDA regulatory review process. The length of the patent term extension is calculated based on the length of time it takes for regulatory review. A patent term extension under the Hatch-Waxman Act cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. Moreover, a patent can only be extended once, and thus, if a single patent is applicable to multiple products, it can only be extended based on one product. Similar provisions are available in Europe and certain other foreign jurisdictions to extend the term of a patent that covers an approved drug. When possible, depending upon the length of clinical trials and other factors involved in the submission of an NDA, we expect to apply for patent term extensions for patents covering our product candidates and/or their methods of use.

We also rely on trademarks, trade secrets, know-how, continuing technological innovation, confidentiality agreements, and invention assignment agreements to develop and maintain our proprietary position. The confidentiality agreements are designed to protect our proprietary information and the invention assignment agreements are designed to grant us ownership of technologies that are developed for us by our employees, consultants, or other third parties. We seek to preserve the integrity and confidentiality of our data and trade secrets by maintaining physical security of our premises and physical and electronic security of our information technology systems. While we have confidence in our agreements and security measures, either may be breached, and we may not have adequate remedies. In addition, our trade secrets may otherwise become known or independently discovered by competitors.

Our commercial success also depends in part on our ability to operate without infringing on the proprietary rights of others and to prevent others from infringing our proprietary rights. A comprehensive discussion on risks relating to intellectual property is provided under the section of this prospectus entitled “Risk Factors—Risks Related to Our Intellectual Property.”

We have conducted searches of the patent landscape at certain points and in certain jurisdictions with respect to AMX0035, and based on these searches and our analyses, we have not identified any

issued patents that we believe are valid and could be successfully asserted to block our ability to commercialize AMX0035.

European Patent EP3016654, entitled "Tauroursodeoxycholic acid (TUDCA) for Use in the Treatment of Neurodegenerative Disorders," is owned by Bruschettini S.r.l. The patent relates to use of TURSO in the treatment of ALS in a mammal. An opposition has been filed to the grant of EP3016654 at the European Patent Office (EPO), asking the EPO to revoke EP3016654. The EPO issued a preliminary opinion on November 18, 2019 finding that at least the main claim of EP3016654 lacked novelty. Oral proceedings were held before an Opposition Division of the EPO on June 11, 2021. At the end of the oral proceedings, the Opposition Division announced the decision revoking all claims of EP3016654. A written decision has been issued; however Bruschettini has appealed the decision of the Opposition Division to the Board of Appeal. A response to Bruschettini's appeal has been filed on June 7, 2022 requesting that the appeal should be dismissed and that the decision of the Opposition Division to revoke all claims of EP3016654 be upheld.

Government Regulation

The FDA and comparable regulatory authorities in state and local jurisdictions and in other countries, including Canada and member states of the EU impose requirements upon companies involved in the clinical development, manufacture, marketing and distribution of drugs, such as those we are developing. These agencies and other federal, state and local entities regulate, among other things, the research and development, testing, manufacture, quality control, safety, effectiveness, labeling, storage, record keeping, approval, advertising and promotion, distribution, post-approval monitoring and reporting, sampling and export and import of our product candidates.

U.S. Government Regulation of Drug Products

In the United States, the FDA regulates drugs under the Federal Food, Drug, and Cosmetic Act, or FDCA, and its implementing regulations. The process of obtaining regulatory approvals and the subsequent compliance with applicable federal, state, local and foreign statutes and regulations requires the expenditure of substantial time and financial resources. Failure to comply with the applicable U.S. requirements at any time during the product development process, approval process or after approval, may subject an applicant to a variety of administrative or judicial sanctions, such as the FDA's refusal to approve pending NDAs, withdrawal of an approval, imposition of a clinical hold, issuance of warning letters, product recalls, product seizures, total or partial suspension of production or distribution, injunctions, fines, refusals of government contracts, restitution, disgorgement or civil or criminal penalties.

The process required by the FDA before a drug may be marketed in the United States generally involves the following:

- Completion of preclinical laboratory tests, animal studies and formulation studies in compliance with the FDA's good laboratory practice, or GLP, regulations;
- Submission to the FDA of an investigational new drug, or IND, application, which must become effective before human clinical trials may begin;
- Approval by an independent IRB at each clinical site before each trial may be initiated;
- Performance of adequate and well-controlled human clinical trials in accordance with current Good Clinical Practices, or cGCP, requirements to establish the safety and efficacy of the proposed drug product for each indication;
- Submission to the FDA of an NDA, including payment of application user fees;
- A determination by the FDA within 60 days of its receipt of an NDA to accept the marketing application for review;

- Satisfactory completion of an FDA advisory committee review, if applicable;
- Satisfactory completion of an FDA inspection of the manufacturing facility or facilities at which the product is produced to assess compliance with current good manufacturing practice, or cGMP, requirements and to assure that the facilities, methods and controls are adequate to preserve the product's identity, strength, quality and purity;
- Satisfactory completion of FDA audits of clinical trial sites to assure compliance with cGCPs and the integrity of the clinical data; and
- FDA review and approval of the NDA.

Preclinical Studies

Preclinical studies include laboratory evaluation of product chemistry, toxicity and formulation, as well as *in vitro* and animal studies to assess potential safety and efficacy. The conduct of preclinical studies is subject to federal regulations and requirements, including good laboratory practice regulations for safety/toxicology studies.

An IND sponsor must submit the results of the preclinical tests, together with manufacturing information, analytical data and any available clinical data or literature and plans for clinical studies, among other things, to the FDA as part of an IND. An IND is a request for authorization from the FDA to administer an investigational product to humans and must become effective before human clinical trials may begin. Some preclinical testing, such as animal tests of reproductive adverse events and carcinogenicity, may continue even after the IND is submitted. An IND automatically becomes effective 30 days after receipt by the FDA, unless before that time the FDA raises concerns or questions related to one or more proposed clinical trials and places the clinical trial on a clinical hold. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. As a result, submission of an IND may not result in the FDA allowing clinical trials to initiate.

Clinical Trials

Clinical trials involve the administration of the investigational new drug to human subjects under the supervision of qualified investigators in accordance with cGCP requirements, which include the requirement that all research subjects provide their informed consent in writing for their participation in any clinical trial. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the parameters to be used in monitoring safety, and the effectiveness criteria to be evaluated. A protocol for each clinical trial and any subsequent protocol amendments must be submitted to the FDA as part of the IND. In addition, an IRB representing each institution participating in the clinical trial must review and approve the plan for any clinical trial before it is initiated at that institution. The IRB also must review and approve the informed consent form that must be provided to each clinical trial subject or his or her legal representative, and must monitor the clinical trial until completion.

Information about certain clinical trials must be submitted within specific timeframes to the National Institutes of Health, or NIH, for public dissemination on their www.clinicaltrials.gov website. Information related to the product, patient population, phase of investigation, study sites and investigators and other aspects of the clinical trial is made public as part of the registration of the clinical trial. Although sponsors are obligated to disclose the results of their clinical trials after completion, disclosure of the results can be delayed in some cases for up to two years after the date of completion of the trial. Failure to timely register a covered clinical study or to submit study results as provided for in the law can give rise to civil monetary penalties and also prevent the non-compliant party from receiving future grant funds from the federal government. The NIH's Final Rule on

ClinicalTrials.gov registration and reporting requirements became effective in 2017, and both the NIH and FDA recently signaled the government's willingness to begin enforcing those requirements against non-compliant clinical trial sponsors.

Human clinical trials are typically conducted in three sequential phases, which may overlap or be combined:

- Phase 1: The drug is initially introduced into healthy human subjects or patients with the target disease or condition and tested for safety, dosage tolerance, absorption, metabolism, distribution, excretion and, if possible, to gain an early indication of its effectiveness.
- Phase 2: The drug is administered to a limited patient population to identify possible adverse effects and safety risks, to preliminarily evaluate the efficacy of the product for specific targeted diseases and to determine dosage tolerance and optimal dosage.
- Phase 3: The drug is administered to an expanded patient population, generally at geographically dispersed clinical trial sites, in well-controlled clinical trials to generate enough data to statistically evaluate the efficacy and safety of the product for approval, to establish the overall risk-benefit profile of the product, and to provide adequate information for the labeling of the product.

Post-approval trials, sometimes referred to as Phase 4 clinical trials, may be conducted after initial marketing approval. These trials are used to gain additional experience from the treatment of patients in the intended therapeutic indication. In certain instances, the FDA may mandate the performance of Phase 4 clinical trials as a condition of approval on an NDA.

Progress reports detailing the results of the clinical trials must be submitted at least annually to the FDA and more frequently if SAEs occur. Written IND safety reports must be submitted to the FDA and investigators for serious and unexpected suspected adverse events, findings from other studies or animal or in vitro testing that suggest a significant risk for human subjects and any clinically important increase in the rate of a serious suspected adverse reaction over that listed in the protocol or investigator brochure. The sponsor must submit an IND safety report within 15 calendar days after the sponsor determines that the information qualifies for reporting. The sponsor also must notify the FDA of any unexpected fatal or life-threatening suspected adverse reaction within seven calendar days after the sponsor's initial receipt of the information.

Phase 1, Phase 2 and Phase 3 trials may not be completed successfully within any specified period, or at all. Furthermore, the FDA or the sponsor may suspend or terminate a clinical trial at any time on various grounds, including a finding that the research subjects are being exposed to an unacceptable health risk. Similarly, an IRB can suspend or terminate approval of a clinical trial at its institution if the clinical trial is not being conducted in accordance with the IRB's requirements or if the drug has been associated with unexpected serious harm to patients. Additionally, some clinical trials are overseen by an independent group of qualified experts organized by the clinical trial sponsor, known as a data safety monitoring board or committee. This group provides authorization for whether a trial may move forward at designated check points based on access to certain data from the trial.

Concurrent with clinical trials, companies usually complete additional animal studies and also must develop additional information about the chemistry and physical characteristics of the drug as well as finalize a process for manufacturing the product in commercial quantities in accordance with cGMP requirements. The manufacturing process must be capable of consistently producing quality batches of product and, among other things, companies must develop methods for testing the identity, strength, quality and purity of the final product. Additionally, appropriate packaging must be selected and tested and stability studies must be conducted to demonstrate that the drug does not undergo unacceptable deterioration over its shelf life.

Expanded Access to an Investigational Drug for Treatment Use

Expanded access, sometimes called “compassionate use,” is the use of investigational products outside of clinical trials to treat patients with serious or immediately life-threatening diseases or conditions when there are no comparable or satisfactory alternative treatment options. The rules and regulations related to expanded access are intended to improve access to investigational products for patients who may benefit from investigational therapies. FDA regulations allow access to investigational products under an IND by the company or the treating physician for treatment purposes on a case-by-case basis for: individual patients (single-patient IND applications for treatment in emergency settings and non-emergency settings); intermediate-size patient populations; and larger populations for use of the investigational product under a treatment protocol or treatment IND application.

When considering an IND application for expanded access to an investigational product with the purpose of treating a patient or a group of patients, the sponsor and treating physicians or investigators will determine suitability when all of the following criteria apply: patient(s) have a serious or immediately life-threatening disease or condition, and there is no comparable or satisfactory alternative therapy to diagnose, monitor, or treat the disease or condition; the potential patient benefit justifies the potential risks of the treatment and the potential risks are not unreasonable in the context or condition to be treated; and the expanded use of the investigational drug for the requested treatment will not interfere with initiation, conduct, or completion of clinical investigations that could support marketing approval of the product or otherwise compromise the potential development of the product.

There is no obligation for a sponsor to make its drug products available for expanded access; however, as required by the 21st Century Cures Act, or Cures Act, passed in 2016, if a sponsor has a policy regarding how it responds to expanded access requests, it must make that policy publicly available. Sponsors are required to make such policies publicly available upon the earlier of initiation of a Phase 2 or Phase 3 trial; or 15 days after the investigational drug or biologic receives designation as a breakthrough therapy, fast track product, or regenerative medicine advanced therapy.

In addition, on May 30, 2018, the Right to Try Act was signed into law. The law, among other things, provides a federal framework for certain patients to access certain investigational products that have completed a Phase 1 clinical trial and that are undergoing investigation for FDA approval. Under certain circumstances, eligible patients can seek treatment without enrolling in clinical trials and without obtaining FDA permission under FDA expanded access program. There is no obligation for a manufacturer to make its investigational products available to eligible patients as a result of the Right to Try Act.

Combination Rule for Fixed-Dose Combination Products

Under the combination rule, the FDA may not file or approve an NDA for a fixed-dose combination product unless each component of a proposed drug product is shown to make a contribution to the claimed effects and the dosage of each component (amount, frequency, duration) is safe and effective for the intended population. To satisfy these requirements, the FDA typically requires a clinical factorial study, designed to assess the effects attributable to each drug in the combination product. This is particularly true when the ingredients are directed at the same sign or symptom of the disease or condition.

The FDA has accepted a variety of approaches to satisfy the combination rule. In December 2015, the FDA proposed regulations that would allow the agency to waive the requirements of the combination rule for certain drug products under particular circumstances. The FDA has not, to date, finalized these regulations, but the FDA has stated that factorial studies may be unethical (e.g., omitting a drug known to improve survival) or impractical (there may be too many components to conduct a factorial study, meaning the trial cannot be conducted). The FDA has also stated that it may be possible to use other types of clinical and nonclinical data and mechanistic information available to demonstrate the contributions of the individual active ingredients to the effect of the combination.

Similar requirements may be imposed on us by the EMA in the EU and comparable regulatory authorities in other jurisdictions. While no similar combination rule formally exists in Canada, Health Canada may consider the contributions of each component in a combination product in connection with review of the NDS.

NDA Submission and Marketing Approval

Assuming successful completion of the required clinical testing, the results of the preclinical and clinical studies, together with detailed information relating to the product's chemistry, manufacture, controls and proposed labeling, among other things, are submitted to the FDA as part of an NDA requesting approval to market the product for one or more indications. In most cases, the submission of an NDA is subject to a substantial application user fee. The FDA will initially review an NDA for completeness before it accepts it for "filing." Under the FDA's procedures, the agency has 60 days from its receipt of the NDA to determine whether the application will be accepted for filing based on the agency's threshold determination that the application is sufficiently complete to permit substantive review. Under the Prescription Drug User Fee Act, or PDUFA, guidelines that are currently in effect, the FDA has a goal of ten months from the date of "filing" of a standard NDA, for a new molecular entity to review and act on the submission, and six months from the filing date of a new molecular entity NDA with priority review. Accordingly, this review process typically takes 12 months and eight months, respectively from the date the NDA is submitted to the FDA. The FDA does not always meet its PDUFA goal dates for standard or priority NDAs, and the review process is often extended by FDA requests for additional information or clarification. The FDA reviews an NDA to determine, among other things, whether the drug is safe and effective for its intended use(s), with the latter determination being made on the basis of substantial evidence. This finding can be substantiated based on two adequate and well-controlled studies, or in certain circumstances on a single, large, multicenter, adequate and well-controlled study that is very persuasive or from a single adequate and well-controlled study together with confirmatory evidence. FDA regulations and guidance also allow for greater flexibility and tolerance for uncertainty in the context of rare and fatal diseases. The FDA also assesses whether the facility in which the product is manufactured, processed, packaged or held meets standards designed to assure the product's continued safety, quality and purity.

In addition, under the Pediatric Research Equity Act of 2003, or PREA, as amended, certain NDAs or supplements to an NDA must contain data that are adequate to assess the safety and effectiveness of the drug for the claimed indications in all relevant pediatric subpopulations, and to support dosing and administration for each pediatric subpopulation for which the product is safe and effective. The FDA may, on its own initiative or at the request of the applicant, grant deferrals for submission of some or all pediatric data until after approval of the product for use in adults, or full or partial waivers from the pediatric data requirements. A sponsor who is planning to submit a marketing application for a drug that includes a new active ingredient, new indication, new dosage form, new dosing regimen or new route of administration must submit an initial Pediatric Study Plan, or PSP, within 60 days of an end-of-Phase 2 meeting or, if there is no such meeting, as early as practicable before initiation of the Phase 3 or Phase 2/3 study. The initial PSP must include an outline of the pediatric study or studies that the sponsor plans to conduct, including study objectives and design, age groups, relevant endpoints and statistical approach, or a justification for not including such detailed information, and any request for a deferral of pediatric assessments or a full or partial waiver of the requirement to provide data from pediatric studies along with supporting information. The FDA and the sponsor must reach an agreement on the PSP. A sponsor can submit amendments to an agreed-upon initial PSP at any time if changes to the pediatric plan need to be considered based on data collected from preclinical studies, early phase clinical trials and/or other clinical development programs. PREA does not apply to a drug for an indication for which orphan drug designation has been granted.

The FDA conducts a preliminary review of all NDAs within the first 60 days after submission, before accepting them for filing, to determine whether they are sufficiently complete to permit

substantive review. The FDA may request additional information rather than accept an NDA for filing. In this event, the application must be resubmitted with the additional information. The resubmitted application is also subject to review before the FDA accepts it for filing. Once the submission is accepted for filing, the FDA begins an in-depth substantive review.

The FDA may refer an application for a novel drug or a drug that presents difficult questions of safety or efficacy to an advisory committee. An advisory committee is a panel of independent experts, including clinicians and other scientific experts, which reviews, evaluates and provides a recommendation as to whether the application should be approved and under what conditions. The FDA is not bound by the recommendations of an advisory committee, but it considers such recommendations carefully when making decisions.

The FDA also may require the submission of an REMS if it determines that a REMS is necessary to ensure that the benefits of the drug outweigh its risks and to assure the safe use of the drug. A REMS may include one or more elements, including medication guides, physician communication plans, patient package insert and/or elements to assure safe use, such as restricted distribution methods, patient registries or other risk minimization tools. The FDA determines the requirement for a REMS, as well as the specific REMS provisions, on a case-by-case basis. If the FDA concludes a REMS is needed, the sponsor of the NDA must submit a proposed REMS. The FDA will not approve the NDA without a REMS, if required.

