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# UNITED STATES
# SECURITIES AND EXCHANGE COMMISSION
**WASHINGTON, D.C. 20549**

# Form 10-K

**(Mark One)**

☒ **ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**
**For the fiscal year ended December 31, 2011**

**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 ☒

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 ☒

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 ☒ 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 ☒ 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. ☒

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 ☒ |
| 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 ☒

As of June 30, 2011, 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 $85.7 million, based on the closing price of the registrant's common stock on the NASDAQ Global Market on June 30, 2011 of $1.63 per share.

As of March 1, 2012, 52,903,450 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, 2012 are incorporated by reference into Part III of this report.

**ACADIA PHARMACEUTICALS INC.**

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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,” “intends,” “estimates,” “could,” “should,” “would,” “continue,” “seeks,” “aims,” “projects,” “predicts,” “pro forma,” “anticipates,” “potential” or other similar words (including their 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 four product candidates in clinical development led by pimavanserin, which is in Phase III development as a potential first-in-class treatment for Parkinson’s disease psychosis. We hold worldwide commercialization rights to pimavanserin. In addition, we have a product candidate in Phase II development for chronic pain and a product candidate in Phase I development for glaucoma, both in collaboration with Allergan, Inc., and a product candidate in Phase I development for schizophrenia in collaboration with Meiji Seika Pharma Co., Ltd. All of the product candidates in our pipeline emanate from discoveries made using our proprietary drug discovery platform.

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 clinical-stage product candidates are as follows:

***Pimavanserin*.** Pimavanserin is a new chemical entity that we discovered and have advanced to Phase III development as a potential first-in-class treatment for Parkinson’s disease psychosis. Parkinson’s disease psychosis is a debilitating disorder that develops in up to 60 percent of patients with Parkinson’s disease. This disorder deeply affects the quality of life of patients with Parkinson’s disease and is associated with increased caregiver distress and burden, nursing home placement, and increased mortality. The U.S. Food and Drug Administration, or FDA, has not approved any drug to treat Parkinson’s disease psychosis. Pimavanserin provides an innovative approach to treating this disorder by selectively blocking a key serotonin receptor that

plays an important role in psychosis. We believe pimavanserin has the potential to be the first safe and effective 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.

We are currently conducting several clinical trials in our Phase III program with pimavanserin for Parkinson's disease psychosis, including a pivotal Phase III efficacy, tolerability and safety study, and open-label safety extension studies. 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 have established plans for a future Phase II feasibility study to explore the use of pimavanserin as a treatment for 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.

***AM-831***. We have discovered and, in collaboration with Meiji Seika Pharma, are developing AM-831, a small molecule product candidate for the treatment of schizophrenia. Currently prescribed treatments do not effectively address or may exacerbate cognitive disturbances associated with schizophrenia. We believe that AM-831 provides the potential for a new class of pro-cognitive antipsychotic drugs. AM-831 has reached Phase I development.

In addition to our clinical-stage product candidates, we have used our proprietary drug discovery platform to discover additional product candidates. These include two preclinical programs that we believe provide the potential for innovative disease-modifying therapies for Parkinson's disease and other neurological disorders. We have demonstrated that our platform can be used to rapidly discover new compounds that may serve as potential treatments for significant unmet medical needs. Currently, we have focused our resources on our most advanced product candidates, including pimavanserin.

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 become a leader in the discovery, development, and commercialization of 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 independently or in collaboration with partners, and position pimavanserin as a potential 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 plan 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. In therapeutic areas that involve an extensive development program or require large specialty or primary care sales forces, we intend to complete late-stage development and commercialization through, or in collaboration with, partners. We may elect to retain commercialization rights in selected areas where we feel pimavanserin can be sold by a specialty sales force that calls on a focused group of physicians.
- ***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 clinical programs with Allergan and Meiji Seika Pharma, and our internal preclinical programs. While our resources are currently focused on our most advanced clinical-stage 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 product candidates.*** Although all of the product candidates currently in our pipeline emanate from discoveries made using our proprietary platform, in the future, we may elect to in-license or acquire preclinical assets, and clinical-stage product candidates or products to augment our pipeline and to leverage any sales force that we may establish in the future.

**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 neurological 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 less able 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 neurological 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 currently 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 psychotic symptoms, commonly consisting of 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 mortality.

Treatment of Parkinson's disease psychosis poses a challenge to physicians. The FDA has not approved any therapy for Parkinson's disease psychosis. Physicians may attempt to address this disorder initially by decreasing 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 is often associated with a significant worsening of motor function in these patients. Despite substantial limitations, currently marketed antipsychotic drugs are used off-label to treat patients with Parkinson's disease psychosis. Because antipsychotic drugs block dopamine receptors, and thereby may counteract the dopamine replacement therapy, these drugs often worsen motor symptoms in patients with Parkinson's disease when used at doses required to achieve antipsychotic effects. Nevertheless, physicians frequently resort to off-label use of antipsychotic medications, including Seroquel and the generic drug clozapine, to treat Parkinson's disease psychosis.

The only current 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 blood disorder that necessitates stringent blood monitoring.

Current antipsychotic drugs are associated with a number of side effects, which can be 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. 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.

***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 this disease. Worldwide sales of antipsychotic drugs used to treat schizophrenia and other psychiatric conditions exceeded $25 billion in 2010. 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, 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 2006, 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 an improved side effect and efficacy profile.

***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 Unites 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.

There is no proven safe and effective therapy for 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 chronic pain disorder 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.

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 $3.7 billion and $4.2 billion, respectively, in 2011. 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, 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 adverse 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.

***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 $1.3 billion in 2011, 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 Preclinical Programs**

Our pipeline includes four product candidates in clinical development and two additional programs in 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 clinical-stage product candidates and preclinical 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 |
| AM-831 | Schizophrenia | Phase I | Meiji Seika Pharma—Asia<br>ACADIA—Rest of World |
| $ER_{\beta}$ program | Neuroprotection/<br>Chronic Pain | Preclinical | ACADIA |
| Nurr-1 program | Parkinson's Disease | Preclinical | ACADIA |

(1) Completed Phase II schizophrenia co-therapy trial.
(2) We have established a protocol for a future Phase II feasibility study in Alzheimer's disease psychosis.

***Pimavanserin***

*Overview*

Pimavanserin is a new chemical entity that we discovered and have advanced to Phase III development as a potential first-in-class treatment for Parkinson's disease psychosis. Pimavanserin is a small molecule that can be taken orally as a tablet once-a-day. Pimavanserin 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 have established a protocol for a future Phase II feasibility study to explore the potential of pimavanserin as a treatment for Alzheimer's disease psychosis. In the future, we intend to use our Phase III Parkinson's disease psychosis program as a foundation to develop and commercialize pimavanserin for these and other potential neurological and psychiatric indications independently or in collaboration with strategic 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 safe and effective 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.

We are currently conducting several clinical trials in our Phase III program with pimavanserin for Parkinson's disease psychosis, including a pivotal Phase III study, referred to as the -020 Study, designed to evaluate the efficacy, tolerability and safety of pimavanserin as a treatment for patients with Parkinson's disease psychosis. The -020 Study is a multi-center, double-blind, placebo-controlled trial expected to enroll about 200 patients at clinical centers located in North America. Patients are randomized to two study arms and receive oral doses of either 40 mg of pimavanserin or placebo once-daily for six weeks. Patients also continue to receive stable doses of their existing dopamine replacement therapy used to manage the motor symptoms of Parkinson's disease. The primary endpoint of the -020 Study is antipsychotic efficacy as measured using nine items from the hallucinations and delusions domains of the Scale for the Assessment of Positive Symptoms, or SAPS. We are using an independent group of centralized raters to assess the primary endpoint in the -020 Study. Motoric tolerability is a key secondary endpoint in the study and is measured using Parts II and III of the Unified Parkinson's Disease Rating Scale, or UPDRS. The -020 Study builds on the signals of efficacy observed in our earlier studies and incorporates several study design enhancements guided by the previous data and experience we have gained in our Parkinson's disease program. We expect to report top-line results from the -020 Study near the end of the third quarter of 2012. If successful, the -020 Study would represent the first of two required pivotal Phase III trials in our Parkinson's disease psychosis program.

In addition to the -020 Study, 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 our earlier Phase III studies as well as patients who complete the -020 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 that is ongoing 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.

In September 2009, we announced top-line results from an initial Phase III trial with pimavanserin in patients with Parkinson's disease psychosis, referred to as the -012 Study. While the -012 Study was impacted by a larger than expected placebo response and did not meet its primary endpoint, signals of antipsychotic efficacy were consistently observed in the pimavanserin 40 mg study arm. These signals were most prominent in the United States portion of the study, which comprised nearly one-half of the patients in the study. The -012 Study met the key secondary endpoint of motoric tolerability and pimavanserin was generally safe and well tolerated in

the study. On the basis of data from the -012 Study, during 2010 we concluded a second Phase III trial, referred to as the -014 Study, early and analyzed this study in order to use the findings to support our design of the -020 Study. In the -014 Study, the 20 mg pimavanserin arm showed a signal of antipsychotic efficacy on the primary assessment scale and a statistically significant difference from placebo on a secondary outcome measure. The -014 Study met the key secondary endpoint of motoric tolerability and pimavanserin was generally safe and well tolerated in the study.

In 2006, we announced top-line results from a multi-center, double-blind, placebo-controlled Phase II trial with pimavanserin in patients with Parkinson's disease psychosis. The trial met the primary endpoint, which was to demonstrate that administration of pimavanserin did not result in deterioration of the motoric function of these patients as measured by the UPDRS. Pimavanserin also showed antipsychotic effects in secondary endpoints using two different rating scales, including SAPS. Pimavanserin was generally safe and well tolerated in the study.

*Pimavanserin as a Co-Therapy for Schizophrenia*

By combining pimavanserin with a low dose of an antipsychotic drug such as risperidone, a commonly prescribed atypical antipsychotic drug that is now generic, we believe that the optimal relationship between 5-HT2A receptor blockade and partial dopamine receptor blockade can be achieved. 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 reported positive results in 2007 from a 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 enhanced efficacy comparable to that of a 6 mg, or standard, dose of risperidone, a faster onset of antipsychotic action, and an improved side effect profile, including significantly less weight gain, compared to the standard dose of risperidone. If we elect to pursue further development for this indication in the future, we currently expect that it will be through, 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 muscarinic agonists and 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 feasibility study to evaluate the potential of pimavanserin as a treatment for Alzheimer's disease psychosis. While our resources are currently focused on our Phase III program in Parkinson's disease psychosis, we intend to pursue our planned feasibility study in Alzheimer's disease psychosis in the future independently or in collaboration with a partner.

***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.

***AM-831***

We have discovered and, in collaboration with Meiji Seika Pharma, are developing AM-831, a small molecule product candidate for the treatment of schizophrenia. AM-831 is a novel and orally available small molecule that combines muscarinic m1 partial agonism with both dopamine D2 and serotonin 5-HT2A receptor antagonism. AM-831 has demonstrated robust effects in preclinical models of psychosis and pro-cognitive effects in preclinical behavioral models. AM-831 has reached Phase I development.

We intend to co-develop AM-831 in collaboration with Meiji Seika Pharma through completion of proof-of-concept clinical studies, at which point Meiji Seika Pharma will be solely responsible for continued development and commercialization in the licensed Asian territory. We plan to seek a strategic partner to pursue development and commercialization of AM-831 in the rest of the world.

***Preclinical Programs***

In addition to our four clinical-stage product candidates, we have used our proprietary drug discovery platform to discover additional product candidates. These include two preclinical programs that we believe provide the potential for innovative disease-modifying therapies for treating Parkinson’s disease and other neurological disorders. In our ER-beta program, we have discovered compounds that exhibit anti-inflammatory and neuroprotective properties in preclinical models and may have the ability to slow down the progression of Parkinson’s disease. These compounds also may address symptoms of chronic, inflammatory and neuropathic pain while avoiding the side effects associated with activating ER-alpha receptors. Our initial research studies in the ER-beta program have been supported by grants from The Michael J. Fox Foundation, and we were awarded another grant from the National Institute of Neurological Disorders and Stroke, a division of the National Institutes of Health. In the second preclinical program, we discovered compounds that selectively activate Nurr1-RXR complexes and promote viability of dopamine-containing neurons. We are conducting studies to examine the effects of these compounds on neuroprotection and neuroregeneration in preclinical models of Parkinson’s disease pursuant to a separate grant from The Michael J. Fox Foundation.

Currently, our resources are focused on our most advanced product candidates, including pimavanserin, and we are not devoting significant resources to earlier-stage programs that are not directly funded. However, we may elect to pursue the development of additional product candidates in the future independently or in partnerships.

## Our Drug Discovery Platform and Capabilities

### *Overview*

All of our product candidates that are currently in clinical trials and earlier stages of discovery and development emanate from discoveries made using our proprietary drug discovery platform. We have demonstrated that our 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, a collaboration agreement with Meiji Seika Pharma 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, 2011, we had received an aggregate of $18.5 million under the agreement, consisting of an upfront payment, and 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, 2011, we had received an aggregate of $9.5 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 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, 2011 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.

***Meiji Seika Pharma***

In March 2009, we entered into a collaboration agreement with Meiji Seika Pharma to develop and commercialize a novel class of pro-cognitive drugs to treat patients with schizophrenia and related disorders in Japan and several other Asian countries. Under the agreement, we are eligible to receive up to $25 million in aggregate payments, consisting of $3 million in license fees and up to $22 million in payments upon the achievement of development and regulatory milestones in the licensed Asian territory. In addition, we are eligible to receive royalties on future product sales, if any, in the Asian territory. Meiji Seika Pharma also is responsible for the first $15 million of development expenses and we and Meiji Seika Pharma will share remaining expenses through clinical proof-of-concept, subject to possible adjustment in the event we further license the program outside of the Asian territory. Meiji Seika Pharma is responsible for all costs associated with the development, manufacturing and commercialization of the product candidate in the Asian territory, and is eligible to share a portion of any product-related revenues received by us in the rest of the world. As of December 31, 2011, we had received an aggregate of $4.3 million in payments under the agreement, including $3 million in license fees and reimbursement of initial development expenses. Our agreement with Meiji Seika Pharma is subject to early termination upon specified events.

