Table of Contents

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, 2008

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 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, 2008, 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 $102 million, based on the closing price of the registrant's common stock on the NASDAQ Global Market on June 30, 2008 of $3.69 per share.

As of March 2, 2009, 37,179,124 shares of 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, 2009 are incorporated by reference into Part III of this report.

ACADIA PHARMACEUTICALS INC.

TABLE OF CONTENTS
FORM 10-K
For the Year Ended December 31, 2008
INDEX

		Page
	PART I	
Item 1.	Business.	1
Item 1A.	Risk Factors.	17
Item 1B.	Unresolved Staff Comments.	34
Item 2.	Properties.	34
Item 3.	Legal Proceedings.	34
Item 4.	Submission of Matters to a Vote of Security Holders.	34
	PART II	
Item 5.	Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.	35
Item 6.	Selected Financial Data.	36
Item 7.	Management's Discussion and Analysis of Financial Condition and Results of Operations.	37
Item 7A.	Quantitative and Qualitative Disclosures About Market Risk.	46
Item 8.	Financial Statements and Supplementary Data.	47
Item 9.	Changes in and Disagreements With Accountants on Accounting and Financial Disclosure.	47
Item 9A.	Controls and Procedures.	47
Item 9B.	Other Information.	48
	PART III	
Item 10.	Directors, Executive Officers and Corporate Governance.	49
Item 11.	Executive Compensation.	49
Item 12.	Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.	49
Item 13.	Certain Relationships and Related Transactions, and Director Independence.	49
Item 14.	Principal Accounting Fees and Services.	49
	PART IV	
Item 15.	Exhibits, Financial Statement Schedules.	50

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 the development and commercialization of small molecule drugs for the treatment of central nervous system disorders. We currently are developing a portfolio consisting of our four most advanced product candidates including pimavanserin, which is in Phase III development for the treatment of Parkinson’s disease psychosis. We have retained worldwide commercialization rights to pimavanserin. In addition, we have a product candidate in Phase II for chronic pain and a product candidate in Phase I for glaucoma, both in collaboration with Allergan, Inc., and ACP-106 in IND-track development. All of the product candidates in our pipeline emanate from discoveries made using our proprietary drug discovery platform.

Our pipeline addresses diseases that are not well served by currently available therapies and represent large potential commercial opportunities. We believe that our product candidates offer innovative therapeutic approaches and may provide significant advantages relative to current therapies. Our most advanced product candidates are as follows:

Pimavanserin. Pimavanserin is a small molecule product candidate that we discovered and have advanced to Phase III development as a treatment for patients with Parkinson’s disease psychosis. Parkinson’s disease psychosis is a debilitating psychiatric disorder that occurs in up to 40 percent of patients with Parkinson’s disease and is associated with increased caregiver burden, nursing home placement, and increased mortality. Currently, there are no therapies approved to treat Parkinson’s disease psychosis in the United States. We believe that pimavanserin has the potential to be the first-in-class treatment, which may effectively treat Parkinson’s disease psychosis without impairing motor function, thereby significantly improving the quality of life for patients with Parkinson’s disease.

We are currently conducting a number of studies in our Phase III development program with pimavanserin for Parkinson's disease psychosis, including two pivotal trials, an open-label safety extension study, and supporting studies. We also have reported positive results with pimavanserin in a Phase II trial as a co-therapy in schizophrenia and in a proof-of-concept clinical study for sleep maintenance insomnia. We believe that pimavanserin has the potential to address a range of central nervous system indications with large unmet medical needs. We plan to leverage our Phase III program to develop and commercialize pimavanserin for multiple neurological and psychiatric indications that are underserved by currently marketed antipsychotics, including psychoses in elderly patients.

AGN-XX/YY. In collaboration with Allergan, we have discovered and are developing a new class of small molecule product candidates that provide the potential for a significant breakthrough in 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 is currently conducting Phase II development in this program. Allergan has reported preliminary data from its Phase II program, 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.

AC-262271. 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. AC-262271 has demonstrated a promising preclinical profile, including robust efficacy and a long duration of action. Allergan is conducting Phase I development in this program.

ACP-106. We have discovered and are currently conducting IND-track development with ACP-106, a small molecule product candidate. We believe that ACP-106 may be used to pursue a range of potential central nervous system disorders, including neuropsychiatry and sleep indications.

In addition to our four most advanced product candidates, we have used our proprietary drug discovery platform to discover several additional product candidates that we may elect to develop in the future in partnerships or independently. Currently, we have focused our resources primary on our most advanced product candidates, including pimavanserin. 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. We believe that our expertise combined with our proprietary platform has allowed us to discover product candidates more efficiently than traditional approaches.

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

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 novel small molecule drugs for the treatment of central nervous system disorders and other areas of unmet medical need. Key elements of our strategy are to:

- ***Develop and commercialize our lead product candidate, pimavanserin.*** We are focused on advancing our Phase III program with pimavanserin for the treatment of Parkinson's disease psychosis. We intend to complete the development in this program and, if successful, participate in the commercialization of pimavanserin for this indication in the United States. We also intend to leverage our Phase III program to develop and commercialize pimavanserin for additional neurological and psychiatric indications that are underserved by currently marketed antipsychotics through, or in collaboration with, partners.
- ***Selectively establish strategic collaborations to advance and maximize the commercial potential of our pipeline.*** We will continue to pursue strategic collaborations to leverage the development and commercialization expertise of our partners. We plan to retain selected commercialization rights to certain of our products in areas where we feel they can be sold by a specialty sales force that calls on a focused group of physicians. In therapeutic areas that involve a more extensive development program or address large primary care markets, we intend to complete late-stage clinical development and commercialization of our product candidates through, or in collaboration with, partners.
- ***Expand our pipeline of product candidates for the treatment of central nervous system and related disorders.*** We plan to continue using our drug discovery platform and expertise to identify additional product candidates directed at central nervous system disorders that we may develop in partnerships or independently. We believe that our diversified pipeline will mitigate the risks inherent in drug discovery and development and increase the likelihood of commercial success.
- ***Opportunistically in-license or acquire complementary technologies and 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 complementary technologies or augment our internal pipeline with product candidates or products.

Disease and Market Overview

Our product candidates address diseases that are not well served by currently available therapies and 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 results from the degeneration of neurons in a region of the brain that controls movement. This degeneration creates a shortage of an important brain signaling chemical, or neurotransmitter, known as dopamine, rendering patients unable to initiate their movements in a normal manner. Parkinson's disease is characterized by a number of symptoms including tremors, limb stiffness, slowness of movements, and difficulties with posture and balance. The severity of Parkinson's disease symptoms tends to worsen over time.

According to the National Parkinson Foundation, over 1.5 million people in the United States suffer from this disease. Parkinson's disease is more prevalent in people over 60 years of age, and the incidence of this disease is expected to increase 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 40 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 often disrupts their ability to perform many of the activities of daily living that keeps them independent and active. As a result, Parkinson's disease psychosis is associated with increased caregiver burden, nursing home placement, and increased mortality.

The U.S. Food and Drug Administration, or 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 patients to manage the motoric symptoms of Parkinson's disease. However, this approach is generally not effective in alleviating psychotic symptoms in most patients and is often associated with the significant worsening of motor function in these patients. Despite substantial limitations, currently marketed antipsychotic drugs, including Seroquel, also may be used off-label to treat patients with Parkinson's disease psychosis. Because antipsychotic drugs block dopamine receptors, which may counteract the dopamine therapy used to manage the motoric symptoms of Parkinson's disease, these drugs are generally not well tolerated by patients with Parkinson's disease at doses required to achieve antipsychotic effects. Current antipsychotic drugs also are associated with a number of side effects, which can be especially problematic for elderly patients with Parkinson's disease. In addition, antipsychotic drugs have a black box warning for use in elderly patients with dementia-related psychosis due to increased mortality and morbidity.

One antipsychotic therapy that has demonstrated efficacy in reducing psychosis in patients with Parkinson's disease without further impairing motor function is low-dose treatment with the generic drug clozapine. Our studies suggest that this unique clinical utility of 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 for the treatment of psychotic disorders in Parkinson's disease. However, patients being treated with clozapine require frequent blood monitoring because clozapine is associated with the occurrence of a rare blood disorder. Currently, there is a large unmet medical need for new therapies that will effectively treat psychosis in patients with Parkinson's disease without impairing motor function.

Schizophrenia

Schizophrenia is a chronic, debilitating mental illness characterized by disturbances in thinking, emotional reaction, and behavior. These disturbances may include positive symptoms, such as hallucinations and delusions, and a range of negative symptoms, including loss of interest, emotional withdrawal, and cognitive disturbances. Schizophrenia is associated with persistent impairment of a patient's social functioning and productivity. It is believed that cognitive disturbances 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 population develops schizophrenia during their lifetime and more than two million people in the United States suffer from this disease. Worldwide sales of antipsychotic drugs used to treat schizophrenia and other psychoses approached $18 billion in 2007. 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 in elderly patients. Despite their commercial success, current antipsychotic drugs have substantial limitations, including inadequate efficacy and severe side effects. Antipsychotic drugs also have a black box warning for use in elderly patients with dementia-related psychosis due to increased mortality and morbidity.

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 of 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 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 a broadened efficacy profile that extends beyond the positive symptoms, such as effects on the negative symptoms and cognitive deficits, and induce fewer side effects.

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 characterized by chronic pain, stiffness and tenderness of muscles, tendons and joints without detectable inflammation. It also is often associated with restless sleep, awakening tired, anxiety, depression and disturbances in bowel function. Fibromyalgia affects an estimated three to six million people in the United States, predominately women between the ages of 35 and 55. 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 currently 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 treatment of major depressive disorder. Lyrica and Cymbalta had worldwide sales of $2.6 billion and $2.7 billion, respectively, in 2008. 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 neuropathic pain and fibromyalgia get meaningful relief from anticonvulsants and antidepressants. There are no drugs currently indicated for treatment of irritable bowel syndrome and other visceral hypersensitivity pain in the United States. 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 4 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 prevalent in people over 60 years of age. The incidence 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 is the market leader for glaucoma treatment with worldwide sales of $1.7 billion in 2008. 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.

Sleep Maintenance Insomnia

Chronic insomnia, a sleep disorder lasting a month or more, is estimated to affect about 10 percent of the U.S. adult population. A significant portion of insomnia patients complain of frequent awakenings during the night and difficulty returning to sleep, which may be referred to as sleep maintenance insomnia. Patients with sleep maintenance insomnia may experience a number of problems, including a lack of energy, difficulty concentrating, irritability, and impairment of daytime functioning. The prevalence of sleep disorders appears to increase with advancing age. There is also an increased incidence of sleep maintenance insomnia in patients with neurological and psychiatric disorders. Slow wave sleep, which is the deepest and most restorative sleep, normally decreases with age, and this may contribute to an increase in sleep maintenance insomnia.

Most of the currently marketed therapies for insomnia are sedatives that are designed primarily to address sleep onset and have limitations in treating the symptoms of sleep maintenance insomnia. Most of these therapies work by interacting with gamma-aminobutyric acid, or GABA, receptors in the brain and may be associated with side effects including the risk of developing tolerance to the drug and the potential for causing lethargy upon awakening, referred to as a hangover effect. In addition, drugs that work by activating the GABA receptors are designated by the U.S. Drug Enforcement Administration as controlled substances due to their potential for abuse. We believe that there is a large unmet medical need for new therapies that can treat the symptoms of sleep maintenance insomnia without impairing daytime functioning and with fewer side effects.

Our Product Candidates

We currently are focused on developing a portfolio of our four most advanced product candidates, including three product candidates in clinical development and one product candidate in IND-track development, where we are conducting testing required in preparation for potential future clinical trials. We believe that our product candidates offer innovative therapeutic approaches and may provide significant advantages relative to current therapies. The following table summarizes our most advanced product candidates:

Product Candidate	Indication	Stage of Development	Commercialization Rights
Pimavanserin	Parkinson's disease psychosis	Phase III	ACADIA
	Schizophrenia	Phase II	ACADIA
	Sleep maintenance insomnia	Phase II	ACADIA
AGN-XX/YY	Chronic Pain	Phase II	Allergan
AC-262271	Glaucoma	Phase I	Allergan
ACP-106	Neuropsychiatry and sleep indications	IND-track development	ACADIA

Our Most Advanced Product Candidates

Pimavanserin

Overview

Pimavanserin is a small molecule product candidate that we discovered and have advanced to Phase III development as a treatment for patients with Parkinson's disease psychosis. Pimavanserin can be taken orally and is a novel, potent and selective 5-HT2A inverse agonist, meaning that it blocks the activity of the 5-HT2A receptor. Currently, there are no therapies approved to treat Parkinson's disease psychosis in the United States. We believe that pimavanserin has the potential to be the first-in-class treatment for this disorder, which may effectively treat Parkinson's disease psychosis without impairing motor function, thereby significantly improving the quality of life for patients with Parkinson's disease. Pimavanserin has demonstrated an attractive clinical profile in a number of clinical trials conducted to date and we believe it will offer significant advantages relative to current antipsychotics used off-label for the treatment of Parkinson's disease psychosis.

While we are currently focused on advancing our Phase III program with pimavanserin as a treatment for Parkinson's disease psychosis, we also have completed a Phase II trial with pimavanserin as a co-therapy in schizophrenia and a proof-of-concept clinical study for sleep maintenance insomnia. We believe that pimavanserin has the potential to address a range of central nervous system indications with large unmet medical needs. We plan to leverage our Phase III program to develop and commercialize pimavanserin for multiple neurological and psychiatric indications that are underserved by currently marketed antipsychotics, including psychoses in elderly patients.

Development Status

We are currently conducting a number of studies in our Phase III development program with pimavanserin for Parkinson's disease psychosis, including two pivotal trials, an open-label safety extension study, and supporting studies. Each of the two pivotal trials is a multi-center, double-blind, placebo-controlled Phase III trial designed to evaluate the safety and efficacy of pimavanserin in approximately 240 patients. We are continuing to enroll patients in both of these trials.

Patients in each of the pivotal trials are randomized to three different study arms, including two different doses of pimavanserin and one placebo arm. Patients receive oral doses of either pimavanserin or placebo once daily for six weeks in addition to stable doses of their existing dopamine replacement therapy. The primary endpoint of each trial is antipsychotic efficacy as measured using the Scale for the Assessment of Positive Symptoms, or SAPS. Motoric tolerability is an important secondary endpoint in each trial and is measured using the Uniform Parkinson's Disease Rating Scale, or UPDRS.

