ACADIA PHARMACEUTICALS INC
Form 10-K
March 12, 2013
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UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

WASHINGTON, D.C. 20549

Form 10-K

(Mark One)

x **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the fiscal year ended December 31, 2012

Or

¨ **TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
For the transition period from to

Commission File Number: 000-50768

ACADIA PHARMACEUTICALS INC.

(Exact Name of Registrant as Specified in Its Charter)

Delaware	**06-1376651**
(State or Other Jurisdiction of Incorporation or Organization)	**(I.R.S. Employer Identification Number)**
3911 Sorrento Valley Boulevard	
San Diego, California	**92121**
(Address of Principal Executive Offices)	**(Zip Code)**

Registrant s telephone number, including area code:

(858) 558-2871

Securities registered pursuant to Section 12(b) of the Act:

Title of each class	**Name of each exchange on which registered**
Common Stock, par value $0.0001 per share	**The NASDAQ Global Market**

Securities registered pursuant to Section 12(g) of the Act: None

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes ¨ No x

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934. Yes ¨ No x

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes x No ¨

Indicate by check mark whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes x No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of the registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K. x

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, a non-accelerated filer, or a smaller reporting company. See definitions of large accelerated filer , accelerated filer and smaller reporting company in Rule 12b-2 of the Securities Exchange Act of 1934:

Large accelerated filer ¨	Accelerated filer x
Non-accelerated filer ¨ (Do not check if a smaller reporting company)	Smaller reporting company ¨

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act of 1934). Yes ¨ No x

As of June 30, 2012, the last business day of the registrant s most recently completed second fiscal quarter, the aggregate market value of the registrant s common stock held by non-affiliates of the registrant was approximately $92.8 million, based on the closing price of the registrant s common stock on the NASDAQ Global Market on June 29, 2012 of $1.76 per share.

As of March 1, 2013, 78,758,017 shares of the registrant s common stock, $0.0001 par value, were outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Portions of the registrant s definitive Proxy Statement to be filed with the Securities and Exchange Commission by April 30, 2013 are incorporated by reference into Part III of this report.

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PART I

FORWARD-LOOKING STATEMENTS

This report and the information incorporated herein by reference contain forward-looking statements that involve a number of risks and uncertainties, as well as assumptions that, if they never materialize or prove incorrect, could cause our results to differ materially from those expressed or implied by such forward-looking statements. Although our forward-looking statements reflect the good faith judgment of our management, these statements can only be based on facts and factors currently known by us. Consequently, forward-looking statements are inherently subject to risks and uncertainties, and actual results and outcomes may differ materially from results and outcomes discussed in the forward-looking statements.

Forward-looking statements can be identified by the use of forward-looking words such as believes, expects, hopes, may, will, plans, in estimates, could, should, would, continue, seeks, aims, projects, predicts, pro forma, anticipates, potential or other simil use in the negative), or by discussions of future matters such as the development of product candidates or products, technology enhancements, possible changes in legislation, and other statements that are not historical. These statements include but are not limited to statements under the captions Business, Risk Factors, and Management s Discussion and Analysis of Financial Condition and Results of Operations as well as other sections in this report. You should be aware that the occurrence of any of the events discussed under the caption Risk Factors and elsewhere in this report could substantially harm our business, results of operations and financial condition. If any of these events occurs, the trading price of our common stock could decline and you could lose all or a part of the value of your shares of our common stock.

The cautionary statements made in this report are intended to be applicable to all related forward-looking statements wherever they may appear in this report. We urge you not to place undue reliance on these forward-looking statements, which speak only as of the date of this report.

Item 1. ***Business.***

Overview

We are a biopharmaceutical company focused on innovative small molecule drugs that address unmet medical needs in neurological and related central nervous system disorders. We have a pipeline of product candidates led by pimavanserin, which is in Phase III development as a potential first-in-class treatment for Parkinson s disease psychosis. We recently reported successful top-line results from a pivotal Phase III trial with pimavanserin in patients with Parkinson s disease psychosis. We hold worldwide commercialization rights to pimavanserin. Our pipeline also includes clinical-stage programs for chronic pain and glaucoma in collaboration with Allergan, Inc., and two advanced preclinical programs directed at Parkinson s disease and other neurological disorders. All of the product candidates in our pipeline emanate from discoveries made at ACADIA.

Our pipeline of product candidates addresses diseases that are not well served by currently available therapies and that represent large potential commercial market opportunities. We believe our product candidates offer innovative therapeutic approaches and may provide significant advantages relative to current therapies. Our pipeline consists of the following product candidates and programs:

Pimavanserin**.** Pimavanserin is a new chemical entity that we discovered and have advanced to Phase III development, potentially positioning it to be the first drug approved in the United States for the treatment of Parkinson s disease psychosis. This debilitating disorder develops in up to 60 percent of patients with Parkinson s disease. Parkinson s disease psychosis substantially contributes to the burden of Parkinson s disease and deeply affects the quality of life of patients. Parkinson s disease psychosis is associated with increased caregiver distress and burden, nursing home placement, and increased morbidity and mortality. Currently, there are no drugs approved to treat Parkinson s disease psychosis in the United States. Pimavanserin provides an innovative, non-dopaminergic approach to treating this disorder by selectively blocking a key serotonin receptor

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that plays an important role in psychosis. We believe pimavanserin has the potential to be the first effective and safe drug that will treat Parkinson s disease psychosis without compromising motor control, thereby significantly improving the quality of life for patients with Parkinson s disease.

In November 2012, we announced successful top-line results from a pivotal Phase III clinical trial evaluating the efficacy, tolerability and safety of pimavanserin in patients with Parkinson s disease psychosis. Pimavanserin met the primary endpoint of the study by demonstrating highly significant antipsychotic efficacy. Pimavanserin also met the key secondary endpoint for motoric tolerability. These results were further supported by a highly significant improvement in the secondary efficacy measure, and by clinical benefits observed in exploratory efficacy measures of sleep and caregiver burden. Consistent with previous studies, pimavanserin was safe and well tolerated in this Phase III trial. We are currently preparing to initiate a second, confirmatory pivotal Phase III trial in the first half of 2013. We are focused on advancing our Phase III program toward registration for Parkinson s disease psychosis.

We believe that pimavanserin also has the potential to address a range of other neurological and psychiatric disorders, including Alzheimer s disease psychosis and schizophrenia, which are underserved by currently marketed antipsychotic drugs. We have completed a Phase II trial with pimavanserin as a co-therapy in schizophrenia and are planning to initiate a Phase II trial in the second half of 2013 to evaluate the use of pimavanserin as a treatment for patients with Alzheimer s disease psychosis.

Alpha Adrenergic Agonists. In collaboration with Allergan, we have discovered and are developing small molecule product candidates for the treatment of chronic pain. Chronic pain is a common form of persistent pain that may be related to a number of medical conditions and is often resistant to treatment. Allergan has conducted several Phase II trials in this program and has reported preliminary results, including positive proof-of-concept in a human visceral pain trial and efficacy signals in two chronic pain trials in the areas of fibromyalgia and irritable bowel syndrome. Allergan has announced that it is seeking a partner for the further development of this program and for commercialization in areas predominantly served by general practitioners.

Muscarinic Agonist. We have discovered and, in collaboration with Allergan, are developing a small molecule product candidate for the treatment of glaucoma. Glaucoma is a chronic eye disease and is the second leading cause of blindness in the world. Our selective muscarinic agonist has demonstrated a promising preclinical profile, including robust efficacy and a long duration of action. This program has reached Phase I development.

ER-Beta Program. We have discovered a compound that exhibits anti-inflammatory and neuroprotective properties in preclinical models and may have the ability to slow down the progression of Parkinson s disease. This compound also may address symptoms of chronic, inflammatory and neuropathic pain, as well as serve as a new approach to the treatment of neurodegeneration associated with multiple sclerosis. We are currently pursuing research and development in this program pursuant to a grant from the National Institute of Neurological Disorders and Stroke, a division of the National Institutes of Health, and through funding from Fast Forward, LLC, and EMD Serono, a subsidiary of Merck KGaA.

Nurr-1 Program. We have discovered a compound that activates Nurr1-RXR complexes and promotes viability of dopamine-containing neurons in preclinical models. We are conducting studies to examine the effect of this compound on neuroprotection and neurodegeneration in preclinical models of Parkinson s disease pursuant to a grant from The Michael J. Fox Foundation. We believe that our Nurr-1 program provides the potential for an innovative disease-modifying therapy for treating Parkinson s disease and other neurological disorders.

We have assembled a management team with significant industry experience to lead the discovery and development of our product candidates. We complement our management team with a group of scientific and clinical advisors that includes recognized experts in the fields of Parkinson s disease psychosis, schizophrenia, and other central nervous system disorders.

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We maintain a website at *www.acadia-pharm.com*, to which we regularly post copies of our press releases as well as additional information about us. Our filings with the Securities and Exchange Commission, or SEC, are available free of charge through our website as soon as reasonably practicable after being electronically filed with or furnished to the SEC. Interested persons can subscribe on our website to email alerts that are sent automatically when we issue press releases, file our reports with the SEC or post certain other information to our website. Information contained in our website does not constitute a part of this report or our other filings with the SEC.

Our Strategy

Our goal is to discover, develop, and commercialize innovative small molecule drugs that address unmet medical needs in neurological and related central nervous system disorders. Key elements of our strategy are to:

Develop and commercialize our lead product candidate, pimavanserin, for Parkinson s disease psychosis. We have selected Parkinson s disease psychosis as our lead indication for pimavanserin and we are focused on advancing our Phase III program toward registration for this indication. We plan to complete the development in this program and position pimavanserin as a first-in-class treatment for patients with Parkinson s disease psychosis. If successful, we intend to participate in the commercialization of pimavanserin for this indication in the United States by establishing a small specialty sales force that calls on a focused group of neurologists. We may choose to commercialize pimavanserin in markets outside of the United States by establishing one or more strategic alliances in the future.

Maximize the commercial potential of pimavanserin by expanding to additional neurological and psychiatric disorders. We intend to use our Phase III Parkinson s disease psychosis program as a foundation to develop and commercialize pimavanserin for additional neurological and psychiatric indications that are underserved by currently available antipsychotics and represent large unmet medical needs. This may include development of pimavanserin as a treatment for psychoses associated with other neurological disorders, including Alzheimer s disease, and as a co-therapy for schizophrenia. We plan to retain commercialization rights in therapeutic areas where we feel pimavanserin can be sold by a specialty sales force that calls on a focused group of physicians. In therapeutic areas that require large specialty or primary care sales forces, we may elect to complete late-stage development and commercialization through, or in collaboration with, partners.

Continue to develop our other product candidates for the treatment of central nervous system and related disorders. We plan to continue developing our other product candidates, including our collaborative programs with Allergan, and our advanced internal preclinical programs. While our resources are currently focused on our most advanced product candidates, most notably pimavanserin, we may choose to pursue additional product candidates in the future. These may be directed at neurological and related central nervous system disorders and may be developed independently or in partnerships. We believe that a diversified pipeline will mitigate risks inherent in drug development and increase the likelihood of commercial success.

Opportunistically in-license or acquire complementary products or product candidates. Although all of the product candidates currently in our pipeline emanate from internal discoveries, in the future we may elect to in-license or acquire preclinical assets, clinical-stage product candidates or products to augment our pipeline and to leverage any sales force that we may establish in the future.

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Disease and Market Overview

Our product candidates address diseases that are not well served by currently available therapies and that represent large potential commercial market opportunities. Background information on the diseases and related commercial markets that may be addressed by our product candidates is set forth below.

Parkinson s Disease Psychosis

Parkinson s disease is a chronic and progressive neurodegenerative disorder that involves malfunction and death of neurons in a region of the brain that controls movement. This neurodegeneration creates a shortage of an important brain signaling chemical, or neurotransmitter, known as dopamine, thereby rendering patients unable to direct or control their movements in a normal manner. Parkinson s disease is characterized by well-known motor symptoms including tremors, limb stiffness, slowness of movements, and difficulties with posture and balance, as well as by non-motor symptoms, which often include psychosis. Parkinson s disease progresses slowly in most people and the severity of symptoms tends to worsen over time.

Parkinson s disease is the second most common neurodegenerative disorder after Alzheimer s disease. According to the National Parkinson Foundation, about one million people in the United States and from four to six million people worldwide suffer from this disease. Parkinson s disease is more common in people over 60 years of age, and the prevalence of this disease is expected to increase significantly as the average age of the population increases. Parkinson s disease patients are commonly treated with dopamine replacement therapies such as levodopa, commonly referred to as L-dopa, which is metabolized to dopamine, and dopamine agonists, which are molecules that mimic the action of dopamine.

Studies have suggested that up to 60 percent of patients with Parkinson s disease will develop Parkinson s disease psychosis, which is a debilitating disorder commonly characterized by visual hallucinations and delusions. The development of psychosis in patients with Parkinson s disease substantially contributes to the burden of Parkinson s disease and deeply affects their quality of life. Parkinson s disease psychosis is associated with increased caregiver stress and burden, nursing home placement, and increased morbidity and mortality.

Treatment of Parkinson s disease psychosis poses a challenge to physicians. The U.S. Food and Drug Administration, or FDA, has not approved any therapy for Parkinson s disease psychosis. Traditionally, there are two approaches which may be applied in the treatment of this condition. Initially, physicians may attempt to decrease the dose of the dopamine replacement drugs which are administered to manage the motor symptoms of Parkinson s disease. However, this approach is generally not effective in alleviating psychotic symptoms and often comes at the cost of significant worsening of motor function in patients. Therefore, despite substantial limitations, currently marketed antipsychotic drugs are used off-label to treat patients with Parkinson s disease psychosis. Due to their dopamine blocking properties, these drugs may counteract the dopamine replacement therapy and, therefore, often worsen motor symptoms in patients with Parkinson s disease. Current antipsychotic drugs also are associated with a number of side effects, which can be especially problematic for elderly patients with Parkinson s disease. In addition, all current antipsychotic drugs have a black box warning for use in elderly patients with dementia-related psychosis due to increased mortality and morbidity. Nevertheless, because there is no alternative, physicians frequently resort to off-label use of antipsychotic drugs, including Seroquel and the generic drug clozapine, to treat Parkinson s disease psychosis.

The only currently marketed antipsychotic drug that has demonstrated efficacy in reducing psychosis in patients with Parkinson s disease without further impairing motor function is clozapine when given at low doses. Studies suggest that this unique clinical utility of low-dose clozapine arises from its potent blocking of a key serotonin receptor, a protein that responds to the neurotransmitter serotonin, known as the 5-HT2A receptor. The use of low-dose clozapine has been approved in Europe, but not in the United States, for the treatment of psychotic disorders in Parkinson s disease. However, routine use of clozapine is limited by its potential to cause a rare, and potentially fatal, blood disorder that necessitates stringent blood monitoring. Currently, there is a large unmet medical need for new therapies that will effectively treat psychosis in patients with Parkinson s disease without compromising motor control or causing other serious side effects in this fragile, elderly patient population.

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Schizophrenia

Schizophrenia is a severe chronic mental illness that involves disturbances in cognition, perception, emotion, and other aspects of behavior. The positive symptoms of schizophrenia include hallucinations and delusions, while the negative symptoms may manifest as loss of interest and emotional withdrawal. Schizophrenia is associated with persistent impairment of a patient s social functioning and productivity. Cognitive disturbances often prevent patients with schizophrenia from readjusting to society. As a result, patients with schizophrenia are normally required to be under medical care for their entire lives.

According to the National Institute of Mental Health, approximately one percent of the U.S. population suffers from schizophrenia. Worldwide sales of antipsychotic drugs used to treat schizophrenia and other psychiatric conditions exceeded $28 billion in 2011. These drugs have been increasingly used by physicians to address a range of disorders in addition to schizophrenia, including bipolar disorder and a variety of psychoses and related conditions in elderly patients. Despite their commercial success, current antipsychotic drugs have substantial limitations, including inadequate efficacy and severe side effects.

The first-generation, or typical, antipsychotics that were introduced in the late-1950s block dopamine receptors. While typical antipsychotics are effective against positive symptoms of schizophrenia in many patients, these drugs often induce disabling motor disturbances, and they fail to address or worsen most of the negative symptoms and cognitive disturbances associated with schizophrenia.

Most schizophrenia patients in the United States today are treated with second-generation, or atypical, antipsychotics, which induce fewer motor disturbances than typical antipsychotics, but still fail to address most of the negative symptoms of schizophrenia. In addition, currently prescribed treatments do not effectively address or may exacerbate cognitive disturbances associated with schizophrenia. It is believed that the efficacy of atypical antipsychotics is due to their interactions with dopamine and 5-HT2A receptors. The side effects induced by the atypical agents may include weight gain, non-insulin dependent (type II) diabetes, cardiovascular side effects, sleep disturbances, and motor disturbances. We believe that these side effects generally arise either from non-essential receptor interactions or from excessive dopamine blockade.

The limitations of currently available antipsychotics result in poor patient compliance. A study conducted by the National Institute of Mental Health, which was published in *The New England Journal of Medicine* in September 2005, found that 74 percent of patients taking typical or atypical antipsychotics discontinued treatment within 18 months because of side effects or lack of efficacy. We believe there is a large unmet medical need for new therapies that have improved side effect and efficacy profiles.

Alzheimer s Disease Psychosis

Alzheimer s disease is a progressive neurodegenerative disorder that slowly destroys memory and thinking skills, and eventually even the ability to carry out simple tasks. Its symptoms include cognitive dysfunction, memory abnormalities, progressive impairment in activities of daily living, and a host of behavioral and neuropsychiatric symptoms. Alzheimer s disease primarily affects older people and, in most cases, symptoms first appear after age 60. Alzheimer s disease gets worse over time and is fatal.

According to the Alzheimer s Association, 5.4 million people in the United States are living with Alzheimer s disease and it is currently the fifth leading cause of death for people age 65 and older. While the diagnostic criteria for Alzheimer s disease mostly focus on the related cognitive deficits, it is often the behavioral and psychiatric symptoms that are most troublesome for caregivers and lead to poor quality of life for patients. These symptoms include agitation, aggressive behaviors, and psychosis. Studies have suggested that approximately 25 to 50 percent of Alzheimer s disease patients may develop psychosis, commonly consisting of hallucinations and delusions. The diagnosis of Alzheimer s disease psychosis is associated with more rapid cognitive and functional decline and institutionalization.

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The FDA has not approved any drug to treat Alzheimer s disease psychosis. As symptoms progress and become more severe, physicians often resort to off-label use of antipsychotic medications in these patients. Current antipsychotic drugs are associated with a number of side effects, which can be problematic for elderly patients with Alzheimer s disease. In addition, antipsychotic drugs may exacerbate the cognitive disturbances associated with Alzheimer s disease. Current antipsychotic drugs also have a black box warning for use in elderly patients with dementia-related psychosis due to increased mortality and morbidity. There is a large unmet medical need for a safe and effective therapy to treat the psychosis in patients with Alzheimer s disease.