***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 48 issued U.S. patents and 236 issued foreign patents. All of these patents originated from us. In addition, we have 20 provisional and utility U.S. patent applications and 98 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.

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***

Ten U.S. patents have been issued to us that provide coverage for pimavanserin, comprising three that cover the compound generically and seven that specifically cover pimavanserin, polymorphs thereof, the use thereof for treating Parkinson's disease psychosis, schizophrenia and sleep disorders, or the method 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. The patent that covers polymorphs of pimavanserin provides protection until June 2028. We have 50 issued foreign patents that specifically cover pimavanserin, including patents in 39 European countries, Australia, Hong Kong, India, 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 45 issued foreign patents and 15 pending foreign applications that cover these compounds. The issued foreign patents for this program will expire in 2022 and 2025.

***AM-831***

Two U.S. patents have been issued to us that provide coverage for the compounds covered by our collaboration with Meiji Seika Pharma. These patents expire in 2024 and 2026. We have 40 issued foreign patents that cover these compounds. These patents provide protection through 2024.

***Other Product Candidates***

We have 14 issued U.S. patents and 15 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, as applicable, 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.

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, Risperdal, and clozapine are 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, 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 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.

**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.

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. 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 six months for priority review for NDAs that cover product candidates that offer major advances in treatment or provide a treatment where no adequate therapy exists, and 10 months for the standard review of non-priority NDAs. However, the FDA is not legally required to complete its review within these periods, these performance goals may change over time and the 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.

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 professionsals. 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.

**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. For example, if a drug product is reimbursed by Medicare, Medicaid or other federal or state health care programs, sales, marketing and scientific/educational grant

programs must comply with the Medicare-Medicaid Anti-Fraud and Abuse Act, as amended, the False Claims Act, also as amended, and similar state laws. If a drug product is reimbursed by Medicare or Medicaid, pricing and rebate programs 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. Additionally, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Affordability Reconciliation Act, or collectively the PPACA, enacted in March 2010, substantially changes the way healthcare is financed by both governmental and private insurers. Among other cost containment measures, the 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. If drug products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. All of these activities are also potentially subject to federal and state consumer protection and unfair competition laws.

**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 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 plan to partner our product candidates for commercialization. We plan 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, 2011, we had 24 employees, of whom 12 hold Ph.D. or other advanced degrees. Of our total workforce, 14 are engaged in research and development activities and 10 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 $17.3 million in 2011, $20.6 million in 2010, and $41.6 million in 2009.

**Long-Lived Assets**

Our long-lived assets located in the United States totaled $151,000, $282,000 and $738,000 as of December 31, 2011, 2010 and 2009, respectively. Our only other long-lived assets were located in Europe and totaled $0, $144,000 and $324,000 as of December 31, 2011, 2010 and 2009, respectively.

**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, 2011, we had an accumulated deficit of approximately $346.9 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, 2011 were from our collaborations with Allergan and Meiji Seika Pharma as well as our agreements with other parties. We anticipate that collaborations, which provide us with research funding and potential milestone payments and royalties, will continue to be our primary source of revenues for the next several years.

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.

***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 and Meiji Seika Pharma 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 our existing 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.

Each of Meiji Seika Pharma and 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 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 approximately $31.0 million at December 31, 2011. While we believe that our existing cash resources and anticipated payments from our existing collaborations will be sufficient to fund our cash requirements at least into the second quarter of 2013, 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:

- 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;
- 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 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. Following the end of the collaboration, we now have full responsibility for the pimavanserin program. We expect our research and development costs for the continued development of pimavanserin to continue to be substantial. While we are continuing to run the ongoing trials for pimavanserin, we would need to add resources and raise additional funds in the future in order to take this product candidate to market, if we do not secure another partner.

***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 previously had an unsuccessful Phase III trial with our product candidate, pimavanserin. We are currently conducting the -020 Study, a Phase III trial with pimavanserin for the treatment of Parkinson's disease psychosis that we initiated in the third quarter of 2010. An unfavorable outcome in the -020 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 are in Phase II and Phase I development, respectively, and a clinical program for the treatment of schizophrenia in Phase I development with Meiji Seika Pharma.

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.

***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;
- 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 competitors 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.

Our collaboration with Meiji Seika Pharma is initially focused on the development of AM-831 as a treatment for schizophrenia and related disorders. While Meiji Seika Pharma has rights to AM-831 in the Asian territory, we have the right to pursue the development and commercialization of AM-831, alone or with a partner, in the rest of the world. Meiji Seika Pharma is also pursuing other research and development programs related to schizophrenia 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;

- 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.

***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.

***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 may need to hire additional personnel if 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 new and 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 reduced 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 and Meiji Seika Pharma, 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.

***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.

***Relying on third-party manufacturers may result in delays in our clinical trials 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 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. We currently use third-party manufacturers to produce clinical supplies of our compounds for us, including pimavanserin. 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.

The manufacturers of our product candidates are obliged to operate in accordance with FDA-mandated current good manufacturing practices, or cGMPs. 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 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 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.

***Healthcare legislation may make it more difficult to receive revenues, if we have products that are approved.***

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 changes 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:

- 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, including reporting any "payments or transfers of value" made or distributed to prescribers, teaching hospitals and other healthcare providers, beginning March 31, 2013, and reporting any investment interests held by physicians and their immediate family members during the preceding calendar year;
- a new requirement to annually report drug samples that manufacturers and distributors provide to physicians, effective April 1, 2012; 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.

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 receive for any approved product, and could seriously harm our future revenues. Any reduction in reimbursement from Medicare or other government programs may result in a similar reduction in payments from private payors.

***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;
- 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.

***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.

***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 United States 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 United States 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. 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 is currently developing regulations and procedures to administer the Leahy-Smith Act, and many of the substantive changes to patent law associated with the Leahy-Smith Act will not become effective until one year or 18 months after its enactment. 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.

**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;
- 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.

**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 schizophrenia, 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 a registration statement in connection with a private financing that we concluded in January 2011, which registration covers approximately 17.0 million shares of our common stock. We also have effective registration statements to sell shares of our common stock on our own behalf, and may elect to sell shares pursuant to such registrations from time to time, as we did, in April 2011, pursuant to the termination agreement we entered into regarding the lease of a facility in Sweden. 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.

***If the price of our common stock trades below $1.00 per share for a sustained period or we do not meet other 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, which was the case in 2010, or we do not meet other requirements, which was the case in 2010 when we failed to meet the minimum market value listing requirement, 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.

***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.

***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.

**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 the end of 2012 with an option to extend. 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 November 2012, 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.

## 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.

| 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 |
| **2010** | | |
| First Quarter | $1.75 | $1.21 |
| Second Quarter | $2.00 | $1.00 |
| Third Quarter | $1.42 | $0.91 |
| Fourth Quarter | $1.50 | $0.65 |

As of March 1, 2012, there were approximately 48 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.

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

The following data has been derived from our audited financial statements, including the consolidated balance sheets at December 31, 2011 and 2010 and the related consolidated statements of operations for the three years ended December 31, 2011 and related notes appearing elsewhere in this report. The statement of operations data for the years ended December 31, 2008 and 2007 and the balance sheet data as of December 31, 2009, 2008 and 2007 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, | | | | |
|---|---|---|---|---|---|
| | 2011 | 2010 (1) | 2009 | 2008 | 2007 |
| | (In thousands, except per share data) | | | | |
| **Consolidated Statement of Operations Data:** | | | | | |
| Revenues: | | | | | |
| Collaborative revenues | $ 2,067 | $42,135 | $ 6,399 | $ 1,590 | $ 7,555 |
| Operating expenses: | | | | | |
| Research and development | 17,309 | 20,579 | 41,585 | 56,750 | 57,942 |
| General and administrative | 7,610 | 6,462 | 10,282 | 11,818 | 12,267 |
| Total operating expenses | 24,919 | 27,041 | 51,867 | 68,568 | 70,209 |
| Income (loss) from operations | (22,852) | 15,094 | (45,468) | (66,978) | (62,654) |
| Interest income, net | 87 | 45 | 323 | 2,734 | 6,264 |
| Net income (loss) | $(22,765) | $15,139 | $(45,145) | $(64,244) | $(56,390) |
| Net income (loss) per common share, basic | $ (0.44) | $ 0.39 | $ (1.20) | $ (1.73) | $ (1.60) |
| Net income (loss) per common share, diluted | $ (0.44) | $ 0.39 | $ (1.20) | $ (1.73) | $ (1.60) |
| Weighted average shares used in computing net income (loss) per common share, basic | 52,183 | 38,593 | 37,476 | 37,113 | 35,211 |
| Weighted average shares used in computing net income (loss) per common share, diluted | 52,183 | 38,720 | 37,476 | 37,113 | 35,211 |

(1) As described in Note 6 of the notes to our consolidated financial statements appearing elsewhere in this report, in October 2010 we ended a collaboration agreement with Biovail and recognized all remaining revenues related to this collaboration agreement, resulting in net income for us for the year ended December 31, 2010.

| | At December 31, | | | | |
|---|---|---|---|---|---|
| | 2011 | 2010 | 2009 | 2008 | 2007 |
| | (in thousands) | | | | |
| **Consolidated Balance Sheet Data:** | | | | | |
| Cash, cash equivalents and investment securities | $31,048 | $37,087 | $47,060 | $60,083 | $126,858 |
| Working capital | 25,784 | 31,890 | 33,766 | 51,331 | 111,966 |
| Total assets | 32,114 | 38,394 | 49,680 | 64,677 | 134,584 |
| Long-term debt, less current portion | — | 32 | 98 | 430 | 1,156 |
| Total stockholders' equity | 23,362 | 29,688 | 12,114 | 52,992 | 113,934 |

**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," "continue," "seeks," "aims," "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 four product candidates in clinical development led by pimavanserin, which is in Phase III development as a potential first-in-class treatment for Parkinson's disease psychosis. We hold worldwide commercialization rights to pimavanserin. In addition, we have a product candidate in Phase II development for chronic pain and a product candidate in Phase I development for glaucoma, both in collaboration with Allergan, and a product candidate in Phase I development for schizophrenia in collaboration with Meiji Seika Pharma. All of the product candidates in our pipeline emanate from discoveries made using our proprietary drug discovery platform.

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, 2011, we had an accumulated deficit of $346.9 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, 2011, we had received an aggregate of $112.5 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 Meiji Seika Pharma 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 $18.5 million in payments as of December 31, 2011, consisting of an upfront payment, research funding and related fees. This collaboration agreement is currently 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 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. Under the agreement, we are eligible to receive up to $25 million in aggregate payments, consisting of $3 million in license fees and up to $22 million in payments upon achievement of development and regulatory milestones in the licensed Asian territory. In addition, we are eligible to receive royalties on future product sales, if any, in the Asian territory. Meiji Seika Pharma also is responsible for the first $15 million of designated development expenses and we will share the remaining expenses through clinical proof-of-concept, subject to possible adjustment in the event we further license the program outside of the Asian territory. As of December 31, 2011, we had received an aggregate of $4.3 million in payments from Meiji Seika Pharma, consisting of license fees and reimbursed research and development expenses. Our agreement with Meiji Seika Pharma is subject to early termination upon specified events.

In May 2009, we entered into a collaboration agreement with Biovail, pursuant to which we received a non-refundable $30 million upfront payment. Under this collaboration, we also were eligible to receive potential development, regulatory and sales milestones as well as royalties on future net sales of pimavanserin. In October 2010, we entered an agreement with Biovail to regain all rights to pimavanserin and conclude our collaboration. In connection with this agreement, we recorded all remaining revenues related to our collaboration Biovail, which totaled $34.7 million during the fourth quarter of 2010. We recognized aggregate revenues relating to the Biovail collaboration of $39.5 million during the year ended December 31, 2010. We have no future obligations to Biovail.

***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.

Pursuant to our collaboration, Meiji Seika Pharma is responsible for the first $15 million of designated development expenses for the product candidate, AM-831, and we and Meiji Seika Pharma will share remaining expenses through clinical proof-of-concept, subject to possible adjustment. As of December 31, 2011, approximately $2.8 million of the designated development expenses had been incurred. We expect to coordinate a significant portion of the planned external development services and, accordingly, we may incur the related development costs for these external services and receive reimbursement of Meiji Seika Pharma’s portion of these costs pursuant to the agreement. Meiji Seika Pharma is responsible for all costs associated with the development of AM-831 in the Asian territory. We are not responsible for, nor have we incurred, development expenses in our clinical programs for chronic pain and glaucoma, which we are pursuing in collaboration with Allergan.

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, 2011, 2010, and 2009 (in thousands):

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Costs of external service providers: | | | |
| Pimavanserin | $10,373 | $12,506 | $27,079 |
| AM-831 and other | 1,438 | 1,087 | 822 |
| Subtotal | 11,811 | 13,593 | 27,901 |
| Internal costs | 4,986 | 6,387 | 12,810 |
| Stock-based compensation | 512 | 599 | 874 |
| Total research and development | $17,309 | $20,579 | $41,585 |

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 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 external research and development expenses to continue to be substantial as we pursue the development of pimavanserin and our other product candidates, including AM-831. 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. While our significant accounting policies are described in more detail in the notes to consolidated financial statements included in this report, we believe that the following accounting policies require the application of significant judgments and estimates.

***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 as 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 has been reasonably assured.

We evaluate milestone payments on an individual basis and recognize revenues from non-refundable milestone payments when the earnings process is complete and the payment 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 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 cost normally relates to the projected cost to treat a patient in our trials and we recognize this cost over the term of the study based on the number of patients enrolled in the trial on an ongoing basis. 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. As of December 31, 2011, total unrecognized compensation cost related to stock options and purchase plan rights was approximately $2.2 million, and the weighted average period over which this cost is expected to be recognized is 2.4 years.

