ARENA PHARMACEUTICALS INC
Form 10-K
March 16, 2009
Table of Contents

UNITED STATES

SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

FORM 10-K

x **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 000-31161

ARENA PHARMACEUTICALS, INC.

(Exact name of registrant as specified in its charter)

Delaware	**23-2908305**
(State or other jurisdiction of incorporation or organization)	**(I.R.S. Employer Identification No.)**
6166 Nancy Ridge Drive, San Diego, CA	**92121**
(Address of principal executive offices)	**(Zip Code)**

858.453.7200

(Registrant s telephone number, including area code)

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

Title of each class	**Name of each exchange on which registered**
Common Stock, $0.0001 par value	NASDAQ Global Market
Preferred Stock Purchase Rights	NASDAQ Global Market

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

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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§229.405 of this chapter) is not contained herein, and will not be contained, to the best of registrant s knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K x

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

Large accelerated filer ¨ Accelerated filer x
Non-accelerated filer ¨ (Do not check if a smaller reporting company) Smaller reporting company ¨
Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes ¨ No x

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately $377.5 million as of June 30, 2008, based on the last sale price of the registrant s common stock as reported on the NASDAQ Global Market on such date. For purposes of this calculation, shares of the registrant s common stock held by directors and executive officers have been excluded. This number is provided only for purposes of this Annual Report on Form 10-K and does not represent an admission that any particular person or entity is an affiliate of the registrant.

As of March 13, 2009, there were 74,194,462 shares of the registrant s common stock outstanding.

DOCUMENTS INCORPORATED BY REFERENCE

Certain information required by Part III of this Annual Report on Form 10-K is incorporated by reference from the registrant s definitive proxy statement for the annual meeting of stockholders to be held in June 2009, which will be filed with the Securities and Exchange Commission within 120 days after the close of the registrant s fiscal year ended December 31, 2008.

Table of Contents

ARENA PHARMACEUTICALS, INC.

TABLE OF CONTENTS

Table of Contents

INFORMATION RELATING TO FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements. These forward-looking statements involve a number of risks and uncertainties. These forward-looking statements can generally be identified as such because the context of the statement will include words such as may, will, intends, plans, believes, anticipates, expects, estimates, predicts, potential, continue, likely, or opportunit words or other similar words. Similarly, statements that describe our future plans, strategies, intentions, expectations, objectives, goals or prospects and other statements that are not historical facts are also forward-looking statements. Discussions containing these forward-looking statements may be found, among other places, in Business and Management s Discussion and Analysis of Financial Condition and Results of Operations in this Annual Report on Form 10-K. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. Readers of this Annual Report on Form 10-K are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the time this Annual Report on Form 10-K was filed with the Securities and Exchange Commission, or SEC. These forward-looking statements are based largely on our expectations and projections about future events and future trends affecting our business, and are subject to risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. These risks and uncertainties include, without limitation, those discussed in Risk Factors and in Management s Discussion and Analysis of Financial Condition and Results of Operations of this Annual Report on Form 10-K. In addition, past financial or operating performance is not necessarily a reliable indicator of future performance, and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we undertake no obligation to publicly revise our forward-looking statements to reflect events or circumstances that arise after the filing of this Annual Report on Form 10-K or documents incorporated by reference herein that include forward-looking statements.

Arena Pharmaceuticals®, Arena® and our corporate logo are registered service marks of Arena. CART and BRL Screening are unregistered service marks of Arena. All other brand names or trademarks appearing in this Annual Report on Form 10-K are the property of their respective holders.

In this Annual Report on Form 10-K, Arena Pharmaceuticals, Arena, we, us and our refer to Arena Pharmaceuticals, Inc., and our wholly ow subsidiaries on a consolidated basis, unless the context otherwise provides.

Table of Contents

PART I

Item 1. Business.

We are a clinical-stage biopharmaceutical company committed to discovering and developing innovative therapies offering significant medical advances and new options for patients. We are focused on discovering, developing and commercializing oral drugs in four major therapeutic areas: cardiovascular, central nervous system, inflammatory and metabolic diseases. Our lead drug candidate, lorcaserin hydrochloride, or lorcaserin, is being investigated in a Phase 3 clinical trial program for the treatment of obesity. Our broad pipeline of novel compounds targets G protein-coupled receptors, or GPCRs, and includes compounds being evaluated independently and with partners, including Merck & Co., Inc., or Merck, and Ortho-McNeil-Janssen Pharmaceuticals, Inc., or Ortho-McNeil-Janssen.

We focus on GPCRs because they are a validated class of drug targets that mediate the majority of cell-to-cell communication in humans. A high percentage of today s prescription drugs target one or more GPCRs, and we believe that approved GPCR-based drugs target only approximately one third of the known non-sensory GPCRs. Selective targeting of specific GPCRs is intended to increase the likelihood of the desired pharmacology and minimize the risk of off target effects. We believe our GPCR-focused technologies and integrated discovery and development capabilities will allow us to continue to build our pipeline of unique and selective drug candidates.

We expect to announce around the end of March 2009 results from BLOOM (Behavioral modification and Lorcaserin for Overweight and Obesity Management), the first of two pivotal Phase 3 clinical trials evaluating the efficacy and safety of lorcaserin. BLOOM is a two-year, randomized, double-blind and placebo-controlled trial initiated in September 2006 that enrolled 3,181 overweight and obese patients. In December 2007, we initiated the second pivotal trial, BLOSSOM (Behavioral modification and Lorcaserin Second Study for Obesity Management). The BLOSSOM trial is a one-year, randomized, double-blind and placebo-controlled trial that enrolled 4,008 overweight and obese patients, and we expect to announce results for this trial around the end of September 2009. These two trials constitute our pivotal trial program for lorcaserin, and will be submitted to the United States Food and Drug Administration, or FDA, to support a New Drug Application, or NDA, for lorcaserin. In addition to our pivotal trials, we have a lorcaserin Phase 3 clinical trial called BLOOM-DM (Behavioral modification and Lorcaserin for Overweight and Obesity Management in Diabetes Mellitus), which is a one-year, randomized, double-blind and placebo-controlled trial that is expected to enroll approximately 600 overweight and obese patients with type 2 diabetes.

A standardized program of diet and exercise advice is included in all of the lorcaserin Phase 3 trials, and the primary efficacy endpoint in the trials is the proportion of patients with a 5% or greater weight reduction from baseline at week 52. We are also studying several key secondary endpoints, including changes in serum lipids and blood pressure and, in the BLOOM-DM trial, HbA1c levels and other indicators of glycemic control. In contrast to BLOOM, patients with preexisting FDA-defined valvulopathy and other echocardiographic abnormalities are included in BLOSSOM and BLOOM-DM.

In addition to lorcaserin, our other internal programs include programs evaluating APD791, APD916 and APD811, as well as earlier-stage research programs. Due to the current global economic challenges and our financial condition, we have temporarily suspended further clinical development of APD791 and delayed the planned filing of an Investigational New Drug, or IND, application for APD916.

APD791 is an oral drug candidate that we discovered and are investigating for the treatment and prevention of arterial thrombosis and other related conditions. We have completed Phase 1a and Phase 1b clinical trials of APD791 evaluating the compound s safety, pharmacokinetics and pharmacodynamics in healthy volunteers. APD916 is an oral drug candidate we discovered and are investigating for the treatment of narcolepsy and cataplexy, and potentially for other indications. Subject to our financial resources and prioritization of lorcaserin, we intend to file an IND for APD916 with the FDA in 2009. We are also developing APD811, our preclinical drug candidate for the treatment of pulmonary arterial hypertension.

Table of Contents

In addition to internal programs, we have partnerships with pharmaceutical companies, including Merck and Ortho-McNeil-Janssen. Our Merck partnership is focused on niacin receptor agonists as treatments for atherosclerosis and other disorders. In February 2009, we announced that Merck initiated a Phase 2 clinical trial of a second generation oral niacin receptor agonist under our partnership. Our Ortho-McNeil-Janssen partnership is focused on receptor agonists of an orphan GPCR, known as GPR119, as treatments for diabetes and other disorders. In December 2008, we announced that Ortho-McNeil-Janssen initiated a first-in-human Phase 1 clinical trial of APD597, a novel, oral drug candidate discovered by Arena.

We intend to commercialize our drug candidates with partners or independently. We have not received regulatory approval for marketing or selling any drugs. We have also not generated commercial revenues from selling any drugs, other than in connection with manufacturing drugs for Siegfried Ltd, or Siegfried. We were incorporated in 1997.

Our Research and Development Programs

We have built a broad pipeline of drug candidates that target large and attractive market opportunities in several therapeutic areas. The following table summarizes our current independent and partnered development programs and selected research programs:

Development Program (Indication)	Development Status	Commercial Rights
Lorcaserin (obesity)	Phase 3	Arena
APD791 (arterial thrombosis)	Phase 1	Arena
Niacin receptor agonist (atherosclerosis and other related conditions)	Phase 2	Merck
APD597 (type 2 diabetes)	Phase 1	Ortho-McNeil-Janssen
APD916 (narcolepsy and cataplexy)	Preclinical	Arena
APD811 (pulmonary arterial hypertension)	Preclinical	Arena
Research Program		
Cardiovascular	Research	Arena
Central nervous system	Research	Arena
Inflammatory diseases	Research	Arena
Metabolic diseases	Research	Arena

Note: The above table does not list all of our research programs.

