TorreyPines Therapeutics, Inc.
Form S-3
April 02, 2007

As filed with the Securities and Exchange Commission on March 30, 2007

Registration No. 333-[]

UNITED STATES
SECURITIES AND EXCHANGE COMMISSION
Washington, D.C. 20549

FORM S-3

REGISTRATION STATEMENT
UNDER THE SECURITIES ACT OF 1933

TORREYPINES THERAPEUTICS, INC.
(Exact Name Of Registrant As Specified In Its Charter)

Delaware	**86-0883978**
(State or Other Jurisdiction of Incorporation or Organization)	(I.R.S. Employer Identification No.)

11085 North Torrey Pines Road, Suite 300 **La Jolla, California**	**92037**
(Address Of Principal Executive Offices)	(Zip Code)

Dr. Neil M. Kurtz
President and Chief Executive Officer
TorreyPines Therapeutics, Inc.
11085 North Torrey Pines Road, Suite 300
La Jolla, California 92037
(858) 623-5665
(Name, Address, Including Zip Code, And Telephone Number, Including Area Code, Of Agent For Service)

Copies to:

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San Diego, California 92121-9109
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Approximate date of commencement of proposed sale to the public:

From time to time after the effective date of this registration statement

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box. o

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, other than securities offered only in connection with dividend or interest reinvestment plans, check the following box. x

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering.o

If this form is a registration statement pursuant to General Instruction I.D. or a post-effective amendment thereto that shall become effective upon filing with the Commission pursuant to Rule 462(e) under the Securities Act, check the following box. o

If this form is a post-effective amendment to a registration statement filed pursuant to General Instruction I.D. filed to register additional securities or additional classes of securities pursuant to Rule 413(b) under the Securities Act, check the following box. o

CALCULATION OF REGISTRATION FEE

Title of Securities to be Registered	**Amount to be Registered(1)**	**Proposed Maximum Offering Price Per Share(2)**	**Proposed Maximum Aggregate Offering Price(2)**	**Amount of Registration Fee**
Common Stock, par value $0.001	9,858,863(3)	$ 6.81	$ 67,138,857	$ 2,062

(1) Pursuant to Rule 416 under the Securities Act, the shares being registered hereunder include such indeterminate number of shares of common stock as may be issuable with respect to the shares being registered hereunder as a result of stock splits, stock dividends or similar transactions.

(2) Estimated solely for the purpose of calculating the registration fee in accordance with Rule 457 under the Securities Act. The price per share and aggregate offering price are based on the average of the high and low sales prices of the registrant s common stock on March 28, 2007, as reported on the Nasdaq Global Market.

(3) Includes 1,500,000 shares of the registrant s common stock issuable upon the exercise of warrants.

The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act of 1933 or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.

Subject to Completion, Dated March 30, 2007

The information in this prospectus is not complete and may be changed. The selling stockholders may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and is not soliciting an offer to buy these securities in any state where the offer or sale is not permitted.

PROSPECTUS

9,858,863 Shares
TORREYPINES THERAPEUTICS, INC.
Common Stock

This prospectus relates to the resale from time to time of up to 9,858,863 shares of our outstanding common stock in the aggregate, including 1,500,000 shares of our common stock issuable upon the exercise of warrants, which are held by the selling stockholders named in this prospectus and such stockholders donees, pledgees or successors. Of the shares of common stock offered under this prospectus, 8,358,863 shares were issued in connection with the business combination between the registrant (formerly known as Axonyx Inc.) and TorreyPines Therapeutics, Inc. (now known as TPTX, Inc.). We are not selling any securities under this prospectus and will not receive any of the proceeds from the sale of shares by the selling stockholders, although we may receive proceeds upon the exercise of the warrants.

The selling stockholders may sell the shares of common stock described in this prospectus in a number of different ways and at varying prices. We provide more information about how the selling stockholders may sell their shares of common stock in the section entitled Plan of Distribution on page 24. We will not be paying any underwriting discounts or commissions in this offering.

Our common stock is traded on the NASDAQ Global Market under the symbol TPTX. On March 28, 2007, the reported closing price of the common stock was $6.72 per share.

An investment in the shares offered hereby involves a high degree of risk. See Risk Factors beginning on page 4 of this prospectus.

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

The date of this prospectus is April , 2007.