**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, 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 internal 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. We anticipate that our research and development expenses will increase in future periods as we continue to conduct our Phase III program for pimavanserin and pursue development of our other product candidates.

*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.

***Comparison of the Years Ended December 31, 2010 and 2009***

*Revenues*

Revenues increased to $42.1 million in 2010 from $6.4 million in 2009. This increase was primarily due to $39.5 million in revenues recognized under our collaboration with Biovail during 2010 compared to $4.6 million in 2009. The Biovail collaboration commenced in May 2009 and was concluded in October 2010. In connection with the conclusion of this collaboration, during the fourth quarter of 2010, we recorded an aggregate of $34.7 million in revenue consisting of an $8.75 million cash payment we received from Biovail and $25.9 million of deferred revenue remaining from this collaboration. Revenues from our collaborations with Allergan totaled $1.1 million in each of 2010 and 2009. Revenues from our agreements with other parties, including our collaboration with Meiji Seika Pharma, which commenced in March 2009, totaled $1.5 million in 2010 compared to $714,000 in 2009.

*Research and Development Expenses*

Research and development expenses decreased to $20.6 million in 2010, including $599,000 in stock-based compensation, from $41.6 million in 2009, including $874,000 in stock-based compensation. The decrease in research and development expenses was primarily due to $14.3 million in decreased external service costs and $6.7 million in decreased costs associated with our internal research and development organization. External service costs totaled $13.6 million, or 66 percent of our research and development expenses in 2010, compared to $27.9 million, or 67 percent of our research and development expenses in 2009. The decrease in external service costs was largely attributable to decreased costs incurred for our Phase III clinical trials for pimavanserin. The decrease in internal research and development costs was primarily attributable to $4.3 million in decreased salaries and related personnel costs, and decreases in laboratory supply, equipment, facility and other costs resulting from a restructuring and related workforce reductions implemented in October 2009. Salaries and related personnel costs for the year ended December 31, 2009 included a charge of $905,000 in connection with these workforce reductions.

*General and Administrative Expenses*

General and administrative expenses decreased to $6.5 million in 2010, including $984,000 in stock-based compensation, from $10.3 million in 2009, including $1.3 million in stock-based compensation. The decrease in general and administrative expenses was primarily due to $2.3 million in decreased salaries, related personnel costs and other costs resulting from our October 2009 restructuring and $1.6 million in decreased external service costs.

**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, 2011, we had received $341.6 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, $112.5 million in payments from collaboration agreements, $22.4 million in debt financing, and $22.2 million in interest income.

At December 31, 2011, we had $31.0 million in cash, cash equivalents and investment securities compared to $37.1 million at December 31, 2010. 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 the second quarter of 2013.

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:

- 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;
- 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 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. We cannot be certain that additional 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 access to additional financing over the near-term future. In particular, given the disappointing results from an initial Phase III Parkinson's disease psychosis trial with pimavanserin that we announced in September 2009, any unfavorable outcome in our development of pimavanserin could have a material adverse effect on our ability to raise additional capital.

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, U.S. Treasury notes, 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 and/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 totaled $19.9 million in 2011 compared to $10.7 million in 2010 and $13.7 million in 2009. 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 a 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.

The decrease in net cash used in operating activities in 2010 relative to 2009 was primarily due to net income of $15.1 million in 2010 compared to a net loss of $45.1 million in 2009, as well as changes in operating assets and liabilities, including changes in deferred revenue, and accounts payable and accrued expenses. Deferred revenue decreased by $25.3 million in 2010 compared to an increase in deferred revenue of $28.2 million in 2009. The decrease in deferred revenue in 2010 was primarily attributable to the recognition of $25.9 million in deferred revenue in connection with the conclusion of our collaboration with Biovail in October 2010. The increase in deferred revenue in 2009 was primarily attributable to the $30 million non-refundable upfront payment received pursuant to our collaboration with Biovail as well as initial licensing fees received from our collaboration with Meiji Seika Pharma, offset by initial revenues recognized pursuant to these agreements. Accounts payable and accrued expenses decreased by an aggregate of $3.1 million in 2010 compared to an aggregate decrease in accounts payable and accrued expenses of $1.6 million in 2009. The decrease in accounts payable and accrued expenses in 2010 was primarily due to payments made for external service costs related to our clinical trials, the timing and amount of which may fluctuate significantly from period to period.

Net cash provided by investing activities totaled $6.0 million in 2011 compared to net cash used in investing activities of $1.1 million in 2010 and net cash provided by investing activities of $9.4 million in 2009. 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 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. The increase in net cash used in investing activities in 2010 relative to net cash provided by investing activities in 2009 was primarily due to increased purchases of investment securities, net of maturities of investment securities.

Net cash provided by financing activities increased to $13.9 million in 2011 compared to $470,000 in 2010 and $1.2 million in 2009. The increase in net cash provided by financing activities during 2011 was primarily due to $13.9 million in net proceeds received from our January 2011 private equity financing. The decrease in net cash provided by financing activities in 2010 relative to 2009 was primarily attributable to reduced proceeds from the issuance of stock offset by decreased repayments of long-term debt.

The following table summarizes our contractual obligations, including interest, at December 31, 2011 (in thousands):

| | Total | Less than 1 Year | 1-3 Years | 4-5 Years | After 5 Years |
|---|---|---|---|---|---|
| Operating leases | $755 | $ 755 | $ — | $ — | $ — |
| Long-term debt | 33 | 33 | — | — | — |
| Total | $788 | $ 788 | $ — | $ — | $ — |

In April 2011, we entered into a termination agreement related to the lease for our Swedish research facility and ceased operations at this site. The lease was entered into in June 2005 and had a 10-year term. Pursuant to this agreement, we made a one-time payment of $690,000 and issued 782,339 shares of our common stock to the landlord in settlement of all lease-related obligations. General and administrative expenses for the year ended December 31, 2011 included a net charge of $1.1 million, which amount consisted of $1.7 million in lease termination charges offset by a $539,000 reduction in the cumulative translation adjustment balance related to the liquidation of substantially all assets of our Swedish subsidiary.

We have also entered into agreements with contract research organizations and other external service providers for services in connection with the development of our product candidates. We were contractually obligated for up to approximately $6.3 million of future services under these agreements as of December 31, 2011. 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, U.S. Treasury notes, 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 and/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, 2011, this change would not have had a material effect on the fair value of our investment portfolio as of that date.

***Foreign Currency Risk***

We have wholly owned subsidiaries in Europe, which expose us to foreign exchange risk. All assets and liabilities of our subsidiaries are translated to U.S. dollars based on the applicable exchange rate on the balance sheet date. Expense components are translated to U.S. dollars at weighted average exchange rates in effect during the period. Gains and losses resulting from foreign currency translation are included as a component of our stockholders’ equity. Other foreign currency transaction gains and losses are included in our results of operations and, to date, have not been significant. We have not hedged exposures denominated in foreign currencies or any other derivative financial instrument.

**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.

**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, control 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, 2011, 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, 2011.

*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, 2011, 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, 2011, 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, 2011 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.

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

None.

## 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 2012 Annual Meeting of Stockholders to be filed with the SEC by April 30, 2012 (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.

## 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.

## 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 6, 2012

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<br>**Uli Hacksell** | Chief Executive Officer and Director (Principal Executive Officer) | March 6, 2012 |
| /S/ THOMAS H. AASEN<br>**Thomas H. Aasen** | Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer) | March 6, 2012 |
| /S/ LESLIE IVERSEN<br>**Leslie Iversen** | Chairman of the Board | March 6, 2012 |
| /S/ MICHAEL BORER<br>**Michael Borer** | Director | March 6, 2012 |
| /S/ LAURA BREGE<br>**Laura Brege** | Director | March 6, 2012 |
| /S/ MARY ANN GRAY<br>**Mary Ann Gray** | Director | March 6, 2012 |
| /S/ LESTER KAPLAN<br>**Lester Kaplan** | Director | March 6, 2012 |
| /S/ TORSTEN RASMUSSEN<br>**Torsten Rasmussen** | Director | March 6, 2012 |
| /S/ WILLIAM M. WELLS<br>**William M. Wells** | Director | March 6, 2012 |

## 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, 2011 and 2010, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2011 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, 2011, 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 audits. 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

PricewaterhouseCoopers LLP
San Diego, California
March 6, 2012

**ACADIA PHARMACEUTICALS INC.**

**CONSOLIDATED BALANCE SHEETS**
**(in thousands, except for par value and share data)**

| | December 31, 2011 | December 31, 2010 |
|---|---|---|
| **Assets** | | |
| Cash and cash equivalents | $ 6,889 | $ 6,849 |
| Investment securities, available-for-sale | 24,159 | 30,238 |
| Prepaid expenses, receivables and other current assets | 901 | 762 |
| Total current assets | 31,949 | 37,849 |
| Property and equipment, net | 151 | 426 |
| Other assets | 14 | 119 |
| Total assets | $ 32,114 | $ 38,394 |
| **Liabilities and stockholders' equity** | | |
| Accounts payable | $ 1,960 | $ 1,972 |
| Accrued expenses | 3,504 | 3,219 |
| Current portion of deferred revenue | 669 | 690 |
| Current portion of long-term debt | 32 | 78 |
| Total current liabilities | 6,165 | 5,959 |
| Long-term portion of deferred revenue | 2,587 | 2,623 |
| Other long-term liabilities | — | 124 |
| Total liabilities | 8,752 | 8,706 |
| Commitments and contingencies (Note 10) | | |
| Stockholders' equity | | |
| Preferred stock, $0.0001 par value; 5,000,000 shares authorized at December 31, 2011 and 2010; no shares issued and outstanding at December 31, 2011 and 2010 | — | — |
| Common stock, $0.0001 par value; 150,000,000 and 75,000,000 shares authorized at December 31, 2011 and December 31, 2010, respectively; 52,898,659 shares and 39,350,561 shares issued and outstanding at December 31, 2011 and December 31, 2010, respectively | 5 | 4 |
| Additional paid-in capital | 370,219 | 353,278 |
| Accumulated deficit | (346,871) | (324,106) |
| Accumulated other comprehensive income | 9 | 512 |
| Total stockholders' equity | 23,362 | 29,688 |
| | $ 32,114 | $ 38,394 |

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

**ACADIA PHARMACEUTICALS INC.**

**CONSOLIDATED STATEMENTS OF OPERATIONS**
**(in thousands, except per share data)**

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| **Revenues** | | | |
| Collaborative revenues | $ 2,067 | $42,135 | $ 6,399 |
| **Operating expenses** | | | |
| Research and development (includes stock-based compensation of $512, $599, and $874, respectively) | 17,309 | 20,579 | 41,585 |
| General and administrative (includes stock-based compensation of $1,086, $984, and $1,260, respectively) | 7,610 | 6,462 | 10,282 |
| Total operating expenses | 24,919 | 27,041 | 51,867 |
| Income (loss) from operations | (22,852) | 15,094 | (45,468) |
| Interest income, net | 87 | 45 | 323 |
| Net income (loss) | $(22,765) | $15,139 | $(45,145) |
| Net income (loss) per common share, basic | $ (0.44) | $ 0.39 | $ (1.20) |
| Net income (loss) per common share, diluted | $ (0.44) | $ 0.39 | $ (1.20) |
| Weighted average common shares outstanding, basic | 52,183 | 38,593 | 37,476 |
| Weighted average common shares outstanding, diluted | 52,183 | 38,720 | 37,476 |

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

**ACADIA PHARMACEUTICALS INC.**

**CONSOLIDATED STATEMENTS OF CASH FLOWS**
**(in thousands)**

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| **Cash flows from operating activities** | | | |
| Net income (loss) | $(22,765) | $ 15,139 | $(45,145) |
| Adjustments to reconcile net income (loss) to net cash used in operating activities: | | | |
| Depreciation | 285 | 607 | 1,111 |
| Stock-based compensation | 1,598 | 1,583 | 2,134 |
| Amortization of investment premium/discount | 105 | (117) | 260 |
| Non-cash charge resulting from lease termination | 806 | — | — |
| Other | — | (94) | 323 |
| Changes in operating assets and liabilities: | | | |
| Prepaid expenses, receivables and other current assets | (131) | 671 | 1,013 |
| Other assets | 106 | 26 | 47 |
| Accounts payable | (29) | (990) | 656 |
| Accrued expenses | 277 | (2,135) | (2,282) |
| Deferred revenue | (57) | (25,303) | 28,178 |
| Other long-term liabilities | (92) | (90) | (22) |
| Net cash used in operating activities | (19,897) | (10,703) | (13,727) |
| **Cash flows from investing activities** | | | |
| Purchases of investment securities | (48,066) | (54,674) | (50,265) |
| Maturities of investment securities | 54,049 | 53,486 | 59,750 |
| Proceeds from sales (purchases) of property and equipment | (3) | 128 | (41) |
| Net cash provided by (used in) investing activities | 5,980 | (1,060) | 9,444 |
| **Cash flows from financing activities** | | | |
| Proceeds from issuance of common stock and warrants, net of issuance costs | 14,022 | 823 | 1,923 |
| Repayments of long-term debt | (78) | (353) | (762) |
| Net cash provided by financing activities | 13,944 | 470 | 1,161 |
| Effect of exchange rate changes on cash | 13 | 20 | 73 |
| Net increase (decrease) in cash and cash equivalents | 40 | (11,273) | (3,049) |
| **Cash and cash equivalents** | | | |
| Beginning of year | 6,849 | 18,122 | 21,171 |
| End of year | $ 6,889 | $ 6,849 | $ 18,122 |
| **Supplemental schedule of cash flow information** | | | |
| Interest paid | $ 8 | $ 37 | $ 96 |