Due to the current global economic challenges and our financial condition, we have decided to focus our near-term research and development efforts on lorcaserin, preclinical activities sufficient to support an IND filing for our most promising research programs, and on earlier-stage research programs. Since preclinical research and development is significantly less resource intensive than clinical development, this will help us conserve resources and focus on the completion of the lorcaserin clinical trials and the preparation and submission of our planned filing of an NDA for lorcaserin by the end of 2009. Consistent with this approach, we have temporarily suspended further clinical development of APD791 and delayed the IND filing for APD916. We will reevaluate this approach in light of changes in our financial condition and the global economic environment. We do not expect this approach to impact the progress of our partnered programs because our partners are controlling and funding the development of these programs.

Clinical Development Programs

Lorcaserin

We are investigating lorcaserin in a Phase 3 pivotal trial program for the treatment of obesity. The US Department of Health and Human Services states that approximately one third of US adults were obese in 2005-2006. Studies have shown that a modest weight loss of 5% to 10% of body weight from baseline can result

Table of Contents

in meaningful improvements in cardiovascular risk factors (e.g., lipids, blood pressure and blood glucose) and a significant reduction in the incidence of type 2 diabetes. Pharmaceutical treatment options for obesity are currently limited.

Mechanism of Action. Lorcaserin is a novel and selective serotonin 2C receptor agonist. The serotonin 2C receptor is a GPCR located in the brain, including the hypothalamus, which is an area of the brain involved in the control of appetite and metabolism. Stimulation of this receptor is strongly associated with feeding behavior and satiety. We conducted preclinical studies examining the activity and serotonin receptor subtype specificity of lorcaserin. In these studies, lorcaserin demonstrated a high affinity and selectivity for the serotonin 2C receptor, with approximately 15-fold and 100-fold selectivity *in vitro* over the human serotonin 2A and serotonin 2B receptors, respectively, and no pharmacologic activity at other serotonin receptors except at concentrations greatly exceeding the expected therapeutic range.

Based on preclinical studies and clinical trial data to date, we believe that lorcaserin is unlikely to cause serotonin-mediated valvulopathy or other cardiovascular side effects. This belief is supported by the independent Echocardiographic Data Safety Monitoring Board, or ESMB, reviews of unblinded echocardiographic data that were performed after patients completed 6 and 12 months of dosing in the BLOOM trial. The ESMB reviews confirmed that differences, if any, in the rates of FDA-defined valvulopathy in patients treated with lorcaserin and in the control group did not meet the ESMB s predetermined stopping criteria. Our belief is also supported by data from our 4- and 12-week clinical trials, in which no apparent effects of the drug were seen on heart valves or pulmonary arterial pressure, and by long-term (6-12 month) toxicity studies at high doses in animals. However, the longer-term, ongoing clinical trials of lorcaserin will be needed to confirm these results. This is a major and continuing focus of our Phase 3 clinical trial program.

Prior Clinical Development. We have completed multiple Phase 1 and Phase 2 clinical trials of lorcaserin. Our Phase 2a clinical trial included 352 obese patients dosed for 28 days, and our Phase 2b clinical trial included 469 obese patients dosed for 12 weeks. Highly statistically significant, clinically meaningful and progressive weight loss was observed in both Phase 2 clinical trials, with no apparent drug effect on heart valves or pulmonary artery pressure, as assessed by serial echocardiograms. Lorcaserin was also generally well tolerated in both Phase 2 clinical trials.

The randomized, double-blind, multiple-dose, 28-day Phase 2a clinical trial of lorcaserin in obese patients compared doses of 1 mg, 5 mg and 15 mg of lorcaserin to placebo. Patients did not receive any diet or exercise advice, other than to abstain from consuming alcohol during the trial. Over the 28-day treatment period there was a highly statistically significant ($p=0.0002$) mean weight loss of 2.9 pounds in patients taking the 15 mg dose of lorcaserin versus 0.7 pounds for the placebo group. Lorcaserin was generally well tolerated at all doses investigated in the trial. An assessment of follow-up echocardiograms taken at the end of dosing and approximately 90 days after patients received their first doses of lorcaserin indicated no apparent drug effect on heart valves or pulmonary artery pressure.

The randomized, double-blind, multiple-dose, 12-week Phase 2b clinical trial of lorcaserin in obese patients compared doses of 10 mg and 15 mg once daily and 20 mg (10 mg dosed twice daily) of lorcaserin to placebo. Patients did not receive any diet or exercise advice, other than to abstain from consuming alcohol during the trial. The primary endpoint of the trial was weight loss after administration of lorcaserin for 12 weeks. Patients completing the 12-week treatment period with lorcaserin achieved a highly statistically significant ($p<0.001$) mean weight loss of 4.0, 5.7 and 7.9 pounds at daily doses of 10 mg, 15 mg and 20 mg (10 mg dosed twice daily), respectively, compared to 0.7 pounds for the placebo group. Using an intent-to-treat, last-observation-carried-forward analysis, treatment with lorcaserin was also associated with a highly statistically significant ($p<0.001$) mean weight loss of 3.7, 4.8 and 6.8 pounds at daily doses of 10 mg, 15 mg and 20 mg (10 mg dosed twice daily), respectively, in patients taking lorcaserin compared to 0.4 pounds for the placebo group. The proportions of patients completing the 12-week treatment period with lorcaserin who achieved a 5%

Table of Contents

or greater weight loss from baseline were 13% (p=0.015), 20% (p<0.001) and 31% (p<0.001) at daily doses of 10 mg, 15 mg and 20 mg (10 mg dosed twice daily), respectively, compared to 2% in the placebo group. Lorcaserin was generally well tolerated at all doses investigated in the trial. Adverse events occurring in greater than 5% in any of the dosed groups were headache, nausea, dizziness, vomiting, dry mouth, nasopharyngitis, fatigue and urinary tract infection. As demonstrated by the graph below, average weight loss increased progressively at each time point measured throughout the trial for all lorcaserin dose groups and was dose-dependent. As we expected, after patients stopped taking lorcaserin, they started to regain weight.

Lorcaserin Phase 2b Clinical Trial: Weight Loss by Dose and Time

An assessment of echocardiograms at baseline and day 85 indicated no apparent lorcaserin effect on heart valves or pulmonary artery pressure. No changes in valvular regurgitation greater than one category, and no significant increases in pulmonary artery pressure in any group were identified in the echocardiogram results. No significant differences in the number of patients with increased regurgitation at any value were observed between any treatment group and placebo. Valvular regurgitation, a measure of back flow or leakage of blood through heart valves due to imperfect valve closing, was scored on a five-point scale (absent, trace, mild, moderate or severe) for the mitral and aortic valves. The FDA defines significant valvulopathy as mild or greater aortic valve regurgitation or moderate or greater mitral valve regurgitation. This is one measure used in our Phase 3 program to assess potential effects of lorcaserin on heart valves. As demonstrated by the table below, the incidence of FDA-defined valvulopathy was greater, as a percentage by treatment, in the placebo group versus the combined lorcaserin treated groups.

Table of Contents

Lorcaserin Phase 2b Clinical Trial: Incidence of FDA-Defined Valvulopathy

		Lorcaserin		
	Placebo	10 mg	15 mg	20 mg
Patients (N)	99	99A, 100M	96	96
Aortic (A) Regurgitation	0	0	1	0
Mitral (M) Regurgitation	2	0	1	0
Percent by Dose	2.0%	0.0%	2.1%	0.0%
Percent by Treatment	2.0%		0.7%	

Phase 3 Clinical Development. In September 2006, we initiated the first of three planned Phase 3 clinical trials to evaluate the safety and efficacy of lorcaserin for the treatment of obesity. BLOOM, the first of the three clinical trials, completed enrollment in February of 2007 with 3,181 overweight and obese patients in approximately 100 centers in the United States.

BLOOM is a randomized, double-blind and placebo-controlled trial evaluating a 20 mg dose (10 mg dosed twice daily) of lorcaserin versus placebo over a two-year treatment period in obese patients (Body Mass Index, or BMI, of 30 to 45) with or without co-morbid conditions and overweight patients (BMI of 27 to less than 30) with at least one co-morbid condition. The primary efficacy endpoint is the proportion of patients with a 5% or greater weight reduction from baseline at week 52 as compared to placebo.