Before approving an NDA, the FDA typically will inspect the facility or facilities where the product is manufactured. The FDA will not approve an application unless it determines that the manufacturing processes and facilities are in compliance with cGMP requirements and adequate to assure consistent production of the product within required specifications. Additionally, before approving an NDA, the FDA may inspect one or more clinical trial sites to assure compliance with cGCP requirements.

After evaluating the NDA and all related information, including the advisory committee recommendation, if any, and inspection reports regarding the manufacturing facilities and clinical trial sites, the FDA may issue an approval letter, or, in some cases, a Complete Response Letter. A Complete Response Letter generally contains a statement of specific conditions that must be met in order to secure final approval of the NDA and may require additional clinical or preclinical testing in order for FDA to reconsider the application. If a Complete Response Letter is issued, the applicant may either resubmit the NDA, addressing all of the deficiencies identified in the letter, or withdraw the application. Even with submission of this additional information, the FDA ultimately may decide that the application does not satisfy the regulatory criteria for approval. If and when those conditions have been met to the FDA's satisfaction, the FDA will typically issue an approval letter. An approval letter authorizes commercial marketing of the drug with specific prescribing information for specific indications.

Even if the FDA approves a product, it may limit the approved indications for use of the product, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess a drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution and use restrictions or other risk management mechanisms under a REMS, which can materially affect the potential market and profitability of the product. The FDA may prevent or limit further marketing of a product based on the results of post-marketing studies or surveillance programs. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes, and additional labeling claims, are subject to further testing requirements and FDA review and approval.

Orphan Drug Designation and Exclusivity

Under the Orphan Drug Act, the FDA may grant orphan designation to a drug product intended to treat a rare disease or condition, which is generally a disease or condition that affects either (i) fewer than 200,000 individuals in the United States, or (ii) more than 200,000 individuals in the United States and for which there is no reasonable expectation that the cost of developing and making the product available in the United States for this type of disease or condition will be recovered from sales of the product. A company must request orphan drug designation before submitting an NDA. If the request is granted, the FDA will disclose the identity of the therapeutic agent and its potential use. Orphan drug designation does not convey any advantage in or shorten the duration of the regulatory review and approval process.

If a product with orphan status receives the first FDA approval for the disease or condition for which it has such designation or for a select indication or use within the rare disease or condition for which it was designated, the product is entitled to orphan product exclusivity. Orphan product exclusivity means that the FDA may not approve any other applications to market the same product for the same indication for seven years, except in certain limited circumstances. If a drug designated as an orphan drug ultimately receives marketing approval for an indication broader than what it was designated for, it may not be entitled to exclusivity. Orphan exclusivity will not bar approval of another product under certain circumstances, including if a subsequent product with the same active ingredient for the same indication is shown to be clinically superior to the approved product on the basis of greater efficacy or safety, or providing a major contribution to patient care, or if the company with orphan drug exclusivity is not able to meet market demand. Further, the FDA may approve more than one product for the same orphan indication or disease as long as the products contain different active ingredients. Moreover, competitors may receive approval of different products for the indication for which the orphan product has exclusivity or obtain approval for the same product but for a different indication for which the orphan drug has exclusivity. U.S. lawmakers have also recently raised the possibility that regulatory or legislative changes might need to be made to the Orphan Drug Act to foster competition. This includes the introduction of legislation that, if adopted into law, would require us to demonstrate to the FDA that AMX0035 would be economically unviable when facing competition to maintain our exclusivity.

Expedited Development and Priority Review Programs

The FDA maintains several programs intended to facilitate and expedite development and review of new drugs to address unmet medical needs in the treatment of serious or life-threatening diseases or conditions. These programs include Fast Track designation, Breakthrough Therapy designation, Priority Review and Accelerated Approval, and the purpose of these programs is to either expedite the development or review of important new drugs to get them to patients earlier than under standard FDA development and review procedures.

The FDA has a FastTrack program that is intended to expedite or facilitate the process for reviewing new drugs that meet certain criteria. Specifically, new drugs are eligible for Fast Track designation if they are intended to treat a serious or life threatening condition and preclinical or clinical data demonstrate the potential to address unmet medical needs for the condition. Fast Track designation applies to both the product and the specific indication for which it is being studied. The sponsor can request the FDA to designate the product for Fast Track status any time before receiving NDA approval, but ideally no later than the pre-NDA meeting. Fast Track designation provides increased opportunities for sponsor interactions with the FDA during preclinical and clinical development, in addition to the potential for rolling review once a marketing application is filed, meaning that the agency may review portions of the marketing application before the sponsor submits the complete application, as well as priority review, discussed below.

Additionally, a drug may be eligible for designation as a breakthrough therapy if the product is intended, alone or in combination with one or more other drugs or biologics, to treat a serious or life-threatening condition and preliminary clinical evidence indicates that the product may demonstrate substantial improvement over currently approved therapies on one or more clinically significant endpoints. The benefits of Breakthrough Therapy designation include the same benefits as Fast Track designation, plus intensive guidance from the FDA to ensure an efficient drug development program. A product may also be eligible for priority review if it treats a serious or life-threatening condition and, if approved, would provide a significant improvement in safety and effectiveness compared to available therapies. The FDA determines at the time that the marketing application is submitted, on a case-by-case basis, whether the proposed drug represents a significant improvement in treatment, prevention or diagnosis of disease when compared with other available therapies. The FDA will attempt to direct additional resources to the evaluation of an application for a new drug designated for priority review in an effort to facilitate the review and to shorten the FDA's goal for taking action on an NDA for a new molecular entity from ten months to six months from the date of filing.

A product may also be eligible for accelerated approval if it treats a serious or life-threatening disease or condition, generally provides a meaningful advantage over available therapies and demonstrates an effect on a surrogate endpoint that is reasonably likely to predict clinical benefit, or on a clinical endpoint that can be measured earlier than irreversible morbidity or mortality, or IMM, that is reasonably likely to predict an effect on IMM or other clinical benefit. As a condition of accelerated approval, the FDA requires that a sponsor perform adequate and well-controlled post-marketing clinical trials. If the FDA concludes that a drug shown to be effective can be safely used only if distribution or use is restricted, it will require such post-marketing restrictions, as it deems necessary to assure safe use of the product.

Even if a product qualifies for one or more of these programs, the FDA may later decide that the product no longer meets the conditions for qualification or decide that the time period for FDA review or approval will not be shortened. Fast Track designation, Breakthrough Therapy designation and Priority Review designation do not change the standards for approval, but may expedite the development or review process. Drugs granted accelerated approval also must meet the same statutory standards for safety and effectiveness as those granted traditional approval.

U.S. Non-Patent Exclusivity

Data exclusivity provisions under the FDCA can delay the submission or the approval of certain follow-on applications. The FDCA provides a five-year period of data exclusivity within the United States to the first applicant to gain approval of an NDA for an NCE. A drug is an NCE if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an ANDA for a generic version of the drug or a 505(b)(2) NDA for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, such a follow-on application may be submitted after four years if it contains a certification of patent invalidity or non-infringement.

The FDA has previously taken the position that NCE exclusivity is not available for fixed-dose combination products if one of the active moieties in the combination product had been previously approved in a drug product. In October 2014, however, the FDA reversed that position when it issued final guidance stating that an application for a fixed-dose combination product will be eligible for 5-year NCE exclusivity if it contains a drug substance with a single, new active moiety, even if the fixed-combination also contains a drug substance with a previously approved active moiety.

The FDCA also provides three years of market exclusivity for an NDA, 505(b)(2) NDA or supplement to an existing NDA if new clinical investigations, other than bioavailability studies, that

were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application, for example, new indications, dosages or strengths of an existing drug. This three-year exclusivity period covers only the conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving follow-on applications that do not reference the protected clinical data. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Pediatric exclusivity is another type of regulatory market exclusivity in the United States. Pediatric exclusivity, if granted, adds six months to existing regulatory exclusivity periods or listed patents. This six-month exclusivity may be granted based on the voluntary completion of a pediatric trial in accordance with an FDA-issued "Written Request" for such a trial.

Post-approval Requirements

Drugs manufactured or distributed pursuant to FDA approvals are subject to pervasive and continuing regulation by the FDA, including, among other things, requirements relating to recordkeeping, periodic reporting, product sampling and distribution, advertising and promotion and reporting of adverse experiences with the product. After approval, most changes to the approved product, such as adding new indications or other labeling claims are subject to prior FDA review and approval. There are continuing, annual user fee requirements for any marketed products.

The FDA may impose a number of post-approval requirements as a condition of approval of an NDA. For example, the FDA may require post-marketing testing, including Phase 4 clinical trials, and surveillance to further assess and monitor the product's safety and effectiveness after commercialization.

FDA regulations require that products be manufactured in specific facilities and in accordance with cGMP regulations which require, among other things, quality control and quality assurance, the maintenance of records and documentation and the obligation to investigate and correct any deviations from cGMP. In addition, drug manufacturers and other entities involved in the manufacture and distribution of approved drugs are required to register their establishments with the FDA and state agencies, and are subject to periodic unannounced inspections by the FDA and these state agencies for compliance with cGMP requirements. Manufacturers and other parties involved in the drug supply chain for prescription drug products must also comply with product tracking and tracing requirements and for notifying FDA of counterfeit, diverted, stolen and intentionally adulterated products or products that are otherwise unfit for distribution in the United States. Changes to the manufacturing process are strictly regulated and often require prior FDA approval before being implemented. FDA regulations also require investigation and correction of any deviations from cGMP requirements and impose reporting and documentation requirements upon the sponsor and any third-party manufacturers that the sponsor may decide to use. Accordingly, manufacturers must continue to expend time, money, and effort in the area of production and quality control to maintain cGMP compliance.

Once an approval of a drug is granted, the FDA may withdraw the approval if compliance with regulatory requirements and standards is not maintained or if problems occur after the product reaches the market, such as if, based on new evidence of clinical experience not contained in the application or not available to the FDA until after the application was approved, there is a lack of substantial evidence that the approved product will have the effect it is purported or represented to have under the conditions of use prescribed, recommended, or suggested in its labeling. Sponsors may also voluntarily withdrawal their approved products from the market for similar reasons. Later discovery of previously unknown problems with a product, including adverse events of unanticipated severity or

frequency, or with manufacturing processes, or failure to comply with regulatory requirements, may result in mandatory revisions to the approved labeling to add new safety information; imposition of post-market studies or clinical trials to assess new safety risks; or imposition of distribution or other restrictions under a REMS program. Any of these limitations on approval or marketing could restrict the commercial promotion, distribution, prescription or dispensing of products. Other potential consequences include, among other things:

- Restrictions on the marketing or manufacturing of the product, complete withdrawal of the product from the market or product recalls;
- Fines, warning letters or holds on post-approval clinical trials;
- Refusal of the FDA to approve pending NDAs or supplements to approved NDAs, or suspension or withdrawal of product approvals;
- Product seizure or detention, or refusal to permit the import or export of products; and
- Injunctions or the imposition of civil or criminal penalties.

The FDA strictly regulates marketing, labeling, advertising and promotion of products that are placed on the market. Drugs may be promoted by a manufacturer and any third parties acting on behalf of a manufacturer only for the approved indications and in a manner consistent with the approved label for the product. The FDA and other agencies actively enforce the laws and regulations prohibiting the promotion of off-label uses, and a company that is found to have improperly promoted off-label uses may be subject to significant liability.

Other U.S. Healthcare Laws

Healthcare providers, physicians, and third-party payors will play a primary role in the recommendation and prescription of drug products for which we obtain marketing approval. Arrangements with third-party payors, healthcare providers and physicians, as well as patients and other third-parties, in connection with the clinical research, sales, marketing and promotion of products, once approved, and related activities, may expose a pharmaceutical manufacturer to broadly applicable fraud and abuse and other healthcare laws and regulations. In the United States, these laws include, without limitation, state and federal anti-kickback, false claims, physician transparency, and patient data privacy and security laws and regulations, including but not limited to those described below:

- the Anti-Kickback Statute, or AKS, which makes it illegal for any person or entity, including a prescription drug manufacturer (or a party acting on its behalf) to knowingly and willfully solicit, receive, offer or pay any remuneration (including any kickback, bribe, or rebate), directly or indirectly, overtly or covertly, in cash or in kind, that is intended to induce or reward, referrals including the purchase, recommendation, order or prescription of a particular drug for which payment may be made under a federal healthcare program, such as the Medicare and Medicaid programs. The AKS has been interpreted to apply to arrangements between therapeutic product manufacturers on one hand and prescribers, purchasers, and formulary managers on the other. A person or entity does not need to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation. Further, courts have found that if “one purpose” of remuneration is to induce referrals, the AKS is violated. In addition, the government may assert that a claim including items or services resulting from a violation of the AKS constitutes a false or fraudulent claim for purposes of the FCA;
- the federal civil and criminal false claims laws, including the FCA, which can be enforced by private citizens through “qui tam” or “whistleblower” actions, and civil monetary penalty laws, which impose criminal and civil penalties against individuals or entities for, among other things,

knowingly presenting, or causing to be presented, claims for payment or approval from Medicare, Medicaid, or other federal health care programs that are false or fraudulent; knowingly making or causing a false statement material to a false or fraudulent claim or an obligation to pay or transmit money or property to the federal government; or knowingly concealing or knowingly and improperly avoiding or decreasing such an obligation. Pharmaceutical and other healthcare companies have been, and continue to be, prosecuted under these laws, among other things, for allegedly providing free product to customers with the expectation that the customers would bill federal programs for the product and for causing false claims to be submitted because of the companies' marketing of the product for unapproved, off-label, and thus generally non-reimbursable, uses. Similar to the AKS, a person or entity does not need to have actual knowledge of these statutes or specific intent to violate them in order to have committed a violation.

- the federal Health Insurance Portability and Accountability Act of 1996, or HIPAA, which created additional federal criminal statutes that prohibit knowingly and willfully executing, or attempting to execute, a scheme to defraud any healthcare benefit program or obtain, by means of false or fraudulent pretenses, representations, or promises, any of the money or property owned by, or under the custody or control of, any healthcare benefit program, regardless of the payor (e.g., public or private) and knowingly and willfully falsifying, concealing or covering up by any trick or device a material fact or making any materially false statements in connection with the delivery of, or payment for, healthcare benefits, items or services relating to healthcare matters. Like the AKS, the Patient Protection and Affordable Care Act, or the ACA, amended the intent standard for certain healthcare fraud statutes under HIPAA such that a person or entity no longer needs to have actual knowledge of the statute or specific intent to violate it in order to have committed a violation;
- HIPAA, as amended by the Health Information Technology for Economic and Clinical Health Act of 2009, or HITECH, and their respective implementing regulations, which impose requirements on certain covered healthcare providers, health plans, and healthcare clearinghouses as well as their respective business associates that perform services for them that involve the creation, use, receipt, maintenance or disclosure of individually identifiable health information, relating to the privacy, security and transmission of individually identifiable health information. HITECH also created four new tiers of civil monetary penalties, amended HIPAA to make civil and criminal penalties directly applicable to business associates, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce HIPAA and seek attorneys' fees and costs associated with pursuing federal civil actions;
- the federal Physician Payments Sunshine Act, created under the ACA, and its implementing regulations, which require manufacturers of drugs, devices, biologics and medical supplies for which payment is available under Medicare, Medicaid or the Children's Health Insurance Program to report annually to CMS under the Open Payments Program, information related to payments or other transfers of value made to physicians (defined to include doctors, dentists, optometrists, podiatrists and chiropractors) and teaching hospitals, as well as ownership and investment interests held by physicians and their immediate family members. Effective January 1, 2022, these reporting obligations extend to include transfers of value made during the previous year to certain non-physician providers such as physician assistants and nurse practitioners; and
- analogous state and foreign laws and regulations, such as state and foreign anti-kickback, false claims, consumer protection and unfair competition laws which may apply to pharmaceutical business practices, including but not limited to, research, distribution, sales and marketing arrangements as well as submitting claims involving healthcare items or services reimbursed by any third-party payor, including commercial insurers; state laws that require pharmaceutical

companies to comply with the pharmaceutical industry's voluntary compliance guidelines and the relevant compliance guidance promulgated by the federal government that otherwise restricts payments that may be made to healthcare providers and other potential referral sources; state laws that require drug manufacturers to file reports with states regarding pricing and marketing information, such as the tracking and reporting of gifts, compensations and other remuneration and items of value provided to healthcare professionals and entities; state and local laws requiring the registration of pharmaceutical sales representatives; and state and foreign laws governing the privacy and security of health information in certain circumstances, many of which differ from each other in significant ways and may not have the same effect, thus complicating compliance efforts.

Because of the breadth of these laws and the narrowness of the statutory exceptions and regulatory safe harbors available, it is possible that some of a pharmaceutical manufacturer's business activities could be subject to challenge under one or more of such laws. Efforts to ensure that business arrangements comply with applicable healthcare laws involve substantial costs. It is possible that governmental and enforcement authorities will conclude that a pharmaceutical manufacturer's business practices do not comply with current or future statutes, regulations or case law interpreting applicable fraud and abuse or other healthcare laws and regulations. If any such actions are instituted against a pharmaceutical manufacturer, and it is not successful in defending itself or asserting its rights, those actions could have a significant impact on its business, including the imposition of significant civil, criminal and administrative penalties, damages, disgorgement, imprisonment, monetary fines, possible exclusion from participation in Medicare, Medicaid and other federal healthcare programs, reporting obligations and oversight if we become subject to integrity and oversight agreements to resolve allegations of non-compliance, contractual damages, reputational harm, diminished profits and future earnings, and curtailment of operations, any of which could adversely affect a pharmaceutical manufacturer's ability to operate its business and the results of operations. In addition, commercialization of any drug product outside the United States will also likely be subject to foreign equivalents of the healthcare laws mentioned above, among other foreign laws.