In addition, we are currently conducting an open-label safety extension study into which patients who have completed either of the pivotal trials have the opportunity to enroll if, in the opinion of the physician, the patient may benefit from continued treatment with pimavanserin. We also are conducting a range of supporting NDA-enabling studies in our Phase III program.

In 2006, we announced top-line results from a multi-center, double-blind, placebo-controlled Phase II clinical trial designed to evaluate the efficacy, safety, and tolerability of pimavanserin in 60 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 safe and well tolerated in the study. In connection with this Phase II trial, we are continuing to conduct an open-label extension study, pursuant to which 24 patients with Parkinson's disease psychosis have been treated with pimavanserin for at least one year, 12 of whom have been treated for at least two years, and several of whom have now been treated for at least four years.

In addition to our development program for Parkinson's disease psychosis, we reported positive results in 2007 from a multi-center, double-blind, placebo-controlled Phase II clinical trial with pimavanserin as a co-therapy in schizophrenia. The results of the trial demonstrated several advantages of co-therapy with pimavanserin and a sub-maximal dose of risperidone, a commonly prescribed atypical antipsychotic drug. These advantages included enhanced efficacy (comparable efficacy to high-dose risperidone plus placebo), a faster onset of antipsychotic action, and an improved side effect profile, including less weight gain.

We also completed a proof-of-concept clinical study in 2006 designed to assess the effect of pimavanserin on slow wave sleep in older healthy volunteers. The results of the study demonstrated that pimavanserin induced a statistically significant and dose-related increase in slow wave sleep, and had a positive impact on measures for sleep maintenance. Pimavanserin did not alter latency to sleep onset and did not impair daytime functioning. We believe that these attributes of pimavanserin may provide added benefits to patients with neurological and psychiatric disorders, many of whom also suffer from sleep disturbances.

AGN-XX/YY

In collaboration with Allergan, we have discovered and are developing a new class of small molecule product candidates that provide the potential for a significant breakthrough in the treatment of chronic pain. Using our proprietary drug discovery platform, we identified a previously unappreciated target for chronic pain, which is an alpha adrenergic receptor. Our novel alpha adrenergic agonists provide highly effective pain relief in a wide range of preclinical models, without the side effects of current pain therapies, including sedation and cardiovascular and respiratory effects. Allergan has completed Phase I studies and is currently conducting Phase II development in this program.

Allergan has reported preliminary data from its Phase II program, including positive proof-of-concept in a visceral pain trial in patients that had hypersensitivity of the esophagus, and efficacy signals in two of three chronic pain trials after completing low-dose cohorts. These efficacy signals were observed in trials for fibromyalgia and irritable bowel syndrome. Allergan is expected to complete the Phase II trials with higher-dose cohorts in 2009 to enable selection of which indications and doses Allergan may pursue in late-stage development.

AC-262271

We have discovered and, in collaboration with Allergan, are developing AC-262271, 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, AC-262271 has demonstrated a promising preclinical profile, including robust efficacy and a long duration of action. Allergan is conducting Phase I development with AC-262271.

ACP-106

We discovered and have nominated ACP-106, a potent and selective 5-HT2A inverse agonist, as a clinical candidate. While both are 5-HT2A inverse agonists, ACP-106 belongs to a class of molecules that is structurally different than pimavanserin. We believe that ACP-106 provides us with additional flexibility and may enable us to more broadly pursue a range of potential central nervous system indications suitable for this mechanism of action. We are currently conducting IND-track development with ACP-106.

Other Product Candidates

In addition to our four most advanced product candidates, we have used our proprietary drug discovery platform to discover several additional product candidates. Currently, our resources are focused primarily on our most advanced product candidates, including pimavanserin. However, we may elect to pursue the development of additional product candidates in the future in partnerships or independently. The following summarizes selected additional product candidates.

ACP-105

We discovered ACP-105, a small molecule product candidate, which is from a class of molecules referred to as selective androgen receptor modulators, or SARMs. SARMs may advance the standard of treatment for a variety of disorders, including muscle-wasting conditions and osteoporosis, with fewer side effects as compared to current treatments based on testosterone replacement. ACP-105 has exhibited promising pharmacological properties and a favorable safety profile in preclinical testing. We are seeking a partner to advance the further development of this program.

PCAP Program

We have discovered a series of lead compounds that provide the potential for a new class of pro-cognitive antipsychotic drugs. These compounds combine muscarinic m1 agonism with actions on both dopamine and serotonin receptors. These novel compounds have demonstrated robust effects in preclinical models of psychosis and pro-cognitive effects in preclinical models of cognition.

Muscarinic Program

We have identified novel sites for muscarinic receptor/drug interactions that yield selective muscarinic agonists. Such compounds have not shown the side effects typical of non-selective muscarinic agents, but show robust effects in preclinical models of psychosis, cognition, and pain. This program includes our muscarinic agonists that selectively target the m1 muscarinic receptor and may represent a novel approach to the treatment of cognition in patients with schizophrenia.

ER-beta Program

We have discovered two series of compounds that selectively stimulate ER-beta receptors, a class of receptors that are activated by estrogen. These compounds may possess anti-inflammatory and neuroprotective properties and may have the ability to slow down the progression of Parkinson's disease. Our current studies of these compounds in preclinical models of Parkinson's disease are supported by a grant from the Michael J. Fox Foundation.

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 that we validate with past clinical experience. A key to our discovery approach is our set of proprietary functional test systems, or assays, that we have developed focused on members of three important gene families, G-protein coupled receptors, nuclear receptors, and tyrosine kinase linked receptors. We believe that these gene families represent the most relevant and feasible targets for small molecule drug discovery. We use our proprietary assays to validate drug targets, and to discover novel small molecules that are specific for these targets, and which may be used as starting points for drug discovery programs.

Key Components of Our Drug Discovery Platform

Key components of our drug discovery platform are discussed below:

Our Target-Based Discovery Technologies

Overview

The human genome project has provided information about the genetic structure of essentially all of the potential drug targets in the human genome. This knowledge, when combined with our proprietary technologies, allows for the efficient testing of the effects of chemical compounds on a wide range of potential drug targets. Within the human genome there are families of genes that include the most frequent targets of drugs. We focus our drug discovery efforts on those families of targets that are most likely to be affected by small molecule drugs.

R-SAT and Other Functional Assay Technologies

Our proprietary receptor selection and amplification technology, which we refer to as R-SAT, is a valuable component of our drug discovery platform. R-SAT is a cell-based assay system where genes are transferred to cultured cells. The functional activity of the gene products, or potential drug targets, are then evaluated through signal transduction pathways that lead to cellular growth. The growth signals are reported using marker gene technologies. Thus, effects of drugs on potential drug targets can be efficiently detected as changes in color or fluorescence. R-SAT enables the efficient screening of large compound libraries for identification of new chemistries at given targets, as well as detailed pharmacological testing of compounds at a wide range of targets. In addition to R-SAT, we have developed other proprietary tools that evaluate compound interaction with these targets.

Proprietary Receptor Assay Platforms

Our scientists have cloned the genes for the majority of the targets in the G-protein coupled receptor, nuclear receptor and tyrosine kinsase gene families. These represent some of the largest families of genes targeted by known drugs. Our R-SAT assay system has enabled the building of functional assays for a large number of these genes. We also have developed assays for several additional targets in other relevant gene families.

Our Chemistry-Based Discovery Technologies

Our drug discovery approach aims to identify small molecules that can serve as chemical starting points, or leads, for optimization efforts providing novel, potent and selective product candidates for targets that are most likely to be affected by small molecule drugs. We have assembled a large proprietary chemical library of diverse compounds. This diverse compound library consists of about 800,000 small organic molecules. We have also developed proprietary synthetic methods for library construction and lead optimization. In addition, our reference drug library provides us with the opportunity to validate targets and is another component of our drug discovery platform. This reference drug library includes a wide range of the known central nervous system active drugs.

Collaboration Agreements

We have established three separate collaboration agreements with Allergan and a technology license agreement with Aventis to leverage our drug discovery platform and related assets and to commercialize selected product candidates. Our collaborations have included upfront payments at initiation of the collaboration, which may be in the form of an equity investment, plus research support during the term, milestone payments upon successful completion of specified development objectives, and royalties based upon 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 2009. As of December 31, 2008, we had received an aggregate of $15.4 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, excluding product royalties.

In July 1999, we entered into a collaboration agreement with Allergan to discover, develop and commercialize selective muscarinic drugs for the treatment of glaucoma based on our compounds. 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, which program is currently in Phase I development. As of December 31, 2008, we had received an aggregate of $9.4 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, which program is currently in Phase II development, 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, 2008 under this agreement. We are eligible to receive additional milestone payments of up to $10.0 million in the aggregate as well as royalties on future product sales worldwide, if any. In connection with the execution of the collaboration agreement in 1997, Allergan made a $6.0 million equity investment in us.

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

Aventis

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

Intellectual Property

We currently hold 26 issued U.S. patents and 173 issued foreign patents. All of these patents originated from us. In addition, we have 76 provisional and utility U.S. patent applications and 294 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

Two U.S. patents have been issued to us that provide generic coverage for pimavanserin. We have 26 issued foreign patents that generally cover pimavanserin, including patents in 21 European countries, Australia, Hong Kong, New Zealand, Singapore and South Africa. 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.

Our Drug Discovery Platform

Our core R-SAT technology is protected by six issued U.S. patents and 22 foreign patents.

Other Product candidates

We have 10 issued U.S. patents and 80 issued foreign patents with claims for compounds that affect muscarinic receptor activity. We also have six issued U.S. patents and 14 issued foreign patents for compounds (other than pimavanserin) from our serotonin program. We continue to pursue patent applications in these areas in other countries.

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. In each of our clinical programs, we intend to complete clinical trials designed to evaluate the potential advantages of our product candidates as compared to the current standard of care.

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, chronic pain, glaucoma, and sleep maintenance insomnia. 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.

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. Lyrica had worldwide sales of $2.6 billion in 2008. Cymbalta, indicated for treatment of diabetic peripheral neuropathic pain as well as treatment of major depressive disorder, had worldwide sales of $2.7 billion in 2008.

Our potential products for the treatment of glaucoma would compete with Xalatan, marketed by Pfizer, and Lumigan and Alphagan, marketed by Allergan. Xalatan is the leading drug for glaucoma treatment and had worldwide sales in excess of $1.7 billion in 2008.

Our potential products for the treatment of sleep maintenance insomnia would compete with Ambien and Ambien CR, marketed by Sanofi-Aventis, Lunesta, marketed by Sepracor, Sonata, marketed by King Pharmaceuticals, Inc., Rozerem, marketed by Takeda Pharmaceuticals North America, Inc., and various benzodiazepines. Ambien, a market leader, had worldwide sales of approximately $800 million in 2008.

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. Some of our competitors are using functional genomics technologies or other methods 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 and these performance goals may change over time. Moreover, the outcome of the review, even if generally favorable, may not be an actual approval but a "response letter" that describes additional work that must be done before the NDA can be approved. The FDA's review of an NDA may involve review and recommendations by an independent FDA advisory committee.

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.

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 the Prescription Drug Marketing Act, anti-fraud and abuse laws, and post-marketing safety surveillance. In addition, we are subject to state regulation including, but not limited to, implementation of corporate compliance programs and gift reporting 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.

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. 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 limited marketing and no 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 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.

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, 2008, we had 63 employees, of whom 29 hold Ph.D. or other advanced degrees. Of our total workforce, 43 are engaged in research and development activities and 20 are engaged in executive, finance, business development and administration. A small portion of our employees are located in Sweden. 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 $56.8 million in 2008, $57.9 million in 2007, and $49.4 million in 2006.

Long-Lived Assets

Information regarding long-lived assets by geographic area is as follows:

	As of December 31,		
	2008	2007	2006
		(in thousands)	
United States	$ 1,537	$ 2090	$ 2,347
Europe	566	958	1,158
Total	$ 2,103	$ 3,048	$ 3,505

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, 2008, we had an accumulated deficit of approximately $294.1 million. We expect our annual net losses to continue 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, 2008 were from our collaborations with Allergan 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.

Our Committed Equity Financing Facility, or CEFF, may not be available to us if we elect to make a draw down, may require us to make additional "blackout" or other payments to Kingsbridge and may result in dilution to our stockholders.

Pursuant to the CEFF, Kingsbridge committed to purchase up to the lesser of $60 million or up to approximately 7 million shares of our common stock over a three-year period, if we elect to use this facility. Kingsbridge will not be obligated to purchase shares under the CEFF unless specified conditions are met, which include a minimum price of $1.50 for our common stock, the effectiveness of a registration statement registering for resale the shares of common stock to be issued in connection with the CEFF, and customary other conditions, such as accuracy of representations and warranties and compliance with applicable laws. Kingsbridge is permitted to terminate the CEFF under certain circumstances. If we are unable to access funds through the CEFF or Kingsbridge terminates the CEFF, we may be unable to access capital on favorable terms or at all.

In connection with the CEFF, we filed a registration statement with the SEC to register the resale of shares of our common stock that may be issued pursuant to the CEFF or upon exercise of the warrant. This registration statement was declared effective by the SEC on September 23, 2008. We are entitled, in certain circumstances, to deliver a "blackout" notice to Kingsbridge to suspend the use of the prospectus, which is a part of such registration statement, and prohibit Kingsbridge from selling shares under that prospectus for a certain period of time. If we deliver a blackout notice in the 15 trading days following the settlement of a draw down, or if the registration statement covering the resale of the shares of common stock to be issued in connection with the CEFF is not effective in circumstances not permitted by our registration rights agreement with Kingsbridge, then we must make a payment to Kingsbridge, or issue Kingsbridge additional shares in lieu of this payment, calculated on the basis of a specified number of shares held by Kingsbridge immediately prior to the blackout period and the change in the market price of our common stock during the period in which the use of the resale registration statement is suspended. If the trading price of our common stock declines during a suspension of the resale registration statement, the blackout or other payment could be significant.

If we sell shares to Kingsbridge under the CEFF, or issue shares in lieu of any blackout payment, it will have a dilutive effect on the holdings of our current stockholders, and may result in downward pressure on the price of our common stock. If we draw down amounts under the CEFF, we will issue shares to Kingsbridge at a discount of up to 12% from the volume weighted average price of our common stock. If we draw down amounts under the CEFF when our share price is decreasing, we will need to issue more shares to raise the same amount than if our stock price was higher. Issuances in the face of a declining share price will have an even greater dilutive effect than if our share price were stable or increasing and may further decrease our share price.