Chronic Pain

Chronic pain is a common form of pain that persists or progresses over a long period of time. In contrast to acute pain that usually arises suddenly in response to an identifiable injury and is transient, chronic pain persists over time and is often resistant to medical treatments. Chronic pain may be related to a number of different medical conditions, including diabetes, arthritis, migraine, fibromyalgia, irritable bowel syndrome, cancer, shingles, and previous trauma or injury.

Hypersensitivity is a common feature of many chronic pain disorders, including fibromyalgia and irritable bowel syndrome. Fibromyalgia is a common and complex type of chronic pain characterized by chronic widespread muscle pain, stiffness and tenderness of muscles, tendons and joints without detectable inflammation. It also is often associated with fatigue, sleep disorders, anxiety, depression and disturbances in bowel function. Fibromyalgia affects an estimated 10 million people in the United States, predominately women over the age of 30. Irritable bowel syndrome is one of the most common ailments of the intestines and affects an estimated 15 percent of the U.S. population. Common symptoms of irritable bowel syndrome include abdominal pain or discomfort often reported as cramping, bloating, gas, diarrhea and/or constipation.

There are a variety of drugs used to treat patients with chronic pain, including anticonvulsants, selective serotonin and norepinephrine reuptake inhibitors, or SNRIs, tricyclic antidepressants, opioid painkillers, and non-steroidal anti-inflammatory agents. Currently, the leading drugs include Lyrica, an anticonvulsant approved for postherpetic neuralgia, diabetic neuropathic pain and fibromyalgia, and Cymbalta, an SNRI indicated for treatment of diabetic peripheral neuropathic pain, fibromyalgia, and major depressive disorder. Lyrica and Cymbalta had worldwide sales of $4.2 billion and $5.0 billion, respectively, in 2012. Lyrica is the successor to Neurontin, which was the first product to be approved by the FDA for the treatment of neuropathic pain and is now generic.

Only a portion of patients with chronic pain get meaningful relief from anticonvulsants and antidepressants. Side effects of anticonvulsants may include dizziness, somnolence, dry mouth, blurred vision, weight gain, and concentration or attention difficulties. Side effects of SNRIs may include nausea, vomiting, dizziness, sleep disturbances, constipation, dry mouth, anxiety, abnormal vision, headache and sexual dysfunction. Tricyclic antidepressants have long been used to treat depression and these agents may have pain-relieving effects in some patients. Common side effects of these agents include dry mouth, blurred vision, and constipation, difficulty with urination, impaired thinking and tiredness.

Drugs such as opioid painkillers and non-steroidal anti-inflammatory agents that are effective in treating inflammatory and acute pain usually are not effective in treating chronic pain. Opioid painkillers also have significant side effects that limit their usefulness, and prolonged use of these drugs can lead to the need for increasing dosage and potentially to addiction.

Due to these shortcomings of current therapies, we believe that there is a large unmet medical need for new chronic pain therapies with improved efficacy and side effect profiles.

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Glaucoma

Glaucoma is a chronic eye disease that, if left untreated, can lead to blindness. According to the World Health Organization, glaucoma is the second leading cause of blindness in the world. Loss of vision is caused by degeneration of the optic nerve, which is responsible for carrying images from the eye to the brain. A frequent symptom of glaucoma is increased fluid pressure within the eye, referred to as intraocular pressure. In the early stages of the disease, there may be no symptoms. It is estimated that over four million people in the United States have glaucoma but only half of those know they have it. Older people are at a higher risk for glaucoma and the disease is more common in people over 60 years of age. The prevalence of glaucoma is expected to increase as the average age of the population increases.

Currently there are a variety of options available to treat glaucoma, including eye medications, laser procedures and surgery. These treatment options are intended to decrease intraocular pressure and, thereby, protect the optic nerve. Physicians often treat glaucoma with multiple classes of drugs to optimize therapy and minimize side effects. Drugs used to treat glaucoma include prostaglandin analogs such as Xalatan and Lumigan, beta blockers such as timolol, and alpha agonists such as Alphagan, as well as combined medications. Xalatan, a leading glaucoma treatment with worldwide sales of $806 million in 2012, is now generic. While Xalatan is an effective anti-glaucoma agent, it frequently causes increased pigmentation of the iris that may lead to a change in iris color, and may cause other side effects, including blurred vision and burning and stinging sensations in the eye. We believe there is a need for new and more effective drugs that can treat glaucoma with fewer side effects and help patients reduce the risk of losing their vision.

Our Product Candidates and Programs

Our pipeline includes three product candidates in clinical development and two programs in advanced preclinical testing. We believe that our product candidates offer innovative therapeutic approaches and may provide significant advantages relative to current therapies. The following table summarizes our product candidates and programs:

Product Candidate/Program	Indication	Stage of Development	Commercialization Rights
Pimavanserin	Parkinson s disease psychosis	Phase III	ACADIA
	Schizophrenia	Phase II (1)	ACADIA
	Alzheimer s disease psychosis	Phase II (2)	ACADIA
Alpha adrenergic agonists	Chronic pain	Phase II	Allergan
Muscarinic agonist	Glaucoma	Phase I	Allergan
ER-Beta program	Chronic pain, Multiple Sclerosis, Parkinson s disease	Preclinical	ACADIA
Nurr-1 program	Parkinson s disease	Preclinical	ACADIA

(1) We completed a Phase II schizophrenia co-therapy trial.
(2) We are planning to initiate a Phase II Alzheimer s disease psychosis trial in the second half of 2013.

Pimavanserin

Overview

Pimavanserin is a new chemical entity that we discovered and have advanced to Phase III development, potentially positioning it to be the first drug approved in the United States for the treatment of Parkinson s disease psychosis. Pimavanserin is a small molecule that can be taken orally as a tablet once-a-day. Pimavanserin

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selectively blocks the activity of the 5-HT2A receptor, a drug target that plays an important role in psychosis. We hold worldwide rights to pimavanserin and have established a patent portfolio, which includes numerous issued patents covering pimavanserin in the United States, Europe and several additional countries.

We have selected Parkinson s disease psychosis as our lead indication for pimavanserin and we are focused on advancing our Phase III program toward registration for this indication. We believe that pimavanserin also has the potential to address a range of other neurological and psychiatric indications that are underserved by currently marketed antipsychotics. We have completed a Phase II trial with pimavanserin as a co-therapy in schizophrenia and we are planning a Phase II trial to evaluate the potential of pimavanserin as a treatment for Alzheimer s disease psychosis. We intend to use our Phase III Parkinson s disease psychosis program as a foundation to develop and commercialize pimavanserin for these and potentially other neurological and psychiatric indications independently or in collaboration with partners.

Pimavanserin as a Treatment for Parkinson s Disease Psychosis

We are in Phase III development with pimavanserin as a potential first-in-class treatment for Parkinson s disease psychosis. Currently, there are no therapies approved to treat Parkinson s disease psychosis in the United States. Pimavanserin offers an innovative, non-dopaminergic approach to treating Parkinson s disease psychosis. We believe that pimavanserin has the potential to be the first effective and safe drug that will treat the psychosis in patients with Parkinson s disease without compromising motor control, thereby significantly improving the quality of life for these patients. As a result, we believe that, if approved, pimavanserin will offer significant advantages relative to current antipsychotics used off-label for the treatment of Parkinson s disease psychosis.

In November 2012, we announced successful top-line results from our pivotal Phase III clinical trial, referred to as the -020 Study, evaluating the efficacy, tolerability and safety of pimavanserin in patients with Parkinson s disease psychosis. The -020 Study was a multi-center, double-blind, placebo-controlled study. A total of 199 patients were enrolled in the study and randomized on a one-to-one basis to receive either 40 mg of pimavanserin or placebo once-daily for six weeks, following a two-week screening period including brief psycho-social therapy. Patients also received stable doses of their existing anti-Parkinson s therapy throughout the study. Pimavanserin met the primary endpoint in the -020 Study by demonstrating highly significant antipsychotic efficacy (p=0.001) as measured using the SAPS-PD scale, which consists of nine items from the hallucinations and delusions domains of the Scale for the Assessment of Positive Symptoms. Pimavanserin also met the key secondary endpoint for motoric tolerability as measured using Parts II and III of the Unified Parkinson s Disease Rating Scale, or UPDRS. These results were further supported by a highly significant improvement in the secondary measure of antipsychotic efficacy, the Clinical Global Impression Improvement, or CGI-I scale (p=0.001). In addition, clinical benefits were observed in exploratory efficacy measures of sleep and caregiver burden using the SCOPA-sleep and Caregiver Burden scales, respectively. Pimavanserin demonstrated significant improvement on both nighttime sleep (p=0.045) and daytime wakefulness (p=0.012), and a highly significant improvement on caregiver burden (p=0.002). Consistent with previous studies, pimavanserin was safe and well tolerated in this Phase III trial.

Following the successful top-line results in the -020 Study, we are preparing to initiate a second, confirmatory pivotal Phase III trial, referred to as the -021 Study, using the same trial design. We expect to initiate the -021 Study in the first half of 2013. In addition, we are continuing to conduct an open-label safety extension trial, referred to as the -015 Study, involving patients with Parkinson s disease psychosis who have completed the -020 Study and our earlier Phase III studies as well as patients who complete the -021 Study. Patients are eligible to participate in the -015 Study if, in the opinion of the treating physician, the patient may benefit from continued treatment with pimavanserin. The -015 Study, together with a similar extension trial from our earlier Phase II Parkinson s disease psychosis trial, has generated a considerable amount of long-term safety data on pimavanserin. A total of over 200 patients have now been treated with pimavanserin for over one year and our longest single-patient exposure is greater than seven years. We believe that our experience to date suggests that long-term administration of pimavanserin is generally safe and well tolerated in this fragile, elderly patient population.

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Pimavanserin as a Co-Therapy for Schizophrenia

We believe that the optimal relationship between 5-HT2A receptor blockade and partial dopamine receptor blockade can be achieved by combining pimavanserin with a low dose of an atypical antipsychotic drug such as risperidone, a commonly prescribed antipsychotic that is now generic. Therefore, we believe co-therapy with pimavanserin may result in enhanced efficacy and fewer side effects relative to existing treatments, thereby providing an improved therapy for patients with schizophrenia.

We published results in 2012 from an earlier multi-center, double-blind, placebo-controlled Phase II trial designed to evaluate pimavanserin as a co-therapy in patients with schizophrenia. The trial results showed several advantages of co-therapy with pimavanserin and a 2 mg, or low, dose of risperidone in patients with schizophrenia. These advantages included efficacy comparable to that of a 6 mg, or standard, dose of risperidone, combined with a faster onset of antipsychotic action and an improved side effect profile, including significantly less weight gain, compared to the standard dose of risperidone. We are considering additional studies that we may elect to pursue for this indication in the future, either independently or in collaboration with a partner.

Pimavanserin as a Treatment for Alzheimer s Disease Psychosis

Patients with Alzheimer s disease psychosis and Parkinson s disease psychosis share many common characteristics. They are typically elderly and frail, and often exhibit similar psychiatric symptoms associated with their respective underlying neurodegenerative disease. In preclinical models of Alzheimer s disease psychosis, we have shown that pimavanserin attenuates psychosis-related behaviors. In addition, pimavanserin has been shown to positively interact with cholinesterase inhibitors to enhance their pro-cognitive and antipsychotic actions in preclinical models. Because of its mechanism of action and the favorable safety profile observed to date in studies conducted in elderly patients with Parkinson s disease psychosis, we believe that pimavanserin also may be ideally suited to address the need for a new treatment for Alzheimer s disease psychosis that is safe, effective and well tolerated.

We have established a protocol for a Phase II trial to evaluate the potential of pimavanserin as a treatment for Alzheimer s disease psychosis. We plan to initiate this study in the second half of 2013.

Alpha Adrenergic Agonists

In collaboration with Allergan, we have discovered and are developing small molecule product candidates for the treatment of chronic pain. Our novel alpha adrenergic agonists provide pain relief in a range of preclinical models, without the side effects of current pain therapies, including sedation and cardiovascular and respiratory effects.

Allergan has conducted several Phase II trials in this program and has reported preliminary results, including positive proof-of-concept in a visceral pain trial in patients that had hypersensitivity of the esophagus, and efficacy signals in two chronic pain trials in the areas of fibromyalgia and irritable bowel syndrome. Allergan has announced that it is seeking a partner for the further development of this program and for commercialization in areas predominantly served by general practitioners.

Muscarinic Agonist

We have discovered and, in collaboration with Allergan, are developing a small molecule product candidate for the treatment of glaucoma. Using our proprietary drug discovery platform, we identified a subtype of the muscarinic receptors that controls intraocular pressure and discovered lead compounds that selectively activate this target. In preclinical models, our product candidate has demonstrated a promising preclinical profile, including robust efficacy and a long duration of action. This program has reached Phase I development.

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ER-Beta Program

We have discovered a compound that exhibits anti-inflammatory and neuroprotective properties in preclinical models and may have the ability to slow down the progression of Parkinson s disease. This compound also may address symptoms of chronic, inflammatory and neuropathic pain, as well as serve as a new approach to the treatment of neurodegeneration associated with multiple sclerosis. We are currently pursuing research and development in this program pursuant to a grant from the National Institute of Neurological Disorders and Stroke, a division of the National Institutes of Health, and through funding from Fast Forward, LLC, and EMD Serono, a subsidiary of Merck KGaA.

Nurr-1 Program.

We have discovered a compound that activates Nurr1-RXR complexes and promotes viability of dopamine-containing neurons in preclinical models. We are conducting studies to examine the effect of this compound on neuroprotection and neurodegeneration in preclinical models of Parkinson s disease pursuant to a grant from The Michael J. Fox Foundation. We believe that our Nurr-1 program provides the potential for an innovative disease-modifying therapy for treating Parkinson s disease and other neurological disorders.

Our Drug Discovery Platform and Capabilities

Overview

All of our product candidates that are currently in clinical development and earlier stages of discovery and development emanate from internal discoveries. We have demonstrated that our proprietary drug discovery platform can be used to rapidly identify drug-like, small molecule chemistries for a wide range of drug targets. We believe that our expertise combined with our proprietary platform has allowed us to discover product candidates more efficiently than traditional approaches.

Our Drug Discovery Approach

Our drug discovery approach is designed to introduce chemistry at an early stage in the drug discovery process and enable selection of the most attractive, drug-like chemistries for desired targets. A key to our discovery approach has been our set of proprietary functional test systems, or assays, that we developed for a large number of targets predominantly in the G-protein coupled receptor and nuclear receptor gene families. We believe that these gene families represent the most relevant and feasible targets for small molecule drug discovery focused on central nervous system indications. We have used our proprietary assays in conjunction with our proprietary receptor selection and amplification technology, a cell-based assay system which we refer to as R-SAT, to validate drug targets, and to discover novel small molecules that are specific for these targets.

Collaboration Agreements

We have established three separate collaboration agreements with Allergan and a technology license agreement with Aventis to leverage our drug discovery platform and related assets, and to advance development of and commercialize selected product candidates. Our collaborations have typically included upfront payments at initiation of the collaboration, research support during the research term, if applicable, milestone payments upon successful completion of specified development objectives, and royalties based upon future sales, if any, of drugs developed under the collaboration. Our current agreements are as follows:

Allergan

In March 2003, we entered into a collaboration agreement with Allergan to discover, develop and commercialize new therapeutics for ophthalmic and other indications. The agreement originally provided for a three-year research term, which has been extended by the parties through March 2013. As of December 31, 2012, we had received an aggregate of $19.5 million under the agreement, consisting of an upfront payment, and

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research funding and related fees. During the extended research term, Allergan is entitled to exclusively license specified chemistry and related assets for development and commercialization. If we grant Allergan such an exclusive license, we would be eligible to receive license fees and milestone payments upon the successful achievement of agreed-upon clinical and regulatory objectives as well as royalties on future product sales, if any, worldwide. Assuming the license and successful development of a product in the area of eye care, we could receive up to approximately $13.5 million in aggregate license fees and milestone payments per product under the agreement, as well as royalties on future product sales worldwide, if any.

In July 1999, we entered into a collaboration agreement with Allergan to discover, develop and commercialize selective muscarinic drugs for the treatment of glaucoma. Under this agreement, we provided our chemistry and discovery expertise to enable Allergan to select a compound for development. We granted Allergan exclusive worldwide rights to commercialize products based on this compound for the treatment of ocular disease. As of December 31, 2012, we had received an aggregate of $9.6 million in payments under the agreement, consisting of upfront fees, research funding and milestone payments. We are eligible to receive additional milestone payments of up to $15.0 million in the aggregate as well as royalties on future product sales worldwide, if any. Allergan may terminate this agreement upon 90 days notice. However, if terminated, Allergan s rights to the selected compound would revert to us.

In September 1997, we entered into a collaboration agreement with Allergan focused primarily on the discovery and development of new therapeutics for pain and ophthalmic indications. This agreement was amended in conjunction with the execution and subsequent amendments of the March 2003 collaboration agreement, and provides for the continued development of product candidates for one target area. We are restricted from conducting competing research in that target area. Pursuant to the agreement, we granted Allergan exclusive worldwide rights to commercialize products resulting from the collaboration. We had received an aggregate of $10.5 million in research funding and milestone payments through December 31, 2012 under this agreement. We are eligible to receive additional milestone payments of up to $10.0 million in the aggregate as well as royalties on future product sales worldwide, if any. In connection with the execution of the collaboration agreement in 1997, Allergan made a $6.0 million equity investment in us.

The general terms of our collaboration agreements with Allergan continue until the later of the expiration of the last to expire patent covering a product licensed under the collaboration and at least 10 years from the date of first commercial sale of a product. In addition, each of our Allergan collaboration agreements includes a research term that is shorter but may be renewed if agreed to by the parties.

Aventis

In July 2002, we entered into an agreement with Aventis under which we have licensed a portion of our technology for their use in a specified area that we are not pursuing presently.

Intellectual Property

We currently hold 49 issued U.S. patents and 198 issued foreign patents. All of these patents originated from us. In addition, we have 15 provisional and utility U.S. patent applications and 74 foreign patent applications.

Patents or other proprietary rights are an essential element of our business. Our strategy is to file patent applications in the United States and any other country that represents an important potential commercial market to us. In addition, we seek to protect our technology, inventions and improvements to inventions that are important to the development of our business. Our patent applications claim proprietary technology, including methods of screening and chemical synthetic methods, novel drug targets and novel compounds identified using our technology.