In the United States, numerous federal and state laws and regulations, including state data breach notification laws, state and federal health information privacy laws, and federal and state consumer protection laws, govern the collection, use, disclosure, and protection of health-related and other personal information. For example California recently enacted the California Consumer Privacy Act, or CCPA, which creates new individual privacy rights for California consumers (as defined in the law) and places increased privacy and security obligations on entities handling personal data of consumers or households. The CCPA will require covered companies to provide certain disclosures to consumers about its data collection, use and sharing practices, and to provide affected California residents with ways to opt-out of certain sales or transfers of personal information. The CCPA went into effect on January 1, 2020, and the California State Attorney General has submitted various versions of final regulations. The California State Attorney General also now has the authority to commence enforcement actions against violators as of July 1, 2020. Further, a new California privacy law, the California Privacy Rights Act, or CPRA, was passed by California voters on November 3, 2020. The CPRA will create additional obligations with respect to processing and storing personal information that are scheduled to take effect on January 1, 2023 (with certain provisions having retroactive effect to January 1, 2022). We will continue to monitor developments related to the CPRA and anticipate additional costs and expenses associated with CPRA compliance. Other U.S. states also are considering omnibus privacy legislation (with one additional law already passed in Colorado and Virginia) and industry organizations regularly adopt and advocate for new standards in these areas. While the CCPA and CPRA contain an exception for certain activities involving PHI under HIPAA, we cannot yet determine the impact the CCPA, CPRA or other such future laws, regulations and standards may have on our business, as these laws either do not yet apply to us or are not yet in effect.

In the event we decide to conduct clinical trials or continue to enroll subjects in our ongoing or future clinical trials, we may be subject to additional privacy restrictions, under state and federal law or other obligations. We also may become subject to laws in other countries, including the General Data Protection Regulation in Europe.

Current and Future U.S. Healthcare Reform Legislation

Payors, whether domestic or foreign, or governmental or private, are developing increasingly sophisticated methods of controlling healthcare costs and those methods are not always specifically adapted for new technologies such as gene therapy and therapies addressing rare diseases such as those we are developing. In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory changes to the health care system that could impact our ability to sell our products profitably. In particular, in 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively, the ACA, was enacted, which, among other things, subjected biologic products to potential competition by lower-cost biosimilars; addressed a new methodology by which rebates owed by manufacturers under the Medicaid Drug Rebate Program are calculated for drugs that are inhaled, infused, instilled, implanted or injected; increased the minimum Medicaid rebates owed by most manufacturers under the Medicaid Drug Rebate Program; extended the Medicaid Drug Rebate program to utilization of prescriptions of individuals enrolled in Medicaid managed care organizations; subjected manufacturers to new annual fees and taxes for certain branded prescription drugs; created a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% (increased to 70% pursuant to the Bipartisan Budget Act of 2018, effective as of January 1, 2019) point-of-sale discounts off negotiated prices of applicable brand drugs to eligible beneficiaries during their coverage gap period, as a condition for the manufacturer's outpatient drugs to be covered under Medicare Part D; and provided incentives to programs that increase the federal government's comparative effectiveness research.

Since its enactment, there have been numerous judicial, administrative, executive, and legislative challenges to certain aspects of the ACA. On June 17, 2021, the Supreme Court dismissed the most recent judicial challenge to the ACA brought by several states without specifically ruling on the constitutionality of the ACA. Prior to the Supreme Court's decision, President Biden issued an Executive Order to initiate a special enrollment period from February 15, 2021 through August 15, 2021 for purposes of obtaining health insurance coverage through the ACA marketplace. The Executive Order also instructed certain governmental agencies to review and reconsider their existing policies and rules that limit access to healthcare, including among others, reexamining Medicaid demonstration projects and waiver programs that include work requirements, and policies that create unnecessary barriers to obtaining access to health insurance coverage through Medicaid or the ACA. It is unclear how other healthcare reform measures of the Biden administrations or other efforts, if any, to challenge repeal or replace the ACA, will impact our business.

In addition, other legislative changes have been proposed and adopted in the United States since the ACA was enacted. In August 2011, the Budget Control Act of 2011, among other things, created measures for spending reductions by Congress. A Joint Select Committee on Deficit Reduction, tasked with recommending a targeted deficit reduction of at least $1.2 trillion for the years 2013 through 2021, was unable to reach required goals, thereby triggering the legislation's automatic reduction to several government programs. This includes aggregate reductions of Medicare payments to providers of 2% per fiscal year. These reductions went into effect on April 1, 2013 and, due to subsequent legislative amendments to the statute, will remain in effect through 2030, with the exception of a temporary suspension that lasted from May 1, 2020 through March 31, 2022 due to the COVID-19 pandemic. Following the suspension, a 1% payment reduction began April 1, 2022, lasting through June 30, 2022. The 2% payment reduction resumed on July 1, 2022. The American Taxpayer Relief Act of 2012 further reduced Medicare payments to several providers, including hospitals and cancer treatment

centers, and increased the statute of limitations period for the government to recover overpayments to providers from three to five years. The Bipartisan Budget Act of 2018, also amended the ACA, effective January 1, 2019, by increasing the point-of-sale discount that is owed by pharmaceutical manufacturers who participate in Medicare Part D and closing the coverage gap in most Medicare drug plans, commonly referred to as the "donut hole."

Canadian Review and Approval Process

In Canada, our small molecule product candidates and our research and development activities are primarily regulated by the Food and Drugs Act and the rules and regulations thereunder, which are enforced by Health Canada. Health Canada regulates, among other things, the research, development, testing, approval, manufacture, packaging, labeling, storage, recordkeeping, advertising, promotion, distribution, marketing, post-approval monitoring and import and export of pharmaceutical products. The drug approval process under Canadian laws requires licensing of manufacturing facilities, carefully controlled research and testing of products, government review and approval of experimental results prior to granting approval for commercial sale of drug products. Regulators also typically require that rigorous and specific standards such Continuing Good Manufacturing Practices, or cGMP, GLP and cGCP are followed in the manufacture, nonclinical development and clinical development, respectively, of any drug product. The processes for obtaining regulatory approvals in Canada, along with subsequent compliance with applicable statutes and regulations, require the expenditure of substantial time and financial resources. For further information, see "Risk Factors."

The principal steps required for drug approval in Canada are as follows:

Nonclinical Safety Pharmacology and Toxicology Studies

Non-clinical studies are conducted in vitro and in animals to evaluate pharmacokinetics, metabolism and possible toxic effects to provide evidence of the safety of the drug candidate prior to its administration to humans in clinical studies and throughout development. Such studies are conducted in accordance with applicable laws and GLP.

Clinical Trials

Similar regulations apply in Canada regarding clinical trials as in the United States. In Canada, Research Ethics Boards, or REBs, are used to review and approve clinical trial plans when trials are performed in Canada. For clinical trials that involve the administration of an investigational new drug to human subjects, an application must be made to Health Canada and approved before the trial can commence at a Canadian site. Trials are performed under the supervision of qualified investigators, in most cases a physician, in accordance with cGCP requirements. Clinical trials are conducted under protocols detailing, among other things, the objectives of the trial, the trial procedures, the parameters to be used in monitoring safety and the efficacy criteria to be evaluated and a statistical analysis plan. The protocol and the informed consent forms that are signed by subjects, are reviewed and approved by the REB affiliated with the site where the trial will be conducted. Human clinical trials for new drugs are typically conducted in three sequential phases, Phase 1, Phase 2 and Phase 3, as discussed above in the context of government regulation in the United States. Similar to the FDA, Health Canada also accepts foreign clinical trial data in support of marketing applications. Additionally, the manufacture of investigational drugs for the conduct of human clinical trials is subject to cGMP requirements.

New Drug Submission

In Canada, upon successful completion of Phase 3 clinical trials or earlier stage trials if agreeable to Health Canada, the company sponsoring a new drug then assembles all the nonclinical and clinical

data and other testing relating to the product's pharmacology, chemistry, manufacture, and controls, and submits it to Health Canada as part of an NDS The NDS is then reviewed by Health Canada.

Health Canada will not approve the new drug unless compliance with cGMP—a quality system regulating manufacturing—is satisfactory, and the NDS contains data that provide substantial evidence that the drug is safe and effective in the indication and at the dosage studied. If Health Canada is satisfied that the NDS contains sufficient information, then marketing authorization for the new drug may be granted. In Canada, the marketing authorization for a new drug is called a Notice of Compliance, or NOC.

The testing required to generate data for inclusion in an NDS, and approval process for an NDS, requires substantial time, effort and financial resources, and may take several years to complete. This is necessary to help ensure the efficacy, safety and quality of the product. Data obtained from nonclinical and clinical testing are not always conclusive and may be susceptible to varying interpretations, which could delay, limit or prevent regulatory approval. Health Canada may not grant approval of an NDS on a timely basis, or at all. In Canada, NDSs are subject to user fees and these fees are typically increased annually to reflect inflation.

Health Canada has authority to grant conditional marketing approval following the review of an NDS for a new drug that would treat a serious, life-threatening or severely debilitating disease or condition. A Notice of Compliance with conditions (NOC/c) can be granted when there is promising evidence of clinical effectiveness based on the available data that the drug has the potential to provide (i) effective treatment, prevention or diagnosis of a disease or condition for which no drug is presently marketed in Canada or (ii) a significant increase in efficacy and/or significant decrease in risk such that the overall benefit/risk profile is improved over existing therapies, preventatives or diagnostic agents for a disease or condition that is not adequately managed by a drug marketed in Canada. When a NOC/c is granted, the company to which the NOC/c is issued must make certain commitments to Health Canada, which typically include a requirement to provide confirmatory data to Health Canada to support the safe use and efficacy of the new drug.

Even if Health Canada approves a product candidate, it may limit the approved indications for use of the product candidate, require that contraindications, warnings or precautions be included in the product labeling, require that post-approval studies, including Phase 4 clinical trials, be conducted to further assess a drug's safety after approval, require testing and surveillance programs to monitor the product after commercialization, or impose other conditions, including distribution restrictions or other risk management mechanisms.

Health Canada may prevent or limit further marketing of a product based on the results of post-marketing studies or surveillance programs. After approval, some types of changes to the approved product, such as adding new indications, manufacturing changes, and additional labeling claims, are subject to further testing requirements, notification, and review and approval before the change can be implemented. Further, should new safety information arise, additional testing and/or regulatory notification may be required, or Health Canada may require an update to the product label that impacts the scope of the approved indications or other conditions for clinical use.

European Union Approval Process

The process governing approval of medicinal products in the EU generally follows the same lines as in the United States. It entails satisfactory completion of preclinical studies and adequate and well-controlled clinical trials to establish the safety and efficacy of the product for each proposed indication. It also requires the submission to the relevant competent authorities of an MAA and granting of a marketing authorization by these authorities before the product can be marketed and sold in the EU

Following the UK's departure from the EU, a separate marketing authorization will be required in order to place medicinal products on the market in Great Britain (under the Northern Irish Protocol, the EU regulatory framework will continue to apply in Northern Ireland and centralized EU authorizations will continue to be recognized).

Clinical Trial Approval

The Clinical Trials Directive 2001/20/EC, the Directive 2005/28/EC on GCP and the related national implementing provisions of the individual Member States of the European Union, or EU Member States, govern the system for the approval of clinical trials in the EU. Under this system, an applicant must obtain prior approval from the national competent authority, or NCA, of the EU Member States in which the clinical trial is to be conducted. Furthermore, the applicant may only start a clinical trial at a specific study site after an independent ethics committee, or EC, has issued a favorable opinion. The clinical trial application must be accompanied by, among other documents, an investigational medicinal product dossier (the Common Technical Document) with supporting information prescribed by Directive 2001/20/EC, Directive 2005/28/EC, and corresponding national laws of the EU Member States and further detailed in applicable guidance documents. Under the current regime all suspected unexpected serious adverse reactions to the investigated drug that occur during the clinical trial have to be reported to the NCA and ECs of the EU Member State where they occurred.

In April 2014, the new Clinical Trials Regulation, (EU) No 536/2014, was adopted, which is set to replace the current Clinical Trials Directive. The Clinical Trials Regulation will be directly applicable in all EU Member States without the need for any national implementing legislation. It will overhaul the current system of approvals for clinical trials in the EU. The new Clinical Trials Regulation aims to simplify and streamline the approval of clinical trials in the EU.

Under the new coordinated procedure for the approval of clinical trials, the sponsor of a clinical trial will be required to submit a single application for approval of a clinical trial to a reporting EU Member State through a centralized EU Portal. The submission procedure will be the same irrespective of whether the clinical trial is to be conducted in a single EU Member State or in more than one EU Member State.

The Clinical Trials Regulation has not yet become effective. It is expected that the new Clinical Trials Regulation will come into effect following confirmation of the full functionality of the Clinical Trials Information System, the centralized EU portal and database for clinical trials foreseen by the new Clinical Trials Regulation, through an independent audit. This is currently expected to occur in December 2021. When the Clinical Trials Regulation becomes applicable, the existing Clinical Trial Directive and national legislation put in place to implement the Directive will be repealed. Following implementation of the Clinical Trials Regulation, a transitional period will be in effect for one year where new clinical trial applications can be submitted either under the existing Clinical Trials Directive or under the new Clinical Trials Regulation.

PRIME Designation in the EU

In March 2016, the EMA launched an initiative to facilitate development of product candidates in indications, often rare, for which few or no therapies currently exist. The PRIority MEdicines, or PRIME, scheme is intended to encourage drug development in areas of unmet medical need and provides accelerated assessment of products representing substantial innovation where the marketing authorization application will be made through the centralized procedure. Eligible products must target conditions for which where is an unmet medical need (there is no satisfactory method of diagnosis, prevention or treatment in the EEA or, if there is, the new medicine will bring a major therapeutic

advantage) and they must demonstrate the potential to address the unmet medical need by introducing new methods of therapy or improving existing ones. Products from small- and medium-sized enterprises, or SMEs, may qualify for earlier entry into the PRIME scheme than larger companies. Many benefits accrue to sponsors of product candidates with PRIME designation, including but not limited to, early and proactive regulatory dialogue with the EMA, frequent discussions on clinical trial designs and other development program elements, and accelerated MAA assessment once a dossier has been submitted. Importantly, a dedicated contact and rapporteur from the EMA's CHMP or Committee for Advanced Therapies, are appointed early in PRIME scheme facilitating increased understanding of the product at EMA's Committee level. A kick-off meeting initiates these relationships and includes a team of multidisciplinary experts at the EMA to provide guidance on the overall development and regulatory strategies.

Fixed-Dose Combination Guideline

As with the FDA, the EMA has also issued regulations to address review and approval of fixed-dose combination products. This EMA's Guideline on clinical development of fixed combination medicinal products came into force on October 1, 2017. The basic scientific requirements for any fixed combination medicinal product are justification of the pharmacological and medical rationale for the combination, and establishment of the evidence base for the relevant contribution of all active substances to the desired therapeutic effect (efficacy and/or safety) and a positive benefit-risk for the combination in the targeted indication. For products that involve initial combination of two active ingredients, the EMA has indicated that the design of clinical efficacy/safety studies to support a fixed combination medicinal product application for initial treatment will depend on its rationale, specifically to achieve superior efficacy or improved safety compared to use of the single active substances. In situations when it has been established that monotherapy will not be adequate, appropriate or ethical to reach the desired therapeutic effect, initial use of combination therapy should be easily justified (*e.g.* HIV).

Marketing Authorization

To obtain a marketing authorization for a product European Economic Area (*i.e.*, the EU as well as Iceland, Liechtenstein and Norway), or EEA, an applicant must submit an MAA either under a centralized procedure administered by the EMA, or one of the procedures administered by competent authorities in the EU Member States (decentralized procedure, national procedure or mutual recognition procedure). A marketing authorization may be granted only to an applicant established in the EEA. Regulation (EC) No 1901/2006 provides that prior to obtaining a marketing authorization in the EU, applicants have to demonstrate compliance with all measures included in an EMA-approved Paediatric Investigation Plan, or PIP, covering all subsets of the pediatric population, unless the EMA has granted (1) a product-specific waiver, (2) a class waiver or (3) a deferral for one or more of the measures included in the PIP (for example, when this data is not needed or appropriate because the product is likely to be ineffective or unsafe in children, the disease or condition for which the product is intended occurs only in adult populations, or when the product does not represent a significant therapeutic benefit over existing treatments for pediatric patients). Products that are granted a marketing authorization with the results of the pediatric clinical trials conducted in accordance with the PIP (even where such results are negative) are eligible for six months' supplementary protection certificate extension (if any is in effect at the time of approval).

The centralized procedure provides for the grant of a single marketing authorization by the European Commission that is valid across the EEA. Pursuant to Regulation (EC) No 726/2004, the centralized procedure is compulsory for specific products, including for medicines produced by certain biotechnological processes, products designated as orphan medicinal products, advanced therapy medicinal products (*i.e.* gene therapy, somatic-cell therapy and tissue-engineered medicinal products)

and products with a new active substance indicated for the treatment of certain diseases, including HIV, AIDS, cancer, neurodegenerative disorders, diabetes, auto-immune and other immune dysfunctions and viral diseases. For products with a new active substance indicated for the treatment of other diseases and products that are highly innovative or for which a centralized process is in the interest of public health, the centralized procedure may be optional. The centralized procedure may at the request of the applicant also be used in certain other cases. We anticipate that the centralized procedure will be mandatory for the product candidates we are developing.