Patients in the trial received echocardiograms at screening and at 6, 12, 18 and 24 months after initiating dosing in the trial. In March 2008, we announced the continuation of the BLOOM trial after the independent ESMB conducted the second of its two planned reviews of the unblinded echocardiographic data for patients who had completed 12 months of dosing in the trial. The ESMB s review confirmed that differences, if any, in the rates of FDA-defined valvulopathy in patients treated with lorcaserin and in the control group did not meet their predetermined stopping criteria. The review also confirmed that the rate of FDA-defined valvulopathy in the trial is consistent with our statistical powering assumptions used in the design of the clinical trial program to monitor patients for any increased risk of developing valvulopathy. In September 2007, the ESMB performed its first echocardiographic data review after patients completed six months of dosing in the trial, and reached a similar conclusion.

In December 2007, we initiated BLOSSOM and BLOOM-DM, the second and third Phase 3 clinical trials evaluating lorcaserin s efficacy and safety. These trials are one-year, randomized, double-blind and placebo-controlled clinical trials. BLOSSOM completed enrollment in June 2008 with 4,008 patients, and BLOOM-DM is expected to enroll a total of approximately 600 patients. Consistent with our proposal, the FDA has allowed us to eliminate the requirement to perform echocardiographic testing prior to enrolling patients in both of these trials. As a result, patients with preexisting FDA-defined valvulopathy and other echocardiographic variants and abnormalities were enrolled in the BLOSSOM and BLOOM-DM trials. This is different from the design of BLOOM, the initial Phase 3 trial, in which echocardiography was used to screen for patients with FDA-defined valvulopathy and certain other echocardiographic abnormalities and exclude those patients from enrolling in the trial. Instead, in BLOSSOM and BLOOM-DM, there are no such echocardiographically defined exclusion criteria, although serial echocardiograms are being obtained to extend the lorcaserin safety database. BLOOM, BLOSSOM and BLOOM-DM comprise the entire planned Phase 3 clinical trial program for lorcaserin.

The BLOSSOM trial is evaluating 10 mg and 20 mg daily doses (10 mg dosed once or twice daily) of lorcaserin versus placebo over a one-year treatment period in obese patients (BMI of 30 to 45) with or without co-morbid conditions and overweight patients (BMI of 27 to less than 30) with at least one co-morbid condition

Table of Contents

at about 100 sites in the United States. The BLOOM-DM trial is evaluating 10 mg and 20 mg daily doses (10 mg dosed once or twice daily) of lorcaserin versus placebo over a one-year treatment period in overweight and obese patients with type 2 diabetes at about 60 sites in the United States.

As in the BLOOM trial, a standardized program of diet and exercise advice is also included in the BLOSSOM and BLOOM-DM trials in accordance with current FDA guidelines, and the proportion of patients with a 5% or greater weight reduction from baseline at week 52 is the primary efficacy endpoint. Secondary endpoints include changes in serum lipids, blood pressure and quality of life; in the BLOOM-DM trial, HbA1c levels and other indicators of glycemic control are also being evaluated. In both of these additional trials, all patients will receive echocardiograms at baseline, at month six and at the end of the study to assess heart valve function and other parameters over time. In contrast to the ongoing BLOOM trial, however, there is no oversight by an independent safety monitoring board.

The complete lorcaserin Phase 3 pivotal program consists of the BLOOM and BLOSSOM trials and has enrolled 7,189 patients. In addition to these Phase 3 clinical trials and the BLOOM-DM trial, several additional smaller trials, such as drug interaction and abuse potential trials, have been or are being conducted. Assuming data from the BLOOM and BLOSSOM trials are positive, we expect to file an NDA for lorcaserin with the FDA by the end of 2009. Data from the BLOOM-DM trial will not be included in the initial FDA submission, and is expected to be filed as a supplement to the NDA when the data become available.

Intellectual Property. As of January 31, 2009, we owned issued patents that cover compositions of matter for lorcaserin and related compounds and methods of treatment utilizing lorcaserin and related compounds in 57 jurisdictions, including the United States, Japan, Germany, France, the United Kingdom, Italy, Spain and Canada, and had applications pending in approximately 13 other jurisdictions, of which those with the largest pharmaceutical markets were China, Brazil and Poland. Based on sales statistics provided by IMS Health, the jurisdictions where lorcaserin patents have been issued accounted for more than 92% of global pharmaceutical sales in 2006, while jurisdictions where lorcaserin patents remain pending accounted for more than 4% of global pharmaceutical sales in that same year. The patent on lorcaserin issued by the United States Patent and Trademark Office is serial number US 6,953,787 and the corresponding patent granted by the European Patent Office is serial number EP 1 411 881 B1. Other of our lorcaserin patent applications, including those directed to the lorcaserin HCl salt, the hemihydrate of the lorcaserin HCl salt as well as its crystalline forms, synthetic routes and intermediates useful in the manufacturing of lorcaserin and pharmaceutical combinations of lorcaserin and phentermine, have all been filed in a lesser number of commercially important jurisdictions. The earliest priority date for the patents on lorcaserin is 2002. The terms of these patents are capable of continuing into 2023 in most jurisdictions without taking into account (i) any patent term adjustment or extension regimes of any country or (ii) any additional term of exclusivity we might obtain by virtue of the later filed patent applications.

APD791

Our lead anti-thrombotic drug candidate, APD791, has completed Phase 1a and Phase 1b clinical trials. APD791 is a novel, oral and selective inverse agonist of the serotonin 2A receptor intended to lower the risk of arterial thrombosis and related conditions by reducing the amplification of platelet aggregation, arterial constriction and intimal hyperplasia, or thickening of the vessel wall, mediated by serotonin. Thrombosis is the formation of a clot, or thrombus, inside a blood vessel that restricts the flow of blood. The formation of a thrombus is often caused by an injury to the wall of the blood vessel, such as the rupture of an atherosclerotic plaque. The injury to the blood vessel activates platelets, which then aggregate and adhere to one another as they start to release certain factors, including serotonin, that facilitate thrombosis. Thrombi that form in diseased atherosclerotic arteries of the heart may cause acute coronary syndrome or myocardial infarction, and thrombi that form in the vessels of the brain may cause stroke. The American Heart Association estimates that in the United States 14.4 million people alive in 2006 had survived either a myocardial infarction or a stroke. To reduce the risk of future events, many patients receive daily anti-thrombotic therapy.

Table of Contents

Mechanism and Preclinical Data. APD791 is a novel, oral and selective inverse agonist of the serotonin 2A receptor. Serotonin activation of the serotonin 2A receptor on platelets and vascular smooth muscle is thought to play an important role in the events leading to thrombosis, and elevated serotonin levels have been associated with increased cardiovascular risk. Normally, when a platelet is activated by one of a number of factors such as thrombin or collagen, the platelet releases serotonin, which promotes platelet aggregation, vasoconstriction and intimal hyperplasia in preclinical models. By blocking activation of the serotonin 2A receptor on platelets and in other cardiovascular tissues, APD791 may curb platelet aggregation, vasoconstriction and intimal hyperplasia in the clinical setting, thereby reducing or preventing thrombosis. We believe APD791 represents a new approach to reducing the risk of arterial thromboembolic disease.

APD791 demonstrated improved coronary artery flow in the Folts model, an established animal model of acute coronary syndrome. In other preclinical studies, blocking activation of the serotonin 2A receptor on platelets also demonstrated an improved separation of the dose needed for inhibition of thrombosis versus the dose that increased bleeding relative to existing therapies, suggesting that APD791 has the potential for improved safety relative to existing therapies. We believe these results are consistent with blocking the role of serotonin in the thrombotic process.

Clinical Development. In July 2007, we initiated a single-ascending dose Phase 1a clinical trial evaluating APD791 in healthy volunteers. This Phase 1a trial was a randomized, double-blind and placebo-controlled, single-ascending dose trial in 90 healthy male and female volunteers. Doses originally intended for study ranged from 1 mg to 160 mg, but due to favorable tolerability the maximum dose was increased to 320 mg. In the Phase 1a trial, doses were generally well tolerated, without any dose related adverse events, such that a maximum tolerated dose could not be defined despite achieving high concentrations in blood. APD791 was rapidly absorbed, and exposures were generally related to dose. Terminal half-life ($t_{1/2}$) of parent plus active metabolites was also related to dose, reaching approximately 11 hours at the higher doses. Dose dependent inhibition of serotonin-mediated amplification of platelet aggregation was demonstrated, supporting the preclinical data generated around APD791 and establishing initial clinical validation for APD791 s novel mechanism of action.

The Phase 1b trial, initiated in January 2008, was a randomized, double-blind, placebo-controlled, multiple-ascending dose trial in 50 healthy male and female volunteers. This trial evaluated safety, tolerability, pharmacokinetics and pharmacodynamics of multiple-ascending doses of APD791 over a period of one week. Total daily doses ranged from 15 mg to 80 mg and were generally well tolerated. APD791 was rapidly absorbed and exposures were related to dose. The most frequently reported adverse event was headache, which was more common in the placebo group than in any APD791 dose group. None of the adverse events occurred in a dose-related fashion with the exception of epistaxis (nose bleed), which occurred in two of the volunteers who received the 80 mg dose, a dose outside of the anticipated therapeutic range. Dose-dependent inhibition of serotonin-mediated amplification of platelet aggregation was demonstrated starting at the 15 mg dose and will permit the identification of exposure ranges that produce minimal, moderate and near-complete inhibition of serotonin-mediated platelet aggregation.