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We also rely upon trade secret rights to protect other technologies that may be used to discover and validate targets and that may be used to identify and develop novel drugs. We protect our trade secrets in part through confidentiality and proprietary information agreements. We have entered into a license agreement, dated as of November 30, 2006, for certain intellectual property rights from the Ipsen Group in order to expand and strengthen the intellectual property portfolio for our serotonin platform. We are a party to various other license agreements that give us rights to use certain technologies in our research and development.

Pimavanserin

Eighteen U.S. patents have been issued to us that provide protection for pimavanserin, including three that cover the compound generically and eight that specifically cover pimavanserin, polymorphs thereof, the use thereof for treating Parkinson s disease psychosis, Alzheimer s disease psychosis, schizophrenia, sleep disorders, and other methods of treatment. These patents also provide protection for certain methods of producing pimavanserin. The generic coverage expires in 2021. The pimavanserin specific patent and the Parkinson s disease psychosis treatment patent provide protection until June 2027 and 2026, respectively. Our estimation of the above patent terms includes patent term adjustments made by the U.S. Patent and Trademark Office. These patent terms may be subject to change based on new interpretations of the law. The patent that covers polymorphs of pimavanserin provides protection until June 2028. We have 55 issued foreign patents that specifically cover pimavanserin, including patents in 39 European countries, Australia, China, Hong Kong, India, Japan, Mexico, New Zealand, Russia, Singapore and South Africa, which provide patent protection through 2024. We continue to prosecute patent applications directed to pimavanserin and to methods of treating various diseases using pimavanserin, either alone or in combination with other agents, worldwide.

Alpha Adrenergic Agonists

We have not been issued, and are not pursuing, patents covering the compounds being pursued by Allergan under this collaboration as the compounds are covered by Allergan patents.

Muscarinic Agonist

We have two U.S. patents that have been issued to us providing coverage for the compounds covered by our collaboration with Allergan for the treatment of glaucoma. These U.S. patents will expire in 2023. We have 47 issued foreign patents and 16 pending foreign applications that cover these compounds. The issued foreign patents for this program will expire in 2022 and 2025.

Other Product Candidates

We have 13 issued U.S. patents and 23 issued foreign patents with claims for other product candidates that are at earlier stages of development.

Our Drug Discovery Platform

Our core R-SAT technology is protected by eight issued U.S. patents and 17 foreign patents. Our U.S. patents for R-SAT will expire over the range of 2013 to 2025. The foreign patents covering R-SAT will expire over the range of 2014 to 2024.

Competition

We face, and will continue to face, intense competition from pharmaceutical and biotechnology companies, as well as numerous academic and research institutions and governmental agencies, both in the United States and abroad. We compete, or will compete, with existing and new products being developed by our competitors. Some of these competitors are pursuing the development of pharmaceuticals that target the same diseases and conditions that our research and development programs target.

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Even if we and our collaborators are successful in developing our product candidates, the resulting products would compete with a variety of established drugs in the areas of Parkinson s disease psychosis, schizophrenia, Alzheimer s disease psychosis, chronic pain, and glaucoma. For example, our potential product for the treatment of Parkinson s disease psychosis will compete with off-label use of antipsychotic drugs, including Seroquel, marketed by Astra-Zeneca, and clozapine, a generic drug.

Our potential products for the treatment of schizophrenia would compete with Zyprexa, marketed by Eli Lilly, Risperdal, marketed by Johnson & Johnson, Abilify, marketed jointly by Bristol-Myers Squibb and Otsuka Pharmaceutical, Seroquel, and clozapine. Zyprexa (olanzapine), Risperdal (risperidone), Seroquel (quetiapine) and clozapine (clozaril) are all now generic in the United States. Our potential product for Alzheimer s disease psychosis would compete with off-label use of antipsychotic drugs.

Our potential products for the treatment of chronic pain would compete with Neurontin and Lyrica, each marketed by Pfizer, and Cymbalta, marketed by Eli Lilly, as well as with a variety of generic or proprietary opioids. Currently, the leading drugs approved for chronic pain indications include Lyrica, the successor to Neurontin (gabapentin, now a generic drug), and Cymbalta.

Our potential products for the treatment of glaucoma would compete with Xalatan, marketed by Pfizer, and Lumigan and Alphagan, marketed by Allergan. Xalatan (latanoprost) is a leading glaucoma treatment that is now generic.

In addition, the companies described above and other competitors may have a variety of drugs in development or awaiting FDA approval that could reach the market and become established before we have a product to sell. Our competitors may also develop alternative therapies that could further limit the market for any drugs that we may develop. Many of our competitors are using technologies or methods different or similar to ours to identify and validate drug targets and to discover novel small molecule drugs. Many of our competitors and their collaborators have significantly greater experience than we do in the following:

- identifying and validating targets;
- screening compounds against targets;
- preclinical and clinical trials of potential pharmaceutical products; and
- obtaining FDA and other regulatory clearances.

In addition, many of our competitors and their collaborators have substantially greater advantages in the following areas:

- capital resources;
- research and development resources;
- manufacturing capabilities; and
- sales and marketing.

Smaller companies also may prove to be significant competitors, particularly through proprietary research discoveries and collaborative arrangements with large pharmaceutical and established biotechnology companies. Many of our competitors have products that have been approved or are in advanced development. We face competition from other companies, academic institutions, governmental agencies and other public and private research organizations for collaborative arrangements with pharmaceutical and biotechnology companies, in recruiting and retaining highly qualified scientific and management personnel and for licenses to additional technologies. Our competitors, either alone or with

their collaborators, may succeed in developing technologies or drugs that are more effective, safer, and more affordable or more easily administered than ours and may achieve patent protection or commercialize drugs sooner than us. Developments by others may render our product candidates or our technologies obsolete. Our failure to compete effectively could have a material adverse affect on our business.

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Government Regulation

The manufacturing and marketing of our potential products and our ongoing research and development activities are subject to extensive regulation by numerous governmental authorities in the United States and other countries. Before marketing in the United States, any new drug developed by us must undergo rigorous preclinical testing, clinical trials and an extensive regulatory clearance process implemented by the FDA under the federal Food, Drug, and Cosmetic Act, as amended. The FDA regulates, among other things, the development, testing, manufacture, safety, efficacy, record keeping, labeling, storage, approval, advertising, promotion, sale and distribution of biopharmaceutical products. None of our product candidates has been approved for sale in the United States or any foreign market. The regulatory review and approval process, which includes preclinical testing and clinical trials of each product candidate, is lengthy, expensive and uncertain. Moreover, if our product candidates are approved by the FDA, government coverage and reimbursement policies will both directly and indirectly impact our ability to successfully commercialize our products, and such coverage and reimbursement policies will be impacted by future healthcare reform measures. In addition, we may be subject to state and federal laws, including anti-kickback and false claims statutes as well as data privacy laws, which restrict certain business practices in the pharmaceutical industry.

In the United States, product candidates are tested in animals until adequate proof of safety is established. Clinical trials for new product candidates are typically conducted in three sequential phases that may overlap. Phase I trials involve the initial introduction of the product candidate into healthy human volunteers. The emphasis of Phase I trials is on testing for safety or adverse effects, dosage, tolerance, metabolism, distribution, excretion and clinical pharmacology. Phase II involves studies in a limited patient population to determine the initial efficacy of the compound for specific targeted indications, to determine dosage tolerance and optimal dosage and to identify possible adverse side effects and safety risks. Once a compound shows evidence of effectiveness and is found to have an acceptable safety profile in Phase II evaluations, Phase III trials are undertaken to more fully evaluate clinical outcomes. Before commencing clinical investigations in humans, we or our collaborators must submit to the FDA an Investigational New Drug Application, or IND.

Regulatory authorities may require additional data before allowing the clinical studies to commence or proceed from one phase to another, and could demand that the studies be discontinued or suspended at any time if there are significant safety issues. We have in the past and may in the future rely on some of our collaborators to file INDs and generally direct the regulatory approval process for many of our potential products. Clinical testing must also meet requirements for clinical trial registration, institutional review board oversight, informed consent, health information privacy, and good clinical practices.

To establish a new product candidate s safety and efficacy, the FDA requires companies seeking approval to market a drug product to submit extensive preclinical and clinical data, along with other information, for each indication for which the product will be labeled and launched. The data and information are submitted to the FDA in the form of a New Drug Application, or NDA. Generating the required data and information for an NDA takes many years and requires the expenditure of substantial resources. Information generated in this process is susceptible to varying interpretations that could delay, limit or prevent regulatory approval at any stage of the process. The failure to demonstrate adequately the quality, safety and efficacy of a product candidate under development would delay or prevent regulatory approval of the product candidate. We cannot assure you that, even if clinical trials are completed, either our collaborators or we will submit applications for required authorizations to manufacture and/or market potential products or that any such application will be reviewed and approved by the appropriate regulatory authorities in a timely manner, if at all. Under applicable laws and FDA regulations, each NDA submitted for FDA approval is usually given an internal administrative review within 60 days following submission of the NDA. If deemed sufficiently complete to permit a substantive review, the FDA will file the NDA. The FDA can refuse to file any NDA that it deems incomplete or not properly reviewable. The FDA has established internal goals of eight months from submission for priority review of NDAs that cover product candidates that offer major advances in treatment or provide a treatment where no adequate therapy exists, and 12 months from submission for the standard review of NDAs. However, the FDA is not legally required to complete its review within these periods, these performance goals may change over time and the

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review is often extended by FDA requests for additional information or clarification. Moreover, the outcome of the review, even if generally favorable, may not be an actual approval but a complete response letter that describes additional work that must be done before the NDA can be approved. Before approving an NDA, the FDA will inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facility complies with cGMPs. The FDA s review of an NDA may also involve review and recommendations by an independent FDA advisory committee, particularly for novel indications, such as Parkinson s disease psychosis.

In addition, delays or rejections may be encountered based upon changes in regulatory policy for product approval during the period of product development and regulatory agency review. Changes in regulatory approval policy, regulations or statutes or the process for regulatory review during products development or approval periods may cause delays in the approval or rejection of an application.

Before receiving FDA approval to market a potential product, we or our collaborators must demonstrate through adequate and well-controlled clinical studies that the potential product is safe and effective on the patient population that will be treated. If regulatory approval of a potential product is granted, this approval will be limited to those disease states and conditions for which the product is approved. Marketing or promoting a drug for an unapproved indication is generally prohibited. Furthermore, FDA approval may entail ongoing requirements for risk management, including post-marketing studies. Even if approval is obtained, a marketed product, its manufacturer and its manufacturing facilities are subject to continuing review and periodic inspections by the FDA. Discovery of previously unknown problems with a product, manufacturer or facility may result in restrictions on the product or manufacturer, including labeling changes, warning letters, costly recalls or withdrawal of the product from the market.

Any drug is likely to produce some toxicities or undesirable side effects in animals and in humans when administered at sufficiently high doses and/or for sufficiently long periods of time. Unacceptable toxicities or side effects may occur at any dose level at any time in the course of studies in animals designed to identify unacceptable effects of a product candidate, known as toxicological studies, or during clinical trials of our potential products. The appearance of any unacceptable toxicity or side effect could cause us or regulatory authorities to interrupt, limit, delay or abort the development of any of our product candidates. Further, such unacceptable toxicity or side effects could ultimately prevent a potential product s approval by the FDA or foreign regulatory authorities for any or all targeted indications or limit any labeling claims, even if the product is approved.

Any trade name that we intend to use for a potential product must be approved by the FDA irrespective of whether we have secured a formal trademark registration from the U.S. Patent and Trademark Office. The FDA conducts a rigorous review of proposed product names, and may reject a product name if it believes that the name inappropriately implies medical claims or if it poses the potential for confusion with other product names. The FDA will not approve a trade name until the NDA for a product is approved. If the FDA determines that the trade names of other products that are approved prior to the approval of our potential products may present a risk of confusion with our proposed trade name, the FDA may elect to not approve our proposed trade name. If our trade name is rejected, we will lose the benefit of any brand equity that may already have been developed for this trade name, as well as the benefit of our existing trademark applications for this trade name. If the FDA does not approve our proposed trade name, we may be required to launch a potential product candidate without a brand name, and our efforts to build a successful brand identity for, and commercialize, this product candidate may be adversely impacted.

We and our collaborators and contract manufacturers also are required to comply with the applicable FDA current good manufacturing practice regulations. Good manufacturing practice regulations include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Manufacturing facilities are subject to inspection by the FDA. These facilities must be approved before we can use them in commercial manufacturing of our potential products. The FDA may conclude that we or our collaborators or contract manufacturers are not in compliance with applicable good manufacturing practice requirements and other FDA regulatory requirements.

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If the product is approved, we must also comply with post-marketing requirements, including, but not limited to, compliance with advertising and promotion regulations enforced by FDA s Office of Prescription Drug Promotion, the Prescription Drug Marketing Act, anti-fraud and abuse laws, healthcare information privacy laws, post-marketing safety surveillance, and disclosure of payments or transfers of value to healthcare professionals. In addition, we are subject to other federal and state regulation including, but not limited to, implementation of corporate compliance programs and reporting of payments and transfers of value to healthcare professionals.

Outside of the United States, our ability to market a product is contingent upon receiving a marketing authorization from the appropriate regulatory authorities. The requirements governing the conduct of clinical trials, marketing authorization, pricing and reimbursement vary widely from country to country. At present, foreign marketing authorizations are applied for at a national level, although within the European Community, or EC, registration procedures are available to companies wishing to market a product in more than one EC member state. If the regulatory authority is satisfied that adequate evidence of safety, quality and efficacy has been presented, marketing authorization will be granted. This foreign regulatory approval process involves all of the risks associated with FDA marketing approval discussed above. In addition, foreign regulations may include applicable post-marketing requirements, including safety surveillance, anti-fraud and abuse laws, and implementation of corporate compliance programs and reporting of payments or transfers of value to healthcare professionals.

Drugs for Serious or Life-Threatening Illnesses

The Federal Food, Drug and Cosmetic Act, as amended, and FDA regulations provide certain mechanisms for the accelerated Fast Track approval of potential products intended to treat serious or life-threatening illnesses which have been studied for safety and effectiveness and which demonstrate the potential to address unmet medical needs. These procedures permit early consultation and commitment from the FDA regarding the preclinical and clinical studies necessary to gain marketing approval. Provisions of this regulatory framework also permit, in certain cases, NDAs to be approved on the basis of valid surrogate markers of product effectiveness, thus accelerating the normal approval process. Certain potential products employing our technology might qualify for this accelerated regulatory procedure. Even if the FDA agrees that these potential products qualify for accelerated approval procedures, the FDA may deny approval of our drugs or may require that additional studies be required before approval. The FDA may also require us to perform post-approval, or Phase IV, studies as a condition of such early approval. In addition, the FDA may impose restrictions on distribution and/or promotion in connection with any accelerated approval, and may withdraw approval if post-approval studies do not confirm the intended clinical benefit or safety of the potential product.

Coverage and Reimbursement

Market acceptance and sales of any product candidates that we develop will depend on coverage and reimbursement policies of third-party payors and may be impacted by future healthcare reform measures. Government health administration authorities, private health insurers and other organizations generally decide which drugs they will pay for and establish reimbursement levels for health care. In particular, in the United States, private health insurers and other third-party payers often provide reimbursement for products and services based on the level at which the government (through the Medicare or Medicaid programs) provides reimbursement for such treatments. If a drug product is reimbursed by Medicare, Medicaid or other federal or state health care programs, we, including our sales, marketing and scientific/educational grant programs, must comply with the Medicare-Medicaid Anti-Fraud and Abuse Act, as amended, the False Claims Act, as amended, the federal Anti-Kickback Statute, as amended, and similar state laws. In addition, pricing and rebate programs for drug products reimbursed by Medicare or Medicaid must comply with, as applicable, the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990, as amended, and the Medicare Prescription Drug Improvement and Modernization Act of 2003.

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In the United States, the European Union and other potentially significant markets for our product candidates, government authorities and third-party payers are increasingly attempting to limit or regulate the price of medical products and services, particularly for new and innovative products and therapies, which has resulted in lower average selling prices. Further, the increased emphasis on managed healthcare in the United States and on country-specific and regional pricing and reimbursement controls in the European Union will put additional pressure on product pricing, reimbursement and usage, which may adversely affect our future product sales and results of operations. These pressures can arise from rules and practices of managed care groups, judicial decisions and governmental laws and regulations related to Medicare, Medicaid and healthcare reform, pharmaceutical reimbursement policies and pricing in general.

The United States and some foreign jurisdictions are considering or have enacted a number of additional legislative and regulatory proposals to change the healthcare system in ways that could affect our ability to sell our products profitably. Among policy makers and payers in the United States and elsewhere, there is significant interest in promoting changes in healthcare systems with the stated goals of containing healthcare costs, improving quality and/or expanding access. In the United States, the pharmaceutical industry has been a particular focus of these efforts and has been significantly affected by major legislative initiatives, including, most recently, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively, PPACA, which became law in the United States in March 2010 and substantially changed the way healthcare is financed by both governmental and private insurers. Among other cost containment measures, PPACA establishes: an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents; a new Medicare Part D coverage gap discount program; and a new formula that increases the rebates a manufacturer must pay under the Medicaid Drug Rebate Program. In the future, there may continue to be additional proposals relating to the reform of the U.S. healthcare system, some of which could further limit coverage and reimbursement of drug products, including our product candidates.

Other U.S. Regulatory Requirements

In the United States, the research, manufacturing, distribution, sale, and promotion of drug products are potentially subject to regulation by various federal, state and local authorities in addition to the FDA, including the Centers for Medicare & Medicaid Services (formerly the Health Care Financing Administration), other divisions of the United States Department of Health & Human Services, including, for example, the Office of Inspector General, and state and local governments.

In addition, we may be subject to data privacy and security regulation by both the federal government and the states in which we conduct our business. The Health Insurance Portability and Accountability Act of 1996, or HIPAA, as amended by the Health Information Technology and Clinical Health Act, or HITECH, and its implementing regulations, impose certain requirements relating to the privacy, security and transmission of individually identifiable health information. Among other things, HITECH makes HIPAA s privacy and security standards directly applicable to business associates independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorneys fees and costs associated with pursuing federal civil actions. In addition, state laws govern 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 our compliance efforts.

Marketing, Sales and Distribution

We currently have no marketing, sales or distribution capabilities. In order to commercialize any of our product candidates, we must develop these capabilities internally or through collaboration with third parties. In selected therapeutic areas where we feel that our product candidates can be commercialized by a specialty sales

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force that calls on a limited and focused group of physicians, we plan to participate in the commercialization of our product candidates in the United States. In therapeutic areas that require a large sales force selling to a large and diverse prescribing population, we may elect to commercialize through, or in collaboration with, strategic partners. We may choose to commercialize our products in markets outside of the United States by establishing one or more strategic alliances in the future.