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ABOUT THIS PROSPECTUS

You should rely only on the information contained or incorporated by reference in this prospectus. We have not, and the selling stockholders have not, authorized anyone to provide you with information different from that contained in this prospectus. The selling stockholders are offering to sell, and seeking offers to buy, shares of our common stock only in jurisdictions where it is lawful to do so. The information in this prospectus is accurate only as of the date of this prospectus, regardless of the time of delivery of this prospectus or any sale of our common stock.

Whenever we refer to we, our or us in this prospectus, we mean TorreyPines Therapeutics, Inc., on a consolidated basis with its subsidiaries unless the context indicates otherwise.

PROSPECTUS SUMMARY

This summary highlights information contained elsewhere or incorporated by reference into this prospectus. Because it is a summary, it does not contain all of the information that you should consider before investing in our securities. You should read this entire prospectus carefully, including the section entitled Risk Factors and the documents that we incorporate by reference into this prospectus, before making an investment decision.

TORREYPINES THERAPEUTICS, INC.

Prior to October 3, 2006, we were known as Axonyx Inc. On October 3, 2006, we completed a business combination, referred to as the Merger, with TorreyPines Therapeutics, Inc. (now known as TPTX, Inc.). For accounting purposes, we were deemed to be the acquired entity in the Merger. In connection with the Merger, we changed our name to TorreyPines Therapeutics, Inc. and effected an 8-for-1 reverse stock split of our Common Stock.

We are a biopharmaceutical company committed to the discovery, development and commercialization of novel small molecules to treat diseases and disorders of the central nervous system. Our therapeutic focus is in two areas: chronic pain, including migraine and neuropathic pain; and cognitive disorders, including cognitive impairment associated with schizophrenia and Alzheimer s disease. Through our in-house discovery programs and strategic in-licensing, we have built a robust pipeline of eight product candidates for these indications.

We currently have two product candidates in clinical trials for chronic pain. We initiated a Phase IIb clinical trial of tezampanel, our lead product candidate for chronic pain, in October 2006. This clinical trial will evaluate the use of tezampanel for the abortive treatment of migraine. We expect to have top line results from this clinical trial in the second half of 2007. We are currently conducting a Phase I clinical trial for our follow-on product candidate for chronic pain, NGX426.

We currently have one product candidate in clinical trials for cognitive disorders. NGX267 is our lead product candidate for the treatment of cognitive impairment associated with schizophrenia, or CIAS. We have completed two Phase I clinical trials of NGX267. We initiated an additional Phase I clinical trial of NGX267 in March 2007. Assuming favorable results, we intend to initiate a Phase II clinical trial in the second half of 2007. The Phase II clinical trial would evaluate NGX267 for the treatment of CIAS. We expect that NGX267 would be used primarily as adjunctive therapy to current antipsychotic therapy to treat schizophrenia. Our second product candidate for the treatment of CIAS, NGX292, is currently in preclinical development. In addition, although not the primary targeted indication, we may also evaluate NGX267 and NGX292 for the potential treatment of Alzheimer s disease.

We also have four product candidates in development and two programs in discovery focused on cognitive disorders. Phenserine, Posiphen, bisnorcymserine and NGX555 are in various stages of development for the treatment of Alzheimer s disease. We have completed Phase III clinical trials of phenserine and are currently pursuing out-licensing opportunities. Phase I clinical trials have been completed on Posiphen. Bisnorcymserine and NGX555 are currently in preclinical development. Our two drug discovery programs are focused on discovering and validating small molecules and novel molecular targets for Alzheimer s disease, and we are conducting both programs in collaboration with Eisai Co., Ltd., a leader in Alzheimer s disease research.

We were incorporated in Nevada on July 29, 1997 as Axonyx Inc. and reincorporated in Delaware on October 3, 2006 as TorreyPines Therapeutics, Inc. Our principal executive offices are located at 11085 North Torrey Pines Road, Suite 300, La Jolla, California 92037, and our main telephone number is (858) 623-5665. Our web site is located on the world wide web at http://www.torreypinestherapeutics.com. We do not incorporate by reference into this prospectus the information on, or accessible through, our Web site, and you should not consider it a part of this prospectus.

RISK FACTORS

Investing in our common stock involves a high degree of risk. You should carefully consider the risk factors described below, and all other information contained in or incorporated by reference in this prospectus, before deciding to invest in our common stock. If any of the following risks actually occur, the market price of our common stock could decline, and you could lose all or part of your investment. Additional risks not presently known to us or that we currently believe are immaterial may also significantly impair our business operations and could result in a complete loss of your investment.

Risks Related to Our Business

We expect to continue to incur net operating losses for the next several years and may never achieve profitability.