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

## ACADIA PHARMACEUTICALS INC.

## CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE INCOME (LOSS)
## (in thousands, except share data)

| | Common Stock | | Additional Paid-in Capital | Accumulated Deficit | Accumulated Other Comprehensive Income | Total Stockholders' Equity | Comprehensive Income (Loss) |
|---|---|---|---|---|---|---|---|
| | Shares | Amount | | | | | |
| **Balances at December 31, 2008** | 37,177,874 | $ 4 | $ 346,815 | $ (294,100) | $ 273 | $ 52,992 | $ (64,464) |
| Issuance of common stock from exercise of stock options | 62,189 | — | 74 | — | — | 74 | |
| Issuance of common stock pursuant to employee stock purchase plan | 176,785 | — | 193 | — | — | 193 | |
| Issuance of common stock under Committed Equity Financing Facility, net of issuance costs | 785,271 | — | 1,147 | — | — | 1,147 | |
| Issuance of common stock upon exercise of warrant | 130,000 | — | 509 | — | — | 509 | |
| Net loss | — | — | — | (45,145) | — | (45,145) | (45,145) |
| Stock-based compensation | — | — | 2,134 | — | — | 2,134 | |
| Unrealized loss on investment securities | — | — | — | — | (98) | (98) | (98) |
| Cumulative translation adjustment | — | — | — | — | 308 | 308 | 308 |
| **Balances at December 31, 2009** | 38,332,119 | $ 4 | $ 350,872 | $ (339,245) | $ 483 | $ 12,114 | $ (44,935) |
| Issuance of common stock from exercise of stock options | 10,820 | — | 11 | — | — | 11 | |
| Issuance of common stock pursuant to employee stock purchase plan | 81,032 | — | 65 | — | — | 65 | |
| Issuance of common stock under Committed Equity Financing Facility, net of issuance costs | 926,590 | — | 747 | — | — | 747 | |
| Net income | — | — | — | 15,139 | — | 15,139 | 15,139 |
| Stock-based compensation | — | — | 1,583 | — | — | 1,583 | |
| Unrealized loss on investment securities | — | — | — | — | (5) | (5) | (5) |
| Cumulative translation adjustment | — | — | — | — | 34 | 34 | 34 |
| **Balances at December 31, 2010** | 39,350,561 | $ 4 | $ 353,278 | $ (324,106) | $ 512 | $ 29,688 | $ 15,168 |
| Issuance of common stock and warrants, net of issuance costs | 12,565,446 | 1 | 13,899 | — | — | 13,900 | |
| Issuance of common stock from exercise of stock options | 10,434 | — | 13 | — | — | 13 | |
| Issuance of common stock pursuant to employee stock purchase plan | 189,879 | — | 109 | — | — | 109 | |
| Issuance of common stock in connection with lease termination | 782,339 | — | 1,322 | — | — | 1,322 | |
| Net loss | — | — | — | (22,765) | — | (22,765) | (22,765) |
| Stock-based compensation | — | — | 1,598 | — | — | 1,598 | |
| Unrealized gain on investment securities | — | — | — | — | 9 | 9 | 9 |
| Cumulative translation adjustment | — | — | — | — | (512) | (512) | (512) |
| **Balances at December 31, 2011** | 52,898,659 | $ 5 | $ 370,219 | $ (346,871) | $ 9 | $ 23,362 | $ (23,268) |

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

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

## 1. Organization and Nature of Operations

ACADIA Pharmaceuticals Inc. (the "Company") was originally incorporated in Vermont in 1993 as Receptor Technologies, Inc. The Company reincorporated in Delaware in 1997. The Company is focused on innovative small molecule drugs that address unmet medical needs in neurological and related central nervous system disorders. The Company's operations are based in San Diego, California.

The Company has incurred substantial operating losses since its inception due in large part to expenditures for its research and development activities. As of December 31, 2011, the Company had an accumulated deficit of $346.9 million. The Company expects to continue to incur operating losses for at least the next several years as it pursues the development of its product candidates.

The Company will require significant additional financing in the future to fund its operations. Future capital requirements will depend on many factors, including the progress in, the outcome of and the costs of the Company's clinical trials, the scope, prioritization and number of its research and development programs, and the ability of its collaborators and the Company to reach the milestones, and other events or developments under its collaboration and license agreements. Until the Company can generate significant continuing revenues, it expects to fund its operations through its existing cash, cash equivalents and investment securities, payments from existing and potential future collaborations, proceeds from private or public sales of its equity securities, debt financing, grant funding, or by licensing all or a portion of its product candidates or technology. The Company cannot be certain that additional funding will be available on acceptable terms, or at all. Conditions in the financial markets and other factors could have a material adverse effect on the Company's ability to access sufficient funding on acceptable terms, or at all. If the Company cannot raise adequate additional capital, it will be required to delay, further reduce the scope of, or eliminate one or more of its research or development programs or its commercialization efforts. In addition, the Company may be required to relinquish greater, or even all, rights to product candidates at earlier stages of development or on less favorable terms than it would otherwise choose.

## 2. Summary of Significant Accounting Policies

Significant accounting policies followed in the preparation of these financial statements are as follows:

### *Principles of Consolidation*

The accompanying consolidated financial statements include the accounts of the Company and its two wholly owned subsidiaries located in Europe. All intercompany accounts and transactions have been eliminated in consolidation.

### *Cash and Cash Equivalents*

The Company considers all highly liquid investments with an initial maturity date at the date of purchase of three months or less to be cash equivalents.

### *Investment Securities*

Investment securities are considered to be available-for-sale and are carried at fair value. Unrealized gains and losses, if any, are reported as a separate component of stockholders' equity. The cost of investment securities classified as available-for-sale is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion are included in interest income. Realized gains and losses, if any, are also included in interest income. The cost of securities sold is based on the specific identification method.

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

***Fair Value of Financial Instruments***

For financial instruments, consisting of cash and cash equivalents, accounts payable and accrued expenses included in the Company's financial statements, the carrying amounts are reasonable estimates of fair value due to their short maturities. Estimated fair values for investment securities, which are separately disclosed elsewhere, are based on quoted market prices for the instruments or other observable inputs.

***Property and Equipment***

Property and equipment are recorded at cost and depreciated over their estimated useful lives (generally three to ten years) using the straight line method. Leasehold improvements are amortized over the shorter of their estimated useful lives or the term of the lease by use of the straight line method. Maintenance and repair costs are expensed as incurred. When assets are retired or sold, the assets and accumulated depreciation are removed from the respective accounts and any gain or loss is recognized. During the years ended December 31, 2011, 2010 and 2009, gains or losses from disposals of property and equipment were not material.

***Revenues***

The Company recognizes revenues in accordance with authoritative guidance established by U.S. generally accepted accounting principles ("GAAP"). The Company's revenues are primarily related to its collaboration agreements, which may provide for various types of payments, including upfront payments, funding of research and development, milestone payments, and licensing fees. The Company's collaboration agreements also include potential payments for product royalties; however, the Company has not received any product royalties to date.

The Company considers a variety of factors in determining the appropriate method of accounting under its 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, the Company does not have ongoing involvement or obligations, and the Company 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 as 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 has been reasonably assured.

The Company evaluates milestone payments on an individual basis and recognizes revenues from non-refundable milestone payments when the earnings process is complete and the payment is reasonably assured. Non-refundable milestone payments related to arrangements under which the Company has 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, the Company recognizes revenue using a contingency-adjusted performance model over the period of performance.

***Research and Development Expenses***

Research and development expenses are charged to operations as incurred. Research and development expenses include, among other things, costs associated with services provided by contract organizations for preclinical development, manufacturing of clinical materials and clinical trials. The Company accrues for costs incurred as the services are being provided by monitoring the status of the trial or services provided and the invoices received from its 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 over the estimated term of the study based on the number of patients enrolled in the trial on an ongoing basis, beginning with patient enrollment. As actual costs become known, the Company adjusts its accruals. Certain research and development programs are funded under agreements with collaboration partners, and the Company's costs related to these activities are included in research and development expenses.

***Concentrations of Risk***

Financial instruments, which potentially subject the Company to concentrations of credit risk, principally consist of cash, cash equivalents, and investment securities. The Company currently invests its excess cash primarily in a money market fund, U.S. Treasury notes, and high quality, marketable debt instruments of corporations, financial institutions and government sponsored enterprises. The Company has adopted an investment policy that includes guidelines relative to credit quality, diversification and maturities to preserve principal and liquidity. The Company does not have any direct investments in auction-rate securities or securities that are collateralized by assets that include mortgages or subprime debt.

During the years ended December 31, 2011, 2010 and 2009, revenues from the Company's agreements with certain collaborative partners exceeded 10 percent of its total revenues. During the year ended December 31, 2011, revenues from Allergan, Inc., Meiji Seika Pharma Co., Ltd. ("Meiji Seika Pharma") and The Michael J. Fox Foundation comprised 52 percent, 25 percent and 13 percent, respectively, of total revenues. During the year ended December 31, 2010, revenues from Biovail Laboratories International SRL ("Biovail"), a subsidiary of Biovail Corporation, comprised 94 percent of total revenues. During the year ended December 31, 2009, revenues from Allergan and Biovail comprised 17 percent and 72 percent, respectively, of total revenues.

***Foreign Currency Translation***

The functional currencies of the Company's subsidiaries located in Europe are the local currencies. Accordingly, assets and liabilities of these entities are translated at the current exchange rate at the balance sheet date and historical rates for equity. Revenue and expense components are translated at weighted average exchange rates in effect during the period. Gains and losses resulting from foreign currency translation are included within accumulated other comprehensive income as a component of stockholders' equity. Foreign currency transaction gains and losses are included in the results of operations and, to date, have not been significant.

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

***Stock-Based Compensation***

The fair value of each employee stock option and each employee stock purchase right granted is estimated on the grant date under the fair value method using the Black-Scholes model. The estimated fair values of the stock option or purchase rights, including the effect of estimated forfeitures, are then expensed over the vesting period. The following assumptions were used to estimate the fair value of employee stock options:

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Expected volatility | 98% | 101% | 74-96% |
| Risk-free interest rate | 1-2% | 1-3% | 2-3% |
| Expected forfeiture rate | 10% | 11% | 5-10% |
| Expected dividend yield | 0% | 0% | 0% |
| Expected life of options in years | 5.8 | 5.7 | 5.7 |

*Expected Volatility.* The Company considers its historical volatility and implied volatility when determining the volatility factor. Prior to 2011, the Company also utilized the historical volatility of peer companies due to a lack of trading history. Peer companies were selected based upon similar characteristics such as industry, stage of development, size and financial leverage.

*Risk-Free Interest Rate.* The risk-free interest rate is based on the implied yield currently available on U.S. Treasury zero-coupon issues with a remaining term approximating the expected term of the option.

*Expected Forfeiture Rate.* The Company considers its pre-vesting forfeiture history to determine its expected forfeiture rate.

*Expected Dividend Yield.* The Company has never paid any dividends and currently has no plans to do so.

*Expected Life of Options.* The Company considers, among other factors, its historical exercise experience to date as well as the mean time remaining to full vesting of all outstanding options and the mean time remaining to the end of the contractual term of all outstanding options.

The following assumptions were used to estimate the fair value for the offerings under the employee stock purchase plan that commenced during the indicated year:

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| Expected volatility | 64-111% | 58-152% | 123-179% |
| Risk-free interest rate | 0.1-0.4% | 0-1% | 0-1% |
| Expected dividend yield | 0% | 0% | 0% |
| Expected life of offering in years | 0.5-2.0 | 0.5-2.0 | 0.5-2.0 |

***Income Taxes***

Current income tax expense or benefit represents the amount of income taxes expected to be payable or refundable for the current year. A deferred income tax asset or liability is computed for the expected future impact of differences between the financial reporting and income tax bases of assets and liabilities and for the expected future tax benefit to be derived from tax credits and loss carryforwards. Deferred income tax expense or benefit represents the net change during the year in the deferred income tax asset or liability. Deferred tax assets are reduced by a valuation allowance when, in the opinion of management, it is more likely than not that some portion or all of the deferred tax assets will not be realized.

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

***Use of Estimates***

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Actual results could differ from these estimates.

***Long-Lived Assets***

The Company assesses potential impairments to its long-lived assets when there is evidence that events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. An impairment loss is recognized when the estimated undiscounted cash flows expected to result from the use of the asset and its eventual disposition is less than its carrying amount. The amount of the impairment loss, if any, will generally be measured as the difference between the net book value of the assets and their estimated fair values. No such impairment losses have been recorded by the Company.

***Comprehensive Income (Loss)***

All components of comprehensive income (loss), including net income (loss), are reported in the financial statements in the period in which they are recognized. Comprehensive income (loss) is defined as the change in equity (net assets) of a business enterprise during a period from transactions and other events and circumstances from non-owner sources. Accordingly, in addition to reporting net income (loss) under the current rules, the Company is required to display the impact of any fluctuations in its foreign currency translation adjustments and any unrealized gains or losses on its investment securities as components of comprehensive income (loss) and to display an amount representing total comprehensive income (loss) for each period.

Accumulated other comprehensive income consisted of the following:

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| | (in thousands) | |
| Unrealized gain (loss) on investment securities | $ 4 | $ (4) |
| Foreign currency translation adjustments | 5 | 516 |
| | $ 9 | $ 512 |

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

***Net Income (Loss) Per Common Share***

Basic earnings (loss) per common share is computed by dividing net income (loss) by the weighted average number of common shares outstanding for the period. Diluted earnings (loss) per common share is computed by dividing net income (loss) by the weighted average number of common shares outstanding during the period, increased to include potential dilutive common shares that were outstanding during the period. The effect of outstanding stock options and warrants is reflected, when dilutive, in diluted earnings per common share by application of the treasury stock method. The Company has excluded all outstanding stock options and warrants from the calculation of diluted net loss per common share for the years ended December 31, 2011 and 2009 because all such securities were antidilutive. For the year ended December 31, 2010, outstanding stock options to purchase an aggregate of 127,000 common shares were included in the weighted average common shares outstanding on a diluted basis and, therefore, are not included in the table below. Shares used in calculating basic and diluted net loss per common share exclude these potential common shares:

| | Years Ended December 31, | | |
|---|---|---|---|
| | 2011 | 2010 | 2009 |
| | (in thousands) | | |
| Antidilutive options to purchase common stock | 5,414 | 4,066 | 3,612 |
| Antidilutive warrants to purchase common stock | 4,559 | 848 | 1,691 |
| | 9,973 | 4,914 | 5,303 |

***Segment Reporting***

Management has determined that the Company operates in one business segment. All revenues for the years ended December 31, 2011, 2010 and 2009 were generated in the United States.