Manufacturing

We outsource and plan to continue to outsource manufacturing responsibilities for our existing and future product candidates for development and commercial purposes. The production of pimavanserin employs small molecule synthetic organic chemistry procedures that are standard in the pharmaceutical industry. Our collaboration agreements provide for our partners to arrange for the production of our product candidates for use in clinical trials and potential commercialization.

Employees

At December 31, 2012, we had 26 employees, of whom 13 hold Ph.D. or other advanced degrees. Of our total workforce, 15 are engaged in research and development activities and 11 are engaged in executive, finance, and administration activities. None of our employees is represented by a collective bargaining agreement, nor have we experienced work stoppages. We believe that our relations with our employees are good.

Research and Development Expenses

Our research and development expenses were $18.8 million in 2012, $17.3 million in 2011 and $20.6 million in 2010.

Long-Lived Assets

Our long-lived assets totaled $42,000 and $151,000 as of December 31, 2012 and 2011, respectively. All of our long-lived assets are located in the United States.

Item 1A. *Risk Factors.*

You should consider carefully the following information about the risks described below, together with the other information contained in this Annual Report and in our other public filings in evaluating our business. If any of the following risks actually occurs, our business, financial condition, results of operations and future growth prospects would likely be materially and adversely affected. In these circumstances, the market price of our common stock would likely decline.

Risks Related to Our Business

We expect our net losses to continue for at least several years and are unable to predict the extent of future losses or when we will become profitable, if ever.

We have experienced significant net losses since our inception. As of December 31, 2012, we had an accumulated deficit of approximately $367.7 million. We expect to incur net losses over the next several years as we advance our programs and incur significant clinical development costs.

We have not received, and do not expect to receive for at least the next several years, any revenues from the commercialization of our product candidates. Substantially all of our revenues for the year ended December 31, 2012 were from our existing collaborations with Allergan, our collaboration with Meiji Seika Pharma, which terminated in July 2012, and our agreements with other parties, including our research and development grants. We anticipate that collaborations, which provide us with research funding and potential milestone payments and royalties, and grant funding will continue to be our primary sources of revenues for the next several years.

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We cannot be certain that the milestones required to trigger payments under our existing collaborations will be reached or that we will secure additional collaboration agreements. To obtain revenues from our product candidates, we must succeed, either alone or with others, in developing, obtaining regulatory approval for, and manufacturing and marketing drugs with significant market potential. We may never succeed in these activities, and may never generate revenues that are significant enough to achieve profitability.

The pivotal Phase III study with pimavanserin in Parkinson s disease patients with psychosis, the results of which were announced in November 2012, was our first successful pivotal Phase III trial and there is no guarantee that future studies with pimavanserin in that indication or other indications will be successful.

The historical rate of failures for product candidates in clinical development is extremely high. In November 2012, we announced results from a successful pivotal Phase III trial, the -020 Study, with pimavanserin for the treatment of Parkinson s disease psychosis. While we plan to conduct a confirmatory pivotal Phase III study, the -021 Study, with the same trial design as the -020 Study, there is no guarantee that we will have the same level of success in that trial, or be successful at all. A previous Phase III study with pimavanserin for the treatment of Parkinson s disease psychosis using a different trial design was unsuccessful. We believe that pimavanserin may also have utility in indications other than Parkinson s disease psychosis, such as Alzheimer s disease psychosis and adjunctive therapy for schizophrenia. However, we have never tested pimavanserin in clinical studies for Alzheimer s disease psychosis and we have only conducted a Phase II trial for adjunctive therapy in schizophrenia.

If we do not successfully complete clinical development of pimavanserin, we will be unable to market and sell products derived from it and to generate related product revenues. Even if we do successfully complete clinical trials for pimavanserin, those results are not necessarily predictive of results of future trials that may be needed before an NDA may be submitted to the FDA. Of the large number of drugs in development, only a small percentage result in the submission of an NDA to the FDA and even fewer are approved for commercialization.

We depend on collaborations with third parties to develop and commercialize selected product candidates and to provide substantially all of our revenues.

A key aspect of our strategy is to selectively enter into collaboration agreements with third parties. We currently rely, and will continue to rely, on our collaborators for financial resources and for development, regulatory, and commercialization expertise for selected product candidates. The ongoing research term of our agreements with Allergan will end in March 2013, unless extended, and additional payments from our agreements with Allergan are dependent on successful advancement of our applicable product candidates. There is no guarantee that revenues from our ongoing collaborations will continue at current or past levels. Given the current economic environment, it is possible that collaborators may elect to reduce their external spending.

Our collaborators may fail to develop or effectively commercialize products using our product candidates or technologies because they:

- do not have sufficient resources or decide not to devote the necessary resources due to internal constraints such as limited cash or human resources or a change in strategic focus;
- decide to pursue a competitive product developed outside of the collaboration; or
- cannot obtain the necessary regulatory approvals.

For example, Allergan has announced that it is seeking a partner for further development and commercialization of drug candidates in our chronic pain program. If Allergan is unable to successfully partner this program, it may elect to not pursue further development. In addition, any partner that Allergan does identify may devote substantially less resources than Allergan has devoted to our chronic pain program to date.

Allergan can terminate our existing collaborations under specific circumstances, including in some cases the right to terminate without cause upon prior notice. We may not be able to renew our existing collaborations on acceptable terms, if at all. We also face competition in our search for new collaborators, if we seek a new partner

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for our pimavanserin program. Given the current economic environment, it is possible that competition for new collaborators may increase. If we are unable to renew any existing collaboration or find new collaborations, we may not be able to continue advancing our programs alone.

If we fail to obtain the capital necessary to fund our operations, we will be unable to successfully develop products.

We have consumed substantial amounts of capital since our inception. Our cash, cash equivalents and investment securities totaled $108.0 million at December 31, 2012. While we believe that our existing cash resources and anticipated payments from our existing collaborations will be sufficient to fund our cash requirements into 2015, we will require significant additional financing in the future to continue to fund our operations. Our future capital requirements will depend on, and could increase significantly as a result of, many factors including:

- the progress in, and the costs of, our preclinical studies and clinical trials and other research and development programs;
- the scope, prioritization and number of our research and development programs;
- the ability of our collaborators and us to reach the milestones, and other events or developments, triggering payments under our collaboration agreements or to otherwise make payments under these agreements;
- our ability to enter into new, and to maintain existing, collaboration and license agreements;
- the extent to which we are obligated to reimburse our collaborators or our collaborators are obligated to reimburse us for clinical trial costs under our collaboration agreements;
- the costs involved in filing, prosecuting, enforcing and defending patent claims and other intellectual property rights;
- the extent to which potential rescission rights for redeemable common stock are exercised;
- the costs of securing manufacturing arrangements for clinical or commercial production;
- the costs of preparing applications for regulatory approvals for our product candidates;
- the costs of establishing, or contracting for, sales and marketing capabilities if we obtain regulatory clearances to market our product candidates; and
- the costs associated with litigation.

Until we can generate significant continuing revenues, we expect to satisfy our future cash needs through our existing cash, cash equivalents and investment securities, strategic collaborations, private or public sales of our securities, debt financings, grant funding, or by licensing all or a portion of our product candidates or technology. Turmoil and volatility in the financial markets have adversely affected the market capitalizations of many biotechnology companies, and generally made equity and debt financing more difficult to obtain. This, coupled with other factors, may limit our access to additional financing over the near-term future. This could have a material adverse effect on our ability to access sufficient funding. We cannot be certain that additional funding will be available to us on acceptable terms, if at all. If funds are not available, we will be required to delay, reduce the scope of, or eliminate one or more of our research or development programs or our

commercialization efforts. Additional funding, if obtained, may significantly dilute existing stockholders.

We do not have a partner for the development of our lead product candidate, pimavanserin, and are solely responsible for the advancement of this program.

Following the September 2010 merger of Biovail Corporation with Valeant, we entered into an agreement with Biovail, in October 2010, to end our collaboration regarding North American rights to pimavanserin. This agreement allowed us to regain the rights that we had licensed to Biovail and receive a one-time payment of $8.75 million. Pursuant to the collaboration, Biovail had been responsible for funding development of pimavanserin, and seeking regulatory approval for and any future marketing of pimavanserin in North America.

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Since the end of the collaboration, we have had full responsibility for the pimavanserin program throughout the world. We expect our research and development costs for continued development of pimavanserin to be substantial. While we currently are running the ongoing trials for pimavanserin, in the future we would need to add resources and raise additional funds in order to take this product candidate to market, if we do not secure another partner. Following approval by the FDA, our current strategy is to participate in the commercialization of pimavanserin for Parkinson s disease psychosis in the United States by establishing a small specialty sales force that calls on a focused group of neurologists. In addition, if we commercialize pimavanserin in markets outside of the United States, we will more than likely need to establish one or more strategic alliances in the future for that purpose. Without future collaboration partners in the United States and abroad, we might not be able to realize the full value of pimavanserin.

Our most advanced product candidates are in clinical trials, which are long, expensive and unpredictable, and there is a high risk of failure.

Preclinical testing and clinical trials are long, expensive and unpredictable processes that can be subject to delays. It may take several years to complete the preclinical testing and clinical development necessary to commercialize a drug, and delays or failure can occur at any stage. Interim results of clinical trials do not necessarily predict final results, and success in preclinical testing and early clinical trials does not ensure that later clinical trials will be successful. A number of companies in the pharmaceutical and biotechnology industries have suffered significant setbacks in advanced clinical trials even after promising results in earlier trials.

Our drug development programs are at various stages of development and the historical rate of failures for product candidates is extremely high. In fact, we ended Phase I testing of AM-831 in 2012 and had previously had an unsuccessful Phase III trial with our most advanced product candidate, pimavanserin. Following the reporting of successful results from the Phase III -020 Study with pimavanserin in November 2012, we are planning a confirmatory Phase III study, the -021 Study, which is expected to start in the first half of 2013. An unfavorable outcome in the -021 Study would be a major set-back for the program and for us, generally. In particular, an unfavorable outcome in this or other studies in our pimavanserin program may require us to delay, reduce the scope of, or eliminate this program and could have a material adverse effect on us and the value of our common stock. In addition to our pimavanserin program, we also have clinical programs in collaboration with Allergan for the treatment of chronic pain and glaucoma, which have reached Phase II and Phase I development, respectively, and we expect to commence a Phase II study with pimavanserin for patients with Alzheimer s disease psychosis in the second half of 2013.

In connection with clinical trials, we face risks that:

- a product candidate may not prove to be efficacious;
- patients may die or suffer other adverse effects for reasons that may or may not be related to the product candidate being tested;
- the results may not confirm the positive results of earlier trials; and
- the results may not meet the level of statistical significance required by the FDA or other regulatory agencies.

If we do not successfully complete preclinical and clinical development, we will be unable to market and sell products derived from our product candidates and to generate product revenues. Even if we do successfully complete clinical trials, those results are not necessarily predictive of results of additional trials that may be needed before an NDA may be submitted to the FDA. Of the large number of drugs in development, only a small percentage result in the submission of an NDA to the FDA and even fewer are approved for commercialization.

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Delays, suspensions and terminations in our clinical trials could result in increased costs to us and delay our ability to generate product revenues.

The commencement of clinical trials can be delayed for a variety of reasons, including delays in:

- demonstrating sufficient safety and efficacy to obtain regulatory approval to commence a clinical trial;
- reaching agreement on acceptable terms with prospective contract research organizations and clinical trial sites;
- manufacturing sufficient quantities of a product candidate;
- obtaining clearance from the FDA to commence clinical trials pursuant to an IND;
- obtaining institutional review board approval to conduct a clinical trial at a prospective clinical trial site; and
- patient enrollment, which is a function of many factors, including the size of the patient population, the nature of the protocol, the proximity of patients to clinical trial sites, the availability of effective treatments for the relevant disease and the eligibility criteria for the clinical trial.

Once a clinical trial has begun, it may be delayed, suspended or terminated due to a number of factors, including:

- ongoing discussions with regulatory authorities regarding the scope or design of our clinical trials or requests by them for supplemental information with respect to our clinical trial results;
- failure to conduct clinical trials in accordance with regulatory requirements;
- lower than anticipated screening or retention rates of patients in clinical trials;
- serious adverse events or side effects experienced by participants; and
- insufficient supply or deficient quality of product candidates or other materials necessary for the conduct of our clinical trials.

Many of these factors may also ultimately lead to denial of regulatory approval of a current or potential product candidate. If we experience delays, suspensions or terminations in a clinical trial, the commercial prospects for the related product candidate will be harmed, and our ability to generate product revenues will be delayed.

If conflicts arise with our collaborators, they may act in their self interests, which may be adverse to our interests.

Conflicts may arise in our collaborations due to one or more of the following:

disputes or breaches with respect to payments that we believe are due under the applicable agreements, particularly in the current economic environment when companies, including large established ones, may be seeking to reduce external payments;

disputes on strategy as to what development or commercialization activities should be pursued under the applicable agreements;

disputes as to the responsibility for conducting development and commercialization activities pursuant to the applicable collaboration, including the payment of costs related thereto;

disagreements with respect to ownership of intellectual property rights;

unwillingness on the part of a collaborator to keep us informed regarding the progress of its development and commercialization activities, or to permit public disclosure of these activities;

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- delay of a collaborator s development or commercialization efforts with respect to our product candidates; or

- termination or non-renewal of the collaboration.

Conflicts arising with our collaborators could impair the progress of our product candidates, harm our reputation, result in a loss of revenues, reduce our cash position, and cause a decline in our stock price.

In addition, in our collaborations, we generally have agreed not to conduct independently, or with any third party, any research that is directly competitive with the research conducted under the applicable program. Our collaborations may have the effect of limiting the areas of research that we may pursue, either alone or with others. Our collaborators, however, may develop, either alone or with others, products in related fields that are competitive with the products or potential products that are the subject of these collaborations. Competing products, either developed by our collaborators or to which our collaborators have rights, may result in the allocation of resources by our collaborators to competing products and their withdrawal of support for our product candidates or may otherwise result in lower demand for our potential products.

We have collaborations with Allergan for the development of product candidates related to chronic pain and ophthalmic diseases, including glaucoma. Allergan currently markets therapeutic products to treat glaucoma and is engaged in other research programs related to glaucoma and other ophthalmic products that are independent from our development program in this therapeutic area. Allergan is also pursuing other research programs related to pain management that are independent from our collaboration in this therapeutic area.

We rely on third parties to conduct our clinical trials and perform data collection and analysis, which may result in costs and delays that prevent us from successfully commercializing product candidates.

Although we design and manage our current preclinical studies and clinical trials, we currently do not have the ability to conduct clinical trials for our product candidates on our own. In addition to our collaborators, we rely on contract research organizations, medical institutions, clinical investigators, and contract laboratories to perform data collection and analysis and other aspects of our clinical trials. In addition, we also rely on third parties to assist with our preclinical studies, including studies regarding biological activity, safety, absorption, metabolism, and excretion of product candidates.

Our preclinical activities or clinical trials may be delayed, suspended, or terminated if:

- these third parties do not successfully carry out their contractual duties or fail to meet regulatory obligations or expected deadlines;

- these third parties need to be replaced; or

- the quality or accuracy of the data obtained by these third parties is compromised due to their failure to adhere to our clinical protocols or regulatory requirements or for other reasons.

Failure to perform by these third parties may increase our development costs, delay our ability to obtain regulatory approval, and delay or prevent the commercialization of our product candidates. We currently use several contract research organizations to perform services for our preclinical studies and clinical trials. While we believe that there are numerous alternative sources to provide these services, in the event that we seek such alternative sources, we may not be able to enter into replacement arrangements without delays or additional expenditures.

Even if we or our collaborators successfully complete the clinical trials of product candidates, the product candidates may fail for other reasons.

Even if we or our collaborators successfully complete the clinical trials of product candidates, the product candidates may fail for other reasons, including the possibility that the product candidates will:

- fail to receive the regulatory clearances required to market them as drugs;

be subject to proprietary rights held by others requiring the negotiation of a license agreement prior to marketing;

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be difficult or expensive to manufacture on a commercial scale;

have adverse side effects that make their use less desirable; or

fail to compete with product candidates or other treatments commercialized by competitors.

Relying on third-party manufacturers may result in delays in our clinical trials, regulatory approvals and product introductions.

We have no manufacturing facilities and have no experience in the manufacturing of drugs or in designing drug-manufacturing processes. We have contracted with third-party manufacturers to produce, in collaboration with us, our product candidates, including pimavanserin, for clinical trials. If any of our product candidates are approved by the FDA or other regulatory agencies for commercial sale, we may need to contract with a third party to manufacture them in larger quantities. While we believe that there are alternative sources available to manufacture our product candidates, in the event that we seek such alternative sources, we may not be able to enter into replacement arrangements without delays or additional expenditures. We cannot estimate these delays or costs with certainty but, if they were to occur, they could cause a delay in our development and commercialization efforts. We have not entered into long-term agreements with our current third-party manufacturers or with any alternate suppliers. Although we intend to do so prior to any commercial launch of a product that is approved by the FDA in order to ensure that we maintain adequate supplies of commercial drug product, we may be unable to enter into such agreements or do so on commercially reasonable terms, which could delay a product launch or subject our commercialization efforts to significant supply risk.

The manufacturers of our product candidates are obliged to operate in accordance with FDA-mandated current good manufacturing practices, or cGMPs. In addition, the facilities used by our contract manufacturers or other third party manufacturers to manufacture our product candidates must be approved by the FDA pursuant to inspections that will be conducted after we request regulatory approve from the FDA. A failure of any of our contract manufacturers to establish and follow cGMPs and to document their adherence to such practices may lead to significant delays in clinical trials or in obtaining regulatory approval of product candidates or the ultimate launch of products based on our product candidates into the market. Failure by our third-party manufacturers or us to comply with applicable regulations could result in sanctions being imposed on us, including fines, injunctions, civil penalties, failure of the government to grant pre-market approval of drugs, delays, suspension or withdrawal of approvals, seizures or recalls of products, operating restrictions, and criminal prosecutions.

Our product candidates may not gain acceptance among physicians, patients, and the medical community, thereby limiting our potential to generate revenues.

Even if our product candidates are approved for commercial sale by the FDA or other regulatory authorities, the degree of market acceptance of any approved product candidate by physicians, healthcare professionals and third-party payors, and our profitability and growth will depend on a number of factors, including:

the ability to provide 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, which may be subject to regulatory control;

effectiveness of our or our collaborators sales and marketing strategy; and

our ability to obtain sufficient third-party insurance coverage or reimbursement.

If any product candidate that we discover and/or develop does not provide a treatment regimen that is as beneficial as the current standard of care or otherwise does not provide patient benefit, that product will not achieve market acceptance and we will not generate sufficient revenues to achieve or maintain profitability.