Under the centralized procedure, the CHMP is responsible for conducting the initial assessment of a product and for several post-authorization and maintenance activities, such as the assessment of modifications or extensions to an existing marketing authorization. Under the centralized procedure, the maximum timeframe for the evaluation of an MAA is 210 days, excluding clock stops, when additional information or written or oral explanation is to be provided by the applicant in response to questions of the CHMP. Clock stops may extend the timeframe of evaluation of an MAA considerably beyond 210 days. Accelerated evaluation might be granted by the CHMP in exceptional cases, when a medicinal product is of major interest from the point of view of public health and in particular from the viewpoint of therapeutic innovation. If the CHMP accepts such request, the time limit of 210 days will be reduced to 150 days (excluding clock stops) but it is possible that the CHMP can revert to the standard time limit for the centralized procedure if it considers that it is no longer appropriate to conduct an accelerated assessment. At the end of this period, the CHMP provides a scientific opinion on whether or not a marketing authorization should be granted in relation to a medicinal product. Where the CHMP gives a positive opinion, the EMA provides the opinion together with supporting documentation to the European Commission, who make the final decision to grant a marketing authorization, which is issued within 67 days of receipt of the EMA's recommendation.

The European Commission may grant a so-called "marketing authorization under exceptional circumstances". Such authorization is intended for products for which the applicant can demonstrate that it is unable to provide comprehensive data on the efficacy and safety under normal conditions of use, because either (i) the indications for which the product in question is intended are encountered so rarely that the applicant cannot reasonably be expected to provide comprehensive evidence; (ii) in the present state of scientific knowledge, comprehensive information cannot be provided; or (iii) it would be contrary to generally accepted principles of medical ethics to collect such information. Consequently, marketing authorization under exceptional circumstances may be granted subject to certain specific obligations, which may include the following:

- the applicant must complete an identified program of studies within a time period specified by the competent authority, the results of which form the basis of a reassessment of the benefit/risk profile;
- the medicinal product in question may be supplied on medical prescription only and may in certain cases be administered only under strict medical supervision, possibly in a hospital and in the case of a radiopharmaceutical, by an authorized person; and
- the package leaflet and any medical information must draw the attention of the medical practitioner to the fact that the particulars available concerning the medicinal product in question are as yet inadequate in certain specified respects.

A marketing authorization under exceptional circumstances is subject to annual review to reassess the risk-benefit balance in an annual reassessment procedure. Continuation of the authorization is linked to the annual reassessment and a negative assessment could potentially result in the marketing authorization being suspended or revoked. The renewal of a marketing authorization of a medicinal product under exceptional circumstances, however, follows the same rules as a "normal" marketing authorization. Thus, a marketing authorization under exceptional circumstances is granted

for an initial five years, after which the authorization will become valid indefinitely, unless the EMA decides that safety grounds merit one additional five-year renewal.

The EU medicines rules expressly permit the EU Member States to adopt national legislation prohibiting or restricting the sale, supply or use of any medicinal product containing, consisting of or derived from a specific type of human or animal cell, such as embryonic stem cells. While the products we have in development do not make use of embryonic stem cells, it is possible that the national laws in certain EU Member States may prohibit or restrict us from commercializing our products, even if they have been granted an EU marketing authorization.

Unlike the centralized authorization procedure, the decentralized marketing authorization procedure requires a separate application to, and leads to separate approval by, the competent authorities of each EU Member State in which the product is to be marketed. This application is identical to the application that would be submitted to the EMA for authorization through the centralized procedure. The reference EU Member State prepares a draft assessment and drafts of the related materials within 120 days after receipt of a valid application. The resulting assessment report is submitted to the concerned EU Member States who, within 90 days of receipt, must decide whether to approve the assessment report and related materials. If a concerned EU Member State cannot approve the assessment report and related materials due to concerns relating to a potential serious risk to public health, disputed elements may be referred to the European Commission, whose decision is binding on all EU Member States.

The mutual recognition procedure similarly is based on the acceptance by the competent authorities of the EU Member States of the marketing authorization of a medicinal product by the competent authorities of other EU Member States. The holder of a national marketing authorization may submit an application to the competent authority of an EU Member State requesting that this authority recognize the marketing authorization delivered by the competent authority of another EU Member State.

Conditional Marketing Authorization

The European Commission may also grant a so-called “conditional marketing authorization” prior to obtaining the comprehensive clinical data required for an application for a full marketing authorization. Such conditional marketing authorizations may be granted for product candidates (including medicines designated as orphan medicinal products), if (i) the risk-benefit balance of the product candidate is positive, (ii) it is likely that the applicant will be in a position to provide the required comprehensive clinical trial data post-authorization, (iii) the product fulfills an unmet medical need and (iv) the benefit to public health of the immediate availability on the market of the medicinal product concerned outweighs the risk inherent in the fact that additional data are still required. A conditional marketing authorization may contain specific obligations to be fulfilled by the marketing authorization holder, including obligations with respect to the completion of ongoing or new studies, and with respect to the collection of pharmacovigilance data. Conditional marketing authorizations are valid for one year, and may be renewed annually, if the risk-benefit balance remains positive, and after an assessment of the need for additional or modified conditions and/or specific obligations. The timelines for the centralized procedure described above also apply with respect to the review by the CHMP of applications for a conditional marketing authorization. A conditional marketing authorization can be converted into a standard centralized marketing authorization (no longer subject to specific obligations) once the marketing authorization holder fulfils the obligations imposed and the complete data confirm that the medicine’s benefits continue to outweigh its risks.

Regulatory Data Protection in the EU

In the EEA, innovative medicinal products approved on the basis of a complete independent data package qualify for eight years of data exclusivity upon marketing authorization and an additional two years of market exclusivity. Data exclusivity, if granted, prevents applicants for authorization of generics or biosimilars of these innovative products from referencing the innovator's preclinical and clinical trial data contained in the dossier of the reference product when applying for a generic or biosimilar marketing authorization, for a period of eight years from the date on which the reference product was first authorized in the EEA. During an additional two-year period of market exclusivity, a generic or biosimilar MAA can be submitted and authorized, and the innovator's data may be referenced, but no generic or biosimilar medicinal product can be placed on the EEA market until the expiration of the market exclusivity. The overall ten-year period will be extended to a maximum of 11 years if, during the first eight years of those ten years, the marketing authorization holder obtains an authorization for one or more new therapeutic indications which, during the scientific evaluation prior to their authorization, are held to bring a significant clinical benefit in comparison with existing therapies. Even if a compound is considered to be an innovative medical product so that the innovator gains the prescribed period of data exclusivity, another company nevertheless could also market another version of the product if such company obtained marketing authorization based on an MAA with a complete independent data package of pharmaceutical tests, preclinical tests and clinical trials.

Periods of Authorization and Renewals

A marketing authorization has an initial validity for five years in principle. The marketing authorization may be renewed after five years on the basis of a re-evaluation of the risk-benefit balance by the EMA (for a centrally authorized product) or by the competent authority of the relevant EU Member State(for a centrally authorized product). To this end, the marketing authorization holder must provide the EMA or the competent authority with a consolidated version of the file in respect of quality, safety and efficacy, including all variations introduced since the marketing authorization was granted, at least six months before the marketing authorization ceases to be valid. The European Commission or the competent authorities of the EU Member States may decide, on justified grounds relating to pharmacovigilance, to proceed with one further five-year period of marketing authorization. Once subsequently definitively renewed, the marketing authorization shall be valid for an unlimited period. Any authorization which is not followed by the actual placing of the medicinal product on the EEA market (in case of centralized procedure) or on the market of the authorizing EU Member State within three years after authorization, or if the product is removed from the market for three consecutive years, ceases to be valid (the so-called sunset clause).

Orphan Drug Designation and Exclusivity

Regulation (EC) No. 141/2000, as implemented by Regulation (EC) No. 847/2000 provides that a drug can be designated as an orphan drug by the European Commission if its sponsor can establish: that the product is intended for the diagnosis, prevention or treatment of a life-threatening or chronically debilitating condition and either (i) the prevalence of the condition is affecting not more than five in ten thousand persons in the EU when the application is made, or (ii) that without incentives it is unlikely that the marketing of the drug in the EU would generate sufficient return to justify the necessary investment in its development. In each case, the applicant must demonstrate that there exists no satisfactory method of diagnosis, prevention or treatment of the condition in question that has been authorized in the EU or, if such method exists, the drug will be of significant benefit to those affected by that condition.

Once authorized, orphan medicinal products are entitled to ten years of market exclusivity in all EU Member States and in addition a range of other benefits during the development and regulatory

review process including scientific assistance for study protocols, authorization through the centralized marketing authorization procedure and a reduction or elimination of registration and marketing authorization fees. During the period of market exclusivity, marketing authorization may only be granted for a "similar medicinal product" with the same orphan indication if: (i) the marketing authorization holder for the original orphan medicinal product consents to the authorization of the second orphan product; or (ii) the manufacturer of the original orphan medicinal product is unable to supply sufficient quantities. Marketing authorization may also be granted to a similar medicinal product with the same orphan indication if it is established that this product is safer, more effective or otherwise clinically superior to the original orphan medicinal product. A "similar medicinal product" is defined as a medicinal product containing a similar active substance or substances as contained in an authorized orphan medicinal product, and which is intended for the same therapeutic indication. The period of market exclusivity may, in addition, be reduced to six years if at the end of the fifth year, it is established that the product no longer meets the criteria for orphan drug designation because, for example, the original orphan medicinal product is sufficiently profitable not to justify maintenance of market exclusivity.

Regulatory Requirements After a Marketing Authorization has been Obtained

Where an authorization for a medicinal product in the EU is obtained, the holder of the marketing authorization is required to comply with a range of requirements applicable to the manufacturing, marketing, promotion and sale of medicinal products. These include:

- Compliance with the EU's stringent pharmacovigilance or safety reporting rules must be ensured. These rules can impose post-authorization studies and additional monitoring obligations.
- The manufacturing of authorized medicinal products, for which a separate manufacturer's license is mandatory, must also be conducted in strict compliance with the applicable EU laws, regulations and guidance, including Directive 2001/83/EC, Directive 2003/94/EC, Regulation (EC) No 726/2004 and the European Commission Guidelines for Good Manufacturing Practice. These requirements include compliance with EU cGMP standards when manufacturing medicinal products and active pharmaceutical ingredients, including the manufacture of active pharmaceutical ingredients outside of the EU with the intention to import the active pharmaceutical ingredients into the EU.
- The marketing and promotion of authorized drugs, including industry-sponsored continuing medical education and advertising directed toward the prescribers of drugs and/or the general public, are strictly regulated in the EU notably under Directive 2001/83EC, as amended, and are also subject to EU Member State national laws. Direct-to-consumer advertising of prescription medicines is prohibited across the EU.

General Data Protection Regulation

The collection, use, disclosure, transfer, or other processing of personal data regarding individuals in the EU, including personal health data, is subject to the EU General Data Protection Regulation, or GDPR, which became effective on May 25, 2018. The GDPR is wide-ranging in scope and imposes numerous requirements on companies that process personal data, including requirements relating to processing health and other sensitive data, obtaining consent of the individuals to whom the personal data relates, providing information to individuals regarding data processing activities, implementing safeguards to protect the security and confidentiality of personal data, providing notification of data breaches, and taking certain measures when engaging third-party processors. The GDPR also imposes strict rules on the transfer of personal data to countries outside the EU, including the United States, and permits data protection authorities to impose large penalties

for violations of the GDPR, including potential fines of up to €20 million or 4% of annual global revenues, whichever is greater. The GDPR also confers a private right of action on data subjects and consumer associations to lodge complaints with supervisory authorities, seek judicial remedies, and obtain compensation for damages resulting from violations of the GDPR. Compliance with the GDPR will be a rigorous and time-intensive process that may increase the cost of doing business or require companies to change their business practices to ensure full compliance.

Brexit and the Regulatory Framework in the United Kingdom

On June 23, 2016, the electorate in the United Kingdom voted in favor of leaving the EU, commonly referred to as Brexit. Following protracted negotiations, the United Kingdom left the EU on January 31, 2020. A transition period began on February 1, 2020, during which EU pharmaceutical law remained applicable to the United Kingdom, however this ended on December 31, 2020. Since the regulatory framework in the United Kingdom covering quality, safety and efficacy of pharmaceutical products, clinical trials, marketing authorization, commercial sales and distribution of pharmaceutical products is derived from EU Directives and Regulations, Brexit could materially impact the future regulatory regime that applies to products and the approval of product candidates in the United Kingdom, as the United Kingdom legislation now has the potential to diverge from EU legislation. It remains to be seen how Brexit will impact regulatory requirements for product candidates and products in the United Kingdom in the long-term. The MHRA has recently published detailed guidance for industry and organizations to follow from January 1, 2021 now that the transition period is over, which will be updated as the United Kingdom's regulatory position on medical products evolves over time.

Furthermore, while the Data Protection Act of 2018 in the United Kingdom that "implements" and complements the EU's GDPR, is now effective in the United Kingdom, it is still unclear whether transfer of data from the European Economic Area, or EEA, to the United Kingdom will remain lawful under GDPR. The Trade and Cooperation Agreement provides for a transitional period during which the United Kingdom will be treated like an EU Member State in relation to processing and transfers of personal data for four months from January 1, 2021. This may be extended by two further months. After such period, the United Kingdom will be a "third country" under the GDPR unless the European Commission adopts an adequacy decision in respect of transfers of personal data to the United Kingdom. The United Kingdom has already determined that it considers all of the EU and EEA member states to be adequate for the purposes of data protection, ensuring that data flows from the United Kingdom to the EU and EEA remain unaffected.

Pricing Decisions for Approved Products

In the EU, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost-effectiveness of a particular product candidate to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. For example, EU Member States have the option to restrict the range of products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. EU Member States may approve a specific price for a product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the product on the market. Other EU Member States allow companies to fix their own prices for products, but monitor and control prescription volumes and issue guidance to physicians to limit prescriptions. Recently, many countries in the EU have increased the amount of discounts required on pharmaceuticals and these efforts could continue as countries attempt to manage health care expenditures, especially in light of the severe fiscal and debt crises experienced by many countries in the EU. The downward pressure on health care costs in general, particularly prescription products, has become intense.

As a result, increasingly high barriers are being erected to the entry of new products. Political, economic and regulatory developments may further complicate pricing negotiations, and pricing negotiations may continue after reimbursement has been obtained. Reference pricing used by various EU Member States, and parallel trade, i.e., arbitrage between low-priced and high-priced EU Member States, can further reduce prices. There can be no assurance that any country that has price controls or reimbursement limitations for pharmaceutical products will allow favorable reimbursement and pricing arrangements for any products, if approved in those countries.

Rest of the World Regulation

For other countries outside of Canada, the EU and the United States, such as countries in Eastern Europe, Latin America or Asia, the requirements governing the conduct of clinical trials, product licensing, pricing and reimbursement vary from country to country. Additionally, the clinical trials must be conducted in accordance with GCP requirements and the applicable regulatory requirements and the ethical principles that have their origin in the Declaration of Helsinki.

If we fail to comply with applicable foreign regulatory requirements, we may be subject to, among other things, fines, suspension or withdrawal of regulatory approvals, product recalls, seizure of products, operating restrictions and criminal prosecution.

Coverage and Reimbursement

Successful commercialization of new drug products depends in part on the extent to which reimbursement for those drug products will be available from government health administration authorities, private health insurers, and other organizations. In the United States, government authorities and third-party payors, such as private health insurers and health maintenance organizations, decide which drug products they will pay for and establish reimbursement levels. The availability and extent of reimbursement by governmental and private payors is essential for most patients to be able to afford a drug product. Sales of drug products depend substantially, both domestically and abroad, on the extent to which the costs of drugs products are paid for by health maintenance, managed care, pharmacy benefit and similar healthcare management organizations, or reimbursed by government health administration authorities, private health coverage insurers and other third-party payors.

A primary trend in the U.S. healthcare industry and elsewhere is cost containment. Government authorities and third-party payors have attempted to control costs by limiting coverage and the amount of reimbursement for particular drug products. Third-party payors are increasingly challenging the price, examining the medical necessity, and reviewing the cost-effectiveness of medical products, therapies and services, in addition to questioning their safety and efficacy. Obtaining reimbursement for our products may be particularly difficult because of the higher prices often associated with branded drugs and drugs administered under the supervision of a physician. We may need to conduct expensive pharmacoeconomic studies in order to demonstrate the medical necessity and cost-effectiveness of our products, in addition to the costs required to obtain FDA and foreign approvals. These studies could result in delays or disadvantageous coverage for products we develop. Our product candidates may not be considered medically necessary or cost-effective. Obtaining coverage and reimbursement approval of a product from a government or other third-party payor is a time-consuming and costly process that could require us to provide to each payor supporting scientific, clinical and cost-effectiveness data for the use of our product on a payor-by-payor basis, with no assurance that coverage and adequate reimbursement will be obtained. A payor's decision to provide coverage for a product does not imply that an adequate reimbursement rate will be approved. Further, one payor's determination to provide coverage for a product does not assure that other payors will also provide coverage for the product. Adequate third-party reimbursement may not be available to enable

us to maintain price levels sufficient to realize an appropriate return on its investment in product development. If reimbursement is not available or is available only at limited levels, we may not be able to successfully commercialize any product candidate that we successfully develop.

In many countries, the prices of drug products are subject to varying price control mechanisms as part of national health systems. In general, the prices of drug products under such systems are substantially lower than in the United States. Other countries allow companies to fix their own prices for drug products, but monitor and control company profits. Accordingly, in markets outside the United States, the reimbursement for drug products may be reduced compared with the United States.