APD125

In December 2008 we announced preliminary data from a Phase 2b clinical trial of APD125, an internally discovered drug candidate that was being evaluated for the treatment of insomnia. The trial measured subjective endpoints in patients with primary insomnia. Treatment with APD125 was well tolerated, and there were no reports of serious adverse events and no emerging safety findings as compared to placebo. However, APD125 did not meet the trial s primary or secondary endpoints, and we are not planning any further clinical development of APD125.

Merck Collaboration

In our partnership with Merck, we are collaborating on three GPCRs to develop therapeutics for atherosclerosis and other disorders. We believe one or more of these GPCRs plays a role in regulating plasma

Table of Contents

lipid profiles, including HDL cholesterol, the so-called good cholesterol, and is responsible for the HDL-raising activity of niacin. HDL cholesterol, commonly known as the good cholesterol, can help clear the fatty deposits from the walls of blood vessels and transport cholesterol to the liver for processing and removal from the body. Drugs that can influence the levels of HDL cholesterol, or good cholesterol, may potentially provide clinical benefits to patients by reducing the risk of heart attack and stroke. There are very successful drugs available for lowering LDL cholesterol. However, development of novel, effective therapies to increase HDL cholesterol remains a major focus of research. We believe that such therapies may reduce the risk of atherosclerotic heart disease and compete in the large dyslipidemia market.

Development and Partnership Status. In October 2002, we entered into this collaboration with Merck. In October 2004, we extended and expanded this collaboration, and Merck selected one of our compounds for preclinical development. In February 2007, we amended the terms of the collaboration to reduce the number of our research employees funded under the collaboration in exchange for Merck making a $1.0 million investment in our common stock at approximately a 70% premium to the then current market price. Merck s obligation to provide research funding ended in October 2007.

In October 2008, we announced that Merck completed a Phase 1 program of a second generation oral niacin receptor agonist under this collaboration. In February 2009, Merck initiated a randomized, double-blind, placebo-controlled Phase 2 clinical trial of this niacin receptor agonist.

From the inception of this collaboration through December 31, 2008, we have received $18.0 million from Merck in upfront and milestone payments, and equity investments totaling $8.5 million. We may receive additional milestone payments of up to $28.0 million for Merck s clinical and marketing achievements, as well as royalty payments associated with Merck s commercialization of any products discovered under the collaboration. In addition, prior to the end of the research portion of the collaboration, we received research funding from Merck totaling $27.5 million. As of October 2007, we no longer receive research funding, have significant involvement or perform research services under this collaboration.

Ortho-McNeil-Janssen Collaboration

In our partnership with Ortho-McNeil-Janssen, we are collaborating on the development of compounds for the treatment of type 2 diabetes and other disorders by targeting GPR119. The International Diabetes Federation estimates that in 2007 there were 246 million adults with diabetes worldwide, an increase of over 20% since 2003. Approximately 90% of diabetics in developed countries suffer from type 2 diabetes, which is characterized by inadequate response to insulin, inadequate secretion of insulin as blood glucose levels rise or dysregulation of glucose production by the liver. Therapies for type 2 diabetes are directed toward correcting the body s inadequate response with oral or injectable medications, directly modifying insulin levels by injection of insulin or insulin analogs, modifying nutrient absorption from the gut or modifying hepatic glucose production.

Oral medications for type 2 diabetes include insulin releasers such as glyburide, insulin sensitizers such as Actos and Avandia, inhibitors of glucose production by the liver such as metformin, DPP-IV inhibitors like Januvia, as well as Precose and Glyset, which slow the uptake of glucose from the intestine. The worldwide market for diabetes medications was approximately $11.8 billion in 2005, of which oral drugs exceeded $7.0 billion. However, a significant portion of type 2 diabetics fail oral medication and require injectable agents, e.g. insulin. Current oral medications for type 2 diabetes have a number of side effects, including hypoglycemia, weight gain, edema and perhaps an increase in cardiovascular mortality. Numerous pharmaceutical and biotechnology companies are seeking to develop insulin sensitizers, novel insulin formulations and other therapeutics to improve the treatment of diabetes.

Mechanism and Preclinical Data. We believe GPR119 represents a novel pharmaceutical mechanism for discovering drugs for the treatment of diabetes that may offer advantages over current approaches. We have found GPR119 to be expressed in beta cells, the cells in the pancreas responsible for producing insulin in

Table of Contents

response to increases in blood glucose. Our preclinical results indicate that stimulating GPR119 allows beta cells to secrete insulin more efficiently in response to changes in blood glucose levels. GPR119 is also expressed in cells other than pancreatic beta cells, such as endocrine cells in the gastrointestinal tract, and in preclinical studies GPR119 stimulates the release of GLP and GIP, two incretins that play an important role in insulin regulation and glucose homeostasis. We have also found in these studies that stimulation of GPR119 leads to increased levels and activity of intracellular factors thought to be involved in the preservation of beta cells. Our preclinical studies suggest that GPR119 is amenable to oral small molecule drug development, and we have discovered potent, selective and oral small molecule agonists of GPR119 that improve glucose tolerance and lower blood glucose levels in animal models of diabetes. The GPR119 mechanism is glucose dependent, so that in animal studies our compounds only lowered blood glucose when it rose above normal levels, such as after a meal. Our preclinical results indicate that these compounds do not lower normal fasting baseline glucose levels in animal models and, therefore, may not cause hypoglycemia, unlike the glucose-insensitive sulphonylureas.

Development and Partnership Status. In December 2004, we entered into a collaboration and license agreement with Ortho-McNeil-Janssen to further develop GPR119 agonists for the potential treatment of type 2 diabetes and other disorders. In January 2005, we received a non-refundable $17.5 million upfront payment and two milestone payments of $2.5 million each and, in February 2006, we received a $5.0 million milestone payment related to Ortho-McNeil-Janssen s initiation of a Phase 1 clinical trial of APD668, a novel, oral drug candidate discovered by Arena and intended to stimulate GPR119. The initial clinical trials of APD668 by Ortho-McNeil-Janssen were randomized, double-blind, placebo-controlled, ascending dose trials involving healthy volunteers and patients with type 2 diabetes and evaluated the safety, tolerability, pharmacokinetics and pharmacodynamics of single and multiple (14 day) doses of APD668.

In January 2008, we announced that initial clinical trial results for APD668 suggest that GPR119 agonists may improve glucose control in patients with type 2 diabetes. Based on such data, Ortho-McNeil-Janssen placed APD668 on hold and advanced APD597, a potentially more potent Arena-discovered GPR119 agonist, into preclinical development. In December 2008 we announced that Ortho-McNeil-Janssen initiated a first-in-human Phase 1 clinical trial of APD597 under our partnership. Ortho-McNeil-Janssen s Phase 1 program will evaluate the safety, tolerability, pharmacokinetics and pharmacodynamics of APD597 in single and multiple ascending dose studies in healthy volunteers. Ortho-McNeil-Janssen s planned clinical studies also include the evaluation of patients with type 2 diabetes.

From the inception of this collaboration through December 31, 2008, we have received $27.5 million from Ortho-McNeil-Janssen in upfront and milestone payments. In addition, prior to the end of the research portion of the collaboration, we received research funding from Ortho-McNeil-Janssen totaling $7.2 million. We are eligible to receive a total of $295.0 million in milestone payments for each compound, as well as royalty payments associated with Ortho-McNeil-Janssen s commercialization of any products discovered under the collaboration. These milestones include development and approval milestone payments of up to $132.5 million for the first indication and $62.5 million for the second indication for each compound, and up to $100.0 million in sales milestone payments for each product resulting from the collaboration. As of December 2007, we no longer receive research funding, have significant involvement or perform research services under this collaboration.

Earlier-Stage Development and Research Programs

Cardiovascular. Our lead drug candidate for the treatment of pulmonary arterial hypertension, or PAH, is APD811. Discovered by us, APD811 is an oral, novel, potent and selective agonist of the prostanoid IP receptor, and is in preclinical development. Based on data from the National Institutes of Health Registry, we believe that, without treatment, patients in the United States with PAH, defined as elevated pulmonary artery pressure, have a median survival time of approximately three years from diagnosis. IP receptor agonists are among the treatments administered as standard of care for advanced PAH. IP agonists improve mortality and exercise tolerance in PAH patients, but currently available IP agonists are rapidly metabolized and have poor oral bioavailability. Consequently, currently available IP agonists need to be administered frequently or continuously through

Table of Contents

intravenous, subcutaneous or inhaled means. We believe APD811 has the potential to improve the standard of care for PAH by providing an oral, once-daily form of administration with clinical benefits similar to currently available treatments.