We have incurred net operating losses every year since our inception. As of December 31, 2006, we had an accumulated deficit of approximately $73.0 million. Over the next several years we expect a significant increase in our operating losses as we conduct additional research, development, clinical testing and regulatory compliance activities. All of our revenue to date has been payments received in connection with our collaboration and licensing agreements. We cannot be certain that we will generate additional revenue through licensing activities or that we will receive any of the milestone or royalty payments associated with our current collaboration and licensing agreements. Given the risks associated with discovery, development, clinical testing, manufacturing and marketing of drug products, we may never be successful in commercializing a drug product that will enable us to be profitable. Our ability to generate significant continuing revenue depends on a number of factors, including:

- successful completion of ongoing and future clinical trials for our product candidates;
- achievement of regulatory approval for our product candidates;
- successful completion of current and future strategic collaborations; and
- successful manufacturing, sales, distribution and marketing of our products.

We do not anticipate that we will generate significant continuing revenue for several years. Even if we do achieve profitability, we may not be able to sustain or increase profitability.

Substantially all of our product candidates are at an early stage of development and only a portion of these are in clinical development. We cannot be certain that any of our product candidates will be successfully developed, receive regulatory approval, or be commercialized.

Our product candidates, other than phenserine, are at an early stage of development and we do not have any products that are commercially available. Our product candidates, tezampanel and NGX426 for migraine, phenserine and Posiphen for Alzheimer s disease, and NGX267 for CIAS are currently in clinical development. Our other product candidates, NGX292, a muscarinic agonist, BNC, a butyrylcholinesterase inhibitor and NGX555, a gamma-secretase modulator, are in preclinical development. We will need to perform additional development work and conduct further clinical trials for all of our product candidates before we can seek the regulatory approvals necessary to begin commercial sales.

Success in preclinical testing and early clinical trials does not mean that later clinical trials will be successful. Companies frequently suffer significant setbacks in advanced clinical trials, even after earlier clinical trials have

shown promising results. In future clinical trials with larger or somewhat different populations, results from early clinical trials may not be reproduced and analysis of new or additional data may not demonstrate sufficient safety and efficacy to support regulatory approval of a product candidate.

Additionally, preclinical studies and clinical trials are expensive, can take many years, and have an uncertain outcome. Product candidates may not be successful in clinical trials for a number of reasons, including, but not limited to, the failure of a product candidate to be safe and efficacious, the results of later stage clinical trials not confirming earlier clinical results, or clinical trial results not being acceptable to the United States Food and Drug Administration, or FDA, or other regulatory agencies.

We do not anticipate that any of our current product candidates will be eligible to receive regulatory approval and begin commercialization for a number of years, if at all. Even if we were to ultimately receive regulatory approval for one or more of our product candidates, we may be unable to successfully commercialize them for a variety of reasons including:

- the availability of alternative treatments;
- the product not being cost effective to manufacture and sell;
- limited acceptance in the marketplace; and
- the effect of competition with other marketed products.

The success of our product candidates may also be limited by the prevalence and severity of any adverse side effects. Additionally, any regulatory approval to market a product may be subject to the imposition by such regulatory agency of limitations on the indicated uses. These limitations may reduce the size of the market for the product. If we fail to commercialize one or more of our current product candidates, our business, results of operations, financial condition, and prospects for future growth will be materially and adversely affected.

Delays in the commencement or completion of clinical testing of our product candidates could result in increased costs to us and delay our ability to generate significant revenues.

We cannot predict whether we will encounter problems with any of our planned clinical trials that will cause us or regulatory authorities to delay or suspend our clinical trials, or delay the analysis of data from our ongoing clinical trials. Any of the following factors could delay the clinical development of our product candidates:

- ongoing discussions with the FDA or comparable foreign authorities regarding the scope or design of one or more clinical trials;
- delays in receiving, or the inability to obtain, required approvals from institutional review boards or other reviewing entities at clinical trial sites selected for participation in a clinical trial;
- delays or slower than anticipated enrollment of participants into clinical trials;
- lower than anticipated retention rate of participants in clinical trials;
- need to repeat clinical trials as a result of inconclusive or negative results or unforeseen complications in testing;
- inadequate supply or deficient quality of product candidate materials or other materials necessary to conduct our clinical trials;
- unfavorable FDA inspection and review of a clinical trial site or records of any clinical or preclinical investigation;

- serious, unexpected or undesirable side effects experienced by participants in the clinical trials that delay or

preclude regulatory approval or limit the commercial use or market acceptance if approved;

- findings that the clinical trial participants are being exposed to unacceptable health risks;
- placement by the FDA of a clinical hold on a clinical trial;
- restrictions on or post-approval commitments with regard to any regulatory approval we ultimately obtain that renders a product candidate not commercially viable; and
- unanticipated cost overruns in preclinical and clinical trials.