In the United States, the principal decisions about reimbursement for new drug products are typically made by CMS, an agency within the HHS. CMS decides whether and to what extent a new drug product will be covered and reimbursed under Medicare, and private payors tend to follow CMS to a substantial degree. However, no uniform policy of coverage and reimbursement for drug products exists among third-party payors and coverage and reimbursement levels for drug products can differ significantly from payor to payor. Coverage and reimbursement by a third-party payor may depend upon a number of factors, including the third-party payor's determination that use of a drug product is:

- a covered benefit under its health plan;
- safe, effective and medically necessary;
- appropriate for the specific patient;
- cost-effective; and
- neither experimental nor investigational.

We cannot be sure that coverage or reimbursement will be available for any product that we commercialize and, if coverage and reimbursement are available, what the level of reimbursement will be. Coverage may also be more limited than the purposes for which the product is approved by the FDA or comparable foreign regulatory authorities. Future coverage and reimbursement may be subject to increased restrictions, such as prior authorization requirements, and to changes in the rates of reimbursement for orphan drug products both in the United States and in international markets. Reimbursement may impact the demand for, or the price of, any product for which we obtain regulatory approval.

The MMA established the Medicare Part D program to provide a voluntary prescription drug benefit to Medicare beneficiaries. Under Part D, Medicare beneficiaries may enroll in prescription drug plans offered by private entities that provide coverage of outpatient prescription drugs. While all Medicare drug plans must give at least a standard level of coverage set by Medicare, Part D prescription drug plan sponsors are not required to pay for all covered Part D drugs, and each Part D prescription drug plan can develop its own drug formulary that identifies which drugs it will cover and at what tier or level. However, Part D prescription drug formularies must include drugs within each therapeutic category and class of covered Part D drugs, though not necessarily all the drugs in each category or class. Any formulary used by a Part D prescription drug plan must be developed and reviewed by a pharmacy and therapeutic committee. Government payment for some of the costs of prescription drugs may increase demand for drugs for which we obtain marketing approval. Any negotiated prices for any of our products covered by a Part D prescription drug plan will likely be lower than the prices we might otherwise obtain. Moreover, while the MMA applies only to drug benefits for Medicare beneficiaries, private payors often follow Medicare coverage policy and payment limitations in setting their own payment rates. Any reduction in payment that results from the MMA may result in a similar reduction in payments from non-governmental payors.

For a drug product to receive federal reimbursement under the Medicaid or Medicare Part B programs or to be sold directly to U.S. government agencies, the manufacturer must extend discounts

to entities eligible to participate in the 340B drug pricing program. The required 340B discount on a given product is calculated based on the average manufacturer price, or AMP, and Medicaid rebate amounts reported by the manufacturer. As of 2010, the ACA expanded the types of entities eligible to receive discounted 340B pricing, although under the current state of the law these newly eligible entities (with the exception of children's hospitals) will not be eligible to receive discounted 340B pricing on orphan drugs. As the required 340B discount is determined based on average manufacturer price, or AMP, and Medicaid rebate data, the revisions to the Medicaid rebate formula and AMP definition described above could cause the required 340B discount to increase. The American Recovery and Reinvestment Act of 2009 provides funding for the federal government to compare the effectiveness of different treatments for the same illness. The plan for the research was published in 2012 by HHS, the Agency for Healthcare Research and Quality and the NIH, and periodic reports on the status of the research and related expenditures are made to Congress. Although the results of the comparative effectiveness studies are not intended to mandate coverage policies for public or private payors, it is not clear what effect, if any, the research will have on the sales of our product candidates, if any such drug or the condition that they are intended to treat are the subject of a trial. It is also possible that comparative effectiveness research demonstrating benefits in a competitor's drug could adversely affect the sales of our product candidate. If third-party payors do not consider our drugs to be cost-effective compared to other available therapies, they may not cover our drugs after approval as a benefit under their plans or, if they do, the level of payment may not be sufficient to allow us to sell our drugs on a profitable basis.

These laws and future state and federal healthcare reform measures may be adopted in the future, any of which may result in additional reductions in Medicare and other healthcare funding and otherwise affect the prices we may obtain for any product candidates for which we may obtain regulatory approval or the frequency with which any such product candidate is prescribed or used.

Outside of the United States, the pricing of pharmaceutical products and medical devices is subject to governmental control in many countries. For example, in the EU, pricing and reimbursement schemes vary widely from country to country. Some countries provide that products may be marketed only after a reimbursement price has been agreed. Some countries may require the completion of additional studies that compare the cost effectiveness of a particular therapy to currently available therapies or so-called health technology assessments, in order to obtain reimbursement or pricing approval. Other countries may allow companies to fix their own prices for products, but monitor and control product volumes and issue guidance to physicians to limit prescriptions. Efforts to control prices and utilization of pharmaceutical products and medical devices will likely continue as countries attempt to manage healthcare expenditures.

Legal Proceedings

We are not currently subject to any material legal proceedings.

Facilities

Our offices are located in Cambridge, Massachusetts and consist of approximately 8,850 square feet of leased office space. The lease expires in October 2026. In January 2022, we entered into an operating lease for additional office space in Cambridge, Massachusetts. The lease includes an option to extend the lease term for one period of three years at the then prevailing market rate. The lease called for a security deposit of $0.5 million. The lease was amended in March 2022 to increase the monthly minimum rent payment amount. Total minimum rental payments over the initial three year lease term are expected to be $5.7 million. We believe that our facilities are adequate for our current needs and that suitable additional or substitute space would be available if needed.

Employees and Human Capital

As of June 30, 2022, we had 226 full-time employees. Of our workforce, 47 employees are directly engaged in research and development with the rest providing administrative, business and operations support. None of our employees are represented by labor unions or covered by collective bargaining agreements. We consider the relationship with our employees to be good. We also use outside consultants and contractors with unique expertise and skills for limited engagements. As of June 30, 2022, we utilized multiple outside consultants or contractors that represented approximately 6 full-time equivalents to supplement our full-time workforce.

Our human capital is integral to helping us achieve our goal to end the suffering caused by neurodegenerative diseases. Our human capital resources objectives include, as applicable, identifying, recruiting, retaining, incentivizing and integrating our existing and additional employees. The principal purposes of our equity incentive plans are to attract, retain and motivate selected employees, consultants and directors through the granting of stock-based compensation awards and cash-based performance bonus awards.

PRINCIPAL STOCKHOLDERS

The following table sets forth information with respect to the beneficial ownership of our common stock as of September 15, 2022 by:

- each of our directors;
- each of our named executive officers;
- all of our directors and executive officers as a group; and
- each person, or group of affiliated persons, who is known by us to beneficially own more than 5% of our common stock.

The column entitled "Percentage of Shares Beneficially Owned—Before Offering" is based on a total of 58,533,226 shares of our common stock outstanding as of September 15, 2022. The column entitled "Percentage of Shares Beneficially Owned—After Offering" is based on 65,226,976 shares of our common stock to be outstanding after this offering, including the 6,693,750 shares of our common stock that we are selling in this offering, but not including any additional shares issuable upon exercise of outstanding options or any exercise by the underwriters of their option to purchase additional shares.

Beneficial ownership is determined in accordance with the rules and regulations of the SEC and includes voting or investment power with respect to our common stock. Shares of our common stock subject to options that are currently exercisable or exercisable within 60 days after September 15, 2022 are considered outstanding and beneficially owned by the person holding the options for the purpose of calculating the percentage ownership of that person but not for the purpose of calculating the percentage ownership of any other person. Except as otherwise noted, the persons and entities in this table have sole voting and investment power with respect to all of the shares of our common stock beneficially owned by them, subject to community property laws, where applicable. Except as otherwise set forth below, the address of the beneficial owner is c/o Amylyx Pharmaceuticals, Inc., 43 Thorndike St., Cambridge, MA 02141.

		Percentage of Shares Beneficially Owned	
Name of Beneficial Owner	Shares Beneficially Owned	Before Offering	After Offering
5% Stockholders			
Morningside Venture Investments Limited[1]	9,302,142	15.9%	14.3%
Viking Global Opportunities Illiquid Investments Sub-Master LP[2]	5,770,536	9.9%	8.8%
ALS Invest 1 B.V.[3]	5,795,280	9.9%	8.9%
Perceptive Advisors LLC[4]	2,971,413	5.1%	4.6%
Named Executive Officers and Directors			
Joshua Cohen[5]	2,973,609	5.1%	4.6%
Justin Klee[6]	2,973,609	5.1%	4.6%
James Frates[7]	197,768	*	*
Margaret Olinger[8]	268,775	*	*
Patrick D. Yeramian, M.D.[9]	260,771	*	*
George Mclean Milne Jr, Ph.D.[10]	921,221	1.6%	1.4%
Isaac Cheng, M.D.[11]	14,978	*	*
Paul Fonteyne[12]	46,155	*	*
Daphne Quimi[13]	35,452	*	*
All Current Executive Officers and Directors as a Group (ten persons)[14]	7,692,338	13.0%	11.8%

* Represents beneficial ownership of less than 1% of our outstanding stock.

(1) Consists of (i) 9,057,264 shares of common stock held by Morningside Venture Investments Limited, or Morningside, and (ii) 244,878 shares of common stock held by MVIL, LLC, or MVIL, a wholly-owned subsidiary of Morningside. Frances Anne Elizabeth Richard, Jill Marie Franklin, Peter Stuart Allenby Edwards, and Cheung Ka Ho are the directors of Morningside and share voting and dispositive power with respect to the securities held by Morningside, including by MVIL, its wholly owned subsidiary. Ms. Richard, Ms. Franklin, Mr. Edwards and Mr. Cheung each disclaim beneficial ownership of the securities held by Morningside and MVIL. Cheng Yee Wing and Wong See Wai are the managers of MVIL and share voting and dispositive power with respect to the securities held by MVIL. Ms. Cheng and Mr. Wong each disclaim ownership of the securities owned by MVIL. Morningside is ultimately wholly beneficially owned by a family trust established by Madam Chan Tan Ching Fen. The address of Morningside is 2nd Floor, Le Prince de Galles, 3-5 Avenue Citronniers, MC 98000, Monaco.

(2) Based on a Schedule 13G/A filed with the SEC on September 12, 2022 by Viking Global Investors LP, or VGI, Viking Global Opportunities Parent GP LLC, or Opportunities Parent, Viking Global Opportunities GP LLC, or Opportunities GP, Viking Global Opportunities Portfolio GP LLC, or Opportunities Portfolio GP, Viking Global Opportunities Illiquid Investments Sub-Master LP, or Viking, DRAGSA 96 LLC, or DRAGSA 96, O. Andreas Halvorsen, David C. Ott and Rose S. Shabet. Consists of (i) 3,919,596 shares of common stock held by Viking and (ii) 1,850,940 shares of common stock held by DRAGSA 96. VGI provides managerial services to Viking and DRAGSA 96. VGI has the authority to dispose of and vote the shares of common stock directly owned by Viking and DRAGSA 96. Opportunities Parent is the general partner of Opportunities GP, which has the authority to dispose of and vote the shares of common stock controlled by Opportunities Portfolio GP (which consists of the shares of common stock directly held by Viking) and the shares of common stock directly held by DRAGSA 96. Opportunities GP serves as the sole member of Opportunities Portfolio GP and has the authority to dispose of and vote the shares of common stock controlled by Opportunities Portfolio GP, which consists of the shares of common stock directly held by Viking. In addition, Opportunities GP is the general partner of each of Viking Global Opportunities Intermediate LP and Viking Global Opportunities LP. The membership interests of DRAGSA 96 are held by Viking Global Opportunities Intermediate LP and Viking Global Opportunities LP. Accordingly, Opportunities GP has the authority to dispose of and vote the shares of common stock directly held by DRAGSA 96. Opportunities Portfolio GP serves as the general partner of Viking and has the authority to dispose of and vote the shares of common stock directly owned by Viking. Viking has the authority to dispose of and vote the shares of common stock directly owned by it, which power may be exercised by its general partner, Opportunities Portfolio GP, and by VGI, an affiliate of Opportunities Portfolio GP, which provides managerial services to Viking. Viking Global Opportunities LP (a Delaware limited partnership) and Viking Global Opportunities III LP (a Cayman Islands exempted limited partnership), through its investment in Viking Global Opportunities Intermediate LP (a Cayman Islands exempted limited partnership), invest substantially all of their assets in Viking Global Opportunities Master LP (a Cayman Islands exempted limited partnership), which in turn invests through Viking. DRAGSA 96 has the authority to dispose of and vote the shares of common stock directly owned by it, which power may be exercised by Opportunities GP and its general partner, Opportunities Parent, and by VGI, an affiliate of Opportunities GP, which provides managerial services to DRAGSA 96. The membership interests of DRAGSA 96 are held by Viking Global Opportunities Intermediate LP and Viking Global Opportunities LP. Opportunities GP is the general partner of Viking Global Opportunities LP and Viking Global Opportunities Intermediate LP. Mr. Halvorsen, Mr. Ott and Ms. Shabet, as Executive Committee Members of Viking Global Partners LLC (general partner of VGI) and Opportunities Parent, have shared authority to dispose of and vote the shares of common stock beneficially owned by VGI and Opportunities Parent. The address of each of the entities is c/o Viking Global Investors LP, 55 Railroad Avenue, Greenwich, CT 06830.

(3) Consists of 5,795,280 shares of common stock held by ALS Invest. ALS Invest is managed by SUNU Ventures BV. Felix-André von Coerper is the sole corporate director of SUNU Ventures BV and has voting and dispositive power with respect to the shares held by ALS Invest. The address for ALS Invest and SUNU Ventures BV is Eerste Weteringdwarsstraat 54E, 1017 TP Amsterdam, The Netherlands.

(4) Based on a Schedule 13G filed with the SEC on June 21, 2022 by Perceptive Advisors LLC, or Perceptive Advisors, Perceptive Life Sciences Master Fund, Ltd., or Perceptive Master Fund, and Joseph Edelman. Consists of 2,971,413 shares of common stock directly held by Perceptive Master Fund. Perceptive Advisors serves as the investment manager to Perceptive Master Fund and may be deemed to beneficially own such shares. Mr. Edelman is the managing member of Perceptive Advisors and may be deemed to beneficially own such shares.

(5) Consists of (i) 2,823,585 shares of common stock and (ii) 150,024 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022.

(6) Consists of (i) 2,823,585 shares of common stock and (ii) 150,024 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022.

(7) Consists of 197,768 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022.

(8) Consists of (i) 188,425 shares of common stock and (ii) 80,350 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022.

(9) Consists of (i) 178,000 shares of common stock and (ii) 82,771 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022.

(10) Consists of (i) 910,821 shares of common stock and (ii) 10,400 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022.

(11) Consists of (i) 6,578 shares of common stock and (ii) 8,400 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022. Dr. Cheng, a member of our board of directors, is an investment professional at Morningside Technology Advisory, LLC, an indirect advisor to Morningside Venture Investments Limited and MVIL, LLC. Dr. Cheng has no voting or dispositive power over the shares held by the Morningside shareholder entities and therefore disclaims beneficial ownership of all shares referred to in Footnote 1 above.

(12) Consists of (i) 3,947 shares of common stock and (ii) 42,208 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022.

(13) Consists of 35,452 shares of common stock underlying stock options exercisable within 60 days of September 15, 2022.

(14) Includes options to purchase 757,397 shares of common stock exercisable within 60 days of September 15, 2022 held by executive officers and directors.

DESCRIPTION OF CAPITAL STOCK

The following summary description of our common stock and preferred stock summarizes the material terms and provisions of our capital stock. The following description of our capital stock does not purport to be complete and is subject to, and qualified in its entirety by, our certificate of incorporation and bylaws, which are exhibits to the registration statement of which this prospectus forms a part, and by applicable law. The terms of our common stock and preferred stock may also be affected by Delaware law.

General

Our authorized capital stock consists of 300,000,000 shares of common stock, par value $0.0001 per share, and 10,000,000 shares of preferred stock, par value $0.0001 per share, all of which shares of preferred stock are undesignated.

As of June 30, 2022, we had 58,533,226 shares of our common stock outstanding, held by 134 stockholders of record, and no shares of our preferred stock outstanding.

Common Stock

The holders of our common stock are entitled to one vote for each share held on all matters submitted to a vote of the stockholders. The holders of our common stock do not have any cumulative voting rights. Holders of our common stock are entitled to receive ratably any dividends declared by our board of directors out of funds legally available for that purpose, subject to any preferential dividend rights of any outstanding preferred stock. Our common stock has no preemptive rights, conversion rights or other subscription rights or redemption or sinking fund provisions.

In the event of our liquidation, dissolution or winding up, holders of our common stock will be entitled to share ratably in all assets remaining after payment of all debts and other liabilities and any liquidation preference of any outstanding preferred stock.

Preferred Stock

Our board of directors has the authority, without further action by our stockholders, to issue up to 10,000,000 shares of preferred stock in one or more series and to fix the rights, preferences, privileges and restrictions thereof. These rights, preferences and privileges could include dividend rights, conversion rights, voting rights, terms of redemption, liquidation preferences, sinking fund terms and the number of shares constituting, or the designation of, such series, any or all of which may be greater than the rights of common stock. The issuance of our preferred stock could adversely affect the voting power of holders of common stock and the likelihood that such holders will receive dividend payments and payments upon our liquidation. In addition, the issuance of preferred stock could have the effect of delaying, deferring or preventing a change in control of our company or other corporate action. No shares of preferred stock are outstanding, and we have no present plan to issue any shares of preferred stock.