Regulation of smooth muscle tone is a major role of the prostanoid receptors. Prostanoid IP receptor agonists relax vascular smooth muscle, inhibit platelet aggregation and may inhibit pulmonary vascular remodeling. IP agonists improve cardiovascular functioning by counteracting the vasoconstriction that occurs in PAH, and may have other beneficial effects on the pathophysiology of this disease.

APD811 demonstrated efficacy in a chronic model of PAH in rats. In this model, APD811 attenuated the development of several indexes of PAH, including pulmonary artery remodeling, increased pulmonary arterial pressure, right ventricle hypertrophy and mortality. As IP receptors are expressed in both systemic and pulmonary arteries, a reduction in systemic blood pressure following APD811 administration has also been measured in preclinical studies. Appropriate dosing in humans will require balancing of systemic hypotensive and therapeutic effects. Pharmacokinetics across species suggest the plasma half life in humans will support once-daily dosing.

In addition to APD811, we are researching various aspects of heart disease, including acute myocardial infarction and heart failure. Myocardial infarction, which is commonly known as a heart attack, is often followed in survivors by heart failure. Myocardial infarction and heart failure are often a direct consequence of atherosclerosis, and both remain major causes of death. We have identified certain GPCRs that we believe play a role in the processes related to atherosclerosis, reperfusion injury, and cardiac contractile function, and are seeking to identify small molecules directed at these GPCR targets which will provide therapeutic benefit for heart disease.

Central Nervous System. APD916, our lead drug candidate for the treatment of narcolepsy and cataplexy, has completed preclinical development. Subject to our financial resources and prioritization of lorcaserin, we expect to file an IND for APD916 in 2009. In animal models, APD916 has also demonstrated the potential to improve wakefulness and cognitive function, and we may continue to conduct preclinical research in these and other areas.

Discovered by us, APD916 is a potent and selective inhibitor of the histamine H3 receptor. The histamine H3 receptor is expressed almost exclusively in the brain, and modulates the synthesis and release of histamine. In addition, the H3 receptor modulates the release of other key transmitter substances involved in central nervous system, or CNS, function. As such, the H3 receptor has been implicated in a number of important functions, and drug discovery efforts have focused on developing H3 ligands for several indications, including obesity, excessive daytime sleepiness and cognitive disorders.

APD916 was efficacious in multiple preclinical models, including the demonstration of dose dependent improvements in wakefulness, cognitive function and cataplexy. These data suggest APD916 to be a potent and selective inhibitor of the histamine H3 receptor across species with potential utility in the treatment of disorders characterized by excessive daytime sleepiness or cognitive dysfunction.

Since many GPCRs are predominately found in the brain or the CNS, we believe targeting GPCRs provides significant opportunities to selectively treat various CNS diseases beyond APD916. Many approved drugs for indications ranging from depression to schizophrenia and Parkinson s disease target GPCRs.

Inflammatory Diseases. We are researching and developing S1P receptor agonists as treatments for a number of conditions related to autoimmune dysfunction, including rheumatoid arthritis and multiple sclerosis. S1P receptors are thought to be involved in the modulation of several biological responses, including lymphocyte trafficking. We have optimized potent small molecule S1P1 receptor agonists that in preclinical autoimmune disease models of multiple sclerosis, such as the experimental autoimmune encephalomyelitis (EAE) model, and the collagen-induced arthritis (CIA) animal disease model, reduce the severity of disease.

Table of Contents

We are also researching GPCRs involved in other inflammatory processes, and have identified GPCRs that are found in specific immune cell types associated with neurodegenerative diseases, including multiple sclerosis and skin diseases such as atopic dermatitis. In addition to modulating the immune response *per se*, some of these GPCR targets also regulate downstream biological processes that result in pain and itch. Our screening and medicinal chemistry research teams have identified small molecules directed to these targets. In preclinical disease models, the lead compounds have shown the potential to treat the symptoms as well as the underlying immune disease processes.

Metabolic Diseases. We are working on a series of GPCR targets in addition to lorcaserin and other compounds that act on the serotonin 2C receptor to develop other oral therapies for obesity. For example, we have identified additional GPCRs expressed in the hypothalamus that we believe play a role in the regulation of food intake and weight.

We are also working on multiple GPCR targets to develop oral therapies for type 1 and type 2 diabetes. Our efforts include research and development of compounds targeting GPR119. GPR119 is a novel receptor discovered by us that, in our preclinical models, demonstrated the ability to stimulate insulin secretion in response to increases in blood glucose. Under our GPR119 collaborative agreement with Ortho-McNeil-Janssen, we now have the right to research and develop compounds targeting GPR119 for our own purposes or with new partners, with the exception of a limited number of compounds that Ortho-McNeil-Janssen has selected.

We are also conducting research with receptors that may act to regulate glucose uptake, glucose absorption, insulin sensitivity, insulin secretion, lipid levels and production of glucose in the liver. To develop a therapy for general metabolic disease, we have focused on GPCRs that have the potential to modulate blood glucose and lipid levels.

Our GPCR Technologies and Programs

Our drug candidates have resulted from our GPCR-focused drug discovery and development approach, specialized expertise and technologies, including Constitutively Activated Receptor Technology, or CART, and our Melanophore technology. GPCRs are categorized as known when their naturally occurring, or native, ligands have been identified. Scientists have used molecular cloning in combination with the sequencing of the human genome to identify both additional receptor subtypes of known GPCRs as well as hundreds of novel GPCRs. These novel GPCRs are categorized as orphan GPCRs because their native ligands have not been identified. We believe both orphan and known GPCRs offer significant promise for the development of novel GPCR-based therapeutics.

Our drug discovery approach, specialized expertise and technologies allow us to simultaneously identify drug leads that act as receptor activators, or agonists, which increase the detected biological response, or act as receptor inhibitors, which decrease the detected response. We can also identify inverse agonists, which inhibit ligand-independent, as well as ligand-dependent, receptor activity.

We believe that our drug discovery approach, specialized expertise and technologies offer several key advantages for drug discovery, including:

- eliminating the need to identify the native ligand for an orphan receptor;
- enhancing the detection of, and allowing us to simultaneously identify, both receptor inhibitor and receptor activator drug leads;
- allowing for the identification of drug leads that inhibit both ligand-independent and ligand-dependent activity; and
- providing the ability to discover novel and improved therapeutics directed at known receptors.

Table of Contents

We use our drug discovery technologies to detect GPCRs that couple to major G protein classes. We believe our drug discovery and development approach, specialized expertise and technologies are well-suited for studying orphan receptors whose coupling parameters are unknown. We also believe our drug discovery approach, specialized expertise and technologies provide us with a robust, reproducible, high-throughput and low-cost means for identifying and optimizing GPCR agonists, antagonists and inverse agonists, and are sensitive enough to detect the constitutive activity of many GPCRs.

Our Strategy

The key elements of our general scientific and business strategy are as follows:

Advance our lead candidates. We intend to selectively advance our current drug candidates, with a partner or independently, through clinical development and, if successful, to commercialization.

Discover and develop additional drug candidates targeting GPCRs. We intend to continue to discover and develop oral, small molecule compounds for GPCRs identified or validated through our research efforts.

Focus on attractive market opportunities. Obesity, diabetes, atherosclerosis and arterial thrombosis each represent large market opportunities. We intend to continue to focus on these and other markets with attractive commercial potential.

Recognize significant economic value for our drug candidates. We intend to maximize the value of our drug candidates through both independent development and licensing and other partnership opportunities.

Improve and develop our capabilities. To capitalize on our discoveries, we plan to selectively improve and develop our capabilities as our drug candidates enter into, and move through, clinical trials and to commercialization.

Maintain strong discovery research capabilities. Our technologies, our drug discovery infrastructure and the integrated approach to research used by our scientists have allowed us to identify a number of GPCR targets and novel compounds. We believe these and other discoveries will fuel our pipeline for future development.

Intellectual Property

Our success depends in large part on our ability to protect our proprietary technologies, compounds and information, and to operate without infringing the proprietary rights of third parties. We rely on a combination of patent, trade secret, copyright, and trademark laws, as well as confidentiality, licensing and other agreements, to establish and protect our proprietary rights. We seek patent protection for our key inventions, including drug candidates we identify, routes for chemical synthesis, pharmaceutical formulations and drug screening technologies.