In addition, once a clinical trial has started, it may be suspended or terminated by us or the FDA or other regulatory authorities due to a number of factors, including:

- failure to conduct the clinical trial in accordance with regulatory requirements;
- inspection of the clinical trial operations or clinical trial site by the FDA or other regulatory authorities resulting in the imposition of a clinical hold;
- negative clinical trial results;
- adverse events or negative side-effects experienced by the clinical trial participants; or
- lack of adequate funding to continue the clinical trial.

We will need to reach agreement with the FDA on the targeted endpoints for our clinical trials. In some cases, the FDA may not have validated endpoints established, and we may work with the FDA to potentially design and validate one or more endpoints. The FDA may not approve any or all of the endpoints and they may ultimately decide that the endpoints are inadequate to demonstrate the safety and efficacy levels required for regulatory approval. Our failure to adequately demonstrate the safety and efficacy of our product candidates would jeopardize our ability to achieve regulatory approval for, and ultimately to commercialize, the product candidates.

Clinical trials require sufficient participant enrollment, which is a function of many factors, including the size of the target population, the nature of the clinical trial protocol, the proximity of participants to clinical trial sites, the availability of effective treatments for the relevant disorder or disease, the eligibility criteria for our clinical trials and competing clinical trials. Delays in enrollment can result in increased costs and longer development times. Failure to enroll participants in our clinical trials could delay the completion of the clinical trials beyond current expectations. In addition, the FDA could require us to conduct clinical trials with a larger number of participants than we may project for any of our product candidates. As a result of these factors, we may not be able to enroll a sufficient number of participants in a timely or cost-effective manner.

Additionally, enrolled participants may drop out of clinical trials, which could impair the validity or statistical significance of the clinical trials. A number of factors can lead participants in a clinical trial to discontinue participating in the clinical trial, including, but not limited to: the inclusion of a placebo arm in the clinical trial; possible lack of effect of the product candidate being tested at one or more of the dose levels being tested; adverse side effects experienced by the participant, whether or not related to the product candidate; and the availability of alternative treatment options.

We, the FDA or other applicable regulatory authorities may suspend clinical trials of a product candidate at any time if we or they believe the participants in such clinical trials, or in independent third-party clinical trials for product candidates based on similar technologies, are being exposed to unacceptable health risks or for other reasons. In addition, it is impossible to predict whether legislative changes will be enacted, or whether FDA regulations, guidance or interpretations will be changed, or what the impact of such changes, if any, may be.

If we experience any such problems, we may not have the financial resources to continue development of the product candidate that is affected or the development of any of our other product candidates. If we experience

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significant delays in the commencement or completion of clinical testing, financial results and the commercial prospects for the product candidates will be harmed, costs will increase and our ability to generate revenue will be delayed.

We expect to complete a Phase IIb clinical trial of tezampanel in 2007, and our stock price could decline significantly if the results are not favorable or are not viewed favorably.

In the second half 2007, we expect to complete a Phase IIb clinical trial currently in progress for tezampanel. The results of this clinical trial may not be favorable or viewed favorably by us or third parties, including investors and analysts. Biopharmaceutical company stock prices have declined significantly in certain instances where clinical results were not favorable, were perceived negatively or otherwise did not meet expectations. Unfavorable results or negative perceptions regarding the results of our clinical trials of tezampanel, or any of our other product candidates, could cause our stock price to decline significantly.

We rely on third parties to assist us in conducting clinical trials. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may not be able to obtain regulatory approval for or commercialize our product candidates.

We rely on, and intend to continue to rely on, third parties, such as contract research organizations, medical institutions, clinical investigators and contract laboratories, to conduct clinical trials of our product candidates. Our reliance on these third parties for development activities reduces our control over these activities. If these third parties do not successfully carry out their contractual duties or obligations or meet expected deadlines, or if the quality or accuracy of the clinical data they obtain is compromised due to the failure to adhere to our clinical protocols or for other reasons, our clinical trials may be extended, delayed or terminated. If these third parties do not successfully carry out their contractual duties or meet expected deadlines, we may be required to replace them. Although we believe there are a number of third-party contractors we could engage to continue these activities, replacing a third-party contractor may result in a delay of the affected trial. Accordingly, we may not be able to obtain regulatory approval for or successfully commercialize our product candidates.