Registration Rights

Certain holders of our common stock are entitled to rights with respect to the registration of these securities under the Securities Act. These rights are provided under the terms of an amended and restated investors' rights agreement, or the investors' rights agreement, between us and certain holders of our common stock. The investors' rights agreement includes demand registration rights, short-form registration rights and piggyback registration rights. All fees, costs and expenses of

underwritten registrations under the investors' rights agreement will be borne by us and all selling expenses, including underwriting discounts and selling commissions, will be borne by the holders of the shares being registered.

Demand Registration Rights

Certain holders of our common stock are entitled to demand registration rights. Under the terms of the investors' rights agreement, we will be required, upon the written request of the holders of at least 25% of our outstanding registrable securities, as defined in the investors' rights agreement, or a lesser percent if the total amount of registrable shares requested to be registered has an anticipated aggregate offering price to the public, net of selling expenses, of least $15.0 million, to file a registration statement and use commercially reasonable efforts to effect the registration of all or a portion of their registrable securities for public resale. We are required to effect only two registrations pursuant to this provision of the investors' rights agreement.

Short-Form Registration Rights

Pursuant to the investors' rights agreement, if we are eligible to file a registration statement on Form S-3, upon the written request of the holders of at least 10% of our outstanding registrable securities, as defined in the investors' rights agreement, may demand in writing that we register their registrable securities under the Securities Act so long as the total amount of registrable shares requested to be registered has an anticipated aggregate offering price to the public, net of selling expenses, of least $3.0 million. We are required to effect only two registrations in any twelve month period pursuant to this provision of the investors' rights agreement. The right to have such shares registered on Form S-3 is further subject to other specified conditions and limitations.

Piggyback Registration Rights

Pursuant to the investors' rights agreement, if we register any of our securities either for our own account or for the account of other security holders, the holders of registrable securities are entitled to include their shares in the registration. Subject to certain exceptions contained in the investors' rights agreement, we and the underwriters may limit the number of shares included in the underwritten offering to the number of shares which we and the underwriters determine in our sole discretion will not jeopardize the success of the offering.

Indemnification

Our investors' rights agreement contains customary cross-indemnification provisions, under which we are obligated to indemnify holders of registrable securities in the event of material misstatements or omissions in the registration statement attributable to us, and they are obligated to indemnify us for material misstatements or omissions attributable to them.

Expiration of Registration Rights

The demand registration rights and short form registration rights granted under the investors' rights agreement will terminate no later than January 11, 2027, the fifth anniversary of the completion of our IPO.

Anti-Takeover Effects of our Certificate of Incorporation and Bylaws and Delaware Law

Our certificate of incorporation and bylaws include a number of provisions that may have the effect of delaying, deferring or preventing another party from acquiring control of us and encouraging

persons considering unsolicited tender offers or other unilateral takeover proposals to negotiate with our board of directors rather than pursue non-negotiated takeover attempts. These provisions include the items described below.

Board Composition and Filling Vacancies

Our certificate of incorporation provides for the division of our board of directors into three classes serving staggered three-year terms, with one class being elected each year. Our certificate of incorporation also provides that directors may be removed only for cause and then only by the affirmative vote of the holders of 66-2/3% or more of the shares then entitled to vote at an election of directors. Further, any vacancy on our board of directors, however occurring, including a vacancy resulting from an increase in the size of our board, may only be filled by the affirmative vote of a majority of our directors then in office even if less than a quorum. The classification of directors, together with the limitations on removal of directors and treatment of vacancies, has the effect of making it more difficult for stockholders to change the composition of our board of directors.

No Written Consent of Stockholders

Our certificate of incorporation provides that all stockholder actions are required to be taken by a vote of the stockholders at an annual or special meeting, and that stockholders may not take any action by written consent in lieu of a meeting. This limit may lengthen the amount of time required to take stockholder actions and would prevent the amendment of our bylaws or removal of directors by our stockholders without holding a meeting of stockholders.

Meetings of Stockholders

Our certificate of incorporation and bylaws provide that only a majority of the members of our board of directors then in office may call special meetings of stockholders and only those matters set forth in the notice of the special meeting may be considered or acted upon at a special meeting of stockholders. Our bylaws limit the business that may be conducted at an annual meeting of stockholders to those matters properly brought before the meeting.

Advance Notice Requirements

Our bylaws establish advance notice procedures with regard to stockholder proposals relating to the nomination of candidates for election as directors or new business to be brought before meetings of our stockholders. These procedures provide that notice of stockholder proposals must be timely given in writing to our corporate secretary prior to the meeting at which the action is to be taken. Generally, to be timely, notice must be received at our principal executive offices not less than 90 days nor more than 120 days prior to the first anniversary date of the annual meeting for the preceding year. Our bylaws specify the requirements as to form and content of all stockholders' notices. These requirements may preclude stockholders from bringing matters before the stockholders at an annual or special meeting.

Amendment to Certificate of Incorporation and Bylaws

Any amendment of our certificate of incorporation must first be approved by a majority of our board of directors, and if required by law or our certificate of incorporation, must thereafter be approved by a majority of the outstanding shares entitled to vote on the amendment and a majority of the outstanding shares of each class entitled to vote thereon as a class, except that the amendment of the provisions relating to stockholder action, board composition, limitation of liability and the amendment of our bylaws and certificate of incorporation must be approved by not less than 66-2/3% of the

outstanding shares entitled to vote on the amendment, and not less than 66-2/3% of the outstanding shares of each class entitled to vote thereon as a class. Our bylaws may be amended by the affirmative vote of a majority of the directors then in office, subject to any limitations set forth in the bylaws; and may also be amended by the affirmative vote of at least 66-2/3% of the outstanding shares entitled to vote on the amendment, or, if our board of directors recommends that the stockholders approve the amendment, by the affirmative vote of the majority of the outstanding shares entitled to vote on the amendment, in each case voting together as a single class.

Undesignated Preferred Stock

Our certificate of incorporation provides for 10,000,000 authorized shares of preferred stock. The existence of authorized but unissued shares of preferred stock may enable our board of directors to discourage an attempt to obtain control of us by means of a merger, tender offer, proxy contest or otherwise. For example, if in the due exercise of its fiduciary obligations, our board of directors were to determine that a takeover proposal is not in the best interests of our stockholders, our board of directors could cause shares of preferred stock to be issued without stockholder approval in one or more private offerings or other transactions that might dilute the voting or other rights of the proposed acquirer or insurgent stockholder or stockholder group. In this regard, our certificate of incorporation grants our board of directors broad power to establish the rights and preferences of authorized and unissued shares of preferred stock. The issuance of shares of preferred stock could decrease the amount of earnings and assets available for distribution to holders of shares of common stock. The issuance may also adversely affect the rights and powers, including voting rights, of these holders and may have the effect of delaying, deterring or preventing a change in control of us.

Exclusive Jurisdiction for Certain Actions

Our bylaws provide that, unless we consent in writing to an alternative forum, the Court of Chancery of the State of Delaware will be the sole and exclusive forum for (i) any derivative action or proceeding brought on our behalf, (ii) any action asserting a claim of breach of a fiduciary duty owed by any of our directors, officers and employees to us or our stockholders, (iii) any action asserting a claim arising pursuant to any provision of the Delaware General Corporation Law, our certificate of incorporation or our bylaws, or (iv) any action asserting a claim that is governed by the internal affairs doctrine, in each case subject to the Court of Chancery having personal jurisdiction over the indispensable parties named as defendants therein. Although we believe this provision benefits us by providing increased consistency in the application of Delaware law in the types of lawsuits to which it applies, the provision may have the effect of discouraging lawsuits against our directors and officers. The enforceability of similar exclusive forum provisions in other companies' bylaws has been challenged in legal proceedings, and it is possible that a court could rule that this provision in our bylaws is inapplicable or unenforceable.

Our bylaws also provide that the United States Federal District Courts will be the exclusive forum for resolving any complaint asserting a cause of action arising under the Securities Act or the Exchange Act, unless we consent in writing to an alternative forum, is intended to allow for the consolidation of multi-jurisdiction litigation, avoid state court forum shopping, provide efficiencies in managing the procedural aspects of securities litigation and reduce the risk that the outcome of cases in multiple jurisdictions could be inconsistent. Although our bylaws contain the choice of forum provisions described above, it is possible that a court could rule that such provisions are inapplicable for a particular claim or action or that such provisions are unenforceable. For example, under the Securities Act, federal courts have concurrent jurisdiction over all suits brought to enforce any duty or liability created by the Securities Act, and investors cannot waive compliance with the federal securities laws and the rules and regulations thereunder.

Section 203 of the Delaware General Corporation Law

We are subject to the provisions of Section 203 of the Delaware General Corporation Law. In general, Section 203 prohibits a publicly held Delaware corporation from engaging in a "business combination" with an "interested stockholder" for a three-year period following the time that this stockholder becomes an interested stockholder, unless the business combination is approved in a prescribed manner. Under Section 203, a business combination between a corporation and an interested stockholder is prohibited unless it satisfies one of the following conditions:

- before the stockholder became interested, our board of directors approved either the business combination or the transaction which resulted in the stockholder becoming an interested stockholder;
- upon consummation of the transaction which resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, excluding for purposes of determining the voting stock outstanding, shares owned by persons who are directors and also officers, and employee stock plans, in some instances, but not the outstanding voting stock owned by the interested stockholder; or at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.
- at or after the time the stockholder became interested, the business combination was approved by our board of directors and authorized at an annual or special meeting of the stockholders by the affirmative vote of at least two-thirds of the outstanding voting stock which is not owned by the interested stockholder.

Section 203 defines a business combination to include:

- any merger or consolidation involving the corporation and the interested stockholder; any sale, transfer, lease, pledge or other disposition involving the interested stockholder of 10% or more of the assets of the corporation; subject to exceptions, any transaction that results in the issuance or transfer by the corporation of any stock of the corporation to the interested stockholder;
- subject to exceptions, any transaction involving the corporation that has the effect of increasing the proportionate share of the stock of any class or series of the corporation beneficially owned by the interested stockholder; and
- the receipt by the interested stockholder of the benefit of any loans, advances, guarantees, pledges or other financial benefits provided by or through the corporation.

In general, Section 203 defines an interested stockholder as any entity or person beneficially owning 15% or more of the outstanding voting stock of the corporation and any entity or person affiliated with or controlling or controlled by the entity or person.

Exchange Listing

Our common stock is listed on the Nasdaq Global Select Market under the trading symbol "AMLX."

Transfer Agent and Registrar

The transfer agent and registrar for our common stock is Computershare Trust Company, N.A.

SHARES ELIGIBLE FOR FUTURE SALE

Future sales of our common stock, including shares issued upon the exercise of outstanding options or warrants, in the public market after this offering, or the perception that those sales may occur, could cause the prevailing market price for our common stock to fall or impair our ability to raise equity capital in the future. As described below, only a limited number of shares of our common stock will be restricted from sale in the public market after consummation of this offering due to the contractual and legal restrictions on resale described below.

Sale of Restricted Shares

Based on the number of shares of our common stock outstanding as of June 30, 2022 and assuming (1) no exercise of the underwriters' option to purchase additional shares of common stock and (2) no exercise of any of our other outstanding options, we will have outstanding an aggregate of approximately 65,226,976 shares of common stock following this offering. All of the shares sold in this offering will be freely tradable in the public market without restriction or further registration under the Securities Act, unless held by our affiliates, as that term is defined under Rule 144 under the Securities Act, or subject to lock-up agreements.

Of the shares that were originally issued and sold by us prior to our IPO in transactions that were exempt from registration under the Securities Act, approximately 16.1 million of those shares are deemed "restricted securities" as that term is defined under Rule 144 under the Securities Act. Restricted securities may be sold in the public market only if their offer and sale is registered under the Securities Act or if the offer and sale of those securities qualify for an exemption from registration, including exemptions provided by Rules 144 and 701 under the Securities Act, which are summarized below. Any shares held by our affiliates may only be sold in compliance with the limitations described below.

Rule 144

In general, under Rule 144, any person who is not our affiliate and has not been our affiliate at any time during the preceding three months and has held their shares for at least six months, including the holding period of any prior owner other than one of our affiliates, may sell shares without restriction, subject to the availability of current public information about us. In addition, under Rule 144, any person who is not our affiliate and has not been our affiliate at any time during the preceding three months and has held their shares for at least one year, including the holding period of any prior owner other than one of our affiliates, would be entitled to sell an unlimited number of shares immediately without regard to whether current public information about us is available.

A person who is our affiliate or who was our affiliate at any time during the preceding three months may sell any unrestricted securities, as well as restricted securities that the person has beneficially owned for at least six months, including the holding period of any prior owner other than one of our affiliates, under Rule 144. Affiliates selling restricted or unrestricted securities may sell a number of shares within any three-month period that does not exceed the greater of:

- 1% of the number of shares then outstanding, which will equal approximately 652,270 shares immediately after this offering, assuming no exercise of the underwriters' option to purchase additional shares; or
- the average weekly trading volume of our common stock on the Nasdaq Global Select Market during the four calendar weeks preceding the filing of a notice on Form 144 with respect to the sale.

Sales under Rule 144 by our affiliates are also subject to manner of sale provisions and notice requirements and to the availability of current public information about us.

Rule 701

In general, under Rule 701 of the Securities Act, any of our employees, consultants or advisors, other than our affiliates, who purchased shares from us in connection with a qualified compensatory stock plan or other written agreement is eligible to resell these shares in reliance on Rule 144, but without compliance with the holding period requirements of Rule 144 and without regard to the volume of such sales or the availability of public information about us.

Lock-Up Agreements

All of our directors and officers and certain stockholders have signed a lock-up agreement which prevents them from selling any of our common stock or any securities convertible into or exercisable or exchangeable for common stock for a period of not less than 90 days from the date of this prospectus without the prior written consent of Goldman Sachs & Co. LLC, BofA Securities, Inc., SVB Securities LLC and Evercore Group L.L.C., subject to certain exceptions. See the section entitled “Underwriting” appearing elsewhere in this prospectus for more information.

Registration Rights

Certain holders of our securities are entitled to various rights with respect to registration of their shares under the Securities Act. Registration of these shares under the Securities Act would result in these shares becoming fully tradable without restriction under the Securities Act immediately upon the effectiveness of the registration. See “—Registration Rights” appearing elsewhere in this prospectus for more information.

Equity Incentive Plans

We have filed one or more registration statements on Form S-8 under the Securities Act to register our shares issued or reserved for issuance under our equity incentive plans. Accordingly, shares registered under such registration statements are available for sale in the open market, unless such shares are subject to vesting restrictions with us or the lock-up restrictions described above.

MATERIAL U.S. FEDERAL INCOME TAX CONSIDERATIONS FOR NON-U.S. HOLDERS OF COMMON STOCK

The following discussion is a summary of certain U.S. federal income tax considerations applicable to non-U.S. holders (as defined below) with respect to their ownership and disposition of shares of our common stock issued pursuant to this offering. For purposes of this discussion, a non-U.S. holder means a beneficial owner of our common stock that is for U.S. federal income tax purposes:

- a non-resident alien individual;
- a corporation or any other organization taxable as a corporation for U.S. federal income tax purposes that is created or organized in or under laws other than the laws of the United States, any state thereof, or the District of Columbia;
- an estate, the income of which is not subject to U.S. federal income tax on a net income basis; or
- a trust that (1) has not made an election to be treated as a U.S. person under applicable U.S. Treasury Regulations and (2) either (i) is not subject to the primary supervision of a court within the United States or (ii) is not subject to the substantial control of one or more U.S. persons.

This discussion does not address the tax treatment of partnerships or other entities that are pass-through entities for U.S. federal income tax purposes or persons that hold their common stock through partnerships or other pass-through entities. A partner in a partnership or other pass-through entity that will hold our common stock should consult his, her or its tax advisor regarding the tax consequences of holding and disposing of our common stock through a partnership or other pass-through entity, as applicable.

This discussion is based on current provisions of the U.S. Internal Revenue Code of 1986, as amended, or the Code, existing and proposed U.S. Treasury Regulations promulgated thereunder, current administrative rulings and judicial decisions, all as in effect as of the date of this prospectus and, all of which are subject to change or to differing interpretation, possibly with retroactive effect. Any such change or differing interpretation could alter the tax consequences to non-U.S. holders described in this prospectus. There can be no assurance that the Internal Revenue Service, which we refer to as the IRS, will not challenge one or more of the tax consequences described herein. We assume in this discussion that a non-U.S. holder holds shares of our common stock as a capital asset within the meaning of Section 1221 of the Code, which is generally property held for investment.

This discussion does not address all aspects of U.S. federal income taxation that may be relevant to a particular non-U.S. holder in light of that non-U.S. holder's individual circumstances including the alternative minimum tax, or the Medicare tax on net investment income, the timing of income accruals required under Section 451(b) of the Code, the rules regarding qualified small business stock within the meaning of Section 1202 of the Code and any election to apply Section 1400Z-2 of the Code to gains recognized with respect to shares of our common stock. This discussion also does not address any U.S. state, local or non-U.S. taxes or any other aspect of any U.S. federal tax other than the income tax. This discussion also does not consider any specific facts or circumstances that may apply to a non-U.S. holder and does not address the special tax rules applicable to particular non-U.S. holders, such as:

- insurance companies;
- tax-exempt or governmental organizations;
- financial institutions;

- brokers or dealers in securities;
- regulated investment companies;
- pension plans;
- “controlled foreign corporations,” “passive foreign investment companies,” and corporations that accumulate earnings to avoid U.S. federal income tax;
- “qualified foreign pension funds,” or entities wholly owned by a “qualified foreign pension fund”;
- persons deemed to sell our common stock under the constructive sale provisions of the Code;
- persons that hold our common stock as part of a straddle, hedge, conversion transaction, synthetic security or other integrated investment;
- persons who have elected to mark securities to market;
- persons who have a functional currency other than the U.S. dollar;
- persons who hold or receive our common stock pursuant to the exercise of any employee stock option or otherwise as compensation; and
- certain U.S. expatriates.