As of January 31, 2009, we owned, in part or in whole, or had exclusively licensed the following patents: 28 in the United States, 7 in Japan, 14 in Germany, 14 in France, 14 in the United Kingdom, 14 in Italy, 14 in Spain, 2 in Canada, 3 in China, and approximately 503 in other jurisdictions. In addition, as of January 31, 2009, we had approximately 1,310 patent applications before the United States Patent and Trademark Office, foreign patent offices and international patent authorities. These patents and patent applications are divided into 118 distinct families of related patents that are directed to chemical compositions of matter, methods of treatment using chemical compositions, GPCR genes, CART, Melanophore technology, or other novel screening methods. One of our patent families was exclusively in-licensed and contains a single issued patent. One hundred and nine of our patent families, which include a total of about 530 patents and 1,219 patent applications, were invented solely by our employees. The remaining 8 of our patent families, which include a total of about 82 patents and 91 patent applications, were the subject of joint inventions by our employees and the employees of other entities. There is

13

Table of Contents

no assurance that any of our patent applications will issue, or that any of the patents will be enforceable or will cover a drug or other commercially significant product or method. Except for the US patents relating to our Melanophore technology, the term of most of our other current patents commenced, and most of our future patents, if any, will commence, on the date of issuance and terminate 20 years from the earliest effective filing date of the patent application. Since our US Melanophore patents were issued under now superseded rules that provided a patent term of 17 years from the date of issuance, the term of these patents is scheduled to end in 2012. Because the time from filing a patent application relating to our business to the issuance, if ever, of the patent is often more than three years and because any marketing and regulatory approval for a drug often occurs several years after the related patent application is filed, the resulting market exclusivity afforded by any patent on our drug candidates and technologies may be substantially less than 20 years. In the United States, the European Union and some other jurisdictions, patent term extensions are available for certain delays in either patent office proceedings or marketing and regulatory approval processes. However, due to the specific requirements for obtaining these extensions, there is no assurance that our patents will be afforded extensions even if we encounter significant delays in patent office proceedings or marketing and regulatory approval.

In addition to patent protection, we rely on trade secrets, proprietary know-how, and continuing technological advances to develop and maintain our competitive position. To maintain the confidentiality of our trade secrets and proprietary information, all of our employees are required to enter into and adhere to an employee confidentiality and invention assignment agreement, laboratory notebook policy, and invention disclosure procedures as a condition of employment. Additionally, our employee confidentiality and invention assignment agreements require that our employees not bring to us, or use without proper authorization, any third-party proprietary technology. We also require our consultants and collaborators that have access to proprietary property and information to execute confidentiality and invention rights agreements in our favor before beginning their relationship with us. While such arrangements are intended to enable us to better control the use and disclosure of our proprietary property and provide for our ownership of proprietary technology developed on our behalf, they may not provide us with meaningful protection for such property and technology in the event of unauthorized use or disclosure.

Competition

The biotechnology and pharmaceutical industries are highly competitive and are subject to rapid and significant change. We face significant competition from organizations that are pursuing the same or similar technologies. We also face significant competition from organizations that are pursuing drugs that would compete with the drug candidates we are developing. We may not be able to compete successfully against these organizations, which include many large, well-financed and experienced pharmaceutical and biotechnology companies, as well as academic and research institutions and government agencies.

The focus of our scientific and business strategy is on GPCRs. We believe that many pharmaceutical and biotechnology companies and other organizations also have internal drug discovery programs focused on GPCRs. In addition, other companies have attempted to overcome the problems associated with traditional drug screening by embarking on a variety of alternative strategies. Developments by others may render our drug candidates or technologies obsolete or noncompetitive.

Our present competitors with respect to lorcaserin include Abbott Laboratories, which markets sibutramine under the brand name Meridia, and Hoffmann-La Roche Inc., the US prescription drug unit of the Roche Group, which markets orlistat under the brand name Xenical. Also, GlaxoSmithKline Consumer Healthcare is marketing an over-the-counter low-dose version of orlistat under the brand name alli in the United States. In addition, there are potentially competing obesity programs that are in development at various pharmaceutical and biotechnology companies, including programs in similar stages of development as lorcaserin, and such programs may include serotonin 2C programs. We believe that at least two of these companies are planning to file an NDA for a drug candidate for the treatment of obesity at around the time we expect the FDA will review our NDA for lorcaserin.

Table of Contents

Many of our existing and potential competitors have substantially greater drug development capabilities and financial, scientific and marketing resources than we do. Additional consolidation in the pharmaceutical industry may result in even more resources being concentrated with our competitors. As a result, our competitors may be able to devote greater resources than we can to the research, development, marketing and promotion of drug discovery techniques or therapeutic products, or to adapt more readily to technological advances than we can. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or commercializing drugs before we do.

We expect to encounter significant competition for the principal drug candidates that we are developing. Companies that complete clinical trials, obtain regulatory approvals and commence commercial sales of their drug candidates before us may achieve a significant competitive advantage. Furthermore, we may be competing against companies with substantially greater manufacturing, marketing, distribution and selling capabilities, and any drug candidate that we successfully develop may compete with existing therapies that have long histories of safe and effective use.

We may rely on our collaborators for support of development programs and for the manufacturing and marketing of drug candidates. Our collaborators may be conducting multiple drug development efforts within the same disease areas that are the subject of their agreements with us, which may negatively impact the development of drugs that they discover that are subject to our agreements. Generally, our agreements with our collaborators do not preclude them from pursuing development efforts in one or more therapeutic areas of interest in which we have internal development efforts ongoing. In addition, we face and will continue to face intense competition from other companies for such collaborative arrangements, and technological and other developments by others may make it more difficult for us to establish such relationships.

Government Regulation

The FDA and comparable regulatory agencies in state and local jurisdictions and in foreign countries impose substantial requirements upon the clinical development, pre-market approval, manufacture, marketing and distribution of pharmaceutical products. These agencies and other regulatory agencies regulate research and development activities and the testing, approval, manufacture, quality control, safety, effectiveness, labeling, storage, recordkeeping, advertising and promotion of drug candidates. Failure to comply with applicable FDA or other requirements may result in civil or criminal penalties, suspension or delays in clinical development, recall or seizure of products, partial or total suspension of production or withdrawal of a product from the market.

In the United States, the FDA regulates drug products under the Federal Food, Drug, and Cosmetic Act, or FFDCA, and its implementing regulations. The process required by the FDA before our drug candidates may be marketed in the United States generally involves the following:

- completion of extensive preclinical laboratory tests and preclinical animal studies, all performed in accordance with the FDA s current Good Laboratory Practice, or cGLP, regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin;
- performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug candidate for each proposed indication;
- submission to the FDA of an NDA;
- satisfactory completion of an FDA pre-approval inspection of the manufacturing facilities at which the product is produced to assess compliance with current Good Manufacturing Practice, or cGMP, regulations; and
- FDA review and approval of the NDA prior to any commercial marketing or sale of the drug.

Table of Contents

The development and approval process requires substantial time, effort and financial resources, and we cannot be certain that any approvals for our drug candidates will be granted on a timely basis, if at all.

Preclinical tests include laboratory evaluation as well as cGLP studies to evaluate toxicity in animals. The results of preclinical tests, together with manufacturing information and analytical data, are submitted as part of an IND to the FDA. The IND automatically becomes effective 30 days after receipt by the FDA, unless the FDA, within the 30 day time period, raises concerns or questions about the conduct of the clinical trial, including concerns that human research subjects will be exposed to unreasonable health risks. In such a case, the IND sponsor and the FDA must resolve any outstanding concerns before the clinical trial can begin. Our IND submissions, or those of our collaborators, may not result in FDA authorization to commence a clinical trial. A separate submission to an existing IND must also be made for each successive clinical trial conducted during product development. Further, an independent institutional review board, or IRB, for each medical center proposing to conduct the clinical trial must review and approve the plan for any clinical trial before it commences at that center and it must monitor the study until completed. The FDA, the IRB or the sponsor may suspend a clinical trial at any time on various grounds, including a finding that the subjects or patients are being exposed to an unacceptable health risk. Clinical testing also must satisfy extensive Good Clinical Practice, or GCP, regulations and regulations for informed consent.

Clinical Trials. For purposes of NDA submission and approval, clinical trials are typically conducted in the following sequential phases, which may overlap:

Phase 1 Clinical Trials. Studies are initially conducted in a limited population to test the drug candidate for safety, dose tolerance, absorption, metabolism, distribution and excretion in healthy humans. In some cases, a sponsor may decide to conduct what is referred to as a Phase 1b evaluation, which is an additional, safety-focused Phase 1 clinical trial.

Phase 2 Clinical Trials. Studies are generally conducted in a limited patient population to identify possible adverse effects and safety risks, to determine the efficacy of the product for specific targeted indications and to determine dose tolerance and optimal dosage. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive Phase 3 clinical trials. In some cases, a sponsor may decide to run what is referred to as a Phase 2b evaluation, which is a second, confirmatory Phase 2 clinical trial.

Phase 3 Clinical Trials. These are commonly referred to as pivotal studies. When Phase 2 evaluations demonstrate that a dose range of the product is effective and has an acceptable safety profile, Phase 3 clinical trials are undertaken in large patient populations to further evaluate dosage, to provide substantial evidence of clinical efficacy and to further test for safety in an expanded and diverse patient population at multiple, geographically dispersed clinical trial sites.

Phase 4 Clinical Trials. In some cases, the FDA may condition approval of an NDA for a drug candidate on the sponsor s agreement to conduct additional clinical trials to further assess the drug s safety and effectiveness after NDA approval. In addition, a sponsor may decide to conduct additional clinical trials after the FDA has approved an NDA. Post-approval trials are typically referred to as Phase 4 clinical trials.