We have licensed rights to product candidates tezampanel and NGX426 from Eli Lilly. Eli Lilly has rights of termination under the license agreement, which if exercised would adversely affect our business.

In April 2003, we entered into an agreement with Eli Lilly to obtain an exclusive license from Eli Lilly to their AK antagonist assets including tezampanel, as well as NGX426. Pursuant to the license agreement we have obligations to make payments to Eli Lilly under the agreement and to use commercially reasonable efforts to develop and commercialize the product candidates, including achievement of specified development events within specified timeframes. Eli Lilly may terminate the agreement for uncured material breach of the agreement by us, including any breach of our diligence obligations. If Eli Lilly were to terminate the agreement, we would lose rights to the AK antagonist product candidates, and our business would be adversely affected.

We have licensed rights to product candidates NGX267 and NGX292 from LSRI and LSRI has rights of termination under the license agreement, which if exercised would adversely affect our business.

In May 2004, we entered into an agreement with LSRI to obtain an exclusive license from LSRI to their muscarinic agonist assets NGX267 and NGX292. We have obligations to make payments to LSRI under the agreement and to use commercially reasonable efforts to develop and commercialize the product candidates subject to the agreement, including achievement of specified development events within specified timeframes. LSRI may terminate the agreement for uncured material breach of the agreement by us, including any breach of our diligence obligations. If LSRI were to terminate the agreement, we would lose rights to the muscarinic agonist product candidates, and our business would be adversely affected.

We depend on Eisai for funding for our gamma-secretase modulator program and Alzheimer s disease genetics research program. Eisai has the first right to obtain rights to gene targets and compounds resulting from these programs, which could delay or limit our ability to develop and commercialize these gene targets and compounds.

In February 2005, we entered into an agreement with Eisai to discover small molecule gamma-secretase

modulator compounds useful in the treating Alzheimer s disease in humans. The agreement had an initial two-year term which Eisai elected to extend for an additional 12 months. In October 2005, we entered into an agreement with Eisai to discover gene targets useful in treating or preventing Alzheimer s disease in humans. This agreement also has a two-year term and may be extended by Eisai for up to an additional 12 months. We depend upon Eisai to provide funding for the research we conduct under each of these agreements. If Eisai were to cease funding these programs for any reason, we would need to provide our own funding for the programs, seek a strategic partner for further work on the programs, raise additional funding, or curtail or abandon the programs.

During the term of the respective agreements, Eisai has exclusive first rights of negotiation and refusal with regard to a license, collaboration or other arrangement regarding compounds discovered and validated in the course of the gamma-secretase modulator program or gene targets discovered and validated in the course of the Alzheimer s disease genetics research program, as applicable. These rights held by Eisai may delay or limit our ability to enter into a license, collaboration or other arrangement with a third party for any compounds resulting from the gamma-secretase modulator program or gene targets resulting from the Alzheimer s disease genetic research program.

We have an agreement providing Johnson & Johnson Development Corporation the first right to obtain rights to our M1 agonist program, which could delay or limit our ability to develop and commercialize these product candidates.

We have an agreement with Johnson & Johnson Development Corporation, or JJDC, regarding our research and development work into the effects of using M1 agonists, such as NGX267 and NGX292, in the treatment of central nervous system, or CNS, diseases and disorders. Upon completion of a specified level of development of our lead M1 agonist, we are obligated to provide results for the compound to JJDC.

For a specified period following receipt of the results, or at an earlier time as agreed to by both parties, JJDC has the exclusive right of first negotiation with us regarding our intellectual property rights or products related to our M1 agonist program. These rights held by JJDC may delay or limit our ability to enter into a transaction with a third party for our M1 agonist product candidates.

If we fail to enter into and maintain collaborations for our product candidates, we may have to reduce or delay product development or increase expenditures.

Our strategy for developing, manufacturing, and commercializing potential products includes establishing and maintaining collaborations with pharmaceutical and biotechnology companies to advance some of our programs and share expenditures with partners on those programs. We may not be able to negotiate future collaborations on acceptable terms, if at all. If we are not able to establish and maintain collaborative arrangements, we may have to reduce or delay further development of some programs or undertake the development activities at our own expense. If we elect to increase capital expenditures to fund development programs on our own, we will need to obtain additional capital, which may not be available on acceptable terms or at all. Even if we do succeed in securing such collaborations, we may not be able to maintain them if, for example, objectives under the agreement are not met, the agreement is terminated or not renewed, development or approval of a product candidate is delayed or sales of an approved drug are disappointing. Furthermore, any delay in entering into collaborations could delay the development and commercialization of our product candidates and reduce their competitiveness, even if they reach the market. Any such delay related to our collaborations could adversely affect our business.