***Recently Issued Accounting Standards***

In June 2011, the Financial Accounting Standards Board (“FASB”) issued authoritative guidance which amends existing guidance related to the presentation of comprehensive income. This guidance (1) eliminates the option to present the components of other comprehensive income as part of the statement of changes in stockholders’ equity; (2) requires the consecutive presentation of the statement of net income and other comprehensive income; and (3) requires an entity to present reclassification adjustments on the face of the financial statements from other comprehensive income to net income. This guidance does not change the items that must be reported in other comprehensive income, when an item of other comprehensive income must be reclassified to net income, or affect how earnings per share is calculated or presented. In December 2011, the FASB deferred the requirement to present on the face of the financial statements the effects of reclassifications out of accumulated other comprehensive income on the components of net income and other comprehensive income for all periods presented. During the deferral, entities should continue to report reclassifications out of accumulated other comprehensive income consistent with previous presentation requirements guidance. This guidance is effective for interim reporting periods and fiscal years beginning after December 15, 2011 and will be applied on a retrospective basis for all periods presented. As this guidance relates to presentation only, the adoption of this guidance will not impact the Company’s financial position or results of operations.

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

**3. Investment Securities**

Investment securities, available-for-sale, consisted of the following:

| | December 31, 2011 | | | |
|---|---|---|---|---|
| | Amortized Cost | Unrealized Gains | Unrealized (Losses) | Estimated Fair Value |
| | (in thousands) | | | |
| U.S. Treasury notes | $ 1,516 | $ — | $ — | $ 1,516 |
| Government sponsored enterprise securities | 9,827 | 2 | (1) | 9,828 |
| Corporate debt securities | 12,812 | 3 | — | 12,815 |
| | $ 24,155 | $ 5 | $ (1) | $ 24,159 |

| | December 31, 2010 | | | |
|---|---|---|---|---|
| | Amortized Cost | Unrealized Gains | Unrealized (Losses) | Estimated Fair Value |
| | (in thousands) | | | |
| U.S. Treasury notes | $ 4,291 | $ — | $ — | $ 4,291 |
| Government sponsored enterprise securities | 23,432 | 2 | (6) | 23,428 |
| Corporate debt securities | 2,519 | — | — | 2,519 |
| | $ 30,242 | $ 2 | $ (6) | $ 30,238 |

**4. Fair Value Measurements**

As of December 31, 2011, the Company held $30.7 million of cash equivalents and available-for-sale investment securities consisting of a money market fund, U.S. Treasury notes, and high quality, marketable debt instruments of corporations, financial institutions and government sponsored enterprises. The Company has adopted an investment policy and established guidelines relating to credit quality, diversification and maturities of its 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 and/or Standard & Poor's.

The Company's cash equivalents and available-for-sale investment securities are classified within the fair value hierarchy as defined by authoritative guidance. The Company's investment securities are classified as follows:

*Level 1.* Quoted prices in active markets for identical assets or liabilities that the Company has the ability to access at the measurement date.

*Level 2.* Inputs other than quoted prices in active markets that are observable for the asset or liability, either directly or indirectly such as recent trades for the securities or similar securities, interest rates on similar securities, or yield curves or benchmark interest rates observable at commonly quoted intervals.

*Level 3.* Inputs that are unobservable for the asset or liability.

The Company's investment securities classified as Level 1 are valued using quoted market prices and the Company's investment securities classified as Level 2 are valued using other observable inputs such as recent trades for the securities or similar securities, interest rates on similar securities, or yield curves or benchmark interest rates observable at commonly quoted intervals. The Company does not hold any securities classified as Level 3, which are securities valued using unobservable inputs. The Company has not transferred any investment securities between the classifications. No other-than-temporary impairments were identified for the investment securities held by the Company as of December 31, 2011.

The fair value measurements of the Company's cash equivalents and available-for-sale investment securities are identified in the following tables:

| | December 31, 2011 | Fair Value Measurements at Reporting Date using: Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|---|---|---|---|---|
| | | (in thousands) | | |
| Money market fund | $ 6,570 | $ 6,570 | $ — | $ — |
| U.S. Treasury notes | 1,516 | 1,516 | — | — |
| Government sponsored enterprise securities | 9,828 | — | 9,828 | — |
| Corporate debt securities | 12,815 | — | 12,815 | — |
| | $ 30,729 | $ 8,086 | $ 22,643 | $ — |

| | December 31, 2010 | Fair Value Measurements at Reporting Date using: Quoted Prices in Active Markets for Identical Assets (Level 1) | Significant Other Observable Inputs (Level 2) | Significant Unobservable Inputs (Level 3) |
|---|---|---|---|---|
| | | (in thousands) | | |
| Money market fund | $ 6,403 | $ 6,403 | $ — | $ — |
| U.S. Treasury notes | 4,291 | 4,291 | — | — |
| Government sponsored enterprise securities | 23,428 | — | 23,428 | — |
| Corporate debt securities | 2,519 | — | 2,519 | — |
| | $ 36,641 | $ 10,694 | $ 25,947 | $ — |

## 5. Balance Sheet Components

Property and equipment, net, consisted of the following:

| | Estimated Useful Lives (Years) | December 31, 2011 | December 31, 2010 |
|---|---|---|---|
| | | (in thousands) | |
| Machinery and equipment | 5–7 | $ 4,089 | $ 5,480 |
| Computers and software | 3 | 982 | 1,162 |
| Furniture and fixtures | 3–10 | 159 | 256 |
| Leasehold improvements | 3–10 | 1,057 | 1,148 |
| | | 6,287 | 8,046 |
| Accumulated depreciation and amortization | | (6,136) | (7,620) |
| | | $ 151 | $ 426 |

Depreciation and amortization of property and equipment was $285,000, $607,000, and $1.1 million for the years ended December 31, 2011, 2010, and 2009, respectively. During 2011, the Company ceased operations at its Swedish research facility and, accordingly, the Company removed $1.7 million of cost and related accumulated depreciation for fully depreciated property and equipment located at this site.

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

Accrued expenses consisted of the following:

| | December 31, | |
|---|---|---|
| | 2011 | 2010 |
| | (in thousands) | |
| Accrued clinical and research services | $2,492 | $2,339 |
| Accrued compensation and benefits | 679 | 537 |
| Other | 333 | 343 |
| | $3,504 | $3,219 |

**6. Collaborative Research and Licensing Agreements**

The Company is currently a party to three separate collaboration agreements with Allergan. Pursuant to the March 2003 collaboration agreement, the Company had received an aggregate of $18.5 million in payments as of December 31, 2011, consisting of an upfront payment, research funding and related fees. The Company also is eligible to receive up to an aggregate of approximately $13.5 million in license fees and development and regulatory milestone payments per product under this agreement. The 2003 collaboration originally provided for a three-year research term, which has been extended by the parties through March 2013. The Company's two other collaboration agreements with Allergan involve the development of product candidates in the areas of glaucoma and chronic pain. Under the glaucoma collaboration, the Company had received an aggregate of $9.5 million in payments as of December 31, 2011, and is eligible to receive up to an aggregate of $15.0 million in additional payments upon the achievement of development and regulatory milestones. Under the chronic pain collaboration, the Company had received an aggregate of $10.5 million in payments as of December 31, 2011, and is eligible to receive up to an aggregate of $10.0 million in additional payments upon the achievement of development and regulatory milestones. The Company is eligible to receive royalties on future product sales worldwide, if any, under each of the three collaboration agreements with Allergan. The Company recognized approximately $1.1 million in revenue related to the Allergan collaboration agreements during each of the years ended December 31, 2011, 2010, and 2009.

In March 2009, the Company entered into a collaboration agreement with Meiji Seika Pharma. Under the agreement, the Company is eligible to receive up to $25 million in aggregate payments, consisting of $3 million in license fees and up to $22 million in payments upon achievement of development and regulatory milestones in the licensed Asian territory. In addition, the Company is eligible to receive royalties on future product sales, if any, in the Asian territory. Meiji Seika Pharma also is responsible for the first $15 million of designated development expenses, of which approximately $2.8 million had been incurred through December 31, 2011. The companies will share remaining expenses through clinical proof-of-concept, subject to possible adjustment in the event the Company further licenses the program outside of the licensed Asian territory. Meiji Seika Pharma is responsible for all costs associated with the development, manufacturing and commercialization of the product candidate in the Asian territory. Meiji Seika Pharma is eligible to receive payments reflecting a portion of the revenue from the Company's product sales outside of the Asian territory, if any, and, in the event the Company licenses the program outside the Asian territory, a portion of the Company's revenues from such licenses. Payments received from Meiji Seika Pharma for license fees and the reimbursement of specified development costs have been deferred and are being recognized as revenues using a contingency-adjusted performance model over the estimated period of the Company's performance. The Company recognized revenues relating to this collaboration of $505,000, $472,000, and $161,000 during the years ended December 31, 2011, 2010, and 2009, respectively. At December 31, 2011, $3.0 million of revenue was deferred under this agreement, of which $414,000 was included in current liabilities and $2.6 million was included in long-term liabilities. At December 31, 2010, $3.0 million of revenue was deferred under this agreement, of which $362,000 was included in current liabilities and $2.6 million was included in long-term liabilities.

In May 2009, the Company entered into a collaboration agreement with Biovail, pursuant to which the Company received a non-refundable $30 million upfront payment. Under this collaboration, the Company also was eligible to receive potential development, regulatory and sales milestones as well as royalties on future net sales of pimavanserin. In October 2010, the Company and Biovail entered into an agreement pursuant to which the Company reacquired all rights to pimavanserin and the parties concluded their collaboration. As a result, the Company recorded all remaining revenues related to its collaboration with Biovail, which totaled $34.7 million during the fourth quarter of 2010. The Company recognized aggregate revenues relating to the Biovail collaboration of $39.5 million and $4.6 million during the years ended December 31, 2010 and 2009, respectively. The Company has no future obligations to Biovail.

**7. Stockholders' Equity**

***Private Equity Financing***

In January 2011, the Company raised net proceeds of $13.9 million through the sale of 12,565,446 units at a price of $1.19375 per unit to a group of institutional investors in a private equity financing. Each unit consisted of one share of the Company's common stock and a warrant to purchase 0.35 shares of common stock. The warrants, exercisable for an aggregate of 4,397,904 shares of common stock, have an exercise price of $1.38 per share and will expire on January 11, 2018. In accordance with authoritative accounting guidance, the warrants' value of $3.3 million was determined on the date of grant using the Black-Scholes model with the following assumptions: risk free interest rate of 2.8 percent, volatility of 99.0 percent, a 7.0 year term and no dividend yield. These warrants were recorded as a component of stockholders' equity with an equal offsetting amount to stockholders' equity because the value of the warrants was considered a financing cost. At December 31, 2011, all of the warrants remained outstanding. Pursuant to the terms of the private financing, the Company has an effective resale registration statement on file with the SEC covering the shares of common stock sold and the shares of common stock issuable upon the exercise of the warrants.

***Other Financing Transactions***

During 2010 and 2009, the Company raised an aggregate of $1.9 million through the issuance of shares of its common stock pursuant to a Committed Equity Financing Facility ("CEFF"). Pursuant to its terms, the CEFF expired in August 2011. In connection with the CEFF, the Company issued a warrant to purchase up to 350,000 shares of common stock at an exercise price of $3.915 per share. The warrant is exercisable through February 2014, subject to certain exceptions. The warrant's value of $576,000 was determined on the date of grant using the Black-Scholes model with the following assumptions: risk free interest rate of 3.23 percent, volatility of 74.33 percent, a 5.5 year term and no dividend yield. This warrant was recorded as a component of stockholders' equity with an equal offsetting amount to stockholders' equity because the value of the warrant was considered a financing cost. As of December 31, 2011, 220,000 shares remain eligible for issuance under the warrant.

The Company also had warrants outstanding at December 31, 2011 to purchase an aggregate of 74,073 shares of its common stock that were issued in connection with a secured promissory note in 2002. These warrants have an exercise price of $8.10 per share and will expire in May 2012.

***Stock Option Plans***

The Company's 2010 Equity Incentive Plan (the "2010 Plan") became effective upon approval of the stockholders in June 2010. The 2010 Plan permits the grant of options to directors, officers, other employees, and consultants. In addition, the 2010 Plan permits the grant of stock bonuses, rights to purchase restricted stock, and

other stock awards. The exercise price of options granted under the 2010 Plan cannot be less than 100 percent of the fair market value of the common stock on the date of grant and the maximum term of any option is ten years. Options granted under the 2010 Plan generally vest over a four-year period. All shares that remained eligible for grant under the Company's 2004 Equity Incentive Plan (the "2004 Plan") at the time of approval of the 2010 Plan were transferred to the 2010 Plan. The 2010 Plan share reserve also has been, and may be, increased by the number of shares that otherwise would have reverted to the 2004 Plan reserve after June 2010. At December 31, 2011, there were 8,314,234 shares of common stock authorized for issuance and 2,507,461 shares of common stock available for new grants under the 2010 Plan.