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 had an unsuccessful Phase II trial in 2008 with our product candidate, ACP-104. In our most advanced program, we are in Phase III development with pimavanserin for the treatment of Parkinson's disease psychosis. Our Phase III program encompasses a number of studies, including two Phase III pivotal trials, open-label safety extension trials and a range of supporting studies, including carcinogenicity studies, a QTc study, and drug-drug interaction studies. We anticipate completing certain of the studies in this program, including the first Phase III pivotal trial, during 2009. An unfavorable outcome in one or more of the studies in this program could be a major set-back for the program and for our company, generally. In particular, given the recent deterioration in the financial markets, an unfavorable outcome in one or more of these studies would likely require us to delay, reduce the scope of, or eliminate this program and could have a material adverse effect on our company and the value of our common stock. We also have chronic pain and glaucoma clinical programs in collaboration with Allergan, which are in Phase II and Phase I development, respectively.

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 U.S. Food and Drug Administration, or 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 a new drug application, or 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 approval of an Investigational New Drug Application, or IND, from the FDA;
- 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 retention rate 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 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. For the year ended December 31, 2008, we used $64.9 million in net cash to fund our operating activities. Our cash and investment securities totaled approximately $60.1 million at December 31, 2008. Due in part to the restructuring we implemented in August 2008 and the associated reductions in our operating expenses, we believe our existing cash resources and anticipated payments from our collaborations will be sufficient to fund our cash requirements into the first half of 2010. However, 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 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 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, or by licensing all or a portion of our product candidates or technology. The recent deterioration in the financial markets has adversely affected the market capitalizations of many biotechnology companies, including us, and generally made equity and debt financing more difficult to obtain. This, coupled with other factors, may dramatically 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 pursuant to our CEFF

or from other sources. Specifically, to the extent that the average price of our common stock remains below the minimum share price of $1.50, we will not be able to raise money under the CEFF. 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 likely 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, including funds raised under the CEFF, may significantly dilute existing stockholders. Moreover, if we do not obtain additional funds in the future, there may be substantial doubt about our ability to continue as a going concern.

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 collaborations 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. Substantially all of our revenues for the year ended December 31, 2008 were from our collaborations with Allergan as well as our agreements with other parties. The ongoing research term of our agreements with Allergan will end in March 2009. There is no guarantee that revenues from our 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;
- decide to pursue a competitive product developed outside of the collaboration; or
- cannot obtain the necessary regulatory approvals.

The continuation of our collaborations is dependent on our collaborators' periodic renewal of the governing agreements. Allergan can terminate our existing collaborations under specific circumstances, including in some cases the right to terminate upon 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. Given the current economic environment, it is possible that competition for new collaborators may increase.

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;
- 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 harm our reputation, result in a loss of revenues, reduce our cash position, and cause a decline in our stock price.

In addition, in each of 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 our collaborations. 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.

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. 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 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.

If we do not realize the expected benefits from the restructuring that we announced in August 2008, our operating results and financial conditions would be negatively impacted.

In August 2008, we implemented a strategic restructuring designed to focus our resources on our most advanced product candidates. If we are unable to realize the expected operational efficiencies from our restructuring, our operating results and financial condition would be adversely affected. Employees whose positions are eliminated in connection with the restructuring 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. We cannot guarantee that we will not have to undertake additional restructuring activities, that any of our restructuring efforts will be successful, or that we will be able to realize the cost savings and other anticipated benefits from our restructuring.

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 scientific 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 drug discovery and development programs depend on our ability to attract and retain highly skilled chemists, biologists, pharmacologists, and 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 U.S. 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.

Much of our research 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 transition our organization in connection with our restructuring, and we may encounter difficulties managing this transition, 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, achieve milestones under our collaboration agreements, facilitate additional collaborations, and pursue other development activities. Following our restructuring, it is possible that our infrastructure may be inadequate to support our future efforts and growth. To manage our transition, we will be required to continue to improve our operational, financial and management controls, and reporting systems and procedures. In addition, 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 the transition of our operations and, accordingly, may not achieve our research, development, and commercialization goals.

We face financial and administrative challenges in coordinating the operations of our European activities with our activities in California, which could have an adverse impact on our operations.

Our principal executive offices are located in San Diego and we also have a subsidiary, ACADIA Pharmaceuticals AB, located in Malmö, Sweden that employed a small percentage of our total personnel as of December 31, 2008. The additional administrative expense required to coordinate activities in both Europe and California could divert management resources from other important endeavors and, in turn, delay our development and commercialization efforts. In addition, currency fluctuations involving our Swedish operations may cause foreign currency gains and losses. These exchange-rate fluctuations could have a negative effect on our operations. We do not engage in currency hedging transactions.

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 by achieving specified research 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;
- 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 and benefits associated with our restructuring;
- 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 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 this 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.

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 been issued only a limited number of patents with respect to these 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; or
- others may identify prior art which could invalidate our patents.

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. 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. 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.

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, Risperdal, marketed by Johnson & Johnson, Abilify, marketed jointly by Bristol-Myers Squibb and Otsuka Pharmaceutical, Seroquel, and clozapine. Our potential products for the treatment of sleep maintenance insomnia would compete with Ambien and Ambien CR, marketed by Sanofi-Aventis, Lunesta, marketed by Sepracor, Sonata, marketed by King Pharmaceuticals, Inc., Rozerem, marketed by Takeda Pharmaceuticals North America, Inc., and various benzodiazepines. 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 pimavanserin or our chronic pain and glaucoma collaborations;
- the initiation, termination, or reduction in the scope of our collaborations or any disputes or developments regarding these 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;
- 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 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; or
- economic and political factors, including but not limited to economic and financial crises, wars, terrorism, and political unrest.

In particular, our Phase III program with pimavanserin for Parkinson's disease psychosis encompasses a number of studies, including two Phase III pivotal trials, open-label safety extension trials and a range of supporting studies, including carcinogenicity studies, a QTc study, and drug-drug interaction studies. We anticipate completing certain of the studies in this program, including the first Phase III pivotal trial, during 2009. An unfavorable outcome in one or more of the studies in this program could be a major set-back for our company. Given the recent deterioration in the financial markets, 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 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.

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. Holders of a significant number of shares of our common stock, from investments made when we were a private company, have rights to cause us to file a registration statement on their behalf or include their shares in registration statements that we may file on our behalf or on behalf of other stockholders. Additionally, in connection with the CEFF, we filed a registration statement with the SEC to register the resale of up to a total of approximately 7.4 million shares of our common stock that may be issued pursuant to the CEFF or upon exercise of the warrant we issued in connection with establishing the CEFF. Our stock price may decline as a result of the sale of the shares of our common stock included in these registration statements.

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 3 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 have reduced our market capitalization and may significantly affect our ability to raise capital.

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

If the price of our common stock remains below $1.00 per share for a sustained period, 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. If the closing bid price of our common stock is below $1.00 per share for 30 consecutive trading days, 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. In light of the recent volatility in stock prices generally and the continued turbulence in the financial markets, Nasdaq recently suspended enforcement of the $1.00 minimum bid price requirement and has informed Nasdaq-listed companies that it will not take any action to delist any security for non-compliance with this requirement. Enforcement of the $1.00 minimum bid price requirement is scheduled to be reinstated on April 19, 2009. If our stock price is below $1.00 per share and remains below that threshold for 30 consecutive trading days after April 19, 2009, 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.

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

This item is not applicable.

Item 2. ***Properties.***

Our primary facilities consist of approximately 53,000 square feet of leased research and office space located in San Diego, California. The lease covering the primary building for our headquarters and laboratories in San Diego, comprising approximately 29,000 square feet, has been amended to include an additional 24,000 square feet of office and other space. These properties are leased through the end of 2012, with options to extend. We also have the right to early terminate the lease with respect to the primary building and/or the additional space. We also lease another facility in San Diego that covers approximately 8,000 square feet of laboratory, office, and other space. That lease is through December 2010, with an option to extend and also provides us with a right to terminate early. We have leased approximately 30,000 square feet of chemistry research and development space in a single facility in Malmö, Sweden. Our Swedish lease commenced in June 2005 and has a ten-year term with a five-year renewal provision. We believe that our existing facilities are adequate for our current needs.

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

This item is not applicable.

Item 4. ***Submission of Matters to a Vote of Security Holders*****.**

No matters were submitted to a vote of security holders during the quarter ended December 31, 2008.

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.

2007	High	Low
First Quarter	$16.84	$ 6.63
Second Quarter	$17.08	$12.20
Third Quarter	$17.33	$13.14
Fourth Quarter	$16.56	$ 9.95
2008		
First Quarter	$13.46	$ 7.63
Second Quarter	$ 9.86	$ 3.55
Third Quarter	$ 3.99	$ 2.30
Fourth Quarter	$ 2.89	$ 0.72

As of March 2, 2009, there were approximately 60 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 sheet at December 31, 2008 and 2007 and the related consolidated statements of operations for the three years ended December 31, 2008 and related notes appearing elsewhere in this report. The statement of operations data for the years ended December 31, 2005 and 2004 and the balance sheet data as of December 31, 2006, 2005 and 2004 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,				
	2008	2007	2006	2005	2004
	(In thousands, except per share data)				
Consolidated Statement of Operations Data:					
Revenues:					
Collaborative revenues	$ 1,590	$ 7,555	$ 8,133	$ 10,956	$ 4,604
Operating expenses(1):					
Research and development	56,750	57,942	49,398	30,336	23,885
General and administrative	11,818	12,267	11,349	10,205	6,814
Provision for loss from (settlement of) litigation	—	—	(3,560)	6,221	—
Total operating expenses	68,568	70,209	57,187	46,762	30,699
Loss from operations	(66,978)	(62,654)	(49,054)	(35,806)	(26,095)
Interest income	2,915	6,532	4,153	1,851	607
Interest expense	(181)	(268)	(198)	(180)	(429)
Loss before change in accounting principle	(64,244)	(56,390)	(45,099)	(34,135)	(25,917)
Cumulative effect of change in accounting principle	—	—	51	—	—
Net loss	$(64,244)	$(56,390)	$(45,048)	$(34,135)	$(25,917)
Net loss available to common stockholders	$(64,244)	$(56,390)	$(45,048)	$(34,135)	$(17,330)
Net loss per common share, basic and diluted	$ (1.73)	$ (1.60)	$ (1.61)	$ (1.55)	$ (1.67)
Weighted average shares used in computing net loss per common share, basic and diluted(2)	37,113	35,211	27,923	22,014	10,353
Net loss available to participating preferred stockholders	$ —	$ —	$ —	$ —	$ (8,587)
Net loss per participating preferred share, basic and diluted	$ —	$ —	$ —	$ —	$ (0.87)
Weighted average participating preferred shares outstanding, basic and diluted(2)	—	—	—	—	9,901

(1) As described in Note 2 of the notes to our consolidated financial statements appearing elsewhere in this report, we adopted the provisions of Statement of Financial Accounting Standards No. 123 (revised 2004), *Share-Based Payment*, effective January 1, 2006.

(2) Please see Note 2 of the notes to our consolidated financial statements for an explanation of the determination of the number of shares used in computing per share data. All amounts reflect a 1-for-2 reverse stock split effected by us on May 25, 2004 in connection with our initial public offering.

	At December 31,				
	2008	2007	2006	2005	2004
			(in thousands)		
Consolidated Balance Sheet Data:					
Cash, cash equivalents and investment securities	$ 60,083	$ 126,858	$ 83,255	$ 55,521	$ 35,927
Working capital	51,331	111,966	65,249	38,424	29,178
Total assets	64,677	134,584	89,544	62,506	40,365
Long-term debt, less current portion	430	1,156	1,379	892	1,044
Total stockholders' equity	52,992	113,934	67,159	39,371	30,680

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, 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 the development and commercialization of small molecule drugs for the treatment of central nervous system disorders. We currently are developing a portfolio consisting of our four most advanced product candidates including pimavanserin, which is in Phase III development for the treatment of Parkinson's disease psychosis. We also have reported positive results with pimavanserin in a Phase II trial as a co-therapy in schizophrenia and in a proof-of-concept clinical study for sleep maintenance insomnia. We have retained worldwide commercialization rights to pimavanserin. In addition, we have a product candidate in Phase II for chronic pain and a product candidate in Phase I for glaucoma, each in collaboration with Allergan, Inc., and ACP-106 in IND-track development. 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. In August 2008, we implemented a strategic restructuring designed to focus resources primarily on our most advanced product candidates, including pimavanserin, and to provide additional financial flexibility and strength. In connection with the restructuring, we reduced our total workforce by about 50 percent and have reduced our internal operating expenses significantly. At December 31, 2008, we had an accumulated deficit of $294.1 million. Although we have reduced our operating expenses in connection with the strategic restructuring, we expect our operating losses to continue 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 research and milestone payments under our collaboration agreements. We have established three separate collaboration agreements with Allergan. We also entered into agreements with Sepracor and The Stanley Medical Research Institute, or SMRI, the terms of which ended in January 2008 and May 2007, respectively, as well as smaller scale research and license agreements with other parties. As of December 31, 2008, we had received an aggregate of $59.5 million in payments under these agreements, including research funding and related fees and upfront and milestone payments. We expect our revenues for the next several years to consist primarily of payments under our current agreements with Allergan and any additional collaborations, including any upfront payments upon execution of new agreements, research funding throughout the research term of our agreements with these parties, and milestone payments contingent upon achievement of agreed-upon objectives.

Pursuant to our March 2003 collaboration agreement with Allergan, we had received an aggregate of $15.4 million in payments as of December 31, 2008, consisting of upfront fees, research funding and related fees. This collaboration originally provided for a three-year research term, which has been extended by the parties through March 2009. We have had a reduced level of research activities and related research funding under this collaboration during the extension. We are also a party to two other collaboration agreements with Allergan, under which we are currently pursuing the clinical development of product candidates in the areas of chronic pain and glaucoma. We are eligible to receive milestone payments and royalties on product sales, if any, under each of our three collaboration agreements with Allergan. Each of our agreements with Allergan is subject to early termination by the collaborator upon specified events, including if we breach the agreement or, 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.

Pursuant to a three-year collaboration agreement with Sepracor, the term of which ended in January 2008, we received $6.7 million in research funding. In connection with this agreement, Sepracor also purchased an aggregate of $20 million of our common stock. Pursuant to a development agreement with SMRI, the term of which ended in May 2007, we received an aggregate of $5.0 million in funding to support the development of a product candidate. Each of the Sepracor and SMRI agreements has ended and will provide no future funding to us.

Research and Development Expenses

Our research and development expenses consist primarily of fees paid to external service providers, salaries and related personnel expenses, facilities and equipment expenses, and supplies 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 are responsible for all costs incurred in the development of pimavanserin as well as the costs associated with our other internal programs. We are not responsible for, nor have we incurred, development expenses, including costs related to clinical trials, in our clinical programs for chronic pain and glaucoma, which we are pursuing in collaboration with Allergan.