If our strategic partners do not devote adequate resources to the development and commercialization of our product candidates, we may not be able to commercialize our products and achieve revenues.

We may enter into collaborations with other strategic partners with respect to our product candidates. If we enter into any such collaborations, we may have limited or no control over the amount and timing of resources that our partners dedicate to the development of our product candidates. Our ability to commercialize products we develop with our partners and generate royalties from product sales will depend on the partner s ability to assist us in establishing the safety and efficacy of our product candidates, obtaining regulatory approvals and achieving market acceptance of products. Our partners may elect to delay or terminate development of a product candidate,

independently develop products that could compete with our products, or not commit sufficient resources to the marketing and distribution of products under the collaboration. If our partners fail to perform as expected under the collaborative agreements, our potential for revenue from the related product candidates will be dramatically reduced. In addition, revenue from our future collaborations may consist of contingent payments, such as payments for achieving development and commercialization milestones and royalties payable on sales of any successfully developed drugs. The milestone, royalty or other revenue that we may receive under these collaborations will depend upon both our ability and our partner s ability to successfully develop, introduce, market and sell new products. In some cases, we will not be involved in these processes and, accordingly, will depend entirely on our partners.

We will need substantial additional funding and may be unable to raise capital when needed, which would force us to delay, reduce or eliminate our research and development programs or commercialization efforts.

We will need to raise substantial additional capital in the future and additional funding requirements will depend on, and could increase significantly as a result of, many factors, including:

- the rate of progress and cost of clinical trials;
- the scope of our clinical trials and other research and development activities;
- the prioritization and number of clinical development and research programs we pursue;
- the terms and timing of any collaborative, licensing and other arrangements that we may establish;
- the costs of filing, prosecuting, defending and enforcing any patent claims and other intellectual property rights;
- the costs and timing of regulatory approvals;
- the costs of goods and manufacturing expenses; and
- the costs of establishing or contracting for sales and marketing capabilities.

We do not anticipate that we will generate significant continuing revenue for several years, if at all. Until we can generate significant continuing revenue, if ever, we expect to satisfy our future cash needs through public or private equity offerings, debt financings or corporate collaboration and licensing arrangements, as well as through interest income earned on cash balances. We cannot be certain that additional funding will be available on acceptable terms, or at all. If adequate funds are not available, we may be required to delay, reduce the scope of, or eliminate one or more of its research and development programs or commercialization efforts.

We do not have internal manufacturing capabilities. If we fail to develop and maintain supply relationships with collaborators or other third-party manufacturers, we may be unable to develop or commercialize our products.

Our ability to develop and commercialize our products depends in part on our ability to manufacture, or arrange for future collaborators or other third parties to manufacture, our products at a competitive cost, in accordance with regulatory requirements and in sufficient quantities for clinical testing and eventual commercialization. None of our current product candidates have been manufactured on a commercial scale. We and our third-party manufacturers may encounter difficulties with the small- and large-scale formulation and manufacturing processes required to manufacture our product candidates, resulting in delays in clinical trials and regulatory submissions, in the commercialization of product candidates or, if any product candidate is approved, in the recall or withdrawal of the product from the market. Our inability to enter into or maintain agreements with capable third-party manufacturers on acceptable terms could delay or prevent the commercialization of our products, which would adversely affect our ability to generate revenue and could prevent us from achieving profitability.

We have supplies of tezampanel, NGX426 and NGX267 that we expect to need for current clinical trials. We will need to identify and reach agreement with third parties for the supply of our product candidates for future

clinical trials. We do not have long-term supply agreements with third parties, and we may not be able to enter into supply agreements with them in a timely manner or on acceptable terms, if at all. These third parties may also be subject to capacity constraints that would cause them to limit the amount of our product candidates they can produce or the chemicals that we can purchase. Any interruption or delay we experience in the supply of our product candidates or the chemicals may impede or delay such product candidates clinical development and cause us to incur increased expenses associated with identifying and qualifying one or more alternate suppliers.