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If we are unable to attract, retain, and motivate key management and research and development staff, our drug development programs and our research and discovery efforts may be delayed and we may be unable to successfully develop or commercialize our product candidates.

Our success depends on our ability to attract, retain, and motivate highly qualified management and scientific personnel. In particular, our development programs depend on our ability to attract and retain highly skilled development personnel, especially in the fields of central nervous system disorders, including neuropsychiatric and related disorders. In the future, we expect to need to hire additional personnel as we expand our research and development efforts from our current levels. We face competition for experienced scientists, clinical operations personnel, and other technical personnel from numerous companies and academic and other research institutions. Competition for qualified personnel is particularly intense in the San Diego, California area. If we are unable to attract and retain the necessary personnel, this will significantly impede the achievement of our research and development objectives and our ability to meet the demands of our collaborators in a timely fashion.

All of our employees are at will employees, which means that any employee may quit at any time and we may terminate any employee at any time. We do not carry key person insurance covering members of senior management.

We do not know whether our drug discovery platform will lead to the discovery or development of commercially viable product candidates.

Our drug discovery platform uses unproven methods to identify and develop product candidates. We have never successfully completed clinical development of any of our product candidates, and there are no drugs on the market that have been discovered using our drug discovery platform.

Our research and development focuses on small molecule drugs for the treatment of central nervous system disorders. Due to our limited resources, we may have to forego potential opportunities with respect to discovering product candidates to treat diseases or conditions in other therapeutic areas. If we are not able to use our technologies to discover and develop product candidates that can be commercialized, we may not achieve profitability. In the future, we may find it necessary to license the technology of others or acquire additional product candidates to augment the results of our internal discovery activities. If we are unable to identify new product candidates using our drug discovery platform, we may be unable to establish or maintain a clinical development pipeline or generate product revenues.

We may not be able to continue or fully exploit our collaborations with outside scientific and clinical advisors, which could impair the progress of our clinical trials and our research and development efforts.

We work with scientific and clinical advisors at academic and other institutions who are experts in the field of central nervous system disorders. They assist us in our research and development efforts and advise us with respect to our clinical trials. These advisors are not our employees and may have other commitments that would limit their future availability to us. Although our scientific and clinical advisors generally agree not to engage in competing work, if a conflict of interest arises between their work for us and their work for another entity, we may lose their services, which may impair our reputation in the industry and delay the development or commercialization of our product candidates.

We will need to continue to manage our organization and we may encounter difficulties with our staffing and any future transitions, which could adversely affect our results of operations.

We will need to effectively manage our operations and facilities in order to advance our drug development programs, including those covered by our collaborations with Allergan, achieve milestones under our collaboration agreements, facilitate additional collaborations, and pursue other development activities. It is possible that our infrastructure may be inadequate to support our future efforts and growth. In particular, we may have to develop internal sales, marketing, and distribution capabilities if we decide to market any drug that we may successfully develop. We may not successfully manage our operations and, accordingly, may not achieve our research, development, and commercialization goals.

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We expect that our results of operations will fluctuate, which may make it difficult to predict our future performance from period to period.

Our quarterly operating results have fluctuated in the past and are likely to do so in the future. Some of the factors that could cause our operating results to fluctuate from period to period include:

- the status of development of pimavanserin and our other product candidates, including compounds being developed under our collaborations;
- whether we generate revenues or reimbursements by achieving specified research, development or commercialization milestones under any agreements or otherwise receive potential payments under these agreements;
- whether we are required to make payments due to achieving specified milestones under any licensing or similar agreements or otherwise make potential payments under these agreements;
- the incurrence of preclinical or clinical expenses that could fluctuate significantly from period to period, including reimbursement obligations pursuant to our collaboration agreements;
- the initiation, termination, or reduction in the scope of our collaborations or any disputes regarding these collaborations;
- the timing of our satisfaction of applicable regulatory requirements;
- the rate of expansion of our clinical development and other internal research and development efforts;
- the effect of competing technologies and products and market developments;
- the costs associated with litigation; and
- general and industry-specific economic conditions.

We believe that quarterly comparisons of our financial results are not necessarily meaningful and should not be relied upon as indications of our future performance.

Our management has broad discretion over the use of our cash and we may not use our cash effectively, which could adversely affect our results of operations.

Our management has significant flexibility in applying our cash resources and could use these resources for corporate purposes that do not increase our market value, or in ways with which our stockholders may not agree. We may use our cash resources for corporate purposes that do not yield a significant return or any return at all for our stockholders, which may cause our stock price to decline.

We have incurred, and expect to continue to incur, significant costs as a result of laws and regulations relating to corporate governance and other matters.

Laws and regulations affecting public companies, including provisions of the Dodd-Frank Wall Street Reform and Consumer Protection Act that was enacted in July 2010, the provisions of the Sarbanes-Oxley Act of 2002, or SOX, and rules adopted or proposed by the SEC and by The Nasdaq Global Market, have resulted in, and will continue to result in, significant costs to us as we evaluate the implications of these rules and respond to their requirements. We issued an evaluation of our internal control over financial reporting under Section 404 of SOX with our Annual Report. In the future, if we are not able to issue an evaluation of our internal control over financial reporting as required or we or our independent registered public accounting firm determine that our internal control over financial reporting is not effective, this shortcoming could have an adverse effect on our business and financial results and the price of our common stock could be negatively affected. New rules could make it more difficult or more costly for us to obtain certain types of insurance, including director and officer liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the coverage that is the same or similar to our current coverage. The impact of these events

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could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors and board committees, and as our executive officers. We cannot predict or estimate the total amount of the costs we may incur or the timing of such costs to comply with these rules and regulations.

Our ability to generate product revenues will be diminished if our products do not receive coverage from payors or sell for inadequate prices, or if patients are unable to obtain adequate levels of reimbursement.

Patients who are prescribed medicine for the treatment of their conditions generally rely on third-party payors to reimburse all or part of the costs associated with their prescription drugs. Adequate coverage and reimbursement from governmental healthcare programs, such as Medicare and Medicaid, and commercial payors is critical to new product acceptance. Coverage decisions may depend upon clinical and economic standards that disfavor new drug products when more established or lower cost therapeutic alternatives are already available or subsequently become available. Even if we obtain coverage for any approved products, the resulting reimbursement payment rates might not be adequate or may require co-payments that patients find unacceptably high. Patients are unlikely to use any products we may market unless coverage is provided and reimbursement is adequate to cover a significant portion of the cost of those products.

In addition, the market for any products for which we may receive regulatory approval will depend significantly on access to third-party payors drug formularies, or lists of medications for which third-party payors provide coverage and reimbursement. The industry competition to be included in such formularies often leads to downward pricing pressures on pharmaceutical companies. Also, third-party payors may refuse to include a particular branded drug in their formularies or otherwise restrict patient access to a branded drug when a less costly generic equivalent or other alternative is available.

Third-party payors, whether foreign or domestic, or governmental or commercial, are developing increasingly sophisticated methods of controlling healthcare costs. In addition, in the United States, no uniform policy of coverage and reimbursement for drug products exists among third-party payors. Therefore, coverage and reimbursement for drug products can differ significantly from payor to payor. As a result, the coverage determination process is often a time-consuming and costly process that will require us to provide scientific and clinical support for the use of our products candidates to each payor separately, with no assurance that coverage will be obtained. If we are unable to obtain coverage of, and adequate payment levels for, our products from third-party payors, physicians may limit how much or under what circumstances they will prescribe or administer them and patients may decline to purchase them. This in turn could affect our ability to successfully commercialize any approved products and thereby adversely impact our profitability, results of operations, financial condition, and future success.

In the future, if we have products that are approved, healthcare legislation may make it more difficult to receive revenues from those products.

In both the United States and certain foreign jurisdictions, there have been a number of legislative and regulatory proposals in recent years to change the healthcare system in ways that could impact our ability to sell our products profitably. In March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively, PPACA, became law in the United States. PPACA substantially changed the way healthcare is financed by both governmental and private insurers and significantly affects the healthcare industry. Among the provisions of PPACA of importance to our potential product candidates are the following:

an annual, nondeductible fee on any entity that manufactures or imports certain branded prescription drugs and biologic agents, apportioned among these entities according to their market share in certain government healthcare programs, beginning in 2011;

an increase in the statutory minimum rebates a manufacturer must pay under the Medicaid Drug Rebate Program, retroactive to January 1, 2010, to 23% and 13% of the average manufacturer price for most branded and generic drugs, respectively;

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expansion of health care fraud and abuse laws, including the False Claims Act and the Anti-Kickback Statute, new government investigative powers, and enhanced penalties for noncompliance;

a new Medicare Part D coverage gap discount program, in which manufacturers must agree to offer 50% 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;

extension of manufacturers Medicaid rebate liability to covered drugs dispensed to individuals who are enrolled in Medicaid managed care organizations;

expansion of eligibility criteria for Medicaid programs by, among other things, allowing states to offer Medicaid coverage to additional individuals beginning in 2014 and by adding new mandatory eligibility categories for certain individuals with income at or below 133% of the Federal Poverty Level, thereby potentially increasing manufacturers Medicaid rebate liability;

expansion of the entities eligible for discounts under the Public Health Service pharmaceutical pricing program;

new requirements to report certain financial arrangements with physicians and teaching hospitals, as defined in PPACA and its implementing regulations, including reporting any payments or transfers of value made or distributed to prescribers, teaching hospitals and other healthcare providers and reporting any ownership and investment interests held by physicians and their immediate family members and applicable group purchasing organizations during the preceding calendar year, with data collection to be required beginning August 1, 2013 and reporting to the Centers for Medicare & Medicaid Services, or CMS, to be required by March 31, 2014 and by the 90th day of each subsequent calendar year;

a new requirement to annually report drug samples that manufacturers and distributors provide to physicians; and

a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Many of the details regarding the implementation of PPACA are yet to be determined and, at this time, it remains unclear the full effect that PPACA would have on our business. On June 28, 2012, the U.S. Supreme Court upheld the constitutionality of PPACA, excepting certain provisions that would have required each state to expand its Medicaid programs or risk losing all of the state s Medicaid funding. At this time, it remains unclear whether there will be any further changes made to PPACA, whether in part or in its entirety. Some states have indicated that they intend to not implement certain sections of PPACA, and some members of the U.S. Congress are still working to repeal PPACA. We cannot predict whether these challenges will continue or other proposals will be made or adopted, or what impact these efforts may have on us.

In addition, in many foreign countries, particularly the countries of the European Union, the pricing of prescription drugs is subject to government control. In some non-U.S. jurisdictions, the proposed pricing for a drug must be approved before it may be lawfully marketed. The requirements governing drug pricing vary widely from country to country. For example, the European Union provides options for its member states to restrict the range of medicinal products for which their national health insurance systems provide reimbursement and to control the prices of medicinal products for human use. A member state may approve a specific price for the medicinal product or it may instead adopt a system of direct or indirect controls on the profitability of the company placing the medicinal product on the market. We may face competition from lower-priced products in foreign countries that have placed price controls on pharmaceutical products. In addition, there may be importation of foreign products that compete with any products we may market, which could negatively impact our profitability.

We expect that PPACA, as well as other healthcare reform measures that may be adopted in the future, may result in more rigorous coverage criteria and in additional downward pressure on the price that we may receive for any approved product. Any reduction in reimbursement from Medicare or other government programs may

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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 any products for which we receive regulatory approval.

If we are unable to establish sales and marketing capabilities or enter into agreements with third parties to sell and market any products we may develop, we may not be able to generate product revenue.

We do not currently have an organization for the sales, marketing and distribution of pharmaceutical products. In order to market any products that may be approved by the FDA, we must build our sales, marketing, managerial, and related capabilities or make arrangements with third parties to perform these services. If we are unable to establish adequate sales, marketing, and distribution capabilities, whether independently or with third parties, we may not be able to generate product revenue and may not become profitable.

If we engage in any acquisition, we will incur a variety of costs and may never realize the anticipated benefits of the acquisition.

We may attempt to acquire businesses, technologies, services, or products or license in technologies that we believe are a strategic fit with our business. We have limited experience in identifying acquisition targets, successfully completing proposed acquisitions and integrating any acquired businesses, technologies, services or products into our current infrastructure. The process of integrating any acquired business, technology, service, or product may result in unforeseen operating difficulties and expenditures and may divert significant management attention from our ongoing business operations. As a result, we will incur a variety of costs in connection with an acquisition and may never realize its anticipated benefits.

Earthquake or fire damage to our facilities could delay our research and development efforts and adversely affect our business.

Our headquarters and research and development facilities in San Diego are located in a seismic zone, and there is the possibility of an earthquake, which could be disruptive to our operations and result in delays in our research and development efforts. In addition, while our facilities have not been adversely impacted by local wildfires, there is the possibility of future fires in the area. In the event of an earthquake or fire, if our facilities or the equipment in our facilities is significantly damaged or destroyed for any reason, we may not be able to rebuild or relocate our facilities or replace any damaged equipment in a timely manner and our business, financial condition, and results of operations could be materially and adversely affected. We do not have insurance for damages resulting from earthquakes. While we do have fire insurance for our property and equipment located in San Diego, any damage sustained in a fire could cause a delay in our research and development efforts and our results of operations could be materially and adversely affected.

Risks Related to Our Intellectual Property

Our ability to compete may decline if we do not adequately protect our proprietary rights.

Our commercial success depends on obtaining and maintaining proprietary rights to our product candidates and technologies and their uses, as well as successfully defending these rights against third-party challenges. We will only be able to protect our product candidates, proprietary technologies, and their uses from unauthorized use by third parties to the extent that valid and enforceable patents, or effectively protected trade secrets, cover them. Although we have filed numerous patent applications worldwide with respect to pimavanserin, we have not been issued patents with respect to each of our filings.

Our ability to obtain patent protection for our product candidates and technologies is uncertain due to a number of factors, including:

- we may not have been the first to make the inventions covered by our pending patent applications or issued patents;
- we may not have been the first to file patent applications for our product candidates or the technologies we rely upon;

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- others may independently develop similar or alternative technologies or duplicate any of our technologies;
- our disclosures in patent applications may not be sufficient to meet the statutory requirements for patentability;
- any or all of our pending patent applications may not result in issued patents;
- we may not seek or obtain patent protection in all countries that will eventually provide a significant business opportunity;
- any patents issued to us or our collaborators may not provide a basis for commercially viable products, may not provide us with any competitive advantages or may be challenged by third parties;
- our proprietary technologies may not be patentable;
- others may design around our patent claims to produce competitive products which fall outside of the scope of our patents;
- others may identify prior art which could invalidate our patents; or
- changes to patent laws that limit the exclusivity rights of patent holders.

Even if we have or obtain patents covering our product candidates or technologies, we may still be barred from making, using and selling our product candidates or technologies because of the patent rights of others. Others have or may have filed, and in the future are likely to file, patent applications covering compounds, assays, genes, gene products or therapeutic products that are similar or identical to ours. There are many issued U.S. and foreign patents relating to genes, nucleic acids, polypeptides, chemical compounds or therapeutic products, and some of these may encompass reagents utilized in the identification of candidate drug compounds or compounds that we desire to commercialize. Numerous U.S. and foreign issued patents and pending patent applications owned by others exist in the area of central nervous system disorders and the other fields in which we are developing products. These could materially affect our ability to develop our product candidates or sell our products. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, that may later result in issued patents that our product candidates or technologies may infringe. These patent applications may have priority over patent applications filed by us.

We regularly conduct searches to identify patents or patent applications that may prevent us from obtaining patent protection for our proprietary compounds or that could limit the rights we have claimed in our patents and patent applications. Disputes may arise regarding the ownership or inventorship of our inventions. It is difficult to determine how such disputes would be resolved. Others may challenge the validity of our patents. If our patents are found to be invalid, we will lose the ability to exclude others from making, using or selling the inventions claimed therein.

Some of our academic institutional licensors, research collaborators and scientific advisors have rights to publish data and information to which we have rights. If we cannot maintain the confidentiality of our technology and other confidential information in connection with our collaborations, then our ability to receive patent protection or protect our proprietary information will be impaired. Additionally, employees whose positions were eliminated in connection with restructurings may seek future employment with our competitors. Although each of our employees is required to sign a confidentiality agreement with us at the time of hire, we cannot guarantee that the confidential nature of our proprietary information will be maintained in the course of such future employment. In addition, technology that we may license in may become important to some aspects of our business. We generally will not control the patent prosecution, maintenance or enforcement of in-licensed technology.

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Confidentiality agreements with employees and others may not adequately prevent disclosure of our trade secrets and other proprietary information and may not adequately protect our intellectual property, which could limit our ability to compete.

Because we operate in the highly technical field of drug discovery and development of small molecule drugs, we rely in part on trade secret protection in order to protect our proprietary technology and processes. However, trade secrets are difficult to protect. We enter into confidentiality and intellectual property assignment agreements with our corporate partners, employees, consultants, outside scientific collaborators, sponsored researchers, and other advisors. These agreements generally require that the other party keep confidential and not disclose to third parties all confidential information developed by the party or made known to the party by us during the course of the party s relationship with us. These agreements also generally provide that inventions conceived by the party in the course of rendering services to us will be our exclusive property. However, these agreements may not be honored and may not effectively assign intellectual property rights to us. Enforcing a claim that a party illegally obtained and is using our trade secrets is difficult, expensive and time consuming and the outcome is unpredictable. In addition, courts outside the United States may be less willing to protect trade secrets. The failure to obtain or maintain trade secret protection could adversely affect our competitive position. In addition, we have not entered into any noncompete agreements with any of our employees.

A dispute concerning the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be time consuming and costly, and an unfavorable outcome could harm our business.

There is significant litigation in our industry regarding patent and other intellectual property rights. While we are not currently subject to any pending intellectual property litigation, and are not aware of any such threatened litigation, we may be exposed to future litigation by third parties based on claims that our product candidates, technologies or activities infringe the intellectual property rights of others. In particular, there are many patents relating to specific genes, nucleic acids, polypeptides or the uses thereof to identify product candidates. Some of these may encompass genes or polypeptides that we utilize in our drug development activities. If our drug development activities are found to infringe any such patents, we may have to pay significant damages or seek licenses to such patents. A patentee could prevent us from using the patented genes or polypeptides for the identification or development of drug compounds. There are also many patents relating to chemical compounds and the uses thereof. If our compounds are found to infringe any such patents, we may have to pay significant damages or seek licenses to such patents. A patentee could prevent us from making, using or selling the patented compounds. We may need to resort to litigation to enforce a patent issued to us, protect our trade secrets or determine the scope and validity of third-party proprietary rights. From time to time, we may hire scientific personnel formerly employed by other companies involved in one or more areas similar to the activities conducted by us. Either we or these individuals may be subject to allegations of trade secret misappropriation or other similar claims as a result of their prior affiliations. If we become involved in litigation, it could consume a substantial portion of our managerial and financial resources, regardless of whether we win or lose. We may not be able to afford the costs of litigation. Any legal action against us or our collaborators could lead to:

payment of damages, potentially treble damages, if we are found to have willfully infringed a party s patent rights;

injunctive or other equitable relief that may effectively block our ability to further develop, commercialize, and sell products; or

we or our collaborators having to enter into license arrangements that may not be available on commercially acceptable terms, if at all. As a result, we could be prevented from commercializing current or future products.