We use our internal research and development resources, including our employees and discovery infrastructure, across several projects and many of our costs are not attributable to a specific project but are directed to broadly applicable research activities. Accordingly, we do not report our internal research and development costs on a project basis. 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. Our external service costs for pimavanserin increased significantly in 2008 relative to previous years primarily due to increased clinical development costs associated

with our Phase III program. 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, 2008, 2007 and 2006 (in thousands):

	Years Ended December 31,		
	2008	2007	2006
Costs of external service providers:			
Pimavanserin	$ 27,189	$ 10,932	$ 18,930
ACP-104[1]	2,658	16,480	3,722
ACP-106 and other	2,251	1,604	1,529
Subtotal	32,098	29,016	24,181
Internal costs	23,327	26,205	23,351
Stock-based compensation	1,325	2,721	1,866
Total research and development	$ 56,750	$ 57,942	$ 49,398

1. ACP-104 was a product candidate that we were developing as a treatment for patients with schizophrenia. We currently do not anticipate conducting further studies with ACP-104.

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. As a result, we cannot be certain when and to what extent we will receive cash inflows from the commercialization of our product candidates.

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. 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 consist 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 Securities and Exchange Commission Staff Accounting Bulletin No. 104, *Revenue Recognition.* Arrangements with multiple elements are accounted for in accordance with Emerging Issues Task Force Issue No. 00-21, or EITF 00-21, *Revenue Arrangements With Multiple Deliverables.* We analyze our multiple element arrangements to determine whether the elements can be separated and accounted for individually as separate units of accounting in accordance with EITF 00-21. Our revenues are primarily related to our collaboration agreements, and such agreements may provide for various types of payments to us, including upfront payments, research funding and related fees during the term of the agreement, milestone payments based on the achievement of established development objectives, licensing fees, and royalties on future product sales.

Upfront, non-refundable payments under collaboration agreements are recorded as deferred revenue once received and recognized ratably over the term of the agreement. Non-refundable payments for research funding are generally recognized as revenues over the period as the related research activities are performed. Revenues from non-refundable milestones are recognized 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 revenue upon achievement of the 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 triggering event. 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 the fair value of any undelivered items can be determined.

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 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 to us, we adjust our accruals. To date, our estimates have not differed significantly from the actual costs incurred. However, we have expanded the level of our clinical trials and related services. As a result, we anticipate that our estimated accruals for clinical services will be more material to our operations in future periods. 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

Effective January 1, 2006, we adopted the fair value recognition provisions of Statement of Financial Accounting Standards, or SFAS, No. 123 (revised 2004), *Share-Based Payment*, or SFAS No. 123(R), to account for employee stock options and stock issued under the employee stock purchase plan.

The 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 option pricing model. For options granted prior to January 1, 2006, we amortize the fair value on an accelerated basis. For options granted after January 1, 2006, we amortize the fair value on a straight-line basis. All option expense is amortized over the requisite

service period of the awards, which is generally the vesting period. As of December 31, 2008, total unrecognized compensation cost related to stock options and purchase rights was approximately $5.7 million, and the weighted average period over which this cost is expected to be recognized is 2.7 years.

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 option pricing model.

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 discovery and 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, 2008 and 2007

Revenues

Revenues totaled $1.6 million in 2008 compared to $7.6 million in 2007. The decrease in revenues was primarily due to the completion of our agreements with Sepracor and SMRI, as well as lower revenues from our collaborations with Allergan and smaller scale research and license agreements with other parties. Revenues from our agreement with Sepracor totaled $91,000 in 2008 compared to $3.4 million in 2007. Revenues from our agreement with SMRI, which ended in May 2007, totaled $1.0 million in 2007. Revenues from our collaborations with Allergan totaled $1.0 million in 2008 compared to $1.6 million in 2007. Revenues from other research and license agreements totaled $487,000 in 2008 compared to $1.6 million in 2007.

Research and Development Expenses

Research and development expenses totaled $56.8 million in 2008, including $1.3 million in stock-based compensation, compared to $57.9 million in 2007, including $2.7 million in stock-based compensation. The decrease in research and development expenses was primarily due to $2.9 million in decreased costs associated with our internal research and development organization and lower stock-based compensation, offset by $3.1 million in increased external service costs. The decrease in internal research and development costs was primarily attributable to $1.2 million in decreased salaries and related personnel costs, $1.1 million in decreased laboratory supply costs, and decreases in equipment and other costs. The decrease in salaries and related personnel costs was net of a $1.7 million charge recorded during the third quarter of 2008 in connection with workforce reductions from our strategic restructuring. External service costs totaled $32.1 million, or 57 percent of our research and development expenses in 2008, compared to $29.0 million, or 50 percent of our research and development expenses in 2007. The increase in external expenses was largely attributable to increased clinical development costs for pimavanserin offset, in part, by reduced costs for ACP-104.

General and Administrative Expenses

General and administrative expenses totaled $11.8 million in 2008, including $1.7 million in stock-based compensation, compared to $12.3 million in 2007, including $1.6 million in stock-based compensation. The decrease in general and administrative expenses was primarily due to decreased professional fees and other administrative costs, partially offset by increased salaries and related personnel costs. The increases in salaries and related personnel costs were primarily attributable to a charge of $454,000 recorded during the third quarter of 2008 in connection with workforce reductions from our strategic restructuring.

Interest Income

Interest income decreased to $2.9 million in 2008 from $6.5 million in 2007. The decrease in interest income was due to lower average levels of cash and investment securities and decreased yields on our investment security portfolio during 2008.

Comparison of the Years Ended December 31, 2007 and 2006

Revenues

Revenues totaled $7.6 million in 2007 compared to $8.1 million in 2006, and were comprised of revenues from our collaborations with Sepracor and Allergan as well as our agreements with SMRI and other parties. The decrease in revenues was primarily due to lower research funding from our collaborations with Allergan and Sepracor, and completion of our agreement with SMRI, partially offset by increased revenues from smaller scale research and license agreements with other parties. Revenues from our collaborations with Allergan totaled $1.6 million in 2007 compared to $2.2 million in 2006. Revenues from our collaboration with Sepracor totaled $3.4 million in 2007 compared to $3.8 million in 2006. Revenues from our agreement with SMRI, which ended in May 2007, totaled $1.0 million in 2007 compared to $2.0 million in 2006.

Research and Development Expenses

Research and development expenses totaled $57.9 million in 2007, including $2.7 million in stock-based compensation, compared to $49.4 million in 2006, including $1.9 million in stock-based compensation, primarily due to increased clinical development activity associated with our proprietary clinical programs. The increase in research and development expenses was primarily due to $4.8 million in increased fees paid to external service providers, $3.3 million in increased salaries and related personnel costs, and $855,000 in increased stock-based compensation, partially offset by a net reduction in other expenses. External service costs totaled $29.0 million, or 50 percent of our research and development expenses in 2007, compared to $24.2 million, or 49 percent of our research and development expenses in 2006.

General and Administrative Expenses

General and administrative expenses totaled $12.3 million in 2007, including $1.6 million in stock-based compensation, compared to $11.3 million in 2006, including $1.5 million in stock-based compensation. The increase in general and administrative expenses was primarily due to $552,000 in increased salaries and related personnel costs and increases in other administrative costs, offset in part by decreases in professional fees associated with accounting and legal services.

Gain From Settlement of Litigation

In 2006, we recorded a gain of $3.6 million associated with an agreement we entered into to fully settle a civil action inclusive of all fees and costs.

Interest Income

Interest income increased to $6.5 million in 2007 from $4.2 million in 2006. The increase in interest income was primarily due to higher average levels of cash and investment securities resulting from sales of our common stock.

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, 2008, we had received $324.8 million in net proceeds from sales of our equity securities, including $6.9 million in debt we had retired through the issuance of our common stock, $59.5 million in payments from collaboration agreements, $22.4 million in debt financing, and $21.6 million in interest income.

At December 31, 2008, we had approximately $60.1 million in cash, cash equivalents and investment securities compared to $126.9 million at December 31, 2007. We have invested a substantial portion of our available cash in a money market fund wholly-backed by U.S. Treasury collateral and in investment securities consisting of 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. We do not have any direct investments in auction-rate securities or securities that are collateralized by assets that include mortgages or subprime debt. Our investment portfolio has not been adversely impacted by the disruption in the credit markets. However, if there is continued and expanded disruption in the credit markets, there can be no assurance that our investment portfolio will not be adversely affected in the future.

We have consumed substantial amounts of capital since our inception. In August 2008, we implemented a strategic restructuring designed to focus resources on our most advanced product candidates and provide additional financial flexibility and strength. In connection with the restructuring, we reduced our total workforce by about 50 percent. Our internal operating expenses, including personnel and related costs, were reduced significantly following the restructuring and we anticipate that the cash used in our operating activities during 2009 will be below its 2008 level.

We believe that our existing cash resources and the anticipated payments from our collaborations will be sufficient to fund our cash requirements into the first half of 2010. In August 2008, we entered into a Committed Equity Financing Facility, or CEFF, designed to provide us with added financial strength and flexibility. The CEFF provides us with access, at our discretion, to up to $60 million of capital during a three-year period through the sale of newly-issued shares of our common stock. We may access capital under the CEFF in tranches of up to a maximum of between 2.0 and 3.5 percent of our market capitalization at the time of the draw down of each tranche, subject to certain conditions, including a minimum share price threshold of $1.50. The funds that can be raised under the CEFF, if available, will depend on the then-current price of our common stock and the number of shares actually sold, which may not exceed an aggregate of approximately 7 million shares. The shares would be sold at discounts ranging from 6 percent to 12 percent, depending on the average market price of our common stock during the applicable pricing period.

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, and other events or developments, 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; 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 securities, debt financings, or by licensing all or a portion of our product candidates or technology. We cannot be certain that funding will be available to us on acceptable

terms, or at all. The recent deterioration in the financial markets has 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 dramatically limit access to additional financing over the near-term future. In particular, given the current market conditions, any unfavorable outcome over the next year in one or more of the studies that we are currently conducting in our Phase III program with pimavanserin, including the first Phase III pivotal trial, could have a material adverse effect on us and our ability to raise additional capital.

The turmoil in the financial markets could have a material adverse effect on our ability to access sufficient funding pursuant to our CEFF or from other sources on acceptable terms, or at all. Our current stock price does not permit us to utilize the CEFF. To the extent that the average price of our common stock does not rise to the minimum share price of $1.50, we will not be able to raise money under the CEFF. If we cannot raise additional capital under the CEFF or from other sources, we have the ability and intent to, and 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. In addition, should we be required to further reduce the scope of our discovery activities, this may lead to an impairment of our equipment and additional charges, which could materially affect our balance sheet and results of operations.

We adopted SFAS No. 157, *Fair-Value Measurements*, or SFAS 157, as of January 1, 2008, as discussed in Note 4 to the Consolidated Financial Statements. SFAS 157 is applicable for all financial assets and liabilities and any other assets and liabilities that are recognized or disclosed at fair value on a recurring basis. SFAS 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles, or GAAP, and expands disclosures about fair-value measurements. Our cash equivalents and investment securities held at December 31, 2008 are classified within Level 1 or Level 2 of the fair value hierarchy. Our investment securities classified as Level 1 are valued using quoted market prices and our 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 partial adoption of SFAS 157, in accordance with FSP 157-2, did not impact our consolidated financial position or valuation of cash equivalents or investment securities.

Net cash used in operating activities totaled $64.9 million in 2008 compared to $54.9 million in 2007 and $41.4 million in 2006. The increase in cash used in operating activities in 2008 relative to 2007 was primarily due to an increase in our net loss and changes in operating assets and liabilities, including decreases in accrued expenses and accounts payable, offset in part by a decrease in prepaid expenses, receivables and other current assets. Accrued expenses and accounts payable decreased by an aggregate of $7.4 million in 2008 compared to an aggregate increase of $598,000 in 2007. The decrease in 2008 was primarily due to payments made for external service costs related to our clinical trials, which had been incurred in 2007. Prepaid expenses, receivables and other current assets decreased $2.0 million in 2008 compared to an increase of $1.8 million in 2007. The decrease in 2008 was primarily due to the amortization of advance payments made in 2007 in connection with external service costs for our clinical trials.

The increase in net cash used in operating activities in 2007 relative to 2006 was primarily due to an increase in our net loss and changes in operating assets and liabilities, including an increase in prepaid expenses, receivables and other current assets, decreases in deferred revenue and accounts payable and a smaller increase in accrued expenses in 2007 compared to 2006. Prepaid expenses, receivables and other current assets increased $1.8 million in 2007 compared to a decrease of $2.1 million in 2006. This increase was primarily attributable to advance payments made in connection with external service costs for our clinical trials. The decrease in deferred revenue of $2.0 million in 2007 and $780,000 in 2006 was primarily attributable to amortization of payments from our collaboration with Sepracor, including the premium amount resulting from Sepracor’s purchases of our common stock. The increase in accrued expenses in 2007 was primarily due to increased external service costs related to our clinical trials.

Net cash provided by investing activities totaled $69.7 million in 2008 compared to net cash used in investing activities of $41.9 million in 2007 and $22.9 million in 2006, and 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 2008 relative to 2007 was primarily due to increased maturities of investment securities, net of purchases of investment securities. The increase in net cash used in investing activities in 2007 relative to 2006 was primarily due to increased purchases of investment securities, net of maturities, resulting from higher levels of cash following our public offering in 2007, partially offset by a decrease in restricted cash in 2006.

Net cash used in financing activities totaled $374,000 in 2008 compared to net cash provided by financing activities of $98.2 million in 2007 and $70.0 million in 2006. The net cash used in financing activities in 2008 was primarily due to repayments of our long-term debt, offset by net proceeds from stock option exercises and employee stock plan purchases. The net cash provided by financing activities in 2007 was primarily due to $98.6 million in net proceeds received from sales of our common stock, including $96.1 million received from a follow-on public offering, offset by net repayments of our long-term debt. The net cash provided by financing activities in 2006 was primarily due to $69.4 million in net proceeds received from sales of our common stock, including $59.4 million received from a follow-on public offering and $8.9 million received from the second purchase of our common stock by Sepracor, which amount did not include the $1.1 million premium received in connection with this stock purchase that was included in deferred revenue in operating activities, offset by net repayments of our long-term debt.