In addition, we, our future collaborators or other third-party manufacturers of our products must comply with cGMP requirements enforced by the FDA through its facilities inspection program. These requirements include quality control, quality assurance and the maintenance of records and documentation. In addition, product manufacturing facilities in California are subject to licensing requirements of the California Department of Health Services and may be inspected by the California Department of Health Services at any time. We, our collaborators or other third-party manufacturers of our products may be unable to comply with these cGMP requirements and with other FDA, state and foreign regulatory requirements. A failure to comply with these requirements may result in fines and civil penalties, suspension or delay in product approval, product seizure or recall, or withdrawal of product approval.

We currently have no marketing or sales staff. If we are unable to enter into or maintain collaborations with marketing partners or if we are unable to develop our own sales and marketing capabilities, we may not be successful in commercializing our potential products and we may be unable to generate significant revenues.

We may elect to commercialize some of the products we are developing on our own, with or without a partner, where those products can be effectively marketed and sold in concentrated markets that do not require a large sales force to be competitive. We currently have no sales, marketing or distribution capabilities. To be able to commercialize our own products, we will need to establish our own specialized sales force and marketing organization with technical expertise and with supporting distribution capabilities. Developing such an organization is expensive and time consuming and could delay or limit our ability to commercialize products.

To commercialize any product candidate that we decide not to market on our own, we will depend on collaborations with third parties that have established distribution systems and direct sales forces. If we are unable to enter into such collaborations on acceptable terms, we may not be able to successfully commercialize those products.

To the extent that we enter into arrangements with collaborators or other third parties to perform sales and marketing services, our product revenue is likely to be lower than if we directly marketed and sold our product candidates. If we are unable to establish adequate sales and marketing capabilities, independently or with others, we may not be able to generate significant revenue and may not become profitable and the price of our common stock may be negatively affected.

Many of our product candidates are new therapies for chronic pain, CIAS and Alzheimer s disease, and we do not know whether these product candidates will yield commercially viable products or receive regulatory approval.

Tezampanel and NGX426 are antagonists of the AK receptors. They are part of a new class of compounds that block the AK receptors and, in turn, stop the transmission of pain signals. These product candidates may represent a novel approach to the management of chronic pain, including migraine and neuropathic pain. There are currently no approved products for chronic pain that are AK antagonists. As a result, we cannot be certain that our product candidates will result in commercially viable drugs that safely and effectively treat chronic pain indications such as migraine or neuropathic pain.

NGX267 and NGX292 are muscarinic agonists with functionally specific M1 receptor activity that we intend to develop for the treatment of CIAS. There are currently no approved therapies for the treatment of CIAS. Therefore, in order to successfully commercialize our product candidates, we will need to agree with the FDA and other applicable regulatory agencies on clinical trial endpoints regarding safety and efficacy. Given the lack of current treatments for CIAS, we may be unable to agree on the endpoints or successfully complete clinic trials that demonstrate that such endpoints, if agreed to, have been met. Any delay in agreeing to clinical trial endpoints or in

achieving those endpoints will prevent us from commercializing our product candidates.

NGX267 and NGX292 as well as NGX555, a gamma-secretase modulator, are product candidates for Alzheimer s disease. These product candidates belong to classes of compounds that have been or are being studied as a treatment for Alzheimer s disease, but there are no approved muscarinic agonist products or gamma-secretase modulator products for Alzheimer s disease. As a result, we cannot be certain that our product candidates will safely and effectively improve the symptoms of Alzheimer s disease or modify the progression of the disease or result in commercially viable drugs.

If our product candidates do not achieve market acceptance among physicians, patients, health care payors and the medical community, they will not be commercially successful and our business will be adversely affected.

The degree of market acceptance of any of our approved product candidates among physicians, patients, health care payors and the medical community will depend on a number of factors, including:

- acceptable evidence of safety and efficacy;
- relative convenience and ease of administration:
- the prevalence and severity of any adverse side effects;
- availability of alternative treatments;
- pricing and cost effectiveness;
- effectiveness of sales and marketing strategies; and
- ability to obtain sufficient third-party coverage or reimbursement.

If we are unable to achieve market acceptance for our product candidates, then such product candidates will not be commercially successful and our business will be adversely affected.

If our efforts to discover new product candidates do not succeed, and product candidates that we recommend for clinical development do not actually begin clinical trials, our business will suffer.

We intend to use our proprietary technologies and expertise in Alzheimer s disease and related neurodegenerative diseases and disorders to discover, develop and commercialize new products for the treatment and prevention of these diseases and disorders. Once recommended for development, a product candidate undergoes drug substance scale up, preclinical testing, including toxicology tests, and formulation development. If this work is successful, an Investigational New Drug application would need to be prepared, filed, and approved by the FDA and the product candidate would then be ready for human clinical testing.