The 2004 Plan became effective upon the closing of the Company's initial public offering in June 2004. The 2004 Plan provided for the grant of options to directors, officers, other employees, and consultants. The exercise price of options granted under the 2004 Plan was at 100 percent of the fair market value of the common stock on the date of grant and the maximum term of any option was ten years. Options granted under the 2004 Plan generally vested over a four-year period.

The Company's 1997 stock option plan (the "1997 Plan") provided for the grant of incentive stock options and nonqualified stock options to employees, officers, directors, consultants and advisors of the Company prior to the Company's initial public offering. The exercise price of each option grant was set at the fair market value for the Company's common stock as determined by the Company's Board of Directors and each option's maximum term was ten years. Options granted under the 1997 Plan generally vested over a four-year period.

Stock option transactions under the 2010 Plan, 2004 Plan and 1997 Plan during the years ended December 31, 2011, 2010, and 2009 are presented below:

| | Number of Shares | Weighted-Average Exercise Prices | Weighted Average Remaining Contractual Term |
|---|---|---|---|
| **Outstanding at December 31, 2008** | 3,553,634 | $ 6.37 | |
| Granted | 537,086 | $ 1.47 | |
| Exercised | (62,189) | $ 1.20 | |
| Canceled/forfeited | (773,085) | $ 4.58 | |
| **Outstanding at December 31, 2009** | 3,255,446 | $ 6.09 | |
| Granted | 1,760,382 | $ 1.44 | |
| Exercised | (10,820) | $ 1.01 | |
| Canceled/forfeited | (689,910) | $ 6.70 | |
| **Outstanding at December 31, 2010** | 4,315,098 | $ 4.11 | |
| Granted | 1,614,855 | $ 1.61 | |
| Exercised | (10,434) | $ 1.22 | |
| Canceled/forfeited | (129,742) | $ 5.38 | |
| **Outstanding at December 31, 2011** | 5,789,777 | $ 3.39 | 7.0 |
| Vested and expected to vest at December 31, 2011 | 5,522,655 | $ 3.47 | 6.9 |
| Exercisable at December 31, 2011 | 3,472,428 | $ 4.57 | 5.7 |

At December 31, 2011, 2010, and 2009, there were 3,472,428, 2,446,730, and 2,311,808 options exercisable, respectively.

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The aggregate intrinsic value of options outstanding and exercisable as of December 31, 2011 is calculated as the difference between the exercise price of the underlying options and the closing market price of the Company's common stock of $1.08 on that date. The aggregate intrinsic value of options outstanding and exercisable as of December 31, 2011 was $8,000. The aggregate intrinsic value of options exercised during the years ended December 31, 2011, 2010, and 2009 was approximately $6,000, $4,000, and $186,000, respectively, determined as of the date of exercise. The Company received $13,000 in cash from options exercised during the year ended December 31, 2011.

The weighted average fair value of options granted during the years ended December 31, 2011, 2010, and 2009 was approximately $1.25, $1.13, and $1.07, respectively. As of December 31, 2011, total unrecognized compensation cost related to stock options and purchase rights was approximately $2.2 million, and the weighted average period over which this cost is expected to be recognized is 2.4 years.

The following table summarizes information about stock options outstanding at December 31, 2011:

| | Options Outstanding | | | Options Exercisable | |
|---|---|---|---|---|---|
| Range of Exercise Prices | Number of Shares | Weighted-Average Remaining Contractual Life | Weighted-Average Exercise Price | Number of Shares | Weighted-Average Exercise Price |
| $ 0.96–$ 1.32 | 985,254 | 6.6 | $1.20 | 769,482 | $1.19 |
| $ 1.33–$ 1.55 | 1,357,916 | 7.7 | $1.49 | 650,303 | $1.49 |
| $ 1.56–$ 1.64 | 1,155,000 | 9.2 | $1.62 | 11,875 | $1.64 |
| $ 1.65–$ 5.48 | 952,060 | 7.3 | $2.08 | 711,997 | $2.14 |
| $ 5.49–$ 9.14 | 973,373 | 4.4 | $7.83 | 962,627 | $7.83 |
| $ 9.15–$15.43 | 366,174 | 4.1 | $13.44 | 366,144 | $13.44 |
| | 5,789,777 | | $3.39 | 3,472,428 | $4.57 |

Stock-based awards issued to non-employees other than directors are accounted for using a fair value method and are re-measured to fair value at each period end until the earlier of the date that performance by the non-employee is complete or a performance commitment has been obtained. The fair value of each award is estimated using the Black-Scholes model. The stock compensation expense related to the grant of stock options to non-employees was not significant for each of the years ended December 31, 2011, 2010, and 2009.

***Employee Stock Purchase Plan***

The Company's 2004 Employee Stock Purchase Plan (the "Purchase Plan") became effective upon the closing of the Company's initial public offering in June 2004. The Purchase Plan includes an "evergreen" provision providing that an additional number of shares may be added to the shares authorized for issuance on the date of each annual meeting of stockholders for a period of ten years, which began with the meeting in 2005. A total of 1,075,000 shares of common stock have been reserved for issuance under the Purchase Plan. Eligible employees who elect to participate in an offering under the Purchase Plan may have up to 15 percent of their earnings withheld, subject to certain limitations, to purchase shares of common stock pursuant to the Purchase Plan. The price of common stock purchased under the Purchase Plan is equal to 85 percent of the lower of the fair market value of the common stock at the commencement date of each offering period or the relevant purchase date. During the years ended December 31, 2011, 2010, and 2009, 189,879, 81,032, and 176,785 shares of common stock were issued at average prices of $0.57, $0.81, and $1.09 under the Purchase Plan, respectively. The weighted average fair value of purchase rights granted during the years ended December 31, 2011, 2010, and

2009 was $0.67, $0.42, and $1.09, respectively. During the years ended December 31, 2011, 2010, and 2009, the Company recorded cash received from the exercise of purchase rights of $109,000, $65,000, and $193,000, respectively.

***Common Stock Reserved For Future Issuance***

At December 31, 2011, 5,789,777 and 4,691,977 shares of common stock were reserved for issuance upon the exercise of stock options and warrants, respectively.

**8. 401(k) Plan**

Effective January 1997, the Company established a deferred compensation plan (the "401(k) Plan") pursuant to Section 401(k) of the Internal Revenue Code of 1986, as amended (the "Code"), whereby substantially all employees are eligible to contribute up to 60 percent of their pretax earnings, not to exceed amounts allowed under the Code. The Company makes contributions to the 401(k) Plan equal to 100 percent of each employee's pretax contributions up to 5 percent of his or her eligible compensation. The Company's total contributions to the 401(k) Plan were $156,000, $133,000, and $271,000 for the years ended December 31, 2011, 2010 and 2009, respectively.

**9. Income Taxes**

At December 31, 2011, the Company had both federal and state net operating loss ("NOL") carryforwards of approximately $306.0 million and $245.2 million, respectively. Federal and state NOL carryforwards of $1.6 million and $502,000, respectively, will expire in 2012 unless utilized. The remaining federal and state NOL carryforwards will begin to expire in 2018 and 2013, respectively. The Company has $7.8 million of federal research and development ("R&D") credit carryforwards of which $21,000 will expire in 2012 unless utilized and the remaining federal R&D credit carryforwards will begin to expire in 2018. The Company has $3.6 million of state R&D credit carryforwards that have no expiration date. The Company also has foreign NOL carryforwards of approximately $3.9 million that have no expiration date.

Utilization of the NOL and R&D credit carryforwards may be subject to a substantial annual limitation due to ownership change limitations that may have occurred or that could occur in the future, as required by Section 382 of the Internal Revenue Code of 1986, as amended (the "Code"), as well as similar state and foreign provisions. These ownership changes may limit the amount of NOL and R&D credit carryforwards that can be utilized annually to offset future taxable income and tax, respectively. In general, an "ownership change" as defined by Section 382 of the Code results from a transaction or series of transactions over a three-year period resulting in an ownership change of more than 50 percentage points of the outstanding stock of a company by certain stockholders or public groups. Since the Company's formation, the Company has raised capital through the issuance of capital stock on several occasions (both before and after its initial public offering) which, combined with the purchasing stockholders' subsequent disposition of those shares, may have resulted in such an ownership change, or could result in an ownership change in the future upon subsequent disposition.

The Company has not completed a study to assess whether an ownership change has occurred or whether there have been multiple ownership changes since the Company's formation due to the complexity and cost associated with such a study, and the fact that there may be additional such ownership changes in the future. If the Company has experienced an ownership change at any time since its formation, utilization of the NOL or R&D credit carryforwards would be subject to an annual limitation under Section 382 of the Code, which is determined by first multiplying the value of the Company's stock at the time of the ownership change by the

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

applicable long-term, tax-exempt rate, and then could be subject to additional adjustments, as required. Any limitation may result in expiration of a portion of the NOL or R&D credit carryforwards before utilization. Further, until a study is completed and any limitation known, no amounts are being considered as an uncertain tax position or disclosed as an unrecognized tax benefit under authoritative accounting guidance. Any carryforwards that will expire prior to utilization as a result of such limitations will be removed from deferred tax assets with a corresponding reduction of the valuation allowance with no net effect on income tax expense or the effective tax rate.

Approximately $2.6 million of the NOL carryforwards relate to excess tax deductions for stock compensation, the income tax benefit of which will be recorded as additional paid-in capital if and when realized.

The components of the deferred tax assets are as follows:

| | 2011 | 2010 |
|---|---|---|
| | (in thousands) | |
| NOL carryforwards | $ 118,285 | $ 108,805 |
| R&D credit carryforwards | 10,119 | 9,604 |
| Deferred revenue | 1,195 | 1,189 |
| Capitalized R&D | 5,128 | 6,250 |
| Stock-based compensation | 2,607 | 2,304 |
| Other | 1,003 | 1,370 |
| | 138,337 | 129,522 |
| Valuation allowance | (138,337) | (129,522) |
| | $ — | $ — |

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the deferred tax assets have been fully offset by a valuation allowance. The valuation allowance increased by $8.8 million in 2011 primarily due to an increase in deferred tax assets generated from net operating losses, fully offset by the valuation allowance.

A reconciliation of income taxes to the amount computed by applying the statutory federal income tax rate to the net income (loss) is summarized as follows:

| | 2011 | 2010 | 2009 |
|---|---|---|---|
| | (in thousands) | | |
| Amounts computed at statutory federal rate | $(7,734) | $ 5,144 | $(15,238) |
| Permanent differences, including stock-based compensation | 306 | 274 | 333 |
| Federal R&D credits | (514) | (350) | (1,237) |
| Change in valuation allowance | 8,820 | (6,080) | 18,809 |
| State taxes | (1,288) | 972 | (2,499) |
| Foreign taxes | 59 | 108 | (99) |
| Other | 368 | (56) | 220 |
| | $ 17 | $ 12 | $ 289 |

The net income tax expense (benefit) for the years ended December 31, 2011, 2010 and 2009 are recorded in the Company's statement of operations in general and administrative expenses.

**ACADIA PHARMACEUTICALS INC.**

**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)**

The tax years 1997-2011 remain open to examination by the major taxing jurisdictions to which the Company is subject.

**10. Commitments and Contingencies**

The Company leases facilities and certain equipment under noncancelable operating leases that expire at various dates through December 2012. Under the terms of the facilities leases, the Company is required to pay its proportionate share of property taxes, insurance and normal maintenance costs. The Company's facilities leases provide for the extension of their lease terms.

Future noncancelable minimum payment obligations under operating lease arrangements are as follows at December 31, 2011:

| Year Ending | (in thousands) |
|---|---|
| 2012 | $ 755 |
| 2013 | — |
| 2014 | — |
| 2015 | — |
| Thereafter | — |
| | $ 755 |

Rent expense was $2.1 million, $2.0 million, and $2.5 million for the years ended December 31, 2011, 2010, and 2009, respectively. Facility operating leases contain escalation clauses. The Company recognizes rent expense on a straight line basis over the lease term. The difference between rent expense recorded and amounts paid under lease agreements is recorded as deferred rent and included in accrued expenses and, if applicable, other long-term liabilities in the accompanying consolidated balance sheets.

In April 2011, the Company entered into a termination agreement related to the lease for its Swedish research facility and ceased operations at this site. The lease was entered into in June 2005 and had a 10-year term. Pursuant to this agreement, the Company made a one-time payment of $690,000 and issued 782,339 shares of its common stock to the landlord in settlement of all lease-related obligations. General and administrative expenses for the year ended December 31, 2011 included a net charge of $1.1 million, which amount consisted of $1.7 million in lease termination charges, offset by a $539,000 reduction in the Company's cumulative translation adjustment balance related to the liquidation of substantially all assets of its Swedish subsidiary.

The Company has entered into agreements with contract research organizations and other external service providers for services in connection with the development of its product candidates. The Company was contractually obligated for up to approximately $6.3 million of future services under these agreements as of December 31, 2011. The nature of the work being conducted under the Company's agreements with contract research organizations is such that, in most cases, the services may be stopped with short notice. In such event, the Company would not be liable for the full amount of the contract. The Company's actual contractual obligations may vary depending upon several factors, including the progress and results of the underlying studies.

In November 2006, the Company entered into an agreement with the Ipsen Group pursuant to which it licensed certain intellectual property rights that complement its patent portfolio. If certain conditions are met, the Company would be required to make future payments, including milestones, sublicensing fees and royalties. The amount of potential future milestones payments is $10.5 million in the aggregate, which amount would be offset by any sublicensing fees the Company may pay under the agreement. Because these milestone payments would

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

only be payable upon the achievement of specified regulatory events and it is uncertain when, or if, such events will occur, the Company cannot forecast with any degree of certainty when, or if, it will be required to make payments under the agreement.