We have entered into equipment financing agreements from time to time, which we have utilized to fund the majority of our property and equipment purchases. The agreements contain fixed interest rates ranging from 8.92 to 10.41 percent per annum. At December 31, 2008, we had $1.2 million in outstanding borrowings under these agreements, which are secured by the related equipment.

The following table summarizes our contractual obligations, including interest, at December 31, 2008 (in thousands):

	Total	Less than 1 Year	1-3 Years	4-5 Years	After 5 Years
Operating leases	$12,293	$ 2,300	$ 6,629	$ 1,969	$1,395
Long-term debt	1,345	882	463	—	—
Total	$13,638	$ 3,182	$ 7,092	$ 1,969	$1,395

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 $30.3 million of future services under these agreements as of December 31, 2008. 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 with short notice. In such event, we would not be liable for the full amount of the contract. Our actual contractual obligations may vary depending upon several factors, including the progress and results of the underlying studies.

In addition, we have entered into an agreement pursuant to which we licensed certain intellectual property rights that complement our patent portfolio. If certain conditions are met for compounds covered by the agreement, we would be required to make future payments, including milestones, sublicensing fees and royalties. The amount of potential future milestones payments is $11 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

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities, an amendment of FASB Statement No. 133*, or SFAS 161, which requires additional disclosures about the objectives of using derivative instruments, the method by which the derivative instruments and related hedged items are accounted for under FASB Statement No.133 and its related interpretations, and the effect of derivative instruments and related hedged items on financial position, financial performance and cash flows. SFAS 161 also requires disclosure of the fair values of derivative instruments and their gains and losses in a tabular format. SFAS 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008. We do not expect the adoption of SFAS 161 to have a material impact on our consolidated financial statements.

In December 2007, the Financial Accounting Standards Board, or FASB, ratified EITF No. 07-1, *Accounting for Collaborative Arrangements*, or EITF 07-1. EITF 07-1 defines collaborative arrangements and establishes reporting requirements for transactions between participants in a collaborative arrangement and between participants in the arrangement and third parties. EITF 07-1 also establishes the appropriate income statement presentation and classification for joint operating activities and payments between participants, as well as the sufficiency of the disclosures related to these arrangements. EITF 07-1 is effective for fiscal years beginning after December 15, 2008, and would be applied retrospectively as a change in accounting principle for collaborative arrangements existing at the effective date. We are currently evaluating the potential impact of EITF 07-1 on our consolidated financial statements.

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations*, or SFAS 141(R). SFAS 141(R) requires changes in the recognition of assets acquired and liabilities assumed arising from contingencies, requires the capitalization of in-process research and development at fair value, and requires the expensing of acquisition-related restructuring actions and transaction-related costs and the recognition of contingent purchase price consideration at fair value at the acquisition date. SFAS 141(R) is effective for fiscal years beginning after December 15, 2008. We would be required to adopt SFAS 141(R) for any business combinations for which the acquisition date occurs on or after January 1, 2009.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements—an amendment of ARB No. 51*, or SFAS 160. SFAS 160 impacts the accounting for minority interest in the consolidated financial statements of filers. The statement requires the reclassification of minority interest to the equity section of the balance sheet and the results from operations attributed to minority interest to be included in net income. The amount of consolidated net income attributable to the parent filer and to the minority interest would be clearly identified and presented on the face of the consolidated statements of operations. SFAS 160 is effective for fiscal years beginning after December 15, 2008. We do not expect the adoption of SFAS 160 to have a material impact on our consolidated financial statements.

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

Interest Rate Risk

We invest our excess cash in investment-grade, interest-bearing securities. The primary objective of our investment activities is to preserve principal and liquidity. To achieve this objective, we invest in a money market fund and in 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, 2008, 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 Sweden and Denmark, which expose us to foreign exchange risk. The functional currency of our subsidiary in Sweden is the Swedish kroner and the functional currency of our subsidiary in Denmark is the Danish kroner. Accordingly, 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, 2008, 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, 2008.

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, 2008, 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, 2008, 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, 2008 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 2009 Annual Meeting of Stockholders to be filed with the SEC by April 30, 2009 (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 Accounting Fees and Services*****.**

The information required by this Item will be set forth in the section headed "Proposal 2—Ratification of Selection of Independent Auditors" in our Proxy Statement and is incorporated in this report by reference.

PART IV

Item 15. ***Exhibits, 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:

	Page Number
Report of Independent Registered Public Accounting Firm	F-1
Consolidated Balance Sheets at December 31, 2008 and 2007	F-2
Consolidated Statements of Operations for Each of the Three Years Ended December 31, 2008, 2007, and 2006	F-3
Consolidated Statements of Cash Flows for Each of the Three Years Ended December 31, 2008, 2007, and 2006	F-4
Consolidated Statements of Stockholders' Equity and Comprehensive Income (Loss) for Each of the Three Years Ended December 31, 2008, 2007, and 2006	F-5
Notes to Consolidated Financial Statements	F-6

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 9, 2009

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

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

Signature	Title	Date
/s/ ULI HACKSELL **Uli Hacksell**	Chief Executive Officer and Director (Principal Executive Officer)	March 9, 2009
/s/ THOMAS H. AASEN **Thomas H. Aasen**	Chief Financial Officer (Principal Financial Officer and Principal Accounting Officer)	March 9, 2009
/s/ LESLIE IVERSEN **Leslie Iversen**	Chairman of the Board	March 6, 2009
Gordon Binder	Director	
/s/ MICHAEL BORER **Michael Borer**	Director	March 9, 2009
/s/ LAURA BREGE **Laura Brege**	Director	March 6, 2009
/s/ MARY ANN GRAY **Mary Ann Gray**	Director	March 9, 2009
/s/ LESTER KAPLAN **Lester Kaplan**	Director	March 9, 2009
/s/ TORSTEN RASMUSSEN **Torsten Rasmussen**	Director	March 5, 2009
/s/ ALAN WALTON **Alan Walton**	Director	March 5, 2009

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, 2008 and 2007, and the results of their operations and their cash flows for each of the three years in the period ended December 31, 2008 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, 2008, 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.

As discussed in Note 2 to the consolidated financial statements, the Company changed the manner in which it accounts for share-based compensation in 2006.

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 4, 2009

ACADIA PHARMACEUTICALS INC.

CONSOLIDATED BALANCE SHEETS

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

	December 31, 2008	December 31, 2007
Assets		
Cash and cash equivalents	$ 21,171	$ 16,987
Investment securities, available-for-sale	38,912	109,871
Prepaid expenses, receivables and other current assets	2,299	4,395
Total current assets	62,382	131,253
Property and equipment, net	2,103	3,048
Other assets	192	283
Total assets	$ 64,677	$ 134,584
Liabilities and stockholders' equity		
Accounts payable	$ 2,283	$ 2,590
Accrued expenses	7,535	15,012
Current portion of deferred revenue	438	707
Current portion of long-term debt	795	978
Total current liabilities	11,051	19,287
Other long-term liabilities	204	207
Long-term debt, less current portion	430	1,156
Total liabilities	11,685	20,650
Commitments and contingencies (Note 12)		
Stockholders' equity		
Preferred stock, $0.0001 par value; 5,000,000 shares authorized at December 31, 2008 and 2007; no shares issued and outstanding at December 31, 2008 and 2007	—	—
Common stock, $0.0001 par value; 75,000,000 shares authorized at December 31, 2008 and 2007; 37,177,874 shares and 37,035,389 shares issued and outstanding at December 31, 2008 and 2007, respectively	4	4
Additional paid-in capital	346,815	343,293
Accumulated deficit	(294,100)	(229,856)
Accumulated other comprehensive income	273	493
Total stockholders' equity	52,992	113,934
	$ 64,677	$ 134,584

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,		
	2008	2007	2006
Revenues			
Collaborative revenues	$ 1,590	$ 7,555	$ 8,133
Operating expenses			
Research and development (includes stock-based compensation of $1,325, $2,721 and $1,866, respectively)	56,750	57,942	49,398
General and administrative (includes stock-based compensation of $1,662, $1,574 and $1,512, respectively)	11,818	12,267	11,349
Gain from settlement of litigation	—	—	(3,560)
Total operating expenses	68,568	70,209	57,187
Loss from operations	(66,978)	(62,654)	(49,054)
Interest income	2,915	6,532	4,153
Interest expense	(181)	(268)	(198)
Loss before change in accounting principle	(64,244)	(56,390)	(45,099)
Cumulative effect of change in accounting principle	—	—	51
Net loss	$(64,244)	$(56,390)	$(45,048)
Net loss per common share, basic and diluted			
Before change in accounting principle	$ (1.73)	$ (1.60)	$ (1.61)
Cumulative effect of change in accounting principle	—	—	—
Net loss per common share, basic and diluted	$ (1.73)	$ (1.60)	$ (1.61)
Weighted average common shares outstanding, basic and diluted	37,113	35,211	27,923

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,		
	2008	2007	2006
Cash flows from operating activities			
Net loss	$ (64,244)	$ (56,390)	$ (45,048)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	1,043	1,065	852
Stock-based compensation	2,987	4,295	3,378
Amortization of investment premium/discount	911	(297)	(998)
Other	5	(155)	(176)
Changes in operating assets and liabilities:			
Prepaid expenses, receivables and other current assets	1,966	(1,788)	2,075
Other assets	83	(27)	(158)
Accounts payable	(276)	(845)	1,314
Accrued expenses	(7,075)	1,443	6,902
Accrued loss from litigation	—	—	(8,710)
Deferred revenue	(268)	(1,959)	(780)
Other long-term liabilities	(1)	(268)	(69)
Net cash used in operating activities	(64,869)	(54,926)	(41,418)
Cash flows from investing activities			
Purchases of investment securities	(79,972)	(222,231)	(116,596)
Maturities of investment securities	149,912	180,745	83,166
Decrease in restricted cash	—	—	12,520
Purchases of property and equipment	(226)	(416)	(2,026)
Net cash provided by (used in) investing activities	69,714	(41,902)	(22,936)
Cash flows from financing activities			
Proceeds from issuance of common stock, net of issuance costs	535	98,599	69,403
Proceeds from issuance of long-term debt	—	754	1,626
Repayments of long-term debt	(909)	(1,133)	(1,033)
Net cash provided by (used in) financing activities	(374)	98,220	69,996
Effect of exchange rate changes on cash	(287)	115	42
Net increase in cash and cash equivalents	4,184	1,507	5,684
Cash and cash equivalents			
Beginning of year	16,987	15,480	9,796
End of year	$ 21,171	$ 16,987	$ 15,480
Supplemental schedule of cash flow information			
Interest paid	$ 171	$ 265	$ 169
Supplemental schedule of noncash investing and financing activities			
Unrealized gain (loss) on investment securities, net of tax	(104)	188	131
Net property acquired under capital leases	—	139	—

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	Unearned Stock-Based Compensation	Accumulated Other Comprehensive (Loss)/Income	Total Stockholders' Equity	Comprehensive Income (Loss)
	Shares	Amount						
Balances at December 31, 2005	23,517,876	$ 2	$168,426	$ (128,418)	$ (773)	$ 134	$ 39,371	
Issuance of common stock to collaborator, net of issuance costs	813,393	—	8,930	—	—	—	8,930	
Issuance of common stock, net of issuance costs	5,285,806	1	59,385	—	—	—	59,386	
Issuance of common stock from exercise of stock options	258,860	—	675	—	—	—	675	
Issuance of common stock pursuant to employee stock purchase plan	64,542	—	412	—	—	—	412	
Net loss	—	—	—	(45,048)	—	—	(45,048)	$ (45,048)
Noncash compensation related to stock options granted	—	—	2,986	—	341	—	3,327	
Reclassification of unearned stock-based compensation to additional paid-in capital upon adoption of SFAS No. 123(R)	—	—	(368)	—	368	—	—	
Unrealized gain on investment securities	—	—	—	—	—	131	131	131
Cumulative translation adjustment	—	—	—	—	—	(25)	(25)	(25)
Balances at December 31, 2006	29,940,477	$ 3	$240,446	$ (173,466)	$ (64)	$ 240	$ 67,159	$ (44,942)
Issuance of common stock, net of issuance costs	6,612,500	1	96,110	—	—	—	96,111	
Issuance of common stock from exercise of stock options	416,736	—	1,984	—	—	—	1,984	
Issuance of common stock pursuant to employee stock purchase plan	65,676	—	522	—	—	—	522	
Net loss	—	—	—	(56,390)	—	—	(56,390)	$ (56,390)
Noncash compensation related to stock options granted	—	—	4,231	—	64	—	4,295	
Unrealized gain on investment securities	—	—	—	—	—	188	188	188
Cumulative translation adjustment	—	—	—	—	—	65	65	65
Balances at December 31, 2007	37,035,389	$ 4	$343,293	$ (229,856)	$ —	$ 493	$ 113,934	$ (56,137)
Issuance of common stock from exercise of stock options	70,548	—	187	—	—	—	187	
Issuance of common stock pursuant to employee stock purchase plan	71,937	—	348	—	—	—	348	
Net loss	—	—	—	(64,244)	—	—	(64,244)	$ (64,244)
Noncash compensation related to stock options granted	—	—	2,987	—	—	—	2,987	
Unrealized gain (loss) on investment securities	—	—	—	—	—	(104)	(104)	(104)
Cumulative translation adjustment	—	—	—	—	—	(116)	(116)	(116)
Balances at December 31, 2008	37,177,784	$ 4	$346,815	$ (294,100)	$ —	$ 273	$ 52,992	$ (64,464)

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 the development and commercialization of small molecule drugs for the treatment of central nervous system disorders. The Company maintains two wholly owned subsidiaries: ACADIA Pharmaceuticals AB based in Malmö, Sweden and ACADIA Pharmaceuticals A/S based in Denmark.

The Company has not been profitable and has incurred substantial operating losses since its inception due in large part to expenditures for its research and development activities. In August 2008, the Company implemented a strategic restructuring designed to focus resources on its most advanced product candidates and to provide additional financial flexibility and strength. In connection with this restructuring, the Company reduced its workforce by about 50 percent and has reduced its operating expenses significantly. At December 31, 2008, the Company had an accumulated deficit of $294.1 million. The Company expects its operating losses to continue 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 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 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 securities, debt financing, or by licensing all or a portion of its product candidates or technology. The Company cannot be certain that funding will be available on acceptable terms, or at all. The recent turmoil in the financial markets could have a material adverse effect on the Company's ability to access sufficient funding pursuant to its Committed Equity Financing Facility ("CEFF") or from other sources on acceptable terms, or at all. If the Company cannot raise adequate additional capital, it has the ability and intent to, and 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. 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 wholly owned subsidiaries. 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 discounted cash flows using market rates of interest for certain corporate commercial paper. Based on borrowing rates currently available to the Company, the carrying value of the long-term debt approximates fair value.