New Drug Applications. The results of product development, preclinical studies and clinical trials are submitted to the FDA as part of an NDA. NDAs also must contain extensive manufacturing information. Once the submission has been accepted for filing, the FDA s goal is to review applications within 10 months or, if the application relates to a serious or life-threatening indication, six months. The review process is often significantly extended by FDA requests for additional information or clarification. The FDA may refer the application to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee, but it generally follows such recommendations. The FDA may deny approval of an NDA if the applicable regulatory criteria are not satisfied, or it may require additional clinical data and/or an additional pivotal Phase 3 clinical trial(s). Even if such data

Table of Contents

are submitted, the FDA may ultimately decide that the NDA does not satisfy the criteria for approval. Data from clinical trials is not always conclusive and the FDA may interpret data differently than we or our collaborators interpret data. Once issued, the FDA may withdraw product approval if ongoing regulatory requirements are not met or if safety problems occur after the product reaches the market. In addition, the FDA may require testing, including Phase 4 clinical trials, and surveillance programs to monitor the safety effects of approved products which have been commercialized, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs or other information.

Other Regulatory Requirements. Any products manufactured or distributed by us or our collaborators pursuant to FDA approvals are subject to continuing regulation by the FDA, including recordkeeping and reporting requirements. Adverse event experience with the product must be reported to the FDA in a timely fashion and pharmacovigilance programs to proactively look for these adverse events may be mandated by the FDA. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including cGMPs, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Following such inspections, the FDA may issue notices on Form 483 and Warning Letters that could cause us to modify certain activities. A Form 483 notice, if issued at the conclusion of an FDA inspection, can list conditions the FDA investigators believe may have violated cGMP or other FDA regulations or guidelines. FDA guidelines specify that a Warning Letter be issued only for violations of regulatory significance, also known as Official Action Indicated, or OAI. Failure to adequately and promptly correct the observations(s) can result in regulatory action. In addition to Form 483 notices and Warning Letters, failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as suspension of manufacturing, seizure of product, injunctive action or possible civil penalties. We cannot be certain that we or our present or future third-party manufacturers or suppliers will be able to comply with the cGMP regulations and other ongoing FDA regulatory requirements. If we or our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, require us to recall a drug from distribution or withdraw approval of the NDA for that drug.

The FDA closely regulates the post-approval marketing and promotion of drugs, including standards and regulations for direct-to-consumer advertising, dissemination of off-label information, industry-sponsored scientific and educational activities and promotional activities involving the Internet. Drugs may be marketed only for the approved indications and in accordance with the provisions of the approved label. Further, if there are any modifications to the drug, including changes in indications, labeling, or manufacturing processes or facilities, we may be required to submit and obtain FDA approval of a new or supplemental NDA, which may require us to develop additional data or conduct additional preclinical studies and clinical trials. Failure to comply with these requirements can result in adverse publicity, Warning Letters, corrective advertising and potential civil and criminal penalties.

Physicians may prescribe legally available drugs for uses that are not described in the product s labeling and that differ from those tested by us and approved by the FDA. Such off-label uses are common across medical specialties. Physicians may believe that such off-label uses are the best treatment for many patients in varied circumstances. The FDA does not regulate the behavior of physicians in their choice of treatments. The FDA does, however, impose stringent restrictions on manufacturers communications regarding off-label use.

In Zofingen, Switzerland, our Swiss subsidiary, Arena Pharmaceuticals GmbH, or Arena GmbH, operates a drug product facility. In Switzerland, Swissmedic is the central Swiss supervisory authority for therapeutic products. It is a public service organization of the federal government. After an inspection of our Swiss manufacturing facility by the competent regional authorities (Regionales Heilmittelinspektorat der Nordostschweiz, Basel, Switzerland), acting on behalf of Swissmedic, in June and July 2007, Swissmedic issued an operation permit to Arena GmbH for the production of drugs in July 2007. This permit is valid until July 2012.

Table of Contents

DEA Regulation. The Drug Enforcement Administration of the United States Department of Justice, or DEA, regulates drugs that are controlled substances. Controlled substances are those drugs that appear on one of the five schedules promulgated and administered by the DEA under the Controlled Substances Act, or CSA. The CSA governs, among other things, the inventory, distribution, recordkeeping, handling, security and disposal of controlled substances. Any drug that acts on the central nervous system has the potential to become a controlled substance, and scheduling by the DEA is an independent process that may delay the commercial launch of a drug even after FDA approval of the NDA. If our drug candidates are scheduled by the DEA as controlled substances, we will be subject to periodic and ongoing inspections by the DEA and similar state drug enforcement authorities to assess our ongoing compliance with the DEA s regulations. Any failure to comply with these regulations could lead to a variety of sanctions, including the revocation, or a denial of renewal of any DEA registration, injunctions, or civil or criminal penalties.

Manufacturing and Sources and Availability of Raw Materials, Intermediates and Clinical Supplies

On January 9, 2008, we acquired from Siegfried certain drug product facility assets, including a licensed production facility, fixtures, equipment, other personal property and real estate assets in Zofingen, Switzerland, under an Asset Purchase Agreement between Siegfried and Arena GmbH. This facility is suitable for producing and packaging lorcaserin tablets for registration and commercial use, as well as tablets and packaging for other programs, and it is being used to manufacture our own proprietary drug candidates and certain drug products for Siegfried. All of our manufacturing services revenues are attributable to Siegfried, which is our only customer for such services. Our revenues of $9.8 million for the year ended December 31, 2008 included $7.4 million, or 75.8% of our total revenues, from Siegfried. Prior to entering into the manufacturing services agreement with Siegfried in January 2008, we had not recognized any manufacturing services revenues.

We purchase raw materials and intermediates when necessary from commercial sources. To decrease the risk of an interruption to our supply, when reasonably possible, we source these materials from redundant suppliers so that, in general, the loss of any one source of supply would not have a material adverse effect on project timelines or inventory of clinical supplies for use in human trials. However, currently we have a primary source of supply for some key intermediates, active pharmaceutical ingredient, or API, excipients and drug products for our lead development projects. The loss of a primary source of supply would potentially delay our lead development projects, including lorcaserin, and potentially those of our collaborators.

Compliance with Environmental Regulations

Our research and development programs involve the controlled use of hazardous materials, chemicals, biological materials and various radioactive compounds. In the United States, we are subject to regulation under the Occupational Safety and Health Act, the Environmental Protection Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, the Controlled Substances Act and other federal, state or local regulations.

With regard to Arena GmbH s drug product manufacturing and packaging facility, Arena GmbH has contracted with Siegfried to provide safety, health and environmental services and assess compliance, train personnel and oversee Arena GmbH s compliance with the applicable safety, health and environmental regulations. Arena GmbH is subject to regulation under the Environmental Protection Act (Umweltschutzgesetz, USG) and the Federal Act on the Protection of Waters (Gewässerschutzgesetz, GSchG), which refer to several ordinances such as the Ordinance on Air Pollution Control (Luftreinhalteverordnung, LRV), the Ordinance on Incentive Taxes on Volatile Organic Compounds (Verordnung über die Lenkungsabgabe auf flüchtigen organischen Verbindungen, VOCV), the Water Protection Ordinance (Gewässerschutzverordnung, GSchV), the Ordinance of the Handling of Wastes (VeVA), the Chemicals Ordinance (Chemikalienverordnung, ChemV) and the Ordinance on Protection against Major Accidents (Störfallverordnung, StFV). The competent authority in Switzerland for the implementation of environmental regulations is BAFU (Bundesamt für Umwelt / Federal Office for the Environment), which is the Swiss agency for the environment as well as the respective authorities

Table of Contents

of the Canton of Aargau (Amt für Umwelt, AfU). Occupational health and safety is regulated by the EKAS (Eidgenössische Koordinationsstelle für Arbeitssicherheit) guideline (Nr. 6508) for the evaluation of worker safety and reporting to the relevant authorities. The competent authority for the implementation of occupational health and safety regulations is the Canton of Aargau (Amt für Wirtschaft und Arbeit), where exposure limits are set by SUVA (Schweizerische Unfallversicherungsanstalt), which is the Swiss Accident Insurance Fund (AWA).

We may be subject to further such regulations in the future. Although we believe that our operations comply in all material respects with the applicable environmental laws and regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result, and the extent of that liability could exceed our resources. Our compliance with these laws and regulations has not had, and is not expected to have, a material effect upon our capital expenditures, results of operations or competitive position.

Research and Development Expenses

Research and development activities, which include personnel costs, research supplies, facility and equipment costs, clinical and preclinical study fees and manufacturing costs, are the primary source of our expenses. Such expenses related to the development and improvement of our technologies and drug candidates totaled $204.4 million for the year ended December 31, 2008, $149.5 million for the year ended December 31, 2007 and $103.4 million for the year ended December 31, 2006. Research that is sponsored by our collaborators is included in our total research and development expenses. No such funding was recorded in 2008. We estimate that research expenses incurred on projects sponsored by our collaborators totaled $4.6 million for the year ended December 31, 2007 and $7.7 million for the year ended December 31, 2006.