This discussion is for general information only and is not tax advice. Accordingly, all prospective non-U.S. holders of our common stock should consult their tax advisors with respect to the U.S. federal, state, local and non-U.S. tax consequences of the purchase, ownership and disposition of our common stock.

Distributions on Our Common Stock

Distributions, if any, on our common stock will constitute dividends for U.S. federal income tax purposes to the extent paid from our current or accumulated earnings and profits, as determined under U.S. federal income tax principles. If a distribution exceeds our current and accumulated earnings and profits, the excess will be treated as a tax-free return of the non-U.S. holder’s investment, up to such holder’s tax basis in the common stock. Any remaining excess will be treated as capital gain, subject to the tax treatment described below in “Gain on sale or other taxable disposition of our common stock.” Any such distributions will also be subject to the discussions below under the sections titled “Backup withholding and information reporting” and “Withholding and information reporting requirements—FATCA.”

Subject to the discussion in the following two paragraphs in this section, dividends paid to a non-U.S. holder generally will be subject to withholding of U.S. federal income tax at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder’s country of residence. If we or another withholding agent apply over-withholding or if a non-U.S. holder does not timely provide us with the required certification, the non-U.S. holder may be entitled to a refund or credit of any excess tax withheld by timely filing an appropriate claim with the IRS.

Dividends that are treated as effectively connected with a trade or business conducted by a non-U.S. holder within the United States and, if an applicable income tax treaty so provides, that are attributable to a permanent establishment or a fixed base maintained by the non-U.S. holder within the United States, are generally exempt from the 30% withholding tax if the non-U.S. holder satisfies applicable certification and disclosure requirements. However, such U.S. effectively connected income, net of specified deductions and credits, is taxed at the same U.S. federal income tax rates applicable to United States persons (as defined in the Code). Any U.S. effectively connected income received by a

non-U.S. holder that is a corporation may also, under certain circumstances, be subject to an additional "branch profits tax" at a 30% rate or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence.

A non-U.S. holder of our common stock who claims the benefit of an applicable income tax treaty between the United States and such holder's country of residence generally will be required to provide a properly executed IRS Form W-8BEN or W-8BEN-E (or successor form) to the applicable withholding agent and satisfy applicable certification and other requirements. Non-U.S. holders are urged to consult their tax advisors regarding their entitlement to benefits under a relevant income tax treaty. A non-U.S. holder that is eligible for a reduced rate of U.S. withholding tax under an income tax treaty may obtain a refund or credit of any excess amounts withheld by timely filing a U.S. tax return with the IRS.

Gain on Sale or Other Taxable Disposition of Our Common Stock

Subject to the discussions below under "Backup withholding and information reporting" and "Withholding and information reporting requirements—FATCA," a non-U.S. holder generally will not be subject to any U.S. federal income tax on any gain realized upon such holder's sale or other taxable disposition of shares of our common stock unless:

- the gain is effectively connected with the non-U.S. holder's conduct of a U.S. trade or business and, if an applicable income tax treaty so provides, is attributable to a permanent establishment or a fixed-base maintained by such non-U.S. holder in the United States, in which case the non-U.S. holder generally will be taxed on a net income basis at the U.S. federal income tax rates applicable to United States persons (as defined in the Code) and, if the non-U.S. holder is a foreign corporation, the branch profits tax described above in "Distributions on our common stock" also may apply;
- the non-U.S. holder is a nonresident alien individual who is present in the United States for a period or periods aggregating 183 days or more in the taxable year of the disposition and certain other conditions are met, in which case the non-U.S. holder will be subject to a 30% tax (or such lower rate as may be specified by an applicable income tax treaty between the United States and such holder's country of residence) on the net gain derived from the disposition, which may be offset by certain U.S. source capital losses of the non-U.S. holder, if any (even though the individual is not considered a resident of the United States), provided that the non-U.S. holder has timely filed U.S. federal income tax returns with respect to such losses; or
- we are, or have been, at any time during the five-year period preceding such sale or other taxable disposition (or the non-U.S. holder's holding period, if shorter) a "U.S. real property holding corporation," unless our common stock is regularly traded on an established securities market and the non-U.S. holder holds no more than 5% of our outstanding common stock, directly or indirectly, actually or constructively, during the shorter of the 5-year period ending on the date of the disposition or the period that the non-U.S. holder held our common stock. Generally, a corporation is a U.S. real property holding corporation only if the fair market value of its U.S. real property interests equals or exceeds 50% of the sum of the fair market value of its worldwide real property interests plus its other assets used or held for use in a trade or business. Although there can be no assurance, we do not believe that we are, or have been, a U.S. real property holding corporation, or that we are likely to become one in the future. No assurance can be provided that our common stock will be regularly traded on an established securities market for purposes of the rules described above

Backup Withholding and Information Reporting

We must report annually to the IRS and to each non-U.S. holder the gross amount of the distributions on our common stock paid to such holder and the tax withheld, if any, with respect to such

distributions. Non-U.S. holders may have to comply with specific certification procedures to establish that the holder is not a United States person (as defined in the Code) in order to avoid backup withholding at the applicable rate with respect to dividends on our common stock. Dividends paid to non-U.S. holders subject to withholding of U.S. federal income tax, as described above in "Distributions on our common stock," generally will be exempt from U.S. backup withholding.

Information reporting and backup withholding will generally apply to the proceeds of a disposition of our common stock by a non-U.S. holder effected by or through the U.S. office of any broker, U.S. or foreign, unless the holder certifies its status as a non-U.S. holder and satisfies certain other requirements, or otherwise establishes an exemption. Generally, information reporting and backup withholding will not apply to a payment of disposition proceeds to a non-U.S. holder where the transaction is effected outside the United States through a non-U.S. office of a broker. However, for information reporting purposes, dispositions effected through a non-U.S. office of a broker with substantial U.S. ownership or operations generally will be treated in a manner similar to dispositions effected through a U.S. office of a broker. Non-U.S. holders should consult their tax advisors regarding the application of the information reporting and backup withholding rules to them. Copies of information returns may be made available to the tax authorities of the country in which the non-U.S. holder resides or is incorporated under the provisions of a specific treaty or agreement. Backup withholding is not an additional tax. Any amounts withheld under the backup withholding rules from a payment to a non-U.S. holder can be refunded or credited against the non-U.S. holder's U.S. federal income tax liability, if any, provided that an appropriate claim is filed with the IRS in a timely manner.

Withholding and Information Reporting Requirements—FATCA

Provisions of the Code commonly referred to as the Foreign Account Tax Compliance Act, or FATCA, generally impose a U.S. federal withholding tax at a rate of 30% on payments of dividends on our common stock paid to a foreign entity unless (i) if the foreign entity is a "foreign financial institution," such foreign entity undertakes certain due diligence, reporting, withholding, and certification obligations, (ii) if the foreign entity is not a "foreign financial institution," such foreign entity identifies certain of its U.S. investors, if any, or (iii) the foreign entity is otherwise exempt under FATCA. Under applicable U.S. Treasury regulations, withholding under FATCA currently applies to payments of dividends on our common stock. Although the FATCA provisions of the Code would require FATCA withholding on gross proceeds, currently proposed U.S. Treasury Regulations provide that FATCA withholding does not apply to gross proceeds from the disposition of property of a type that can produce U.S. source dividends or interest. Taxpayers (including withholding agents) can generally rely on the proposed Treasury Regulations until final Treasury Regulations are issued. Under certain circumstances, a non-U.S. holder may be eligible for refunds or credits of this withholding tax. An intergovernmental agreement between the United States and an applicable foreign country may modify the requirements described in this paragraph. Non-U.S. holders should consult their tax advisors regarding the possible implications of this legislation on their investment in our common stock and the entities through which they hold our common stock, including, without limitation, the process and deadlines for meeting the applicable requirements to prevent the imposition of the 30% withholding tax under FATCA.

UNDERWRITING

We and the underwriters named below have entered into an underwriting agreement with respect to the shares being offered. Subject to certain conditions, each underwriter has severally agreed to purchase the number of shares indicated in the following table. Goldman Sachs & Co. LLC, BofA Securities, Inc., SVB Securities LLC and Evercore Group L.L.C. are acting as joint book-running managers of this offering and as representatives of the underwriters.

Underwriters	Number of Shares
Goldman Sachs & Co. LLC	2,342,813
BofA Securities, Inc.	1,472,625
SVB Securities LLC	1,472,625
Evercore Group L.L.C.	1,204,874
H.C. Wainwright & Co., LLC	200,813
Total	6,693,750

The underwriters are committed to take and pay for all of the shares being offered, if any are taken, other than the shares covered by the option described below unless and until this option is exercised.

The underwriters have an option to buy up to an additional 1,004,062 shares from us at the price to the public less the underwriting discount. They may exercise that option for 30 days. If any shares are purchased pursuant to this option, the underwriters will severally purchase shares in approximately the same proportion as set forth in the table above.

The following table shows the per share and total underwriting discounts and commissions to be paid to the underwriters by us. Such amounts are shown assuming both no exercise and full exercise of the underwriters' option to purchase 1,004,062 additional shares.

	No Exercise	Full Exercise
Per Share	$ 1.92	$ 1.92
Total	$ 12,852,000.00	$ 14,779,799.04

Shares sold by the underwriters to the public will initially be offered at the public offering price set forth on the cover of this prospectus. Any shares sold by the underwriters to securities dealers may be sold at a discount of up to $1.152 per share from the public offering price. After the initial offering of the shares, the representatives may change the offering price and the other selling terms. The offering of the shares by the underwriters is subject to receipt and acceptance and subject to the underwriters' right to reject any order in whole or in part.

We and our officers and our directors and certain shareholders have agreed with the underwriters, subject to certain exceptions, not to dispose of or hedge any of their common stock or securities convertible into or exchangeable for shares of common stock during the period from the date of this prospectus continuing through the date 90 days after the date of this prospectus, except with the prior written consent of the representatives. See "Shares Eligible for Future Sale" for a discussion of certain transfer restrictions.

Our common stock is listed on the Nasdaq Global Select Market under the symbol "AMLX."

In connection with the offering, the underwriters may purchase and sell shares of common stock in the open market. These transactions may include short sales, stabilizing transactions and purchases to cover positions created by short sales. Short sales involve the sale by the underwriters of a greater

number of shares than they are required to purchase in the offering, and a short position represents the amount of such sales that have not been covered by subsequent purchases. A “covered short position” is a short position that is not greater than the amount of additional shares for which the underwriters’ option described above may be exercised. The underwriters may cover any covered short position by either exercising their option to purchase additional shares or purchasing shares in the open market. In determining the source of shares to cover the covered short position, the underwriters will consider, among other things, the price of shares available for purchase in the open market as compared to the price at which they may purchase additional shares pursuant to the option described above. “Naked” short sales are any short sales that create a short position greater than the amount of additional shares for which the option described above may be exercised. The underwriters must cover any such naked short position by purchasing shares in the open market. A naked short position is more likely to be created if the underwriters are concerned that there may be downward pressure on the price of the common stock in the open market after pricing that could adversely affect investors who purchase in the offering. Stabilizing transactions consist of various bids for or purchases of common stock made by the underwriters in the open market prior to the completion of the offering.

The underwriters may also impose a penalty bid. This occurs when a particular underwriter repays to the underwriters a portion of the underwriting discount received by it because the representatives have repurchased shares sold by or for the account of such underwriter in stabilizing or short covering transactions.

Purchases to cover a short position and stabilizing transactions, as well as other purchases by the underwriters for their own accounts, may have the effect of preventing or retarding a decline in the market price of our stock, and together with the imposition of the penalty bid, may stabilize, maintain or otherwise affect the market price of the common stock. As a result, the price of the common stock may be higher than the price that otherwise might exist in the open market. The underwriters are not required to engage in these activities and may end any of these activities at any time. These transactions may be effected on the Nasdaq Global Select Market, in the over-the-counter market or otherwise.

We estimate that the total expenses for the offering, excluding underwriting discounts and commissions, will be approximately $0.8 million. We have agreed to reimburse the underwriters for certain of their expenses in an amount up to $25,000.

We have agreed to indemnify the several underwriters against certain liabilities, including liabilities under the Securities Act.

The underwriters and their respective affiliates are full service financial institutions engaged in various activities, which may include sales and trading, commercial and investment banking, advisory, investment management, investment research, principal investment, hedging, market making, brokerage and other financial and non-financial activities and services. Certain of the underwriters and their respective affiliates have provided, and may in the future provide, a variety of these services to the issuer and to persons and entities with relationships with the issuer, for which they received or will receive customary fees and expenses.

In the ordinary course of their various business activities, the underwriters and their respective affiliates, officers, directors and employees may purchase, sell or hold a broad array of investments and actively traded securities, derivatives, loans, commodities, currencies, credit default swaps and other financial instruments for their own account and for the accounts of their customers, and such investment and trading activities may involve or relate to assets, securities or instruments of the issuer (directly, as collateral securing other obligations or otherwise) or persons and entities with relationships with the issuer. The underwriters and their respective affiliates may also communicate independent

investment recommendations, market color or trading ideas or publish or express independent research views in respect of such assets, securities or instruments and may at any time hold, or recommend to clients that they should acquire, long and/or short positions in such assets, securities and instruments.

Selling Restrictions

European Economic Area

In relation to each Member State of the European Economic Area, each being a Relevant State, no shares have been offered or will be offered pursuant to the offering to the public in that Relevant State prior to the publication of a prospectus in relation to the shares which has been approved by the competent authority in that Relevant State or, where appropriate, approved in another Relevant State and notified to the competent authority in that Relevant State, all in accordance with the Prospectus Regulation, except that the shares may be offered to the public in that Relevant State at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the Prospectus Regulation), subject to obtaining the prior consent of representatives of any such offer; or

(c) in any other circumstances falling within Article 1(4) of the Prospectus Regulation.

provided that no such offer of the shares shall require us or any of the representatives to publish a prospectus pursuant to Article 3 of the Prospectus Regulation or supplement a prospectus pursuant to Article 23 of the Prospectus Regulation.

For the purposes of this provision, the expression an “offer to the public” in relation to the shares in any Relevant State means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares, and the expression “Prospectus Regulation” means Regulation (EU) 2017/1129.

United Kingdom

No shares have been offered or will be offered pursuant to the offering to the public in the United Kingdom prior to the publication of a prospectus in relation to the shares which has been approved by the Financial Conduct Authority, except that the shares may be offered to the public in the United Kingdom at any time:

(a) to any legal entity which is a qualified investor as defined under Article 2 of the UK Prospectus Regulation;

(b) to fewer than 150 natural or legal persons (other than qualified investors as defined under Article 2 of the UK Prospectus Regulation), subject to obtaining the prior consent of the representatives for any such offer; or

(c) in any other circumstances falling within Section 86 of the Financial Services and Markets Act 2000, or FSMA.

provided that no such offer of the shares shall require the Issuer or any Manager to publish a prospectus pursuant to Section 85 of the FSMA or supplement a prospectus pursuant to Article 23 of the UK Prospectus Regulation. For the purposes of this provision, the expression an “offer to the

public" in relation to the shares in the United Kingdom means the communication in any form and by any means of sufficient information on the terms of the offer and any shares to be offered so as to enable an investor to decide to purchase or subscribe for any shares and the expression "UK Prospectus Regulation" means Regulation (EU) 2017/1129 as it forms part of domestic law by virtue of the European Union (Withdrawal) Act 2018.

Canada

The shares may be sold only to purchasers purchasing, or deemed to be purchasing, as principal that are accredited investors, as defined in National Instrument 45-106 Prospectus Exemptions or subsection 73.3(1) of the Securities Act (Ontario), and are permitted clients, as defined in National Instrument 31-103 Registration Requirements, Exemptions and Ongoing Registrant Obligations. Any resale of the shares must be made in accordance with an exemption from, or in a transaction not subject to, the prospectus requirements of applicable securities laws.

Securities legislation in certain provinces or territories of Canada may provide a purchaser with remedies for rescission or damages if this prospectus (including any amendment thereto) contains a misrepresentation, provided that the remedies for rescission or damages are exercised by the purchaser within the time limit prescribed by the securities legislation of the purchaser's province or territory. The purchaser should refer to any applicable provisions of the securities legislation of the purchaser's province or territory for particulars of these rights or consult with a legal advisor.

Pursuant to section 3A.3 of National Instrument 33-105 Underwriting Conflicts (NI 33-105), the underwriters are not required to comply with the disclosure requirements of NI 33-105 regarding underwriter conflicts of interest in connection with this offering.

Hong Kong

The shares have not been offered or sold and will not be offered or sold in Hong Kong, by means of any document, other than (a) to "professional investors" as defined in the Securities and Futures Ordinance (Cap. 571 of the Laws of Hong Kong), or the SFO, of Hong Kong and any rules made thereunder; or (b) in other circumstances which do not result in the document being a "prospectus" as defined in the Companies (Winding Up and Miscellaneous Provisions) Ordinance (Cap. 32) of Hong Kong, or the CO or which do not constitute an offer to the public within the meaning of the CO. No advertisement, invitation or document relating to the shares has been or may be issued or has been or may be in the possession of any person for the purposes of issue, whether in Hong Kong or elsewhere, which is directed at, or the contents of which are likely to be accessed or read by, the public of Hong Kong (except if permitted to do so under the securities laws of Hong Kong) other than with respect to shares which are or are intended to be disposed of only to persons outside Hong Kong or only to "professional investors" as defined in the SFO and any rules made thereunder.