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 respective leases 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, 2008, 2007 and 2006, losses from disposals of property and equipment were not material.

Revenues

The Company recognizes revenues in accordance with Securities and Exchange Commission Staff Accounting Bulletin No. 104, *Revenue Recognition* ("SAB No. 104"). SAB No. 104 requires that four basic criteria must be met before revenue can be recognized: persuasive evidence of an arrangement exists; delivery has occurred or services have been rendered; the fee is fixed or determinable; and collectability is reasonably assured. Arrangements with multiple elements are accounted for in accordance with Emerging Issues Task Force ("EITF") Issue No. 00-21, *Revenue Arrangements with Multiple Deliverables*. The Company analyzes its multiple element arrangements to determine whether the elements can be separated and accounted for individually as separate units of accounting in accordance with EITF 00-21. The Company's revenues are primarily related to its collaboration agreements, and such agreements may provide for various types of payments to the Company, including upfront payments, research funding and related fees during the term of the agreement, milestone payments based on the achievement of established development objectives, licensing fees, and royalties on future product sales.

Upfront, non-refundable payments under collaboration agreements are recorded as deferred revenue once received and recognized ratably over the term of the agreement. Non-refundable payments for research funding are generally recognized as revenues over the period as the related research activities are performed. Revenues from non-refundable milestones are recognized 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 revenue upon achievement of the 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 triggering event. Any amount received under an agreement in advance of performance is recorded as deferred revenue and recognized over the term of the agreement as the Company completes its performance obligations. 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 fair value of any undelivered items can be determined. If the license is considered to have stand-alone value but the fair value of the undelivered items cannot be determined, the license payments are recognized as revenues over the period of performance for such undelivered items or services. No revenues recognized to date pursuant to our agreements are refundable even if the related research activities are not successful.

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

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 projects are funded under agreements with collaboration partners, and the 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 invests its excess cash primarily in a money market fund wholly backed by U.S. Treasury collateral and in marketable debt securities of corporations, financial institutions, and government sponsored enterprises with strong credit ratings. The Company has adopted an investment policy that includes guidelines relative to diversification and maturities to maintain safety 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, 2008, 2007, and 2006, revenues from our two largest customers comprised 88 percent, 66 percent, and 74 percent of total revenues, respectively. Revenues from Allergan, Inc. comprised 64 percent, 22 percent, and 27 percent of total revenues for the years ended December 31, 2008, 2007, and 2006, respectively. Revenue from Sepracor Inc. comprised 44 percent and 47 percent of total revenues for the years ended December 31, 2007 and 2006, respectively. Another customer comprised 24 percent of total revenues for the year ended December 31, 2008.

Foreign Currency Translation

The functional currencies of ACADIA Pharmaceuticals AB and ACADIA Pharmaceuticals A/S 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 as a component of stockholders' equity. At December 31, 2008 and 2007, the balance within accumulated other comprehensive (loss) income from foreign currency translation was $174,000 and $290,000, respectively. Foreign currency transaction gains and losses are included in the results of operations and, to date, have not been significant.

Stock-Based Compensation

Effective January 1, 2006, the Company adopted the fair value recognition provisions of Statement of Financial Accounting Standards ("SFAS") No. 123 (revised 2004), *Share-Based Payment* ("SFAS No. 123(R)") to account for employee stock options and stock issued under the employee stock purchase plan. The adoption of SFAS No. 123(R) resulted in a cumulative benefit from a change in accounting principle of $51,000 during the year ended December 31, 2006.

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

The value of each employee stock option and employee stock purchase right granted is estimated on the grant date under the fair value method using the Black-Scholes option pricing model. For options granted prior to January 1, 2006, the Company amortizes the fair value on an accelerated basis. For options granted after January 1, 2006, the Company amortizes the fair value on a straight-line basis. All option expense is amortized over the requisite service period of the awards, which are generally the vesting periods. The following assumptions were used to estimate the fair value of employee stock options:

	Years Ended December 31,		
	2008	2007	2006
Expected volatility	68-81%	64-68%	64-65%
Risk-free interest rate	2-3%	4-5%	5%
Expected forfeiture rate	5-6%	6%	6-7%
Expected dividend yield	0%	0%	0%
Expected life of options in years	5.5-5.7	5.4-5.5	5.3-5.4

Expected Volatility. The Company completed its initial public offering on June 2, 2004, so there is limited trading history for its shares in the public markets. Therefore, the Company considers the expected and historic volatility of peer companies as well as its own historical volatility and implied volatility when determining the volatility factor. In considering peer companies, the Company considers 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 fair value for the offerings under the employee stock purchase plan commenced during the indicated year:

	Years Ended December 31,		
	2008	2007	2006
Expected volatility	50-164%	45-111%	51-64%
Risk-free interest rate	0-3%	3-5%	5%
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.

Use of Estimates

The preparation of financial statements in conformity with accounting principles generally accepted in the United States of America 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 consists of the following:

	December 31,	
	2008	2007
	(in thousands)	
Unrealized gain on investment securities, net of tax	$ 99	$203
Foreign currency translation adjustments, net of tax	174	290
	$273	$493

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 because all such securities are antidilutive for all periods presented. Shares used in calculating basic and diluted net loss per common share above exclude these potential common shares:

	Years Ended December 31,		
	2008	2007	2006
		(in thousands)	
Antidilutive options to purchase common stock	3,291	2,834	2,713
Antidilutive warrants to purchase common stock	1,539	1,393	1,393
Restricted vesting common stock	—	6	34
	4,830	4,233	4,140

Segment Reporting

Management has determined that the Company operates in one business segment. All revenues for the years ended December 31, 2008 and 2007 were generated in the United States. Information regarding long-lived assets by geographic area is as follows:

	December 31,	
	2008	2007
	(in thousands)	
United States	$ 1,537	$ 2,090
Europe	566	958
	$ 2,103	$ 3,048

Recently Issued Accounting Standards

In March 2008, the FASB issued SFAS No. 161, *Disclosures about Derivative Instruments and Hedging Activities, an amendment of FASB Statement No. 133* (“SFAS 161”), which requires additional disclosures about the objectives of using derivative instruments, the method by which the derivative instruments and related hedged items are accounted for under FASB Statement No.133 and its related interpretations, and the effect of derivative instruments and related hedged items on financial position, financial performance and cash flows. SFAS 161 also requires disclosure of the fair values of derivative instruments and their gains and losses in a tabular format. SFAS 161 is effective for financial statements issued for fiscal years and interim periods beginning after November 15, 2008. The Company does not expect the adoption of SFAS 161 to have a material impact on its consolidated financial statements.

In December 2007, the FASB, ratified EITF No. 07-1, *Accounting for Collaborative Arrangements* (“EITF 07-1”). EITF 07-1 defines collaborative arrangements and establishes reporting requirements for transactions between participants in a collaborative arrangement and between participants in the arrangement and third parties. EITF 07-1 also establishes the appropriate income statement presentation and classification for joint operating activities and payments between participants, as well as the sufficiency of the disclosures related to these arrangements. EITF 07-1 is effective for fiscal years beginning after December 15, 2008, and would be applied retrospectively as a change in accounting principle for collaborative arrangements existing at the effective date. The Company is currently evaluating the potential impact of EITF 07-1 on its consolidated financial statements.

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

In December 2007, the FASB issued SFAS No. 141 (revised 2007), *Business Combinations* ("SFAS 141(R)"). SFAS 141(R) requires changes in the recognition of assets acquired and liabilities assumed arising from contingencies, requires the capitalization of in-process research and development at fair value, and requires the expensing of acquisition-related restructuring actions and transaction-related costs and the recognition of contingent purchase price consideration at fair value at the acquisition date. SFAS 141(R) is effective for fiscal years beginning after December 15, 2008. The Company would be required to adopt SFAS 141(R) for any business combinations for which the acquisition date occurs on or after January 1, 2009.

In December 2007, the FASB issued SFAS No. 160, *Noncontrolling Interests in Consolidated Financial Statements—an amendment of ARB No. 51* ("SFAS 160"). SFAS 160 impacts the accounting for minority interest in the consolidated financial statements of filers. The statement requires the reclassification of minority interest to the equity section of the balance sheet and the results from operations attributed to minority interest to be included in net income. The related minority interest impact on earnings would then be disclosed in the summary of other comprehensive income. SFAS 160 is effective for fiscal years beginning after December 15, 2008. The Company does not expect the adoption of SFAS 160 to have a material impact on its consolidated financial statements.

3. Investment Securities

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

	December 31, 2008			
	Amortized Cost	Unrealized Gains	Unrealized (Losses)	Estimated Fair Value
	(in thousands)			
Corporate debt securities, including commercial paper	$ 16,691	$ 100	$ —	$ 16,791
Government sponsored enterprises	21,992	129	—	22,121
	$ 38,683	$ 229	$ —	$ 38,912

	December 31, 2007			
	Amortized Cost	Unrealized Gains	Unrealized (Losses)	Estimated Fair Value
	(in thousands)			
Corporate debt securities, including commercial paper	$ 88,343	$ 323	$ (2)	$ 88,664
Asset-backed securities	21,190	18	(1)	21,207
	$ 109,533	$ 341	$ (3)	$ 109,871

As of December 31, 2008, all investment securities are in compliance with the Company's investment policy guidelines. The Company's investment portfolio has not been adversely impacted by the recent disruption in the credit markets. However, if there is continued and expanded disruption in the credit markets, the Company's investment portfolio could be adversely affected in the future. No gains or losses were realized during the years ended December 31, 2008 and 2007. As of December 31, 2008, all corporate debt securities had contractual maturity dates of less than one year.

4. Fair Value Measurements

The Company adopted SFAS No. 157, *Fair-Value Measurements* ("SFAS 157"), effective January 1, 2008. SFAS 157 is applicable for all financial assets and liabilities and any other assets and liabilities that are

recognized or disclosed at fair value on a recurring basis. SFAS 157 defines fair value, establishes a framework for measuring fair value in generally accepted accounting principles and expands disclosures about fair-value measurements. SFAS 157 requires fair value measurements be classified and disclosed in one of the following three categories:

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.

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

As of December 31, 2008, the Company held $58.7 million of cash equivalents and available-for-sale investment securities consisting of a money market fund wholly-backed by U.S. Treasury collateral and of 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 does not have any direct investments in auction-rate securities or securities that are collateralized by assets that include mortgages or subprime debt.

The Company's cash equivalents and available-for-sale investment securities are classified within Level 1 or Level 2 of the fair value hierarchy. 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 fair value measurements of the Company's cash equivalents and available-for-sale investment securities are identified in the following hierarchy in connection with the Company's adoption of SFAS 157:

		Fair Value Measurements at Reporting Date using		
	December 31, 2008	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 wholly-backed by U.S. Treasury collateral	$ 18,557	$ 18,557	$ —	$ —
Government sponsored enterprises	22,121	—	22,121	—
Corporate debt securities	2,544	—	2,544	—
Commercial paper	15,497	—	15,497	—
	$ 58,719	$ 18,557	$ 40,162	$ —

In February 2008, the FASB issued FASB Staff Position 157-2, or FSP 157-2, which delays the effective date of SFAS 157 for all nonfinancial assets and nonfinancial liabilities, except those that are recognized or disclosed at fair value in the financial statements on a recurring basis, until fiscal years beginning after November 15, 2008 and interim periods within those years. The partial adoption of SFAS 157 effective

January 1, 2008 for financial assets and liabilities recognized at fair value on a recurring basis, in accordance with FSP 157-2, did not impact the Company's consolidated financial position or valuation of cash equivalents or investment securities.

The Company adopted SFAS No. 159, *The Fair Value Option for Financial Assets and Financial Liabilities*, or SFAS 159, effective January 1, 2008. SFAS 159 permits companies to elect to measure certain financial instruments and certain other items at fair value. The standard requires that unrealized gains and losses on items for which the fair value option has been elected be reported in earnings. The adoption of SFAS 159 did not impact the Company's consolidated financial position, results of operations or cash flows.

5. Balance Sheet Components

Property and equipment, net, consist of:

	Estimated Useful Lives (Years)	December 31, 2008	December 31, 2007
		(in thousands)	
Machinery and equipment	5–7	$ 5,713	$ 5,860
Computers and software	3	1,343	1,826
Furniture and fixtures	3–10	259	274
Leasehold improvements	6–10	1,133	1,102
		8,448	9,062
Accumulated depreciation and amortization		(6,345)	(6,014)
		$ 2,103	$ 3,048

Depreciation and amortization of property and equipment was $1.0 million, $1.1 million, and $852,000 for the years ended December 31, 2008, 2007, and 2006, respectively.

Accrued expenses consist of:

	December 31, 2008	December 31, 2007
	(in thousands)	
Accrued clinical and research services	$5,494	$10,650
Accrued compensation and benefits	1,434	3,410
Other	607	952
	$7,535	$15,012

6. Long-Term Debt

The Company has entered into equipment financing agreements that were used to finance capital expenditures. These agreements provide for equal monthly installments to be paid over a three to four year period, with interest at rates ranging from 8.92 percent to 10.41 percent per annum. At December 31, 2008 and 2007, the Company had $1.2 million and $2.1 million, respectively, in outstanding borrowings under these agreements. Outstanding borrowings under these agreements are collateralized by the related equipment.

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

At December 31, 2008, future payments under the Company's long-term debt were as follows:

Year Ending	(in thousands)
2009	$ 795
2010	331
2011	67
2012	32
	1,225
Less: Current portion	(795)
Long-term portion	$ 430

7. Collaborative Research and Licensing Agreements

In March 2003, the Company 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 2009. As of December 31, 2008, the Company had received an aggregate of $15.4 million under the agreement, consisting of an upfront payment, research funding and related fees. The Company may also receive license fees and milestone payments as well as royalties on future product sales worldwide, if any. Revenue recognized under this agreement during the years ended December 31, 2008, 2007, and 2006 totaled $1.0 million, $1.3 million, and $2.0 million, respectively.

In July 1999, the Company entered into a collaboration agreement with Allergan to discover, develop and commercialize drugs for the treatment of glaucoma based on the Company's compounds. Under the agreement, the Company provided its drug discovery expertise to enable the selection by Allergan of a product candidate for development and commercialization. Allergan was granted exclusive worldwide rights to products based on this product candidate for the treatment of ocular disease. As of December 31, 2008, the Company had received an aggregate of $9.4 million in payments under the agreement, consisting of upfront fees, research funding, and milestone payments. In addition, the Company is eligible to receive additional milestone payments as well as royalties on future product sales worldwide, if any. Revenue recognized under this agreement during the years ended December 31, 2008, 2007, and 2006 totaled $23,000, $336,000 and $179,000, respectively.