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The patent applications of pharmaceutical and biotechnology companies involve highly complex legal and factual questions, which, if determined adversely to us, could negatively impact our patent position.

The patent positions of pharmaceutical and biotechnology companies can be highly uncertain and involve complex legal and factual questions. For example, some of our patent applications will cover gene sequences and products and the uses of those gene sequences and products. Public disclosures and patent applications related to the Human Genome Project and other genomics efforts may limit the scope of our claims or make unpatentable subsequent patent applications. No consistent policy regarding the breadth of claims allowed in biotechnology patents has emerged to date. The U.S. Patent and Trademark Office s standards are uncertain and could change in the future. Consequently, the issuance and scope of patents cannot be predicted with certainty. Patents, if issued, may be challenged, invalidated or circumvented. U.S. patents and patent applications may also be subject to interference proceedings, and U.S. patents may be subject to reexamination proceedings in the U.S. Patent and Trademark Office (and foreign patents may be subject to opposition or comparable proceedings in the corresponding foreign patent office), which proceedings could result in either loss of the patent or denial of the patent application or loss or reduction in the scope of one or more of the claims of the patent or patent application. Similarly, opposition or invalidity proceedings could result in loss of rights or reduction in the scope of one or more claims of a patent in foreign jurisdictions. In addition, such interference, reexamination and opposition proceedings may be costly. Accordingly, rights under any issued patents may not provide us with sufficient protection against competitive products or processes.

In addition, changes in or different interpretations of patent laws in the United States and foreign countries may permit others to use our discoveries or to develop and commercialize our technology and products without providing any compensation to us or may limit the number of patents or claims we can obtain. In particular, there have been proposals to shorten the exclusivity periods available under U.S. patent law that, if adopted, could substantially harm our business. The product candidates that we are developing are protected by intellectual property rights, including patents and patent applications. If any of our product candidates becomes a marketable product, we will rely on our exclusivity under patents to sell the compound and recoup our investments in the research and development of the compound. If the exclusivity period for patents is shortened, then our ability to generate revenues without competition will be reduced and our business could be materially adversely impacted. The laws of some countries do not protect intellectual property rights to the same extent as U.S. laws and those countries may lack adequate rules and procedures for defending our intellectual property rights. For example, some countries, including many in Europe, do not grant patent claims directed to methods of treating humans and, in these countries, patent protection may not be available at all to protect our product candidates. In addition, U.S. patent laws may change which could prevent or limit us from filing patent applications or patent claims to protect our products and/or technologies or limit the exclusivity periods that are available to patent holders. For example, the Leahy-Smith America Invents Act, or the Leahy-Smith Act, was recently signed into law and includes a number of significant changes to U.S. patent law. These include changes to transition from a first-to-invent system to a first-to-file system and to the way issued patents are challenged. These changes may favor larger and more established companies that have more resources to devote to patent application filing and prosecution. The U.S. Patent and Trademark Office has been in the process of implementing regulations and procedures to administer the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act may affect our ability to obtain, enforce or defend our patents. Accordingly, it is not clear what, if any, impact the Leahy-Smith Act will ultimately have on the cost of prosecuting our patent applications, our ability to obtain patents based on our discoveries and our ability to enforce or defend our issued patents.

If we fail to obtain and maintain patent protection and trade secret protection of our product candidates, proprietary technologies and their uses, we could lose our competitive advantage and competition we face would increase, reducing our potential revenues and adversely affecting our ability to attain or maintain profitability.

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Risks Related to Our Industry

We will be subject to stringent regulation in connection with the marketing of any products derived from our product candidates, which could delay the development and commercialization of our products.

The pharmaceutical industry is subject to stringent regulation by the FDA and other regulatory agencies in the United States and by comparable authorities in other countries. Neither we nor our collaborators can market a pharmaceutical product in the United States until it has completed rigorous preclinical testing and clinical trials and an extensive regulatory clearance process implemented by the FDA. Satisfaction of regulatory requirements typically takes many years, depends upon the type, complexity and novelty of the product, and requires substantial resources. Even if regulatory approval is obtained, it may impose significant restrictions on the indicated uses, conditions for use, labeling, advertising, promotion, and/or marketing of such products, and requirements for post-approval studies, including additional research and development and clinical trials. These limitations may limit the size of the market for the product or result in the incurrence of additional costs. Any delay or failure in obtaining required approvals could have a material adverse effect on our ability to generate revenues from the particular product candidate.

Outside the United States, the ability to market a product is contingent upon receiving approval from the appropriate regulatory authorities. The requirements governing the conduct of clinical trials, marketing authorization, pricing, and reimbursement vary widely from country to country. Only after the appropriate regulatory authority is satisfied that adequate evidence of safety, quality, and efficacy has been presented will it grant a marketing authorization. Approval by the FDA does not automatically lead to the approval by regulatory authorities outside the United States and, similarly, approval by regulatory authorities outside the United States will not automatically lead to FDA approval.

In addition, U.S. and foreign government regulations control access to and use of some human or other tissue samples in our research and development efforts. U.S. and foreign government agencies may also impose restrictions on the use of data derived from human or other tissue samples. Accordingly, if we fail to comply with these regulations and restrictions, the commercialization of our product candidates may be delayed or suspended, which may delay or impede our ability to generate product revenues.

If our competitors develop and market products that are more effective than our product candidates, they may reduce or eliminate our commercial opportunity.

Competition in the pharmaceutical and biotechnology industries is intense and expected to increase. We face competition from pharmaceutical and biotechnology companies, as well as numerous academic and research institutions and governmental agencies, both in the United States and abroad. Some of these competitors have products or are pursuing the development of drugs that target the same diseases and conditions that are the focus of our drug development programs.

For example, our potential product for Parkinson s disease psychosis would compete with off-label use of antipsychotic drugs, including Seroquel, marketed by Astra-Zeneca, and with the generic drug clozapine. Our potential products for the treatment of schizophrenia would compete with Zyprexa, marketed by Eli Lilly, Fanapt marketed by Novartis Pharmaceuticals, Risperdal, marketed by Johnson & Johnson, Abilify, marketed jointly by Bristol-Myers Squibb and Otsuka Pharmaceutical, Seroquel, and clozapine. Our potential product for Alzheimer s disease psychosis would compete with off-label use of antipsychotic drugs. In the area of chronic pain, potential products would compete with Neurontin and Lyrica, marketed by Pfizer, and Cymbalta, marketed by Eli Lilly, as well as a variety of generic or proprietary opioids. Our potential products for the treatment of glaucoma would compete with Xalatan, marketed by Pfizer, and Lumigan and Alphagan, marketed by Allergan.

Many of our competitors and their collaborators have significantly greater experience than we do in the following:

identifying and validating targets;

screening compounds against targets;

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preclinical studies and clinical trials of potential pharmaceutical products; and

obtaining FDA and other regulatory approvals.

In addition, many of our competitors and their collaborators have substantially greater capital and research and development resources, manufacturing, sales and marketing capabilities, and production facilities. Smaller companies also may prove to be significant competitors, particularly through proprietary research discoveries and collaboration arrangements with large pharmaceutical and established biotechnology companies. Many of our competitors have products that have been approved or are in advanced development and may develop superior technologies or methods to identify and validate drug targets and to discover novel small molecule drugs. Our competitors, either alone or with their collaborators, may succeed in developing drugs that are more effective, safer, more affordable, or more easily administered than ours and may achieve patent protection or commercialize drugs sooner than us. Our competitors may also develop alternative therapies that could further limit the market for any drugs that we may develop. Our failure to compete effectively could have a material adverse affect on our business.

Any claims relating to improper handling, storage, or disposal of biological, hazardous, and radioactive materials used in our business could be costly and delay our research and development efforts.

Our research and development activities involve the controlled use of potentially harmful hazardous materials, including volatile solvents, biological materials such as blood from patients that has the potential to transmit disease, chemicals that cause cancer, and various radioactive compounds. Our operations also produce hazardous waste products. We face the risk of contamination or injury from the use, storage, handling or disposal of these materials. We are subject to federal, state and local laws and regulations governing the use, storage, handling, and disposal of these materials and specified waste products. The cost of compliance with these laws and regulations could be significant, and current or future environmental regulations may impair our research, development, or production efforts. If one of our employees were accidentally injured from the use, storage, handling, or disposal of these materials, the medical costs related to his or her treatment would be covered by our workers compensation insurance policy. However, we do not carry specific biological or hazardous waste insurance coverage and our general liability insurance policy specifically excludes coverage for damages and fines arising from biological or hazardous waste exposure or contamination. Accordingly, in the event of contamination or injury, we could be subject to criminal sanctions or fines or be held liable for damages, our operating licenses could be revoked, or we could be required to suspend or modify our operations and our research and development efforts.

Consumers may sue us for product liability, which could result in substantial liabilities that exceed our available resources and damage our reputation.

Researching, developing, and commercializing drug products entails significant product liability risks. Liability claims may arise from our and our collaborators use of products in clinical trials and the commercial sale of those products. Consumers may make these claims directly and our collaborators or others selling these products may seek contribution from us if they receive claims from consumers. Although we currently have product liability insurance that covers our clinical trials, we will need to increase and expand this coverage as we commence larger scale trials and if our product candidates are approved for commercial sale. This insurance may be prohibitively expensive or may not fully cover our potential liabilities. Inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or inhibit the commercialization of products that we or our collaborators develop. Product liability claims could have a material adverse effect on our business and results of operations. Our liability could exceed our total assets if we do not prevail in a lawsuit from any injury caused by our drug products.

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Risks Related to Our Common Stock

Our stock price may be particularly volatile because we are a drug discovery and development company.

The market prices for securities of biotechnology companies in general, and drug discovery and development companies in particular, have been highly volatile and may continue to be highly volatile in the future. The following factors, in addition to other risk factors described in this section, may have a significant impact on the market price of our common stock:

- the development status of our product candidates, including results of our clinical trials for our pimavanserin program or our chronic pain or glaucoma collaborations;
- the initiation, termination, or reduction in the scope of our collaborations or any disputes or developments regarding our collaborations;
- market conditions or trends related to biotechnology and pharmaceutical industries, or the market in general;
- announcements of technological innovations, new commercial products, or other material events by our competitors or us;
- disputes or other developments concerning our proprietary rights;
- changes in, or failure to meet, securities analysts or investors expectations of our financial performance;
- our failure to meet applicable Nasdaq listing standards and the possible delisting of our common stock from the Nasdaq Global Market;
- additions or departures of key personnel;
- discussions of our business, products, financial performance, prospects, or stock price by the financial and scientific press and online investor communities such as blogs and chat rooms;
- public concern as to, and legislative action with respect to, genetic testing or other research areas of biopharmaceutical companies, the pricing and availability of prescription drugs, or the safety of drugs and drug delivery techniques;
- regulatory developments in the United States and in foreign countries;
- the announcement of, or developments in, any litigation matters; and
- economic and political factors, including but not limited to economic and financial crises, wars, terrorism, and political unrest.

In particular, our development program with pimavanserin encompasses a number of studies, including Phase III efficacy trials, open-label safety extension trials and a range of supporting studies, including carcinogenicity studies, and drug-drug interaction studies. Another unfavorable outcome in one or more of the studies in the development of pimavanserin could be a major set-back for our company, generally. Such an unfavorable outcome could have a material adverse effect on our company and the value of our common stock.

In the past, following periods of volatility in the market price of a particular company s securities, securities class action litigation has often been brought against that company. We may become subject to this type of litigation, which is often extremely expensive and diverts management s attention.

If we or our stockholders sell substantial amounts of our common stock, the market price of our common stock may decline.

A significant number of shares of our common stock are held by a small number of stockholders. Sales of a significant number of shares of our common stock, or the expectation that such sales may occur, could significantly reduce the market price of our common stock. We filed registration statements in connection with

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private financings that we concluded in January 2011 and December 2012, which registrations cover approximately 17.0 million shares and 19.5 million shares of our common stock, respectively. We also have an effective registration statement to sell shares of our common stock on our own behalf, and may elect to sell shares pursuant to such registration from time to time, including pursuant to the At-the-Market Issuance Sales Agreement, or ATM Agreement, that we put in place in March 2012 with MLV &Co. LLC. Through December 31, 2012, we had sold 5.3 million shares for an aggregate of $17.7 million under the ATM Agreement, which permits total sales of up to $20 million in the aggregate. Our stock price may decline as a result of the sale of the shares of our common stock included in any of these registration statements.

Shares sold under our ATM Agreement may be subject to rescission rights and other penalties, requiring us to re-purchase shares sold thereunder.

We did not timely file a Current Report on Form 8-K for the addition of a new board member in January 2012. Upon becoming aware of the oversight, on December 3, 2012 we filed a Current Report on Form 8-K for the event. As a result of not timely filing this current report, and upon filing our Annual Report on Form 10-K for the year ended December 31, 2011 on March 6, 2012, we became ineligible to use our effective shelf registration statement on Form S-3 (File No. 333-178748). Subsequent to March 6, 2012 and prior to becoming aware of the untimely filing of the current report, we sold shares of our common stock pursuant to the ATM Agreement under this registration statement. These sales consisted of an aggregate of 3,491,500 shares sold from August 13, 2012 to September 19, 2012, at prices ranging from approximately $1.64 to $2.29 per share, and an aggregate of 1,855,637 shares sold on November 27, 2012, at an average price of about $5.74, which we refer to as ATM Sales. Because we were not eligible to use Form S-3 at the time of the ATM Sales, the ATM Sales could be determined to be unregistered sales of securities. Consequently, direct purchasers in the ATM Sales transactions may have rescission rights pursuant to which they could be entitled to recover the amount paid for such shares, plus statutory interest, upon returning the shares to us. If all of the purchasers in the ATM Sales transactions demanded rescission of their purchases and it were determined that every such investor were entitled to such rescission rights, we could be obligated to repay an aggregate of approximately $7.0 million for the sales in August and September 2012 and approximately $10.7 million from the sales on November 27, 2012, in each case plus statutory interest. Rescission rights would arise due to a potential violation of Section 5 of the Securities Act of 1933, as amended. In addition, if it were determined that we sold unregistered securities, the sale of any such unregistered securities could subject us to enforcement actions or penalties and fines by federal or state regulatory authorities. We are unable to predict the likelihood of any claims or actions being brought against us in connection with these events, or the amount of any potential penalties or fines.

If our officers, directors, and largest stockholders choose to act together, they may be able to significantly influence our management and operations, acting in their best interests and not necessarily those of our other stockholders.

Our directors, executive officers and holders of five percent or more of our outstanding common stock and their affiliates beneficially own a substantial portion of our outstanding common stock. As a result, these stockholders, acting together, have the ability to significantly influence all matters requiring approval by our stockholders, including the election of all of our board members, amendments to our certificate of incorporation, going-private transactions, and the approval of mergers or other business combination transactions. The interests of this group of stockholders may not always coincide with the company s interests or the interests of other stockholders and they may act in a manner that advances their best interests and not necessarily those of our other stockholders.

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Anti-takeover provisions in our charter documents and under Delaware law may make an acquisition of us more complicated and may make the removal and replacement of our directors and management more difficult.

Our amended and restated certificate of incorporation and amended and restated bylaws contain provisions that may delay or prevent a change in control, discourage bids at a premium over the market price of our common stock and adversely affect the market price of our common stock and the voting and other rights of the holders of our common stock. These provisions may also make it difficult for stockholders to remove and replace our board of directors and management. These provisions:

- establish that members of the board of directors may be removed only for cause upon the affirmative vote of stockholders owning at least a majority of our capital stock;
- authorize the issuance of blank check preferred stock that could be issued by our board of directors to increase the number of outstanding shares and prevent or delay a takeover attempt;
- limit who may call a special meeting of stockholders;
- establish advance notice requirements for nominations for election to the board of directors or for proposing matters that can be acted upon at stockholder meetings;
- prohibit our stockholders from making certain changes to our amended and restated certificate of incorporation or amended and restated bylaws except with 66 $^{2}/_{3}$ percent stockholder approval; and
- provide for a board of directors with staggered terms.

We are also subject to provisions of the Delaware corporation law that, in general, prohibit any business combination with a beneficial owner of 15 percent or more of our common stock for three years unless the holder s acquisition of our stock was approved in advance by our board of directors. Although we believe these provisions collectively provide for an opportunity to receive higher bids by requiring potential acquirors to negotiate with our board of directors, they would apply even if the offer may be considered beneficial by some stockholders.

Adverse securities and credit market conditions may significantly affect our ability to raise capital.

Turmoil and volatility in the financial markets have adversely affected the market capitalizations of many biotechnology companies, and generally made equity and debt financing more difficult to obtain. This, coupled with other factors, may limit access to financing over the near-term future. This could have a material adverse effect on our ability to access funding on acceptable terms, or at all, and our stock price may suffer further as a result.

If we do not meet continued listing requirements, our common stock may be delisted from the Nasdaq Global Market.

The Nasdaq Global Market imposes, among other requirements, listing maintenance standards as well as minimum bid and public float requirements. In particular, Nasdaq rules require us to maintain a minimum bid price of $1.00 per share of our common stock and to have a specified level of stockholder equity. If the closing bid price of our common stock is below $1.00 per share for 30 consecutive trading days or we do not meet other requirements, we would fail to be in compliance with Nasdaq s continued listing standards and, if we are unable to cure the non-compliance within 180 days, our common stock may be delisted from the Nasdaq Global Market and we may not be able to maintain the continued listing of our common stock on the Nasdaq Global Market. Delisting could adversely affect the market liquidity of our common stock and the market price of our common stock could decrease. Such delisting could also adversely affect our ability to obtain financing for the continuation of our operations.

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Item 1B. ***Unresolved Staff Comments.***

This item is not applicable.

Item 2. ***Properties.***

Our primary facility consists of approximately 29,000 square feet of leased research and office space located in San Diego, California, which is leased through June 2013. We also lease another facility in San Diego that covers approximately 8,000 square feet of laboratory, office, and other space. That lease runs through December 2013, with an option to extend. We believe that our existing facilities are adequate for our current needs.

Item 3. ***Legal Proceedings.***

This item is not applicable.

Item 4. ***Mine Safety Disclosures.***

This item is not applicable.

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PART II

Item 5. ***Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.***

(a) Our common stock is traded on the NASDAQ Global Market under the symbol ACAD . The following table sets forth the high and low sale prices for our common stock as reported on the NASDAQ Global Market for the periods indicated.