**11. Selected Quarterly Financial Data (Unaudited)**

| 2011 | March 31, | June 30, | September 30, | December 31, |
|---|---|---|---|---|
| | (in thousands, except per share data) | | | |
| Revenues | $ 435 | $ 460 | $ 584 | $ 588 |
| Net loss | $ (5,833) | $(6,556) | $ (5,076) | $ (5,300) |
| Net loss per common share, basic and diluted | $ (0.12) | $ (0.12) | $ (0.10) | $ (0.10) |

| 2010 | March 31, | June 30, | September 30, | December 31, (1) |
|---|---|---|---|---|
| | (in thousands, except per share data) | | | |
| Revenues | $ 2,133 | $ 2,297 | $ 2,301 | $ 35,404 |
| Net income (loss) | $ (5,487) | $(4,288) | $ (4,227) | $ 29,141 |
| Net income (loss) per common share, basic | $ (0.14) | $ (0.11) | $ (0.11) | $ 0.74 |
| Net income (loss) per common share, diluted | $ (0.14) | $ (0.11) | $ (0.11) | $ 0.74 |

(1) As described in Note 6, during the fourth quarter of 2010, the Company ended its collaboration agreement with Biovail. In connection with concluding this collaboration, the Company recognized $34.7 million in revenues during the fourth quarter of 2010, which resulted in the Company reporting net income for the fourth quarter and year ended December 31, 2010.

Revenues and net income (loss) are rounded to thousands each quarter. Therefore, the sum of the quarterly amounts may not equal the annual amounts reported. Net income (loss) per common share, basic and diluted, are computed independently for each quarter and the full year based upon respective average shares outstanding. Therefore, the sum of the quarterly net income (loss) per common share amounts may not equal the annual amounts reported.

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## INDEX TO EXHIBITS

| Exhibit Number | Description |
|---|---|
| 3.1 | Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.1 to the Registrant's Quarterly Report on Form 10-Q, filed August 10, 2011). |
| 3.2 | Amended and Restated Bylaws (incorporated by reference to Exhibit 3.1 to the Registrant's Current Report on Form 8-K, filed December 17, 2009). |
| 4.1 | Form of common stock certificate of the Registrant (incorporated by reference to Exhibit 4.1 to Registration Statement No. 333-52492). |
| 4.2 | Form of Warrant to Purchase Preferred Stock issued to GATX Ventures on May 31, 2002 (incorporated by reference to Exhibit 4.3 to Registration Statement No. 333-113137). |
| 4.3 | Form of Warrant to Purchase Common Stock issued to Kingsbridge Capital Limited on August 4, 2008 (incorporated by reference to Exhibit 4.4 to the Registrant's Quarterly Report on Form 10-Q, filed August 7, 2008). |
| 4.4 | Form of Warrant to Purchase Common Stock issued to purchasers in a private placement on January12, 2011 (incorporated by reference to Exhibit 4.5 to Registration Statement No. 333-171722). |
| 10.1[a] | Form of Indemnity Agreement for directors and officers (incorporated by reference to Exhibit 10.1 to Registration Statement No. 333-113137). |
| 10.2[a] | 1997 Stock Option Plan and forms of agreement thereunder (incorporated by reference to Exhibit 10.2 to Registration Statement No. 333-113137). |
| 10.3[a] | 2004 Equity Incentive Plan and forms of agreement thereunder (incorporated by reference to Exhibit 10.3 to Registration Statement No. 333-113137). |
| 10.4[a] | 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, filed August 9, 2010). |
| 10.5[a] | Forms of agreement under the 2010 Equity Incentive Plan (incorporated by reference to Exhibit 10.6 to the Registrant's Annual Report on Form 10-K, filed March 10, 2011). |
| 10.6[a] | 2004 Employee Stock Purchase Plan and initial offering thereunder (incorporated by reference to Exhibit 10.4 to Registration Statement No. 333-113137). |
| 10.7[a] | Volume Submitter Defined Contribution Plan ("401(k) Plan") (incorporated by reference to Exhibit 10.6 to the Registrant's Annual Report on Form 10-K, filed March 9, 2010). |
| 10.8[a] | Adoption Agreement for 401(k) Plan (incorporated by reference to Exhibit 10.7 to the Registrant's Annual Report on Form 10-K, filed March 9, 2010). |
| 10.9[a] | Employment Letter Agreement, dated December 21, 1998, between the Registrant and Uli Hacksell, Ph.D. (incorporated by reference to Exhibit 10.7 to Registration Statement No. 333-52492). |
| 10.10[a] | Employment Letter Agreement, dated March 4, 1998, between the Registrant and Thomas H. Aasen (incorporated by reference to Exhibit 10.9 to Registration Statement No. 333-52492). |
| 10.11[a] | Employment Offer Letter, dated May 26, 2006, between the Registrant and Roger Mills (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K, filed April 2, 2007). |

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| Exhibit Number | Description |
|---|---|
| 10.12[a] | Employment Agreement between the Registrant and Glenn F. Baity (incorporated by reference to Exhibit 10.13 to the Registrant's Annual Report on Form 10-K, filed March 10, 2011). |
| 10.13[a] | Description of Outside Director Compensation Program (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, filed November 5, 2007). |
| 10.14[b] | Collaborative Research, Development and License Agreement, dated September 24, 1997, by and among the Registrant, Allergan, Inc. and Vision Pharmaceuticals L.P. (now Allergan Sales, Inc.) (incorporated by reference to Exhibit 10.12 to Registration Statement No. 333-113137). |
| 10.15[b] | Amendment to Collaborative Research, Development and License Agreement, dated March 27, 2003, by and among the Registrant, Allergan Sales LLC (as successor in interest of Vision Pharmaceuticals L.P.) and Allergan, Inc. (incorporated by reference to Exhibit 10.13 to Registration Statement No. 333-113137). |
| 10.16[b] | Collaborative Research, Development and License Agreement, dated July 26, 1999, by and among the Registrant and Allergan, Inc., Allergan Pharmaceuticals (Ireland) Limited, Inc. and Allergan Sales, Inc. (incorporated by reference to Exhibit 10.14 to Registration Statement No. 333-113137). |
| 10.17[b] | Collaborative Research, Development and License Agreement, dated March 27, 2003, by and among the Registrant, Allergan, Inc. and Allergan Sales, Inc. (incorporated by reference to Exhibit 10.15 to Registration Statement No. 333-113137). |
| 10.18[b] | Second Amendment to Collaborative Research, Development and License Agreement, dated February 28, 2006, by and among the Registrant, Allergan Sales LLC (as successor in interest of Vision Pharmaceuticals L.P.) and Allergan, Inc. (incorporated by reference to Exhibit 10.25 to the Registrant's Annual Report on Form 10-K, filed March 15, 2006). |
| 10.19[b] | Third Amendment to Collaborative Research, Development and License Agreement, dated March 3, 2008, by and among the Registrant, Allergan Sales LLC (as successor in interest of Vision Pharmaceuticals L.P.) and Allergan, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, filed May 5, 2008). |
| 10.20[b] | Fourth Amendment to Collaborative Research, Development and License Agreement, dated April 22, 2009, by and among the Registrant, Allergan Sales LLC (as successor in interest of Vision Pharmaceuticals L.P.) and Allergan, Inc. (incorporated by reference to Exhibit 10.2 to the Registrant's Quarterly Report on Form 10-Q, filed August 5, 2009). |
| 10.21[b] | Fifth Amendment to Collaborative Research, Development and License Agreement, dated March 23, 2010, by and among the Registrant, Allergan Sales LLC (as successor in interest of Vision Pharmaceuticals L.P.) and Allergan, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, filed May 10, 2010). |
| 10.22[b] | Sixth Amendment to Collaborative Research, Development and License Agreement, dated March 28, 2011, by and among the Registrant, Allergan Sales LLC (as successor in interest of Vision Pharmaceuticals L.P.) and Allergan, Inc. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, filed May 9, 2011). |
| 10.23[b] | Seventh Amendment to Collaborative Research, Development and License Agreement, dated February 29, 2012, by and among the Registrant, Allergan Sales LLC (as successor in interest of Vision Pharmaceuticals L.P.) and Allergan, Inc. |
| 10.24[b] | Collaboration and License Agreement, dated April 1, 2009, by and among the Registrant and Meiji Seika Keisha, Ltd. (incorporated by reference to Exhibit 10.1 to the Registrant's Quarterly Report on Form 10-Q, filed May 11, 2009). |

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| Exhibit Number | Description |
|---|---|
| 10.25[b] | Securities Purchase Agreement, dated January 9, 2011, by and between the Registrant and the purchasers listed on Exhibit A thereto (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K, filed January 12, 2011). |
| 10.26 | Standard Industrial/Commercial Single-Tenant Lease-Net, dated August 15, 1997, between the Registrant and R.G. Harris Co. (incorporated by reference to Exhibit 10.18 to Registration Statement No. 333-52492). |
| 10.27 | Lease Amendment, dated November 1, 2005, between the Registrant and E.G. Sirrah, LLC (successor in interest to R.G. Harris Co.), to Standard Industrial/Commercial Single-Tenant Lease-Net, dated August 15, 1997, between the Registrant and R.G. Harris Co. (incorporated by reference to Exhibit 10.3 to the Registrant's Quarterly Report on Form 10-Q, filed November 14, 2005). |
| 10.28 | Lease Amendment, dated November 30, 2007, between the Registrant and E.G. Sirrah, LLC (successor in interest to R.G. Harris Co.), to Standard Industrial/Commercial Single-Tenant Lease-Net, dated August 15, 1997, between the Registrant and R.G. Harris Co. (incorporated by reference to Exhibit 10.21 to the Registrant's Annual Report on Form 10-K, filed March 5, 2008). |
| 10.29 | Lease Amendment, dated January 22, 2010, between the Registrant and E.G. Sirrah, LLC (successor in interest to R.G. Harris Co.), to Standard Industrial/Commercial Single-Tenant Lease-Net, dated August 15, 1997, between the Registrant and R.G. Harris Co. (incorporated by reference to Exhibit 10.25 to the Registrant's Annual Report on Form 10-K, filed March 9, 2010). |
| 10.30 | Assignment of Brann Intellectual Property Rights, dated January 29, 1997, by Mark R. Brann in favor of the Registrant (incorporated by reference to Exhibit 10.17 to Registration Statement No. 333-52492). |
| 10.31[a] | Description of Executive Officer Annual Incentive Cash Compensation Program (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K, filed March 7, 2008). |
| 10.32[b] | License Agreement, dated November 30, 2006, by and between the Registrant and Société de Conseils, de Recherches et d'Applications Scientifiques SAS, a French corporation member of the Ipsen Group (incorporated by reference to Exhibit 99.1 to the Registrant's Current Report on Form 8-K, filed December 4, 2006). |
| 21.1 | List of subsidiaries of the Registrant. |
| 23.1 | Consent of Independent Registered Public Accounting Firm. |
| 24.1 | Power of Attorney (see signature page hereto). |
| 31.1 | Certification of Uli Hacksell, Ph.D., Chief Executive Officer, pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 31.2 | Certification of Thomas H. Aasen, Chief Financial Officer, pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934, as adopted pursuant to Section 302 of the Sarbanes-Oxley Act of 2002. |
| 32.1 | Certification of Uli Hacksell, Ph.D., Chief Executive Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |
| 32.2 | Certification of Thomas H. Aasen, Chief Financial Officer, pursuant to 18 U.S.C. Section 1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. |

Table of Contents

| Exhibit Number | Description |
|---|---|
| 101 | The following financial statements from this Annual Report, formatted in XBRL: (i) Consolidated Balance Sheets, (ii) Consolidated Statements of Operations, (iii) Consolidated Statements of Cash Flows, (iv) Consolidated Statements of Stockholders' Equity and Comprehensive Income (Loss), and (v) Notes to Consolidated Financial Statements, tagged as blocks of text. |

[a] Indicates management contract or compensatory plan or arrangement.

[b] We have received confidential treatment of certain portions of this agreement, which have been omitted and filed separately with the SEC pursuant to Rule 406 under the Securities Act of 1933, as amended, or Rule 24b-2 of the Securities Exchange Act of 1934, as amended.

**Exhibit 10.23**

*****Text Omitted and Filed Separately with the Securities and Exchange Commission. Confidential Treatment Requested Under 17 C.F.R. Sections 200.80(b)(4) and 240.24b-2.**

# SEVENTH AMENDMENT TO COLLABORATIVE RESEARCH, DEVELOPMENT AND LICENSE AGREEMENTS

**THIS SEVENTH AMENDMENT TO COLLABORATIVE RESEARCH, DEVELOPMENT AND LICENSE AGREEMENTS** (the ***"Seventh Amendment"***) is entered into as of February 29, 2012 (the ***"Seventh Amendment Effective Date"***) by and between **ACADIA PHARMACEUTICALS INC.**, a Delaware corporation (***"ACADIA"***) with offices at 3911 Sorrento Valley Blvd., San Diego, CA 92121, and **ALLERGAN SALES, LLC**, a Delaware limited liability company (***"Allergan"***) with offices at 2525 Dupont Drive, Irvine, CA 92612, and **ALLERGAN, INC.,** a Delaware corporation, solely as guarantor of the performance under this Agreement by Allergan.