In September 1997, the Company 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 subsequently amended in conjunction with the execution of the March 2003 collaboration. Pursuant to the 1997 agreement, the Company granted Allergan exclusive worldwide rights to commercialize products resulting from the collaboration. The Company had received an aggregate of $10.5 million in research funding and milestone payments through December 31, 2008 under this agreement. The Company is also eligible to receive additional milestone payments 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 the Company. The Company recognized no revenue under this agreement during the years ended December 31, 2008, 2007, and 2006.

In January 2005, the Company entered into a three-year collaboration agreement with Sepracor, which term ended in January 2008. In connection with the collaboration, Sepracor purchased 1,890,422 shares of the Company's common stock for an aggregate of $20 million in two $10 million tranches. In January 2005, Sepracor purchased 1,077,029 shares at a price per share of approximately $9.28, which represented a 40 percent

premium to the 30-day trailing average closing price of the Company's common stock on the date of the agreement. In January 2006, Sepracor purchased an additional 813,393 shares at a price per share of approximately $12.29, which represented a 25 percent premium to the 30-day trailing average closing price at the one-year anniversary of the agreement. The Company recorded the premium associated with each of these common stock purchases, which was computed based on the excess of the purchase price over the closing price of the Company's common stock on the date of purchase, as deferred revenue. The deferred revenue has been recognized as revenue as the related research activities were performed over the research term. Pursuant to the terms of the collaboration agreement, the Company had received $6.7 million in research funding as of December 31, 2008. During the years ended December 31, 2008, 2007 and 2006, revenue of $91,000, $3.4 million, and $3.8 million was recognized under the collaboration, respectively. As this agreement has terminated, there will be no future payments under it to the Company.

In May 2004, the Company entered into a three-year development agreement with The Stanley Medical Research Institute, or SMRI, which term ended in May 2007. Under this agreement, the Company received an aggregate of $5.0 million in funding to support the further development of one of the Company's product candidates. Upon signing this agreement, the Company also received $1.0 million from SMRI in exchange for a convertible promissory note issued to SMRI bearing interest at 9 percent per annum (the "SMRI Note"). Upon the closing of the Company's initial public offering on June 2, 2004, the SMRI Note and accrued interest automatically converted into 143,914 shares of the Company's common stock at the initial public offering price. Revenue recognized under this agreement totaled $1.0 million and $2.0 million during the years ended December 31, 2007 and 2006, respectively. As this agreement has terminated, there will be no future payments under it to the Company.

8. Restructuring

In August 2008, the Company implemented a strategic restructuring designed to focus resources on its most advanced product candidates and provide additional financial flexibility and strength. In connection with the restructuring, the Company reduced its total workforce by about 50 percent. The Company provided cash severance payments, continuation of benefits and outplacement services to employees directly affected by the workforce reductions. The Company incurred charges of approximately $2.1 million in connection with the workforce reductions, of which $1.7 million is included in research and development expenses and $454,000 is included in general and administrative expenses in the statement of operations for the year ended December 31, 2008. As of December 31, 2008, the Company had accrued remaining restructuring costs totaling $278,000 which amount was included in accrued compensation and benefits (Note 5). It is expected that substantially all of these restructuring costs will be paid by March 31, 2009.

9. Stockholders' Equity

Public Offerings

In April 2007, the Company raised net proceeds of $96.1 million from the sale of 6,612,500 shares of its common stock in a public offering, including 862,500 shares sold pursuant to an exercise of the underwriters' over-allotment option.

In May 2006, the Company raised net proceeds of $59.4 million from the sale of 5,285,806 shares of its common stock in a public offering, including 338,577 shares sold pursuant to an exercise of the underwriters' over-allotment option.

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

Committed Equity Financing Facility

In August 2008, the Company entered into the CEFF with Kingsbridge Capital Limited that provides the Company with access, at its discretion, to up to $60 million in capital during a three-year period through the sale of newly-issued shares of the Company's common stock. The Company may access capital under the CEFF in tranches of up to a maximum of between 2.0 and 3.5 percent of its market capitalization at the time of the draw down of each tranche, subject to certain conditions, including a minimum share price threshold of $1.50, which the Company's stock price was below at December 31, 2008. The funds that can be raised under the CEFF, if available, over the three-year period will depend on the then-current price of the Company's common stock and the number of shares actually sold, which may not exceed an aggregate of approximately 7 million shares. The shares would be sold at discounts ranging from 6 percent to 12 percent, depending on the average market price of the Company's common stock during the applicable pricing period. As of December 31, 2008, the Company had not raised any funds pursuant to the CEFF. The Company is not obligated to utilize any of the funds available under the CEFF and there are no minimum commitments or minimum use penalties.

In connection with the CEFF, the Company issued a warrant to Kingsbridge to purchase 350,000 shares of common stock at an exercise price of $3.915 per share. The warrant became exercisable in February 2009 for a five-year period through February 2014, subject to certain exceptions. The warrant's value of $576,000 was determined on the date of grant using a Black-Scholes pricing 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. In accordance with SFAS No. 150 and EITF 00-19, this warrant was recorded as a component of stockholders' equity with an equal offsetting amount to stockholders' equity because the value of the warrant is considered a financing cost.

Also in connection with the CEFF, the Company filed a resale shelf registration statement on Form S-3 with the SEC, which would allow Kingsbridge to resell, as registered securities, any of the shares of the Company's common stock that may be issued under the CEFF or upon the exercise of the warrant. The registration statement was declared effective by the SEC on September 23, 2008 and must be effective any time that the Company chooses to conduct a draw down under the CEFF. In addition, if the registration statement, or the related prospectus, is not available for the resale of securities purchased by Kingsbridge under the CEFF, then, under certain circumstances, the Company may be required to pay certain liquidated damages to Kingsbridge.

Warrants

In addition to the 350,000 warrants issued in connection with the CEFF, the Company had warrants outstanding at December 31, 2008 to purchase an aggregate of 1,319,402 shares of its common stock that were issued in connection with a private placement completed in April 2005 . These warrants have an exercise price of $8.148 per share and will expire in April 2010. The Company also had warrants outstanding at December 31, 2008 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 2004 Equity Incentive Plan (the "2004 Plan") became effective upon the closing of the initial public offering on June 2, 2004. The 2004 Plan permits the grant of options to directors, officers, other employees, and consultants. In addition, the 2004 Plan permits the grant of stock bonuses, rights to purchase restricted stock, and other stock awards. The exercise price of options granted under the 2004 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 2004 Plan generally vest over a four-year period. At December 31, 2008, 3,718,699 shares of common stock were authorized for issuance under the 2004 Plan. Upon the closing of

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

the Company's initial public offering on June 2, 2004, all shares that remained eligible for grant under the Company's 1997 stock option plan (the "1997 Plan") were transferred to the 2004 Plan. The 2004 Plan share reserve also has been, and may be, increased by the number of shares that otherwise would have reverted to the1997 Plan reserve after June 2, 2004. The 2004 Plan also includes an "evergreen" provision, which provides for automatic increases to the number of shares included in the share reserve in connection with each annual meeting of stockholders for a period of five years, which period began with the meeting in 2005. At December 31, 2008, there were 827,044 shares of common stock available for new grants under the 2004 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. 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 vest over a four-year period. The 1997 Plan permitted grants to certain employees allowing those employees to early exercise their options for restricted shares of the Company's common stock that were subject to the original vesting terms of the option. Restricted shares are generally subject to a repurchase option in favor of the Company that is exercisable upon termination of the continuous service of the optionee at an amount per share equal to the purchase price of the restricted shares. During the year ended December 31, 2007, 16,124 restricted common shares with an aggregate intrinsic value of $161,000 vested. There were no unvested restricted shares outstanding at December 31, 2008 and 2007.

Stock option transactions under the 1997 Plan and 2004 Plan during the years ended December 31, 2008, 2007, and 2006 are presented below:

	Number of Shares	Weighted-Average Exercise Prices	Weighted Average Remaining Contractual Term
Outstanding at December 31, 2005	2,238,647	$ 4.34	
Granted	913,564	$ 11.19	
Exercised	(258,861)	$ 2.42	
Canceled/forfeited	(72,961)	$ 8.51	
Outstanding at December 31, 2006	2,820,389	$ 6.62	
Granted	511,724	$ 10.19	
Exercised	(416,736)	$ 4.72	
Canceled/forfeited	(104,034)	$ 9.30	
Outstanding at December 31, 2007	2,811,343	$ 7.46	
Granted	1,360,434	$ 5.09	
Exercised	(70,548)	$ 2.66	
Canceled/forfeited	(547,595)	$ 9.21	
Outstanding at December 31, 2008	3,553,634	$ 6.37	6.9
Vested and expected to vest at December 31, 2008	3,360,539	$ 6.39	6.7
Exercisable at December 31, 2008	2,013,495	$ 6.74	5.1

At December 31, 2008, 2007, and 2006, there were 2,013,495, 1,741,816 and 1,581,353 options exercisable, respectively.

The aggregate intrinsic value of options outstanding and options exercisable as of December 31, 2008 is calculated as the difference between the exercise price of the underlying options and the closing market price of

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

the Company's common stock of $0.90 on that date. The aggregate intrinsic value of options outstanding and options exercisable as of December 31, 2008 was zero. The aggregate intrinsic value of options exercised during the years ended December 31, 2008, 2007, and 2006 was approximately $380,000, $3.8 million, and $2.0 million, respectively, determined as of the date of exercise. The Company received $188,000 in cash from options exercised during the year ended December 31, 2008. SFAS No. 123(R) requires that cash flows resulting from tax deductions in excess of the cumulative compensation cost recognized for options exercised (excess tax benefits) be classified as cash inflows provided by financing activities and cash outflows used in operating activities. Due to the Company's net loss position, no tax benefits have been recognized in the cash flow statement.

The weighted average fair value of options granted during the years ended December 31, 2008, 2007, and 2006 was approximately $3.21, $6.25, and $6.84, respectively. As of December 31, 2008, total unrecognized compensation cost related to stock options and purchase rights was approximately $5.7 million, and the weighted average period over which this cost is expected to be recognized is 2.7 years.

The following table summarizes information about stock options outstanding at December 31, 2008:

	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
$ 1.08–$ 1.80	511,224	3.8	$ 1.22	496,224	$ 1.21
$ 2.00–$ 4.00	946,313	7.8	$ 2.46	235,313	$ 2.66
$ 5.49–$ 6.95	508,681	6.3	$ 6.74	371,418	$ 6.72
$ 7.19–$ 8.50	726,987	8.3	$ 8.25	237,220	$ 8.10
$ 8.55–$12.00	485,989	6.4	$ 9.66	405,652	$ 9.67
$12.02–$15.98	374,440	7.3	$ 14.90	267,668	$ 14.98
	3,553,634		$ 6.37	2,013,495	$ 6.74

Stock-based awards issued to non-employees are accounted for using a fair value method and are remeasured 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 option pricing model with the following assumptions for the year ended December 31, 2008: dividend yield of 0 percent; volatility of 72 to 76 percent; risk free interest rate of 2 to 4 percent and remaining contractual life of 7 to 10 years. For the year ended December 31, 2007, the following assumptions were used: dividend yield of 0 percent; volatility of 72 to 74 percent; risk free interest rate of 4 to 5 percent and remaining contractual life of 7 to 10 years. For the year ended December 31, 2006 the following assumptions were used: dividend yield of 0 percent; volatility of 72 to 74 percent; risk free interest rate of 5 percent; and remaining contractual life of 7 to 10 years. During the years ended December 31, 2008, 2007, and 2006, in connection with the grant of stock options to non-employees, the Company recorded expense (benefit) of ($39,000), $1.3 million, and $740,000, respectively.

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. The Purchase Plan includes an "evergreen" provision providing that an additional number of shares will automatically be added to the shares authorized for issuance at each annual meeting of stockholders for a period of ten years, which began with the meeting in 2005. A total of

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

625,000 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, 2008, 2007 and 2006, 71,937, 65,676, and 64,542 shares of common stock were issued at average prices of $4.83, $7.94 and $6.38 under the Purchase Plan, respectively. The weighted average fair value of purchase rights granted during the years ended December 31, 2008, 2007 and 2006 was $1.49, $5.48 and $3.78, respectively. During the years ended December 31, 2008, 2007 and 2006, the Company recorded cash received from the exercise of purchase rights of $348,000, $522,000 and $412,000, respectively.

Common Stock Reserved For Future Issuance

At December 31, 2008, 3,553,634 and 1,743,475 shares of common stock were reserved for issuance upon the exercise of stock options and warrants, respectively.

10. 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 $458,000, $435,000 and $372,000, for the years ended December 31, 2008, 2007 and 2006, respectively.

11. Income Taxes

At December 31, 2008, the Company had both federal and state net operating loss (“NOL”) carryforwards of approximately $267.9 and $180.5 million, respectively. The federal and state NOL carryforwards begin to expire in 2012 and 2014 respectively. The Company has $5.8 million of federal research and development (“R&D”) credit carryforwards that will begin to expire in 2012. In addition, the Company has $3.4 million of state R&D credit carryforwards that have no expiration date. The Company also has foreign NOL carryforwards of approximately $4.2 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

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

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 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 Financial Accounting Standards Board Interpretation No. 48, Accounting for Uncertainty in Income Taxes ("FIN 48"), an interpretation of FASB Statement No. 109. Due to the existence of the valuation allowance, future changes in the Company's unrecognized tax benefits will not impact its effective tax rate. 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.

Approximately $2.6 million of the NOL carryforwards relates 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 and deferred tax liabilities are as follows:

	2008	2007
	(in thousands)	
NOL carryforwards	$ 101,615	$ 77,717
R&D credit carryforwards	8,025	6,341
Capitalized R&D	4,135	3,337
Stock-based compensation	1,908	1,976
Other	1,459	2,070
	117,142	91,441
Valuation allowance	(116,855)	(90,839)
Deferred tax liabilities	(239)	(634)
	$ 48	$ (32)

Realization of deferred tax assets is dependent upon future earnings, if any, the timing and amount of which are uncertain. Accordingly, the net deferred tax assets have been fully offset by a valuation allowance. The valuation allowance increased by approximately $26.0 million in 2008 primarily due to NOL carryforwards.