The process of researching, discovering, and conducting preclinical testing on product candidates is expensive, time-consuming and unpredictable. If we are unable to advance our product candidates to clinical trials our business will be adversely affected.

If we fail to attract and keep key management and scientific personnel, we may be unable to develop or commercialize our product candidates successfully.

Our success depends on our continued ability to attract, retain and motivate highly qualified management and scientific personnel. The loss of the services of any principal member of our senior management could delay or prevent the commercialization of our product candidates. We employ these individuals on an at-will basis and their employment can be terminated by us or them at any time, for any reason and with or without notice, subject to the terms contained in their respective employment agreements and offer letters.

Competition for qualified personnel in the biotechnology field is intense. We may not be able to attract and retain quality personnel on acceptable terms given the competition for such personnel among biotechnology, pharmaceutical and other companies.

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Companies and universities that have licensed product candidates to us for research, clinical development and marketing are sophisticated competitors that could develop similar products to compete with our products.

Licensing our product candidates from other companies, universities or individuals does not always prevent them from developing non-identical but competitive products for their own commercial purposes, nor from pursuing patent protection in areas that are competitive with us. Our partners who created these technologies are sophisticated scientists and business people who may continue to do research and development and seek patent protection in the same areas that led to the discovery of the product candidates that they licensed to us. The development and commercialization of successful new drug products from our research program is likely to attract additional research by our licensors in addition to other investigators who have experience in developing products for the CNS market. By virtue of the previous research that led to the discovery of the drugs or product candidates that they licensed to us, these companies, universities, or individuals may be able to develop and market competitive products in less time than might be required to develop a product with which they have no prior experience.

Changes in, or interpretations of, accounting rules and regulations could result in unfavorable accounting charges or require us to change our compensation policies.

Accounting methods and policies for biopharmaceutical companies, including policies governing revenue recognition, expenses, accounting for stock options and in-process research and development costs are subject to further review, interpretation and guidance from relevant accounting authorities, including the United States Securities and Exchange Commission, or SEC. Changes to, or interpretations of, accounting methods or policies in the future may result in unfavorable accounting charges or may require us to change our compensation policies to avoid such charges.

Our management will be required to devote substantial time to comply with public company regulations.

As a public company, we will incur significant legal, accounting and other expenses. In addition, the Sarbanes-Oxley Act of 2002, or the Sarbanes-Oxley Act, as well as rules subsequently implemented by the SEC and the Nasdaq Global Market, impose various requirements on public companies, including corporate governance practices. Our management and other personnel will have to meet these requirements. Moreover, these rules and regulations will increase our legal and financial compliance costs and will make some activities more time-consuming and costly.

In addition, the Sarbanes-Oxley Act requires, among other things, that we maintain effective internal controls for financial reporting and disclosure controls and procedures. In particular, we must perform system and process evaluation and testing of our internal controls over financial reporting to allow management to report on the effectiveness of its internal controls over financial reporting, as required by Section 404 of the Sarbanes-Oxley Act. Our compliance with Section 404 will require that we incur substantial accounting and related expense and expend significant management efforts. We will need to hire additional accounting and financial staff to satisfy the ongoing requirements of Section 404. Moreover, if we are not able to comply with the requirements of Section 404, or if we or our independent registered public accounting firm identifies deficiencies in our internal controls over financial reporting that are deemed to be material weaknesses, the market price of our stock could decline and we could be subject to sanctions or investigations by the Nasdaq Global Market, SEC or other regulatory authorities.

We are a defendant in a class action lawsuit and a stockholder derivative lawsuit which, if determined adversely, could have a material adverse affect on us.

A class action securities lawsuit and a stockholder derivative lawsuit was filed against us prior to the Merger. We are defending against these actions vigorously; however, we do not know what the outcome of these

proceedings will be and, if we do not prevail, we may be required to pay substantial damages or settlement amounts. Furthermore, regardless of the outcome, we may incur significant defense costs, and the time and attention of our management may be diverted from normal business operations. If we are ultimately required to pay significant defense costs, damages or settlement amounts, such payments could materially and adversely affect our operations and results. We have purchased liability insurance, however, if any costs or expenses associated with the litigation exceed the insurance coverage, we may be forced to bear some or all of these costs and expenses directly, which could be substantial and may have an adverse effect on our business, financial condition, results of operations and cash