## RECITALS

**WHEREAS,** the parties previously entered into that certain Collaborative Research, Development and License Agreement, dated September 24, 1997 (as amended by the First Amendment, the Second Amendment and the Third Amendment described below, the ***"1997 Agreement"***), pursuant to which the parties conducted collaborative research regarding, among other things, receptor selective compounds with the goal of establishing drug discovery programs related to such receptor selective compounds;

**WHEREAS,** the parties previously entered into that certain Collaborative Research, Development and License Agreement, dated July 26, 1999 (the ***"1999 Agreement"***), pursuant to which the parties conducted collaborative research regarding […***…] muscarinic compounds for the treatment or prevention of ocular disease;

**WHEREAS**, the 1997 Agreement was first amended on March 27, 2003 (the ***"First Amendment"***) to continue the collaboration under the 1997 Agreement with respect to alpha adrenergic receptors and on the same date the parties entered into a new Collaborative Research, Development and License Agreement (the ***"2003 Agreement"***) regarding ACADIA's chemical-genomics assets;

**WHEREAS**, the 1997 Agreement and the 2003 Agreement were amended on February 28, 2006 (the ***"Second Amendment"***) to continue the collaboration under the 1997 Agreement and the 2003 Agreement with respect to alpha adrenergic receptors and to continue to collaborate on other receptor selective compounds included in ACADIA's chemical-genomics assets;

**WHEREAS**, the 1997 Agreement and the 2003 Agreement were amended on March 3, 2008 (the ***"Third Amendment"***) to continue the collaboration under the 1997 Agreement and the 2003 Agreement with respect to alpha adrenergic receptors and to continue to collaborate on muscarinic compounds for eye-care applications;

**WHEREAS**, the 1997 Agreement and the 2003 Agreement were amended on April 22, 2009 (the ***"Fourth Amendment"***) to finalize the research under the 1997 Agreement with respect to alpha adrenergic receptors, to continue to collaborate on

muscarinic compounds for eye-care applications under the 2003 Agreement, and to expand their collaboration on […***…] muscarinic selective compounds for eye-care indications;

**WHEREAS**, the 1997 Agreement and the 2003 Agreement were amended on March 23, 2010 (the ***"Fifth Amendment"***) to continue to collaborate on […***…] muscarinic selective compounds for eye-care indications and to provide for collaboration on muscarinic selective compounds for eye care indications or on other selective compounds included in ACADIA's chemical-genomics assets pursuant to the 2003 Agreement;

**WHEREAS**, the 1997 Agreement and the 2003 Agreement were amended on March 28, 2011 (the ***"Sixth Amendment"***) to continue to collaborate on […***…] muscarinic selective compounds for eye-care indications and to provide for collaboration on muscarinic selective compounds for eye care indications or on other selective compounds included in ACADIA's chemical-genomics assets pursuant to the 2003 Agreement;

**WHEREAS,** the parties wish to continue their research collaboration on […***…] muscarinic selective compounds for eye-care indications on the terms set forth below; and

**WHEREAS**, the parties may wish to collaborate on muscarinic selective compounds for eye care indications or on other selective compounds included in ACADIA's chemical-genomics assets pursuant to the 2003 Agreement and on the terms set forth below.

**NOW THEREFORE,** in consideration of the foregoing and the covenants and premises contained in this Seventh Amendment, the parties hereby agree as follows:

**1. […***…] Expansion Program.** The parties have agreed on a pool of ten (10) compounds from ACADIA's library of […***…] muscarinic selective compounds from which Allergan may chose a backup compound (the **"**[…***…] ***Expansion Program"***). The current ten (10) compounds are listed on Exhibit A hereto (the ***"Back-up Pool"***). The Research Term of the 2003 Agreement with respect to the […***…] Expansion Program shall be extended to cover the period beginning March 28, 2012 and ending March 27, 2013 (the ***"Additional Extension Period"***). During the Additional Extension Period, ACADIA will provide information on compounds included in the Back-up Pool for continued evaluation by the parties. Further, if directed by the JRC (as defined below), ACADIA shall engage in the synthesis and evaluation of additional […***…] muscarinic selective compounds. Allergan may remove and add compounds to the Back-up Pool from (a) ACADIA's existing […***…] muscarinic selective compounds (i.e., those identified prior to the Additional Extension Period), upon mutual agreement of the parties, or (b) from new compounds synthesized at the direction of the JRC, so long as the total number of compounds in the Back-up Pool does not exceed ten (10) at any given time. Allergan may select one compound from the Back-up Pool to be treated as a Collaboration Lead Compound (as defined in the 1999 Agreement and in addition to the compound based on […***…], which has been advanced by the parties pursuant to the 1999 Agreement) pursuant to the terms of the 1999 Agreement. Allergan shall use reasonable efforts to select a compound from the Back-up Pool to be treated as a second Collaboration Lead Compound prior to the end of the Additional Extension Period. Allergan's right to so select a compound shall expire at the

end of the Additional Extension Period. Upon selecting a compound from the Back-up Pool to be treated as a Collaboration Lead Compound, Allergan shall be entitled to select another compound to add to the Back-up Pool from (a) ACADIA's existing […***…] muscarinic selective compounds (i.e., those identified prior to the Additional Extension Period), upon mutual agreement of the parties, or (b) from compounds synthesized at the direction of the JRC during the Additional Extension Period, so that Allergan retains ten (10) compounds within the Back-up Pool through the end of the Additional Extension Period. If Allergan selects a Back-up Pool compound to be treated as a Collaboration Lead Compound during the Additional Extension Period, then until one year after the end of the Additional Extension Period, Allergan may exchange such Collaboration Lead Compound for a compound within the Back-up Pool, which will then be treated as a Collaboration Lead Compound. Other than any such exchange, the Back-up Pool will not change after the end of the Additional Extension Period. Allergan shall have no rights to the compounds remaining in the Back-up Pool, or those compounds synthesized at the direction of the JRC that are not in the Back-up Pool, on the one-year anniversary of the end of the Additional Extension Period.

**2. Additional Extension Program**. At the direction of the JRC, ACADIA has undertaken discovery efforts to identify new compounds that meet mutually acceptable selection criteria for muscarinic selective compounds for […***…]. These efforts have included and, during the Additional Extension period, will include mining of ACADIA's library of muscarinic compounds, re-screening where desired, in vitro pharmacology/ characterization, and supporting synthesis to enable selection of potential compounds by Allergan for in vivo pharmacology and potential development (the ***"Additional Extension Program"***). Any muscarinic selective compounds identified pursuant to the Additional Extension Program may be designated by Allergan as a Selected Target/Chemistry (as defined in the 2003 Agreement) in accordance with Section 5.1 of the 2003 Agreement; provided that the right to exercise the Option (as defined in the 2003 Agreement) for such Selected Target/Chemistry shall expire on March 27, 2013, notwithstanding the Option Period definition in Section 1.45 of the 2003 Agreement.

**3. FTE Funding**. Research funding during the Additional Extension Period shall be […***…]. During the Additional Extension Period, Allergan shall fund a minimum of […***…], and up to a maximum of […***…]. The Joint Research Committee (the ***"JRC"***) shall determine the work to be done under the […***…] Expansion Program, including the appropriate number of FTEs for such level of work. During the Additional Extension Period, Allergan, with the consent of the JRC, also may elect to pursue the Additional Extension Program. If Allergan elects to pursue the Additional Extension Program, the JRC shall determine the number of ACADIA FTEs required for such program. The allocation of FTEs between the Additional Extension Program, if any, and the […***…] Expansion Program shall be decided by the JRC, provided however in the event that the parties do not agree on such allocation, notwithstanding Section 15.2 of the 2003 Agreement, […***…].

**4. Research Coordinators.** Allergan and ACADIA shall each appoint an individual to act as the research coordinator for such party (each, a "***Research Manager***"). The Research Managers shall be the primary contact for the parties regarding the activities

contemplated by this Seventh Amendment and shall facilitate all such activities hereunder. The initial Research Manager for Allergan shall be Daniel Gil and the initial Research Manager for ACADIA shall be Ethan Burstein. Each party may replace its Research Manager with another individual at any time with prior written notice to the other party. Each Research Manager who is not otherwise a member of the JRC shall be permitted to attend meetings of the JRC.

**5. Patent Costs.** In the event that Allergan selects a Back-up Pool compound to be treated as a Collaboration Lead Compound pursuant to Section 1 above, then Allergan shall reimburse ACADIA for […***…] of all reasonable out of pocket legal expenses incurred by ACADIA that are associated with the filing and prosecuting of (i) all Collaboration Patents having one or more claims covering such compound, and (ii) any ACADIA Patents having one or more claims covering such compound. (Capitalized terms used in this paragraph that are not defined have the meaning given to such terms in the 1999 Agreement).

**6. Bankruptcy.** All rights and licenses granted under the 1997 Agreement, the 1999 Agreement, the 2003 Agreement, and any amendments to those agreements will be considered for purposes of Section 365(n) of 11 U.S.C. (the "***Bankruptcy Code***") licenses of rights to "intellectual property" as defined under Section 101(56) of the Bankruptcy Code. The parties agree that a licensee of such rights under those agreements will retain and may fully exercise all of its rights and elections under the Bankruptcy Code. In the event that a licensor seeks or is involuntarily placed under the protection of the Bankruptcy Code, and the trustee in bankruptcy rejects any of those agreements, the licensee hereby elects, pursuant to Section 365(n), to retain all rights granted to it under those agreements to the extent permitted by law.

**7. Full Force and Effect.** Except as it may specifically be amended by this Seventh Amendment, each of the 1997 Agreement, the 1999 Agreement, the 2003 Agreement, and any amendments to those agreements, shall remain in full force and effect. If there is any inconsistency or conflict between any provision in this Seventh Amendment and any of the foregoing agreements, as amended to date, the provision in this Seventh Amendment shall control.

**8. Miscellaneous.** This Seventh Amendment may be signed in counterparts, each of which shall be deemed an original, all of which taken together shall be deemed one instrument. This Seventh Amendment shall be governed by the laws of the State of California as such laws are applied to contracts entered into or to be performed entirely within such state.

*****Confidential Treatment Requested**

**IN WITNESS WHEREOF,** the parties hereto have duly executed this **SEVENTH AMENDMENT TO COLLABORATIVE RESEARCH, DEVELOPMENT AND LICENSE AGREEMENTS**.

**ACADIA PHARMACEUTICALS INC.**

By: /s/ THOMAS H. AASEN
Name: Thomas H. Aasen
Title: Executive Vice President, Chief Business Officer and Chief Financial Officer

**ALLERGAN SALES, LLC**, a Delaware limited liability company, a successor in interest of
**VISION PHARMACEUTICALS L.P.,**
A Texas limited partnership, dba Allergan,
by Allergan General, Inc.,

its general partner

By: /s/ SCOTT M. WHITCUP
Name: Scott M. Whitcup
Title: Executive Vice President, Chief Scientific Officer

**Guarantee of performance by:**

**ALLERGAN, INC.**

By: /s/ SCOTT M. WHITCUP
Name: Scott M. Whitcup
Title: Executive Vice President, Chief Scientific Officer

Exhibit A

List of Compounds Currently in Back-up Pool

[…***…]

*****Confidential Treatment Requested**

**EXHIBIT 21.1**

**List of Subsidiaries**

| NAME OF SUBSIDIARY | JURISDICTION OF INCORPORATION |
| --- | --- |
| Nordsviten AB (formerly ACADIA Pharmaceuticals AB) | Sweden |
| ACADIA Pharmaceuticals A/S | Denmark |

**EXHIBIT 23.1**

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-3 (Nos. 333-153347, 333-161059, 333-171722 and 333-178748) and the Registration Statements on Form S-8 (Nos. 333-115956, 333-128290, 333-137557, 333-146398, 333-153346, 333-161057, 333-168667 and 333-176212) of ACADIA Pharmaceuticals Inc. of our report dated March 6, 2012 relating to the financial statements and the effectiveness of internal control over financial reporting, which appears in this Form 10-K.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP
San Diego, California
March 6, 2012

**EXHIBIT 31.1**

**CERTIFICATION**
**Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934,**
**as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Uli Hacksell, Ph.D., certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2011 of ACADIA Pharmaceuticals Inc.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 6, 2012

/S/ ULI HACKSELL

**Uli Hacksell, Ph.D.**
**Chief Executive Officer**

**EXHIBIT 31.2**

**CERTIFICATION**
**Pursuant to Rule 13a-14(a) or Rule 15d-14(a) of the Securities Exchange Act of 1934,**
**as Adopted Pursuant to Section 302 of the Sarbanes-Oxley Act of 2002**

I, Thomas H. Aasen, certify that:

1. I have reviewed this annual report on Form 10-K for the year ended December 31, 2011 of ACADIA Pharmaceuticals Inc.

2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;

3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;

4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the registrant and have:

a) designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;

b) designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, 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;

c) evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

d) disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the registrant's internal control over financial reporting; and

5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):

a) all significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and

b) any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting.

Date: March 6, 2012

/S/ THOMAS H. AASEN

**Thomas H. Aasen**
**Executive Vice President, Chief Financial Officer**
**and Chief Business Officer**

**EXHIBIT 32.1**

**CERTIFICATION PURSUANT TO**
**18 U.S.C. SECTION 1350,**
**AS ADOPTED PURSUANT TO**
**SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of ACADIA Pharmaceuticals Inc. (the "Company") on Form 10-K for the period ended December 31, 2011, as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Uli Hacksell, Ph.D., Chief Executive Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge, that:

(1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Report and results of operations of the Company for the period covered by the Report.

Date: March 6, 2012

/S/ ULI HACKSELL

**Uli Hacksell, Ph.D.**
**Chief Executive Officer**

This certification shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.

**EXHIBIT 32.2**

**CERTIFICATION PURSUANT TO**
**18 U.S.C. SECTION 1350,**
**AS ADOPTED PURSUANT TO**
**SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

In connection with the Annual Report of ACADIA Pharmaceuticals Inc. (the "Company") on Form 10-K for the period ended December 31, 2011, as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Thomas H. Aasen, Executive Vice President, Chief Financial Officer and Chief Business Officer of the Company, certify, pursuant to 18 U.S.C. §1350, as adopted pursuant to §906 of the Sarbanes-Oxley Act of 2002, that to the best of my knowledge, that:

(1) the Report fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended (the "Exchange Act"); and

(2) the information contained in the Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Report and results of operations of the Company for the period covered by the Report.

Date: March 6, 2012

/S/ THOMAS H. AASEN

**Thomas H. Aasen**
**Executive Vice President, Chief Financial Officer**
**and Chief Business Officer**

This certification shall not be deemed "filed" for purposes of Section 18 of the Exchange Act or otherwise subject to the liability of Section 18 of the Exchange Act. Such certification shall not be deemed to be incorporated by reference into any filing under the Securities Act of 1933, as amended, or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.