2012	**High**	**Low**
First Quarter	$ 2.30	$ 1.07
Second Quarter	$ 2.19	$ 1.29
Third Quarter	$ 2.84	$ 1.42
Fourth Quarter	$ 6.54	$ 1.80
2011	**High**	**Low**
First Quarter	$ 1.88	$ 1.12
Second Quarter	$ 3.30	$ 1.48
Third Quarter	$ 1.90	$ 0.99
Fourth Quarter	$ 1.35	$ 0.90

As of March 1, 2013, there were approximately 54 stockholders of record of our common stock. We have not paid any cash dividends to date and do not anticipate any being paid in the foreseeable future.

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Item 6. ***Selected Financial Data.***

The following data has been derived from our audited financial statements, including the consolidated balance sheets at December 31, 2012 and 2011 and the related consolidated statements of operations for the three years ended December 31, 2012 and related notes appearing elsewhere in this report. The statement of operations data for the years ended December 31, 2009 and 2008 and the balance sheet data as of December 31, 2010, 2009 and 2008 are derived from our audited consolidated financial statements that are not included in this report. You should read the selected financial data set forth below in conjunction with Management s Discussion and Analysis of Financial Condition and Results of Operations and our financial statements and related notes included elsewhere in this report.

	Years Ended December 31,				
	2012	2011	2010	2009	2008
	(in thousands, except per share data)				
Consolidated Statement of Operations Data:					
Revenues:					
Collaborative revenues	$ 4,907	$ 2,067	$ 42,135	$ 6,399	$ 1,590
Operating expenses:					
Research and development	18,794	17,309	20,579	41,585	56,750
General and administrative	6,999	7,610	6,462	10,282	11,818
Total operating expenses	25,793	24,919	27,041	51,867	68,568
Income (loss) from operations	(20,886)	(22,852)	15,094	(45,468)	(66,978)
Interest income, net	37	87	45	323	2,734
Net income (loss)	$ (20,849)	$ (22,765)	$ 15,139	$ (45,145)	$ (64,244)
Net income (loss) per common share, basic	$ (0.38)	$ (0.44)	$ 0.39	$ (1.20)	$ (1.73)
Net income (loss) per common share, diluted	$ (0.38)	$ (0.44)	$ 0.39	$ (1.20)	$ (1.73)
Weighted average shares used in computing net income (loss) per common share, basic	55,116	52,183	38,593	37,476	37,113
Weighted average shares used in computing net income (loss) per common share, diluted	55,116	52,183	38,720	37,476	37,113

	At December 31,				
	2012	2011	2010	2009	2008
			(in thousands)		
Consolidated Balance Sheet Data:					
Cash, cash equivalents and investment securities	$ 107,967	$ 31,048	$ 37,087	$ 47,060	$ 60,083
Working capital	102,600	25,784	31,890	33,766	51,331
Total assets	108,590	32,114	38,394	49,680	64,677
Long-term debt, less current portion			32	98	430
Total stockholders equity	84,984	23,362	29,688	12,114	52,992

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Item 7. ***Management s Discussion and Analysis of Financial Condition and Results of Operations.***

The following discussion and analysis of our consolidated financial condition and results of operations should be read in conjunction with our consolidated financial statements and related notes included elsewhere in this report. Past operating results are not necessarily indicative of results that may occur in future periods. This discussion contains forward-looking statements, which involve a number of risks and uncertainties. Such forward-looking statements include statements about our strategies, objectives, expectations, discoveries, collaborations, clinical trials, proprietary and external programs, products or product candidates, and other statements that are not historical facts, including statements which may be preceded by the words believes, expects, hopes, may, will, plans, intends, estimates, could, should, would, contin projects, predicts, pro forma, anticipates, potential or similar words. For forward-looking statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. Readers of this report are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. We undertake no obligation to update or revise publicly any forward-looking statements. Forward-looking statements are not guarantees of performance. Actual results or events may differ materially from those anticipated in our forward-looking statements as a result of various factors, including those set forth under the section captioned Risk Factors elsewhere in this report. Information in the following discussion for a yearly period means for the year ended December 31 of the indicated year.

Overview

Background

We are a biopharmaceutical company focused on innovative small molecule drugs that address unmet medical needs in neurological and related central nervous system disorders. We have a pipeline of product candidates led by pimavanserin, which is in Phase III development as a potential first-in-class treatment for Parkinson s disease psychosis. In November 2012, we reported successful top-line results from a pivotal Phase III trial with pimavanserin in patients with Parkinson s disease psychosis. We are currently preparing to initiate a second, confirmatory pivotal Phase III trial in the first half of 2013. We hold worldwide commercialization rights to pimavanserin. Our pipeline also includes clinical-stage programs for chronic pain and glaucoma in collaboration with Allergan, Inc. and two advanced preclinical programs directed at Parkinson s disease and other neurological disorders. All of our product candidates emanate from internal discoveries.

We have incurred substantial operating losses since our inception due in large part to expenditures for our research and development activities. As of December 31, 2012, we had an accumulated deficit of $367.7 million. We expect to continue to incur operating losses for at least the next several years as we pursue the clinical development of our product candidates.

Revenues

We have not generated any revenues from product sales to date and we do not expect to generate revenues from product sales for at least the next several years, if at all. Our revenues to date have been generated substantially from payments under our current and past collaboration agreements. As of December 31, 2012, we had received an aggregate of $115.0 million in payments under these agreements, including upfront payments, research funding, milestone payments and reimbursed development expenses. We expect our revenues for the next several years to consist primarily of revenues derived from payments under our current agreements with Allergan and potential additional collaborations, as well as grant funding.

We currently are a party to three separate collaboration agreements with Allergan. Pursuant to our March 2003 collaboration agreement with Allergan, we had received an aggregate of $19.5 million in payments as of December 31, 2012, consisting of an upfront payment, research funding and related fees. This collaboration agreement is focused on the discovery of new therapeutics for ophthalmic indications and originally provided for a three-year research term, which has been extended by the parties through March 2013. Our two other collaboration agreements with Allergan involve the development of product candidates in the areas of chronic

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pain and glaucoma. We are eligible to receive payments upon achievement of development and regulatory milestones, as well as royalties on future product sales, if any, under each of our three collaboration agreements with Allergan. Each of our agreements with Allergan is subject to early termination upon specified events, including, in the case of one of our agreements, if we have a change in control. Upon the conclusion of the research term under each agreement, Allergan may terminate the agreement by notice.

In March 2009, we entered into a collaboration agreement with Meiji Seika Pharma. In July 2012, we and Meiji Seika Pharma jointly decided to discontinue the development program that was being pursued under the collaboration, and the collaboration agreement was terminated pursuant to its terms. Under the agreement, we had received $3 million in non-refundable license fees as well as payments for the reimbursement of development costs we had incurred in the collaboration.

Research and Development Expenses

Our research and development expenses have consisted primarily of fees paid to external service providers, salaries and related personnel expenses, facilities and equipment expenses, and other costs. We charge all research and development expenses to operations as incurred. Our research and development activities are primarily focused on our most advanced product candidates, including pimavanserin. We currently are responsible for all costs incurred in the development of pimavanserin as well as for the costs associated with our other internal programs. We are not responsible for, nor have we incurred, development expenses in our collaborative programs for chronic pain and glaucoma, which we are pursuing with Allergan. Meiji Seika Pharma was responsible for all development expenses incurred under our collaboration agreement, which terminated in July 2012.

We use external service providers to manufacture our product candidates to be used in clinical trials and for the majority of the services performed in connection with the preclinical and clinical development of our product candidates. We have used our internal research and development resources, including our employees and discovery infrastructure, across several projects and many of our costs have not been attributable to a specific project but were directed to broadly applicable research activities. Accordingly, we have not reported our internal research and development costs on a project basis. To the extent that external expenses are not attributable to a specific project, they are included in other external costs. The following table summarizes our research and development expenses for the years ended December 31, 2012, 2011, and 2010 (in thousands):

	Years Ended December 31,		
	2012	2011	2010
Costs of external service providers:			
Pimavanserin	$ 12,401	$ 10,373	$ 12,506
Other programs	932	1,438	1,087
Subtotal	13,333	11,811	13,593
Internal costs	4,781	4,986	6,387
Stock-based compensation	680	512	599
Total research and development	$ 18,794	$ 17,309	$ 20,579

At this time, due to the risks inherent in the clinical trial process and given the stage of development of our programs, we are unable to estimate with any certainty the costs we will incur for the continued development of our product candidates for potential commercialization. Due to these same factors, we are unable to determine the anticipated completion dates for our current research and development programs. Clinical development timelines, probability of success, and development costs vary widely. While our current focus is primarily on advancing the clinical development of pimavanserin, we anticipate that we will make determinations as to which programs to pursue and how much funding to direct to each program on an ongoing basis in response to the scientific and clinical success of each product candidate, as well as an ongoing assessment of each product candidate s commercial potential and our financial position. We cannot forecast with any degree of certainty

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which product candidates will be subject to future collaborative or licensing arrangements, when such arrangements will be secured, if at all, and to what degree such arrangements would affect our development plans and capital requirements.

We expect our research and development expenses to increase and continue to be substantial as we pursue the development of pimavanserin, including our planned confirmatory pivotal trial and other studies in our Phase III Parkinson s disease psychosis program and a planned Phase II trial in Alzheimer s disease psychosis, and our other product candidates. The lengthy process of completing clinical trials and seeking regulatory approval for our product candidates requires the expenditure of substantial resources. Any failure by us or delay in completing clinical trials, or in obtaining regulatory approvals could cause our research and development expenses to increase and, in turn, have a material adverse effect on our results of operations.

General and Administrative Expenses

Our general and administrative expenses have consisted primarily of salaries and other costs for employees serving in executive, finance, business development, and business operations functions, as well as professional fees associated with legal and accounting services, and costs associated with patents and patent applications for our intellectual property.

Critical Accounting Policies and Estimates

Our discussion and analysis of our financial condition and results of operations is based on our consolidated financial statements. We have identified the accounting policies that we believe require application of management s most subjective judgments, often requiring the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods. Our actual results may differ substantially from these estimates under different assumptions or conditions.

Revenue Recognition

We recognize revenues in accordance with authoritative guidance established by U.S. Generally Accepted Accounting Principles, or GAAP. Our revenues are primarily related to our collaboration agreements, which may provide for various types of payments to us, including upfront payments, funding of research and development, milestone payments, and licensing fees. Our collaboration agreements also include potential payments for product royalties; however, we have not received any product royalties to date.

We consider a variety of factors in determining the appropriate method of accounting under our collaboration agreements, including whether the various elements can be separated and accounted for individually as separate units of accounting. Where there are multiple deliverables identified within a collaboration agreement that are combined into a single unit of accounting, revenues are deferred and recognized over the expected period of performance. The specific methodology for the recognition of the revenue is determined on a case-by-case basis according to the facts and circumstances of the applicable agreement.

Upfront, non-refundable payments that do not have stand-alone value are recorded as deferred revenue once received and recognized as revenues over the expected period of performance. Revenues from non-refundable license fees are recognized upon receipt of the payment if the license has stand-alone value, we do not have ongoing involvement or obligations, and we can determine the best estimate of the selling price for any undelivered items. When non-refundable license fees do not meet all of these criteria, the license revenues are recognized over the expected period of performance. Non-refundable payments for research funding are generally recognized as revenues over the period the related research activities are performed. Payments for reimbursement of external development costs are generally recognized as revenues using a contingency-adjusted performance model over the expected period of performance. Payments received from grants are recognized as revenues as the related research and development is performed and when collectability is reasonably assured.

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We evaluate milestone payments on an individual basis and recognize revenues from non-refundable milestone payments when the earnings process is complete and collectability is reasonably assured. Non-refundable milestone payments related to arrangements under which we have continuing performance obligations are recognized as revenues upon achievement of the associated milestone, provided that (i) the milestone event is substantive and its achievability was not reasonably assured at the inception of the agreement and (ii) the amount of the milestone payment is reasonable in relation to the effort expended or the risk associated with the milestone event. Where separate milestone payments do not meet these criteria, we recognize revenue using a contingency-adjusted performance model over the expected period of performance.

Accrued Expenses

We are required to estimate accrued expenses as part of our process of preparing financial statements. Examples of areas in which subjective judgments may be required include costs associated with services provided by contract organizations for preclinical development, manufacturing of clinical materials, and clinical trials. We accrue for costs incurred as the services are being provided by monitoring the status of the trials or services provided, and the invoices received from our external service providers. In the case of clinical trials, a portion of the estimated cost normally relates to the projected cost to treat a patient in the trials, and this cost is recognized based on the number of patients enrolled in the trial. Other indirect costs are generally recognized on a straight-line basis over the estimated period of the study. As actual costs become known to us, we adjust our accruals. To date, our estimates have not differed significantly from the actual costs incurred. However, subsequent changes in estimates may result in a material change in our accruals, which could also materially affect our balance sheet and results of operations.

Stock-Based Compensation

The fair value of each employee stock option and each employee stock purchase plan right granted is estimated on the grant date under the fair value method using the Black-Scholes model, which requires us to make a number of assumptions including the estimated expected life of the award and related volatility. The estimated fair values of stock options or purchase plan rights, including the effect of estimated forfeitures, are then expensed over the vesting period.

Results of Operations

Fluctuations in Operating Results

Our results of operations have fluctuated significantly from period to period in the past and are likely to continue to do so in the future. We anticipate that our quarterly and annual results of operations will be impacted for the foreseeable future by several factors, including the timing and amount of payments received pursuant to our current and potential future collaborations, and the progress and timing of expenditures related to our development efforts. Due to these fluctuations, we believe that the period-to-period comparisons of our operating results are not a good indication of our future performance.

Comparison of the Years Ended December 31, 2012 and 2011

Revenues

Revenues increased to $4.9 million in 2012 from $2.1 million in 2011. This increase was primarily due to the termination of our collaboration with Meiji Seika Pharma in July 2012, at which time we recognized all of the remaining deferred revenue from this collaboration. We recognized a total of $3.2 million in revenues from this collaboration in 2012 compared to $505,000 in 2011. Revenues from our collaborations with Allergan totaled $1.1 million in each of 2012 and 2011. Revenues from our agreements with other parties, including our research and development grants, totaled $566,000 in 2012 compared to $486,000 in 2011.

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Research and Development Expenses

Research and development expenses increased to $18.8 million in 2012, including $680,000 in stock-based compensation, from $17.3 million in 2011, including $512,000 in stock-based compensation. The increase in research and development expenses was primarily due to $1.5 million in increased external service costs as well as $529,000 in increased salary and personnel costs offset, in part, by $566,000 in decreased facility, equipment and other costs associated with our research and development organization. External service costs totaled $13.3 million, or 71 percent of our research and development expenses, in 2012, compared to $11.8 million, or 68 percent of our research and development expenses, in 2011. The increase in external service costs was largely attributable to increased clinical costs incurred in our Phase III program for pimavanserin offset, in part, by decreased costs of other programs. We anticipate that our research and development expenses will increase in future periods as we continue to conduct our Phase III program for pimavanserin in Parkinson s disease psychosis and initiate a Phase II trial in Alzheimer s disease psychosis and pursue development of our other product candidates.

General and Administrative Expenses

General and administrative expenses decreased to $7.0 million in 2012, including $1.3 million in stock-based compensation, from $7.6 million in 2011, including $1.1 million in stock-based compensation. The decrease in general and administrative expenses was primarily attributable to a net charge of $1.1 million incurred during 2011 in connection with the termination of our Swedish facility lease offset, in part, by $542,000 in increased salary and personnel costs in 2012.

Comparison of the Years Ended December 31, 2011 and 2010

Revenues

Revenues decreased to $2.1 million in 2011 from $42.1 million in 2010. This decrease was primarily due to the conclusion of our collaboration with Biovail in October 2010, at which time we recognized all remaining revenues related to that collaboration. We recognized $39.5 million in revenues from that collaboration in 2010. Revenues from our collaborations with Allergan totaled $1.1 million in each of 2011 and 2010. Revenues from our agreements with other parties, including our collaboration with Meiji Seika Pharma, totaled $1.0 million in 2011 compared to $1.5 million in 2010.

Research and Development Expenses

Research and development expenses decreased to $17.3 million in 2011, including $512,000 in stock-based compensation, from $20.6 million in 2010, including $599,000 in stock-based compensation. The decrease in research and development expenses was primarily due to $1.8 million in decreased external service costs and $1.5 million in decreased facilities, equipment and other costs associated with our research and development organization. External service costs totaled $11.8 million, or 68 percent of our research and development expenses, in 2011, compared to $13.6 million, or 66 percent of our research and development expenses, in 2010. The decrease in external service costs was largely attributable to decreased costs incurred in our Phase III program for pimavanserin.

General and Administrative Expenses

General and administrative expenses increased to $7.6 million in 2011, including $1.1 million in stock-based compensation, from $6.5 million in 2010, including $984,000 in stock-based compensation. The increase in general and administrative expenses was primarily attributable to a net charge of $1.1 million resulting from the termination of our Swedish facility lease in April 2011.

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Liquidity and Capital Resources

Since inception, we have funded our operations primarily through sales of our equity securities, payments received under our collaboration agreements, debt financings, and interest income. As of December 31, 2012, we had received $439.8 million in net proceeds from sales of our equity securities, including $6.9 million in debt we had retired through the issuance of our common stock, $115.0 million in payments from collaboration agreements, $22.4 million in debt financing, and $22.2 million in interest income.

At December 31, 2012, we had $108.0 million in cash, cash equivalents and investment securities compared to $31.0 million at December 31, 2011. We expect to use between $26 million and $30 million of our cash resources to fund our operations during 2013. We expect that our current cash, cash equivalents and investment securities, together with anticipated payments from our existing collaborations, will be sufficient to fund our operations at least into 2015.

We will require significant additional financing in the future to fund our operations. Our future capital requirements will depend on, and could increase significantly as a result of, many factors, including:

- the progress in, and the costs of, our clinical trials, preclinical studies and other research and development programs;
- the scope, prioritization and number of research and development programs;
- the ability of our collaborators and us to reach the milestones, or other events or developments, under our collaboration agreements;
- our ability to enter into new, and to maintain existing, collaboration and license agreements;
- the extent to which we are obligated to reimburse our collaborators or our collaborators are obligated to reimburse us for clinical trial costs under our collaboration agreements;
- the costs involved in filing, prosecuting, enforcing and defending patent claims and other intellectual property rights;
- the extent to which potential rescission rights for redeemable common stock are exercised;
- the costs of securing manufacturing arrangements for clinical or commercial production of product candidates;
- the costs of preparing applications for regulatory approvals for our product candidates; and
- the costs of establishing, or contracting for, sales and marketing capabilities if we obtain regulatory clearances to market our product candidates.