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

	2008	2007	2006
		(in thousands)	
Amounts computed at statutory federal rate	$(21,868)	$(19,167)	$(15,294)
Permanent differences	1,131	499	716
Federal R&D credits	(1,687)	(1,593)	(1,403)
Change in valuation allowance	25,971	22,900	19,025
State taxes	(3,488)	(3,218)	(2,476)
Foreign taxes	(87)	105	(16)
Other	(46)	489	(646)
	$ (74)	$ 15	$ (94)

The net income tax expense (benefit) for the years ended December 31, 2008, 2007 and 2006 are recorded in the Company's statement of operations in general and administrative expenses.

The Company has adopted FIN 48 as of January 1, 2007. Upon adoption, the Company recognized no adjustment in the amount of unrecognized tax benefits. As of the date of adoption, the Company had no unrecognized tax benefits. The Company's policy is to recognize interest and penalties, if any, as a component of income tax expense.

The tax years 1998-2008 remain open to examination by the major taxing jurisdictions to which the Company is subject.

12. Commitments and Contingencies

The Company and its Swedish subsidiary lease office and laboratory facilities and certain equipment under noncancelable operating leases that expire at various dates through May 2015. 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 and the U.S. leases each provide for early termination.

Future noncancelable minimum payment obligations under operating lease arrangements are as follows at December 31, 2008:

Year Ending	(in thousands)
2009	$ 2,300
2010	2,322
2011	2,136
2012	2,171
2013	985
Thereafter	2,379
	$ 12,293

Rent expense was $2.6 million, $2.5 million and $2.2 million for the years ended December 31, 2008, 2007, and 2006, 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 other long-term liabilities in the accompanying consolidated balance sheet.

The Company has also 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 $30.3 million of future services under these agreements as of December 31, 2008. 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 October 2006, the Company entered into an agreement to provide initial seed funding to help establish Abbey Pharmaceuticals, Inc. ("Abbey"), a startup biotechnology company. Under that agreement, the Company

ACADIA PHARMACEUTICALS INC.

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS—(Continued)

has agreed to increase its investment in Abbey to an aggregate of $1 million upon Abbey's satisfaction of certain conditions by December 31, 2009, including completion of an external equity financing. The Company has concluded that Abbey initially represents a variable interest entity and thus, under the guidance of FASB Interpretation No. 46(R), *Consolidation of Variable Interest Entities—an Interpretation of ARB No.51*, it has included the accounts of Abbey in the accompanying consolidated financial statements.

In November 2006, the Company entered into an agreement pursuant to which it licensed certain intellectual property rights that complement its patent portfolio. If certain conditions are met for compounds covered by the agreement, the Company would be required to make future payments, including milestones, sublicensing fees and royalties. The amount of potential future milestones payments is $11 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 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.

During the year ended December 31, 2006, the Company recorded a gain of $3.6 million associated with an agreement it entered into to fully settle a civil action inclusive of all fees and costs. During the year ended December 31, 2005, the Company had recorded a provision for loss from litigation of $6.2 million related to this matter.

13. Selected Quarterly Financial Data (Unaudited)

2008	March 31,	June 30,	September 30,	December 31,
	(in thousands, except per share data)			
Revenues	$ 806	$ 177	$ 282	$ 325
Net loss	$(16,380)	$(18,287)	$ (15,614)	$ (13,963)
Net loss per common share, basic and diluted	$ (0.44)	$ (0.49)	$ (0.42)	$ (0.38)

2007	March 31,	June 30,	September 30,	December 31,
Revenues	$ 1,960	$ 2,055	$ 1,957	$ 1,583
Net loss	$(12,554)	$(10,753)	$ (16,045)	$ (17,038)
Net loss per common share, basic and diluted	$ (0.42)	$ (0.29)	$ (0.43)	$ (0.46)

Revenues, loss before change in accounting principle, and net loss are rounded to thousands each quarter. Therefore, the sum of the quarterly amounts may not equal the annual amounts reported. Net 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 loss per common share amounts may not equal the annual amounts reported.

Table of Contents

INDEX TO EXHIBITS

Exhibit Number	Description
3.1	Amended and Restated Certificate of Incorporation (incorporated by reference to Exhibit 3.3 to Registration Statement File No. 333-113137).
3.2	Amended and Restated Bylaws (incorporated by reference to Exhibit 3.5 to Registration Statement File No. 333-113137).
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 purchasers in a private placement on April 20, 2005 (incorporated by reference to Exhibit 4.3 to Registration Statement No 333-124753).
4.4	Form of Warrant to Purchase Common Stock issued to Kingsbridge Capital Limited on August 4, 2008 (incorporated by reference to Exhibit 4.4 to Registrant's Quarterly Report on Form 10-Q, filed August 7, 2008).
10.1	Amended and Restated Stockholders Agreement, dated March 27, 2003, by and among the Registrant and the stockholders named therein (incorporated by reference to Exhibit 4.2 to Registration Statement No. 333-113137).
10.2[a]	Form of Indemnity Agreement for directors and officers (incorporated by reference to Exhibit 10.1 to Registration Statement No. 333-113137).
10.3[a]	1997 Stock Option Plan and forms of agreement thereunder (incorporated by reference to Exhibit 10.2 to Registration Statement No. 333-113137).
10.4[a]	2004 Equity Incentive Plan and forms of agreement thereunder (incorporated by reference to Exhibit 10.3 to Registration Statement No. 333-113137).
10.5[a]	2004 Employee Stock Purchase Plan and initial offering thereunder (incorporated by reference to Exhibit 10.4 to Registration Statement No. 333-113137).
10.6[a]	401(k) Plan (incorporated by reference to Exhibit 10.5 to Registration Statement No. 333-113137).
10.7[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).
10.9[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).
10.10[a]	Employment Contract, dated November 21, 2000, between the Registrant and Bo-Ragnar Tolf, Ph.D. (incorporated by reference to Exhibit 10.11 to Registration Statement No. 333-113137).
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).
10.12[a]	Employment Offer Letter, dated January 10, 2008, between the Registrant and John J. Kaiser.
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).

Table of Contents

Exhibit Number	Description
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	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).
10.21	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).
10.22	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).
10.23	Lease Agreement, executed November 2, 2005, between ACADIA Pharmaceuticals AB and Medeon Fastigheter AB (incorporated by reference to Exhibit 10.4 to the Registrant's Quarterly Report on Form 10-Q, filed November 14, 2005).
10.24	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).
10.25[b]	Development Agreement, dated May 3, 2004, between the Registrant and The Stanley Medical Research Institute (incorporated by reference to Exhibit 10.18 to Registration Statement No. 333-113137).
10.26	Common Stock Purchase Agreement by and between Kingsbridge Capital Limited and the Registrant, dated as of August 4, 2008 (incorporated by reference to Exhibit 10.1 to Registrant's Quarterly Report on Form 10-Q, filed August 7, 2008).
10.27	Registration Rights Agreement by and between Kingsbridge Capital Limited and the Registrant, dated as of August 4, 2008 (incorporated by reference to Exhibit 10.2 to Registrant's Quarterly Report on Form 10-Q, filed August 7, 2008).

Table of Contents

Exhibit Number	Description
10.28[b]	Registration Rights Agreement, dated January 10, 2005, by and between the Registrant and Sepracor Inc. (incorporated by reference to Exhibit 99.3 to the Registrant's Current Report on Form 8-K, filed January 14, 2005).
10.29[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).
10.30[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 page 51).
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.

[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.

Exhibit 10.12

[ACADIA Letterhead]

January 10, 2008

John J. Kaiser
12389 Lynnwood Boulevard
Carmel, IN 46033

Revised Offer

Dear John:

We are delighted to offer to you the position of VP, Strategic Marketing & Commercial Development with ACADIA Pharmaceuticals Inc. (the "Company" or "ACADIA") reporting to the Company's Chief Executive Officer, Dr. Uli Hacksell. Subject to review and approval by the Company's Board of Directors and successful completion of a background check, the terms of our offer are summarized below:

1. **Base Salary.** Your salary will be $275,000 per year to be paid semi-monthly. As an employee of ACADIA, you will be expected to abide by the Company's rules and regulations and to devote all of your business time, skill, attention and best efforts to ACADIA business to fulfill the responsibilities assigned to you.

2. **Signing Bonus.** The Company will provide you a signing bonus of $100,000, subject to applicable income tax withholdings. This bonus will be paid in two payments. The first payment of $50,000 will be paid on the first pay period following the start date of your employment. You agree to refund this first payment to the Company if you voluntarily terminate your employment within 18 months of the start date of your employment. The second payment of $50,000 will be paid on the first pay period following the one-year anniversary of your start date with ACADIA. You agree to refund this second payment to the Company if you voluntarily terminate your employment prior to your two-year anniversary of employment with ACADIA.

3. **Bonus Plan.** You will be eligible to receive a guaranteed bonus of $60,500, subject to the last two sentences of this paragraph, to be paid during the normal bonus payment schedule for the 2008 calendar year. Beginning the year 2009, you will be eligible to receive a discretionary annual performance bonus currently targeted at 22% of your annual base salary but which will be granted and determined in the sole discretion of the Company's Board of Directors based upon its evaluation of the Company's and your achievement of such specific performance goals as established by your supervisor. You must be an employee of the Company on the date upon which bonuses are paid in a given year to be eligible for any bonus. Your bonus, if any, will not be prorated in the event you resign or are terminated prior to the date upon which bonuses are awarded.

4. **Stock Options**.

(a) **Initial Grant.** In connection with the commencement of your employment, the Company will recommend that the Board of Directors grant you an option (the "Option") to purchase 85,000 shares of the Company's Common Stock (the "Shares") at an exercise price equal to the fair market value of the common stock at the time of grant, as determined in accordance with the terms of the Company's 2004 Equity Incentive Plan (the "Plan").

(b) **Vesting.** The Option will vest over four (4) years, with twenty-five percent (25%) of the Shares vesting on the first anniversary of the date of grant and 1/48th of the Shares vesting monthly thereafter on the monthly anniversary of the date of grant provided that you remain employed by the Company through each vesting installment date.

(c) **Other Terms.** The Option will be an incentive stock option to the maximum extent allowed by the tax code and will be subject to the terms of the Plan, a related stock option agreement, and a notice of stock grant to be executed by you and the Company.

(d) **Change of Control.** In the event the Company is acquired or completes a Corporate Transaction as defined in the Company's 2004 Equity Incentive Plan, any unvested options you then hold will be immediately vested, subject to your continued employment for a period of at least six months following the completion of the Corporate Transaction if so requested by the Company.

5. **Severance Benefit**. In the event the Company terminates your employment other than for Cause (as defined below), you will receive severance in the form of the continuation of your base salary in effect as of the date of termination for a nine month period following the termination of your employment and continuation of the health benefits you were receiving at the time of your termination (subject to the terms of the Company's benefit plans) for the same nine-month period.

"Cause" for termination shall be deemed to exist upon a good faith finding by the Company of (a) your material failure to competently perform your assigned duties for the Company, (b) sustained poor performance of any material aspect of your duties or obligations, (c) dishonesty, gross negligence or other material misconduct, or (d) your conviction of, or the entry of a pleading of guilty or nolo contendere by you to, any crime involving moral turpitude or any felony.

6. **Benefits.** You will be eligible to participate in the Company's standard benefit plans, which include medical, dental, vision, life, accidental death and dismemberment, and short and long-term disability insurance coverage. You will also be able to utilize a flexible spending arrangement that allows employees the opportunity to pay for certain dependent care and health care related costs with pretax dollars. Note that these plans for new employees are effective as of the 1st of the month following the employment start date and enrollment. Your eligibility and participation in these plans, is, of course, subject to the terms of the plans themselves.

7. **Vacation and Holidays.** You will also receive 20 vacation days each year, accrued monthly, and paid holidays in accordance with the Company's annual holiday schedule.

8. **401(k).** You will have the opportunity to participate in the Company's 401(k) plan. This plan currently provides for the Company to match, on a dollar for dollar basis, the employee contributions to the plan up to 5% of the employee's compensation, subject to limitations imposed by the Internal Revenue Service. The Company match is subject to change at the discretion of the Board of Directors. The plan is managed by Fidelity Investments and provides for enrollment on the first day of each quarter.

9. **Inventions and Non-Disclosure.** You will be required to sign the Inventions and Non-Disclosure Agreement, attached to this letter, as a condition of your employment.

10. **Authorization to Work.** You will need to provide the Company with the legally required proof of your identity and authorization to work in the United States. Typically, a **driver's license with photograph and a social security card, or a passport** will be sufficient and should be **brought with you** on your first day of work. Such documentation must be provided within three (3) business days of your date of hire, or our employment relationship with you may be terminated.

11. **At-Will; Entire Agreement.** Your employment is at-will and for no specified period, and either you or ACADIA may terminate this employment relationship at anytime and for any reason. The agreement in this letter sets forth our entire understanding regarding your employment and supersedes any other negotiations, written or oral.

The start date for your employment with ACADIA will be Monday, February 11, 2008 or other date as mutually agreed upon between you, Uli Hacksell and myself.

We look forward to your joining ACADIA Pharmaceuticals Inc. and believe that it will be a mutually beneficial experience. If you have any questions, please contact Uli Hacksell or myself at (858) 320-8690. This offer, if not accepted, will expire on January 18, 2008.

Please indicate your agreement with the above terms by signing below and returning to my attention.

Sincerely,

/s/ Natasha O. Bowman

Natasha O. Bowman
Director of Human Resources

Accepted and agreed:

/s/ John J. Kaiser	January 13, 2008
John J. Kaiser	Date

Enclosure—Inventions and Non-Disclosure Agreement

Exhibit 21.1

List of Subsidiaries

NAME OF SUBSIDIARY	JURISDICTION OF INCORPORATION
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 (No. 333-131079 and 333-153347) and the Registration Statements on Form S-8 (Nos. 333-115956, 333-128290, 333-137557, 333-146398 and 333-153346) of ACADIA Pharmaceuticals Inc. of our report dated March 4, 2009 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 9, 2009

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, 2008 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 9, 2009

/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, 2008 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 9, 2009

/S/ THOMAS H. AASEN

Thomas H. Aasen
Vice President and Chief Financial 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, 2008, 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; 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 9, 2009

/s/ ULI HACKSELL

Uli Hacksell, Ph.D.
Chief Executive Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, or 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 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, 2008, as filed with the Securities and Exchange Commission on or about the date hereof (the "Report"), I, Thomas H. Aasen, Vice President and Chief Financial 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; 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 9, 2009

/s/ THOMAS H. AASEN

Thomas H. Aasen
Vice President and
Chief Financial Officer

This certification shall not be deemed "filed" for purposes of Section 18 of the Securities and Exchange Act of 1934, or 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 or the Exchange Act, except to the extent that the Company specifically incorporates it by reference.