Singapore

Each joint book-running manager has acknowledged that this prospectus has not been registered as a prospectus with the Monetary Authority of Singapore. Accordingly, each joint book-running manager has represented and agreed that it has not offered or sold any shares or caused the shares to be made the subject of an invitation for subscription or purchase and will not offer or sell any shares or cause the shares to be made the subject of an invitation for subscription or purchase, and has not circulated or distributed, nor will it circulate or distribute, this prospectus or any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares, whether directly or indirectly, to any person in Singapore other than:

(a) to an institutional investor (as defined in Section 4A of the Securities and Futures Act (Chapter 289) of Singapore, as modified or amended from time to time, or the SFA, pursuant to Section 274 of the SFA;

(b) to a relevant person (as defined in Section 275(2) of the SFA) pursuant to Section 275(1) of the SFA, or any person pursuant to Section 275(1A) of the SFA, and in accordance with the conditions specified in Section 275 of the SFA; or

(c) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA.

Where the shares are subscribed or purchased under Section 275 of the SFA by a relevant person which is:

(a) a corporation (which is not an accredited investor (as defined in Section 4A of the SFA)) the sole business of which is to hold investments and the entire share capital of which is owned by one or more individuals, each of whom is an accredited investor; or a trust (where the trustee is not an accredited investor) whose sole purpose is to hold investments and each beneficiary of the trust is an individual who is an accredited investor, securities or securities- based derivatives contracts (each term as defined in Section 2(1) of the SFA) of that corporation or the beneficiaries' rights and interest (howsoever described) in that trust shall not be transferred within six months after that corporation or that trust has acquired the shares pursuant to an offer made under Section 275 of the SFA except:

(i) to an institutional investor or to a relevant person, or to any person arising from an offer referred to in Section 275(1A) or Section 276(4)(i)(B) of the SFA;

where no consideration is or will be given for the transfer;

where the transfer is by operation of law; as specified in Section 276(7) of the SFA; or

as specified in Regulation 37A of the Securities and Futures (Offers of Investments) (Securities and Securities-based Derivatives Contracts) Regulations 2018.

Singapore SFA Product Classification—In connection with Section 309B of the SFA and the CMP Regulations 2018, unless otherwise specified before an offer of Notes, we have determined, and hereby notify all relevant persons (as defined in Section 309A(1) of the SFA), that the shares are "prescribed capital markets products" (as defined in the CMP Regulations 2018) and Excluded Investment Products (as defined in MAS Notice SFA 04-N12: Notice on the Sale of Investment Products and MAS Notice FAA-N16: Notice on Recommendations on Investment Products).

Japan

The shares have not been and will not be registered pursuant to Article 4, Paragraph 1 of the Financial Instruments and Exchange Act. Accordingly, none of the shares nor any interest therein may

be offered or sold, directly or indirectly, in Japan or to, or for the benefit of, any "resident" of Japan (which term as used herein means any person resident in Japan, including any corporation or other entity organized under the laws of Japan), or to others for re-offering or resale, directly or indirectly, in Japan or to or for the benefit of a resident of Japan, except pursuant to an exemption from the registration requirements of, and otherwise in compliance with, the Financial Instruments and Exchange Act and any other applicable laws, regulations and ministerial guidelines of Japan in effect at the relevant time.

Switzerland

The shares may not be publicly offered in Switzerland and will not be listed on the SIX Swiss Exchange, or SIX, or on any other stock exchange or regulated trading facility in Switzerland. This document does not constitute a prospectus within the meaning of, and has been prepared without regard to the disclosure standards for issuance prospectuses under art. 652a or art. 1156 of the Swiss Code of Obligations or the disclosure standards for listing prospectuses under art. 27 ff. of the SIX Listing Rules or the listing rules of any other stock exchange or regulated trading facility in Switzerland. Neither this document nor any other offering or marketing material relating to the shares or the offering may be publicly distributed or otherwise made publicly available in Switzerland.

Neither this document nor any other offering or marketing material relating to the offering, us or the shares have been or will be filed with or approved by any Swiss regulatory authority. In particular, this document will not be filed with, and the offer of shares will not be supervised by, the Swiss Financial Market Supervisory Authority FINMA, and the offer of shares has not been and will not be authorized under the Swiss Federal Act on Collective Investment Schemes, or CISA. The investor protection afforded to acquirers of interests in collective investment schemes under the CISA does not extend to acquirers of shares.

Dubai International Financial Centre

This document relates to an Exempt Offer in accordance with the Markets Rules 2012 of the Dubai Financial Services Authority, or DFSA. This document is intended for distribution only to persons of a type specified in the Markets Rules 2012 of the DFSA. It must not be delivered to, or relied on by, any other person. The DFSA has no responsibility for reviewing or verifying any documents in connection with Exempt Offers. The DFSA has not approved this prospectus supplement nor taken steps to verify the information set forth herein and has no responsibility for this document. The securities to which this document relates may be illiquid and/or subject to restrictions on their resale.

Prospective purchasers of the securities offered should conduct their own due diligence on the securities. If you do not understand the contents of this document you should consult an authorized financial advisor. In relation to its use in the Dubai International Financial Centre, or DIFC, this document is strictly private and confidential and is being distributed to a limited number of investors and must not be provided to any person other than the original recipient, and may not be reproduced or used for any other purpose. The interests in the securities may not be offered or sold directly or indirectly to the public in the DIFC.

United Arab Emirates

The shares have not been, and are not being, publicly offered, sold, promoted or advertised in the United Arab Emirates (including the DIFC) other than in compliance with the laws of the United Arab Emirates (and the DIFC) governing the issue, offering and sale of securities. Further, this prospectus does not constitute a public offer of securities in the United Arab Emirates (including the DIFC) and is not intended to be a public offer. This prospectus has not been approved by or filed with the Central Bank of the United Arab Emirates, the Securities and Commodities Authority or the DFSA.

Australia

This prospectus:

- does not constitute a disclosure document or a prospectus under Chapter 6D.2 of the Corporations Act 2001, or the Corporations Act;
- has not been, and will not be, lodged with the Australian Securities and Investments Commission, or ASIC, as a disclosure document for the purposes of the Corporations Act and does not purport to include the information required of a disclosure document for the purposes of the Corporations Act; and
- may only be provided in Australia to select investors who are able to demonstrate that they fall within one or more of the categories of investors, available under section 708 of the Corporations Act, or Exempt Investors.

The shares may not be directly or indirectly offered for subscription or purchased or sold, and no invitations to subscribe for or buy the shares may be issued, and no draft or definitive offering memorandum, advertisement or other offering material relating to any shares may be distributed in Australia, except where disclosure to investors is not required under Chapter 6D of the Corporations Act or is otherwise in compliance with all applicable Australian laws and regulations. By submitting an application for the shares, you represent and warrant to us that you are an Exempt Investor.

As any offer of shares under this document will be made without disclosure in Australia under Chapter 6D.2 of the Corporations Act, the offer of those securities for resale in Australia within 12 months may, under section 707 of the Corporations Act, require disclosure to investors under Chapter 6D.2 if none of the exemptions in section 708 applies to that resale. By applying for the shares you undertake to us that you will not, for a period of 12 months from the date of issue of the shares, offer, transfer, assign or otherwise alienate those shares to investors in Australia except in circumstances where disclosure to investors is not required under Chapter 6D.2 of the Corporations Act or where a compliant disclosure document is prepared and lodged with ASIC.

Bermuda

Shares may be offered or sold in Bermuda only in compliance with the provisions of the Investment Business Act of 2003 of Bermuda which regulates the sale of securities in Bermuda. Additionally, non-Bermudian persons (including companies) may not carry on or engage in any trade or business in Bermuda unless such persons are permitted to do so under applicable Bermuda legislation.

Saudi Arabia

This document may not be distributed in the Kingdom of Saudi Arabia except to such persons as are permitted under the Offers of Securities Regulations as issued by the board of the Saudi Arabian Capital Market Authority, or CMA pursuant to resolution number 2-11-2004 dated 4 October 2004 as amended by resolution number 1-28-2008, as amended. The CMA does not make any representation as to the accuracy or completeness of this document and expressly disclaims any liability whatsoever for any loss arising from, or incurred in reliance upon, any part of this document. Prospective purchasers of the securities offered hereby should conduct their own due diligence on the accuracy of the information relating to the securities. If you do not understand the contents of this document, you should consult an authorized financial adviser.

British Virgin Islands

The shares are not being, and may not be offered to the public or to any person in the British Virgin Islands for purchase or subscription by or on our behalf. The shares may be offered to

companies incorporated under the BVI Business Companies Act, 2004 (British Virgin Islands), or BVI Companies, but only where the offer will be made to, and received by, the relevant BVI Company entirely outside of the British Virgin Islands.

China

This prospectus will not be circulated or distributed in the People's Republic of China, or PRC, and the shares will not be offered or sold, and will not be offered or sold to any person for re-offering or resale directly or indirectly to any residents of the PRC except pursuant to any applicable laws and regulations of the PRC. Neither this prospectus nor any advertisement or other offering material may be distributed or published in the PRC, except under circumstances that will result in compliance with applicable laws and regulations.

Korea

The shares have not been and will not be registered under the Financial Investments Services and Capital Markets Act of Korea and the decrees and regulations thereunder, or the FSCMA, and the shares have been and will be offered in Korea as a private placement under the FSCMA. None of the shares may be offered, sold or delivered directly or indirectly, or offered or sold to any person for re-offering or resale, directly or indirectly, in Korea or to any resident of Korea except pursuant to the applicable laws and regulations of Korea, including the FSCMA and the Foreign Exchange Transaction Law of Korea and the decrees and regulations thereunder, or the FETL. The shares have not been listed on any of securities exchanges in the world including, without limitation, the Korea Exchange in Korea. Furthermore, the purchaser of the shares shall comply with all applicable regulatory requirements (including but not limited to requirements under the FETL) in connection with the purchase of the shares. By the purchase of the shares, the relevant holder thereof will be deemed to represent and warrant that if it is in Korea or is a resident of Korea, it purchased the shares pursuant to the applicable laws and regulations of Korea.

Malaysia

No prospectus or other offering material or document in connection with the offer and sale of the shares has been or will be registered with the Securities Commission of Malaysia, or Commission, for the Commission's approval pursuant to the Capital Markets and Services Act 2007. Accordingly, this prospectus and any other document or material in connection with the offer or sale, or invitation for subscription or purchase, of the shares may not be circulated or distributed, nor may the shares be offered or sold, or be made the subject of an invitation for subscription or purchase, whether directly or indirectly, to persons in Malaysia other than (i) a closed end fund approved by the Commission; (ii) a holder of a Capital Markets Services License; (iii) a person who acquires the shares, as principal, if the offer is on terms that the shares may only be acquired at a consideration of not less than RM250,000 (or its equivalent in foreign currencies) for each transaction; (iv) an individual whose total net personal assets or total net joint assets with his or her spouse exceeds RM3 million (or its equivalent in foreign currencies), excluding the value of the primary residence of the individual; (v) an individual who has a gross annual income exceeding RM300,000 (or its equivalent in foreign currencies) per annum in the preceding twelve months; (vi) an individual who, jointly with his or her spouse, has a gross annual income of RM400,000 (or its equivalent in foreign currencies), per annum in the preceding twelve months; (vii) a corporation with total net assets exceeding RM10 million (or its equivalent in a foreign currencies) based on the last audited accounts; (viii) a partnership with total net assets exceeding RM10 million (or its equivalent in foreign currencies); (ix) a bank licensee or insurance licensee as defined in the Labuan Financial Services and Securities Act 2010; (x) an Islamic bank licensee or takaful licensee as defined in the Labuan Financial Services and Securities Act 2010; and (xi) any other person as may be specified by the Commission; provided that, in the each of the preceding

categories (i) to (xi), the distribution of the shares is made by a holder of a Capital Markets Services License who carries on the business of dealing in securities. The distribution in Malaysia of this prospectus is subject to Malaysian laws. This prospectus does not constitute and may not be used for the purpose of public offering or an issue, offer for subscription or purchase, invitation to subscribe for or purchase any securities requiring the registration of a prospectus with the Commission under the Capital Markets and Services Act 2007.

Taiwan

The shares have not been and will not be registered with the Financial Supervisory Commission of Taiwan pursuant to relevant securities laws and regulations and may not be sold, issued or offered within Taiwan through a public offering or in circumstances which constitutes an offer within the meaning of the Securities and Exchange Act of Taiwan that requires a registration or approval of the Financial Supervisory Commission of Taiwan. No person or entity in Taiwan has been authorized to offer, sell, give advice regarding or otherwise intermediate the offering and sale of the shares in Taiwan.

South Africa

Due to restrictions under the securities laws of South Africa, no "*offer to the public*" (as such term is defined in the South African Companies Act, No. 71 of 2008 (as amended or re-enacted), or the South African Companies Act) is being made in connection with the issue of the shares in South Africa. Accordingly, this document does not, nor is it intended to, constitute a "*registered prospectus*" (as that term is defined in the South African Companies Act) prepared and registered under the South African Companies Act and has not been approved by, and/or filed with, the South African Companies and Intellectual Property Commission or any other regulatory authority in South Africa. The shares are not offered, and the offer shall not be transferred, sold, renounced or delivered, in South Africa or to a person with an address in South Africa, unless one or other of the following exemptions stipulated in section 96(1) applies:

Section 96(1)(a) the offer, transfer, sale, renunciation or delivery is to:

(i) persons whose ordinary business, or part of whose ordinary business, is to deal in securities, as principal or agent;

(ii) the South African Public Investment Corporation;

(iii) persons or entities regulated by the Reserve Bank of South Africa;

(iv) authorized financial service providers under South African law;

(v) financial institutions recognized as such under South African law;

(vi) a wholly owned subsidiary of any person or entity contemplated in (c), (d) or (e), acting as agent in the capacity of an authorized portfolio manager for a pension fund, or as manager for a collective investment scheme (in each case duly registered as such under South African law); or

(vii) any combination of the person in (i) to (vi); or

Section 96(1) (b) the total contemplated acquisition cost of the securities, for any single addressee acting as principal is equal to or greater than ZAR1,000,000 or such higher amount as may be promulgated by notice in the Government Gazette of South Africa pursuant to section 96(2)(a) of the South African Companies Act.

LEGAL MATTERS

The validity of the shares of our common stock offered hereby is being passed upon for us by Goodwin Procter LLP, Boston, Massachusetts. Certain legal matters relating to this offering will be passed upon for the underwriters by Wilmer Cutler Pickering Hale and Dorr LLP, New York, New York.

EXPERTS

The financial statements of Amylyx Pharmaceuticals, Inc., incorporated by reference in this prospectus by reference to Amylyx Pharmaceutical's annual report on Form 10-K for the year ended December 31, 2021, have been audited by Deloitte & Touche LLP, an independent registered public accounting firm, as stated in their report. Such financial statements are incorporated by reference in reliance upon the report of such firm given their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-1 under the Securities Act with respect to the common stock we are offering by this prospectus. This prospectus does not contain all of the information included in the registration statement. For further information pertaining to us and our common stock, you should refer to the registration statement and to its exhibits. Whenever we make reference in this prospectus to any of our contracts, agreements or other documents, the references are not necessarily complete, and you should refer to the exhibits attached to the registration statement for copies of the actual contract, agreement or other document.

You may access, free of charge, our Annual Reports on Form 10-K, Quarterly Reports on Form 10-Q, Current Reports on Form 8-K and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after such material is electronically filed with, or furnished to, the SEC.

We are subject to the informational requirements of the Exchange Act and will file annual, quarterly and current reports, proxy statements and other information with the SEC. You can read our SEC filings, including the registration statement, at the SEC's website at www.sec.gov. We also maintain a website at www.amylyx.com. Information contained on or accessed through our website is not a part of this prospectus (other than those filings with the SEC that we specifically incorporate by reference into this prospectus or any supplement to this prospectus) and the inclusion of our website address in this prospectus is an inactive textual reference only.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference in this prospectus much of the information we file with the SEC, which means that we can disclose important information to you by referring you to those publicly available documents. The information that we incorporate by reference in this prospectus is considered to be part of this prospectus and information that we file later with the SEC will supersede information contained in this prospectus. This prospectus incorporates by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act (in each case, other than those documents or the portions of those documents not deemed to be filed) until the offering of the securities under the registration statement is terminated or completed:

- Annual Report on Form 10-K for the year ended December 31, 2021, filed with the SEC on March 31, 2022;
- Quarterly Reports on Form 10-Q for the periods ended March 31, 2022, filed with the SEC on May 12, 2022 and June 30, 2022, filed with the SEC on August 11, 2022;
- Current Reports on Form 8-K, filed with the SEC on January 11, 2022, June 3, 2022, June 9, 2022, June 13, 2022, July 5, 2022 and September 30, 2022; and
- The information included in our Definitive Proxy Statement on Schedule 14A, filed with the SEC on April 29, 2022, to the extent incorporated by reference into Part III of the Annual Report on Form 10-K for the fiscal year ended December 31, 2021.

We will furnish at no cost to you, on written or oral request, a copy of any or all of the reports or documents incorporated by reference in this prospectus, including exhibits to these documents. You should direct any requests for documents to Amylyx Pharmaceuticals, Inc., 43 Thorndike Street, Cambridge, Massachusetts 02141, or by telephone at (617) 682-0917.

You also may access these filings on our website at www.amylyx.com. The information contained on, or that can be accessed through, our website is not a part of this prospectus. We have included our website address in this prospectus solely as an inactive textual reference.

Any statement contained in a document incorporated or deemed to be incorporated by reference in this prospectus will be deemed modified, superseded or replaced for purposes of this prospectus to the extent that a statement contained in this prospectus modifies, supersedes or replaces such statement.

6,693,750 Shares

Common Stock

Prospectus

Goldman Sachs & Co. LLC **BofA Securities** **SVB Securities** **Evercore ISI**

H.C. Wainwright & Co.

October 6, 2022