Until we can generate significant continuing revenues, we expect to satisfy our future cash needs through strategic collaborations, private or public sales of our equity securities, debt financings, grant funding, or by licensing all or a portion of our product candidates or technology. In March 2012, we entered into an At-The-Market Issuance Sales Agreement, or ATM Agreement, with MLV & Co. LLC, pursuant to which we could elect to issue and sell registered shares of our common stock having an aggregate offering price of up to $20 million from time to time over a three-year period. As of December 31, 2012, we had raised gross proceeds of $17.7 million from the sale of 5.3 million shares of common stock under the ATM Agreement. For a discussion of potential rescission rights related to our ATM sales, see Item 15 of Part IV, Notes to

Consolidated Financial Statements Note 7 Stockholders Equity and Redeemable Common Stock .

We cannot be certain that future funding will be available to us on acceptable terms, or at all. Over the last few years, turmoil and volatility in the financial markets have adversely affected the market capitalizations of many biotechnology companies and generally made equity and debt financing more difficult to obtain. This, coupled with other factors, may limit our access to financing over the near-term future. In particular, any unfavorable development in our pimavanserin program could have a material adverse effect on our ability to raise additional capital.

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If we cannot raise adequate additional capital in the future, we will be required to delay, further reduce the scope of, or eliminate one or more of our research or development programs or our commercialization efforts. We also may be required to relinquish greater or all rights to product candidates at an earlier stage of development or on less favorable terms than we would otherwise choose.

We have invested a substantial portion of our available cash in a money market fund and high quality, marketable debt instruments of corporations, financial institutions and government sponsored enterprises. We have adopted an investment policy and established guidelines relating to credit quality, diversification and maturities of our investments to preserve principal and maintain liquidity. All investment securities have a credit rating of at least AA or A1+/p1 as determined by Moody s Investors Service or Standard & Poor s. Our investment portfolio has not been adversely impacted by the disruption in the credit markets that has occurred during the last few years. However, if there is further and expanded disruption in the credit markets, there can be no assurance that our investment portfolio will not be adversely affected in the future.

Net cash used in operating activities increased to $21.6 million in 2012 compared to $19.9 million in 2011 and $10.7 million in 2010. The increase in net cash used in operating activities in 2012 relative to 2011 was primarily due to changes in operating assets and liabilities, including a decrease in deferred revenue, and a non-cash charge in 2011 resulting from termination of our Swedish facility lease, offset by a decrease in our net loss. Deferred revenue decreased by $2.8 million in 2012 compared to a decrease in deferred revenue of $57,000 in 2011. The decrease in deferred revenue in 2012 was primarily due to the termination of our collaboration with Meiji Seika Pharma in July 2012, at which time we recognized all of the remaining deferred revenue from this collaboration.

The increase in net cash used in operating activities in 2011 relative to 2010 was primarily due to a net loss of $22.8 million in 2011 compared to net income of $15.1 million in 2010, as well as changes in operating assets and liabilities, including changes in deferred revenue, accounts payable and accrued expenses, and the non-cash charge resulting from termination of our Swedish facility lease during 2011. Deferred revenue decreased by $57,000 in 2011 compared to a decrease of $25.3 million in 2010. The decrease in deferred revenue in 2010 was primarily attributable to the conclusion of our collaboration with Biovail in October 2010 and the recognition of all remaining revenue under this collaboration. Accounts payable and accrued expenses increased by an aggregate of $248,000 in 2011 compared to an aggregate decrease of $3.1 million in 2010. Our accounts payable and accrued expenses fluctuated significantly during these years primarily due to the timing of payments made and expenses incurred for external service costs related to our clinical trials.

Net cash used in investing activities totaled $25.5 million in 2012 compared to net cash provided by investing activities of $6.0 in 2011 and net cash used in investing activities of $1.1 million in 2010. Net cash provided by or used in investing activities has fluctuated significantly from period to period primarily due to the timing of purchases and maturities of investment securities. The increase in net cash used in investing activities in 2012 relative to net cash provided by investing activities in 2011 was primarily due to increased purchases of investment securities and decreased maturities of investment securities. The increase in net cash provided by investing activities in 2011 relative to the net cash used in investing activities in 2010 was primarily due to the maturities of investment securities exceeding purchases of investment securities.

Net cash provided by financing activities increased to $98.2 million in 2012 compared to $13.9 million in 2011 and $470,000 in 2010. The increase in net cash provided by financing activities during 2012 was primarily due to $80.5 million in net proceeds received from our December 2012 private equity financing as well as $17.1 million in net proceeds received from the sale of common stock under the ATM Agreement. The increase in net cash provided by financing activities during 2011 relative to 2010 was primarily due to $13.9 million in net proceeds received from our January 2011 private equity financing.

The following table summarizes our contractual obligations at December 31, 2012 (in thousands):

	Total	Less than 1 Year	1-3 Years	4-5 Years	After 5 Years
Operating leases	$ 281	$ 281	$	$	$

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We have also entered into agreements with contract research organizations and other external service providers for services, primarily in connection with the development of our product candidates. We were contractually obligated for up to approximately $15.1 million of future services under these agreements as of December 31, 2012. The nature of the work being conducted under our agreements with contract research organizations is such that, in most cases, the services may be stopped on short notice. In such event, we would not be liable for the full amount of the contract. Our actual contractual obligations will vary depending upon several factors, including the progress and results of the underlying services.

In addition, we have entered into an agreement with the Ipsen Group pursuant to which we licensed certain intellectual property rights that complement our patent portfolio. If certain conditions are met, we would be required to make future payments, including milestones, sublicensing fees and royalties. The amount of potential future milestone payments is $10.5 million in the aggregate, which amount would be offset by any sublicensing fees we may pay under the agreement. Because these milestone payments would only be payable upon the achievement of specified regulatory events and it is uncertain when, or if, such events will occur, we cannot forecast with any degree of certainty when, or if, we will be required to make payments under the agreement. Accordingly, none of these amounts are included in the above table.

Off-Balance Sheet Arrangements

To date, we have not had any relationships with unconsolidated entities or financial partnerships, such as entities referred to as structured finance or special purpose entities, which are established for the purpose of facilitating off-balance sheet arrangements or other contractually narrow or limited purposes. As such, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in these relationships.

Recent Accounting Pronouncements

See Item 15 of Part IV, Notes to Consolidated Financial Statements Note 2 Summary of Significant Accounting Policies .

Item 7A. ***Quantitative and Qualitative Disclosures About Market Risk***

Interest Rate Risk

We invest our excess cash in investment-grade, interest-bearing securities. The primary objective of our investment activities is to preserve principal and liquidity. To achieve this objective, we invest in a money market fund and high quality marketable debt instruments of corporations, financial institutions and government sponsored enterprises with contractual maturity dates of generally less than two years. All investment securities have a credit rating of at least AA or A1+/p1 as determined by Moody s Investors Service or Standard & Poor s. We do not have any direct investments in auction-rate securities or securities that are collateralized by assets that include mortgages or subprime debt. If a 10 percent change in interest rates were to have occurred on December 31, 2012, this change would not have had a material effect on the fair value of our investment portfolio as of that date.

Item 8. ***Financial Statements and Supplementary Data.***

The consolidated financial statements required pursuant to this item are included in Item 15 of this report and are presented beginning on page F-1.

Item 9. ***Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.***

None.

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Item 9A. ***Controls and Procedures.***

Disclosure Controls and Procedures

We maintain disclosure controls and procedures that are designed to ensure that information required to be disclosed in our periodic and current reports that we file with the SEC is recorded, processed, summarized and reported within the time periods specified in the SEC s rules and forms, and that such information is accumulated and communicated to our management, including our Chief Executive Officer and Chief Financial Officer, as appropriate, to allow timely decisions regarding required disclosure. In designing and evaluating the disclosure controls and procedures, management recognized that any controls and procedures, no matter how well designed and operated, can provide only reasonable and not absolute assurance of achieving the desired control objectives. In reaching a reasonable level of assurance, management necessarily was required to apply its judgment in evaluating the cost-benefit relationship of possible controls and procedures. In addition, the design of any system of controls also is based in part upon certain assumptions about the likelihood of future events, and there can be no assurance that any design will succeed in achieving its stated goals under all potential future conditions; over time, controls may become inadequate because of changes in conditions, or the degree of compliance with policies or procedures may deteriorate. Because of the inherent limitations in a cost-effective control system, misstatements due to error or fraud may occur and not be detected.

As of December 31, 2012, we carried out an evaluation, under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of the effectiveness of the design and operation of our disclosure controls and procedures, as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended. Based on this evaluation, our Chief Executive Officer and Chief Financial Officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of December 31, 2012.

Management s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting. Internal control over financial reporting is a process designed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with accounting principles generally accepted in the United States of America.

As of December 31, 2012, our management assessed the effectiveness of our internal control over financial reporting using the criteria set forth by the Committee of Sponsoring Organizations of the Treadway Commission in Internal Control-Integrated Framework. Based on this assessment, management, under the supervision and with the participation of our Chief Executive Officer and Chief Financial Officer, concluded that, as of December 31, 2012, our internal control over financial reporting was effective based on those criteria.

The effectiveness of our internal control over financial reporting as of December 31, 2012 has been audited by PricewaterhouseCoopers LLP, an independent registered public accounting firm, as stated in its report, which appears under Item 15 in this Annual Report.

Changes in Internal Control Over Financial Reporting

An evaluation was also performed under the supervision and with the participation of our management, including our Chief Executive Officer and Chief Financial Officer, of any change in our internal control over financial reporting that occurred during our last fiscal quarter and that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting. That evaluation did not identify any change in our internal control over financial reporting that occurred during our latest fiscal quarter and that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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Item 9B. ***Other Information.***

On March 11, 2013, the Compensation Committee of our Board of Directors, acting pursuant to authority delegated to it by our Board of Directors, adopted the ACADIA Pharmaceuticals Inc. Change in Control Severance Benefit Plan (the Plan).

The Plan entitles our executive officers and other key employees to certain severance payments and benefits in the event of a qualifying termination of employment up to one month prior to or within 13 months following certain change in control events. A qualifying termination is a termination by us for any reason other than cause, or by the employee for good reason. The amount of payments and the type of benefits provided under the Plan vary based on the employee s position and include cash severance payments based on base salary and bonus, accelerated vesting of equity awards, payment for continued coverage under group health plans, and payment for outplacement services. The payments and benefits will replace any severance or similar payments or benefits under an employment agreement or other arrangement with us and are subject to the employee s compliance with the other terms and conditions of the Plan. In order to receive any benefits under the Plan, employees must sign a general release and waiver of all claims against us.

The foregoing is a summary of the material terms of the Plan and is qualified in its entirety by reference to the copy of the Plan that is filed as Exhibit 10.34 to this Annual Report.

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PART III

Item 10. ***Directors, Executive Officers and Corporate Governance*.**
The information required by this Item and not set forth below will be set forth in the section headed Proposal 1 Election of Directors in our definitive Proxy Statement for our 2013 Annual Meeting of Stockholders to be filed with the SEC by April 30, 2013 (the Proxy Statement) and is incorporated in this report by reference.

We have adopted a code of ethics for directors, officers (including our principal executive officer, principal financial officer and principal accounting officer) and employees, known as the Code of Business Conduct and Ethics. The Code of Business Conduct and Ethics is available on our website at *http://www.acadia-pharm.com* under the Corporate Governance section of our Investors page. We will promptly disclose on our website (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals, the name of such person who is granted the waiver and the date of the waiver. Stockholders may request a free copy of the Code of Business Conduct and Ethics from our corporate compliance officer, Glenn F. Baity c/o ACADIA Pharmaceuticals Inc., 3911 Sorrento Valley Boulevard, San Diego, CA 92121.

Item 11. ***Executive Compensation*.**
The information required by this Item will be set forth in the section headed Executive Compensation in our Proxy Statement and is incorporated in this report by reference.

Item 12. ***Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters*.**
The information required by this Item will be set forth in the section headed Security Ownership of Certain Beneficial Owners and Management in our Proxy Statement and is incorporated in this report by reference.

Information regarding our equity compensation plans will be set forth in the section headed Executive Compensation in our Proxy Statement and is incorporated in this report by reference.

Item 13. ***Certain Relationships and Related Transactions, and Director Independence*.**
The information required by this Item will be set forth in the section headed Transactions With Related Persons in our Proxy Statement and is incorporated in this report by reference.

Item 14. ***Principal Accountant Fees and Services*.**
The information required by this Item will be set forth in the section headed Proposal 2 Ratification of Selection of Independent Registered Public Accounting Firm in our Proxy Statement and is incorporated in this report by reference.

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PART IV

Item 15. ***Exhibits and Financial Statement Schedules.***

(a) Documents filed as part of this report.

1. The following financial statements of ACADIA Pharmaceuticals Inc. and Report of PricewaterhouseCoopers LLP, Independent Registered Public Accounting Firm, are included in this report:

2. List of financial statement schedules. All schedules are omitted because they are not applicable or the required information is shown in the financial statements or notes thereto.

3. List of Exhibits required by Item 601 of Regulation S-K. See part (b) below.

(b) Exhibits. See the Exhibit Index and Exhibits filed as part of this report.

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SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities and Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ACADIA Pharmaceuticals Inc.

/s/ Uli Hacksell
Uli Hacksell, Ph.D.

Chief Executive Officer

Date: March 12, 2013

KNOW ALL PERSONS BY THESE PRESENTS, that each individual whose signature appears below constitutes and appoints Uli Hacksell and Thomas H. Aasen, and each of them, his true and lawful attorneys-in-fact and agents with full power of substitution, for him and in his name, place and stead, in any and all capacities, to sign any and all amendments to this Annual Report on Form 10-K, and to file the same, with all exhibits thereto and all documents in connection therewith, with the Securities and Exchange Commission, granting unto said attorneys-in-fact and agents, and each of them, full power and authority to do and perform each and every act and thing requisite and necessary to be done in and about the premises, as fully to all intents and purposes as he might or could do in person, hereby ratifying and confirming all that said attorneys-in-fact and agents or any of them, or his or their substitute or substitutes, may lawfully do or cause to be done by virtue hereof.

Pursuant to the requirements of the Securities and Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

Signature	Title	Date
/s/ Uli Hacksell **Uli Hacksell**	Chief Executive Officer and Director (Principal Executive Officer)	March 12, 2013
/s/ Thomas H. Aasen **Thomas H. Aasen**	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 12, 2013
/s/ Leslie Iversen **Leslie Iversen**	Chairman of the Board	March 12, 2013
/s/ Stephen Biggar **Stephen Biggar**	Director	March 12, 2013
/s/ Michael Borer **Michael Borer**	Director	March 12, 2013
/s/ Laura Brege **Laura Brege**	Director	March 12, 2013
/s/ Mary Ann Gray **Mary Ann Gray**	Director	March 12, 2013

/s/ LESTER KAPLAN **Lester Kaplan**	Director	March 12, 2013
/s/ TORSTEN RASMUSSEN **Torsten Rasmussen**	Director	March 12, 2013
/s/ WILLIAM M. WELLS **William M. Wells**	Director	March 12, 2013

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REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

To the Board of Directors and Stockholders of

ACADIA Pharmaceuticals Inc.

In our opinion, the consolidated financial statements listed in the index appearing under Item 15(a)(1) present fairly, in all material respects, the financial position of ACADIA Pharmaceuticals Inc. and its subsidiaries at December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2012 in conformity with accounting principles generally accepted in the United States of America. Also in our opinion, the Company maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). The Company s management is responsible for these financial statements, for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in Management s Report on Internal Control over Financial Reporting appearing under Item 9A. Our responsibility is to express opinions on these financial statements and on the Company s internal control over financial reporting based on our integrated audit. We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audits to obtain reasonable assurance about whether the financial statements are free of material misstatement and whether effective internal control over financial reporting was maintained in all material respects. Our audits of the financial statements included examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements, assessing the accounting principles used and significant estimates made by management, and evaluating the overall financial statement presentation. Our audit of internal control over financial reporting included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audits also included performing such other procedures as we considered necessary in the circumstances. We believe that our audits provide a reasonable basis for our opinions.

A company s internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company s internal control over financial reporting includes those policies and procedures that (i) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (ii) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (iii) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company s assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

/s/ PricewaterhouseCoopers LLP

San Diego, California

March 12, 2013

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ACADIA PHARMACEUTICALS INC.

CONSOLIDATED BALANCE SHEETS

(in thousands, except for par value and share data)

	December 31, 2012	December 31, 2011
Assets		
Cash and cash equivalents	$ 57,899	$ 6,889
Investment securities, available-for-sale	50,068	24,159
Prepaid expenses, receivables and other current assets	581	901
Total current assets	108,548	31,949
Property and equipment, net	42	151
Other assets		14
Total assets	$ 108,590	$ 32,114
Liabilities, redeemable common stock and stockholders equity		
Accounts payable	$ 1,375	$ 1,960
Accrued expenses	4,139	3,504
Current portion of deferred revenue	434	669
Current portion of long-term debt		32
Total current liabilities	5,948	6,165
Long-term portion of deferred revenue		2,587
Total liabilities	5,948	8,752
Commitments and contingencies (Note 10)		
Redeemable common stock, $0.0001 par value; 5,347,137 shares and no shares issued and outstanding at December 31, 2012 and 2011, respectively (Note 7)	17,658	
Stockholders equity		
Preferred stock, $0.0001 par value; 5,000,000 shares authorized at December 31, 2012 and 2011; no shares issued and outstanding at December 31, 2012 and 2011		
Common stock, $0.0001 par value; 150,000,000 shares authorized at December 31, 2012 and 2011; 73,334,216 shares and 52,898,659 shares issued and outstanding at December 31, 2012 and 2011, respectively	7	5
Additional paid-in capital	452,693	370,219
Accumulated deficit	(367,720)	(346,871)
Accumulated other comprehensive income	4	9
Total stockholders equity	84,984	23,362
Total liabilities, redeemable common stock and stockholders equity	$ 108,590	$ 32,114

The accompanying notes are an integral part of these consolidated financial statements.

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ACADIA PHARMACEUTICALS INC.

CONSOLIDATED STATEMENTS OF OPERATIONS

(in thousands, except per share data)

	Years Ended December 31,		
	2012	2011	2010
Revenues			
Collaborative revenues	$ 4,907	$ 2,067	$ 42,135
Operating expenses			
Research and development (includes stock-based compensation of $680, $512, and $599, respectively)	18,794	17,309	20,579
General and administrative (includes stock-based compensation of $1,250, $1,086, and $984, respectively)	6,999	7,610	6,462
Total operating expenses	25,793	24,919	27,041
Income (loss) from operations	(20,886)	(22,852)	15,094
Interest income, net	37	87	45