Employees

As of February 27, 2009, we had a total of 499 employees, including 422 in research, development and manufacturing and 77 in administration, which includes finance, legal, facilities, information technology and other general support areas. We consider our relationship with our employees to be good.

Available Information

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the Exchange Act) are available free of charge on our website (*www.arenapharm.com*) as soon as reasonably practicable after they are electronically filed with, or furnished to, the SEC.

Item 1A. Risk Factors.

Investment in our stock involves a high degree of risk. You should consider carefully the risks described below, together with other information in this Annual Report on Form 10-K and other public filings, before making investment decisions regarding our stock. If any of the following events actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected. This could cause the trading price of our common stock to decline and you may lose all or part of your investment. Moreover, the risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business, operating results, prospects or financial condition.

Risks Relating to Our Business

We will need additional funds to conduct our planned research and development efforts, we may not be able to obtain such funds and may never become profitable.

We have accumulated a large deficit since inception that has primarily resulted from the significant research and development expenditures we have made in seeking to identify and validate new drug targets and develop

Table of Contents

compounds that could become marketed drugs. We expect that our losses will continue to be substantial for at least the next several years and that our operating expenses will also continue to be substantial, even if we or our collaborators are successful in advancing our compounds or partnered compounds.

We do not have any commercially available drugs, and we have substantially less money than we need to develop our compounds into marketed drugs. It takes many years and potentially hundreds of millions of dollars to successfully develop a preclinical or early clinical compound into a marketed drug, and our efforts may not result in any marketed drugs.

We will need additional funds or a partner to bring lorcaserin to market, if ever, and we may not be able to secure adequate funding or find an acceptable partner at all or on terms you or we believe are favorable. We also believe that due to global economic challenges, and as our cash balances are depleted, it may be difficult for us to obtain additional financing or enter into strategic relationships on terms acceptable to us, if at all. If additional funding is not available, we will have to further scale back or eliminate one or more of our research or development programs or delay the development of one or more of such programs, including our lorcaserin program.

The current global economic environment poses severe challenges to our business strategy, which relies on access to capital from the markets and our collaborators, and creates other financial risks for us.

The global economy, including credit markets and the financial services industry, has been experiencing a period of substantial turmoil and uncertainty. These conditions have generally made equity and debt financing more difficult to obtain, and may negatively impact our ability to complete financing transactions. The duration and severity of these conditions is uncertain, as is the extent to which they may adversely affect our business and the business of current and prospective collaborators and vendors. If the global economy does not improve or worsens, we may be unable to secure additional funding to sustain our operations or to find suitable partners to advance our internal programs, even if we receive positive results from our research and development or business development efforts.

We maintain a portfolio of investments in marketable debt securities which are recorded at fair value. Although we have established investment guidelines relative to diversification and maturity with the objectives of maintaining safety of principal and liquidity, credit rating agencies may reduce the credit quality of our individual holdings which could adversely affect their value. Lower credit quality and other market events, such as changes in interest rates and further deterioration in the credit markets, may have an adverse effect on the fair value of our investment holdings and cash position.

We are focusing our activities and resources on the development of lorcaserin and depend on its success.

We are focusing our near-term research and development activities and resources on lorcaserin, and we believe a significant portion of the value of our company relates to our ability to develop this drug candidate. The development of lorcaserin is subject to many risks, including the risks discussed in other risk factors. If the results of clinical trials and preclinical studies of lorcaserin, the regulatory decisions affecting lorcaserin, the anticipated or actual timing and plan for commercializing lorcaserin, or, ultimately, the market acceptance of lorcaserin do not meet our, your, analysts or others expectations, the market price of our common stock could decline significantly.

If we do not partner one or more unpartnered programs or raise additional funds, we may have to further curtail our activities.

In light of our current financial resources, we decided to focus our near-term research and development efforts to our lorcaserin Phase 3 program and our earlier-stage preclinical and research programs. While we believe this strategy will conserve resources, our ability to advance our drug candidate pipeline outside of

Table of Contents

lorcaserin will be limited. Without additional capital or funding from partners, we will need to significantly curtail some of our current and planned activities and expenditures. We believe narrowing or slowing the development of our pipeline would reduce our opportunities for success. Our decision to limit near-term development of drug candidates other than lorcaserin will likely extend the time it will take us to reach the market in these other therapeutic areas and may allow competing products to reach the market before our drug candidates.

Our stock price could decline significantly based on the results and timing of clinical trials and preclinical studies of, and decisions affecting, our most advanced drug candidates.

We announce results of clinical trials and preclinical studies from time to time. For example, we expect to announce the results of a Phase 3 pivotal trial (BLOOM) for our lead drug candidate, lorcaserin, around the end of March 2009 and the results of our other Phase 3 pivotal trial (BLOSSOM) for lorcaserin by the end of September 2009.

The results and timing of clinical trials and preclinical studies can affect our stock price. Preclinical studies include experiments performed in test tubes, in animals, or in cells or tissues from humans or animals. These studies include all drug studies except those conducted in human subjects, and may occur before or after initiation of clinical trials for a particular compound. Results of clinical trials and preclinical studies of lorcaserin or our other drug candidates may not be viewed favorably by us or third parties, including investors, analysts, potential collaborators, the academic and medical community, and regulators. The same may be true of how we design the development programs of our most advanced drug candidates and regulatory decisions (including by us or regulatory authorities) affecting those development programs. Biotechnology company stock prices have declined significantly when such results and decisions were unfavorable or perceived negatively or when a drug candidate did not otherwise meet expectations.

We have drug programs that are currently in clinical trials. In addition to successfully completing clinical trials, to conduct long-term clinical trials and gain regulatory approval to commercialize drug candidates, regulatory authorities require that all drug candidates complete short- and long-term preclinical toxicity and carcinogenicity studies. These preclinical, animal studies are required to help us and regulatory authorities assess the potential risk that drug candidates may be toxic or cause cancer in humans. The results of clinical trials and preclinical studies are uncertain and subject to different interpretations, and the design of these trials and studies (which may change significantly and be more expensive than anticipated depending on results and regulatory decisions) may also be viewed negatively by us, regulatory authorities or other third parties and adversely impact the development and opportunities for regulatory approval and commercialization of our and our partnered drug candidates. We may not be successful in advancing our programs on our projected timetable, if at all. Failure to initiate or delays in the development programs for any of our drug candidates, or unfavorable results or decisions or negative perceptions regarding any of such programs, could cause our stock price to decline significantly. This is particularly the case with respect to our most advanced drug candidate, lorcaserin.

Our development of lorcaserin may be adversely impacted by cardiovascular side effects previously associated with fenfluramine and dexfenfluramine.

We have developed lorcaserin to more selectively stimulate the serotonin 2C receptor because we believe this may avoid the cardiovascular side effects associated with fenfluramine and dexfenfluramine (often used in combination with phentermine, the combination of which was commonly referred to as fen-phen). These two drugs were serotonin-releasing agents and non-selective serotonin receptor agonists, and were withdrawn from the market in 1997 after reported incidences of heart valve disease and pulmonary hypertension associated with their usage. We may not be correct in our belief that selectively stimulating the serotonin 2C receptor will avoid these undesired side effects or lorcaserin s selectivity profile may not be adequate to avoid these side effects. Moreover, the potential relationship between the activity of lorcaserin and the activity of fenfluramine and dexfenfluramine may result in increased FDA regulatory scrutiny of the safety of lorcaserin and may raise

Table of Contents

potential adverse publicity in the marketplace, which could affect clinical enrollment or sales if lorcaserin is approved for commercialization.

The development programs for our drug candidates are expensive, time consuming, uncertain and susceptible to change, interruption, delay or termination.

Drug development programs are very expensive, time consuming and difficult to design and implement. Our drug candidates are in various stages of research and development and are prone to the risks of failure inherent in drug development. We will need to complete additional clinical trials and preclinical studies before we can demonstrate that our drug candidates are safe and effective to the satisfaction of the FDA and similar non-US regulatory authorities. These trials are expensive and uncertain processes that take years to complete. Failure can occur at any stage of the process, and successful early clinical or preclinical trials do not ensure that later trials or studies will be successful. In addition, the commencement or completion of our planned clinical trials could be substantially delayed or prevented by several factors, including:

- limited number of, and competition for, suitable patients required for enrollment in our clinical trials;
- limited number of, and competition for, suitable sites to conduct our clinical trials;
- delay or failure to obtain FDA approval or agreement to commence a clinical trial;
- delay or failure to obtain sufficient supplies of our drug candidates for our clinical trials;
- delay or failure to reach agreement on acceptable clinical trial agreement terms or clinical trial protocols with prospective sites or investigators; and
- delay or failure to obtain institutional review board, or IRB, approval to conduct a clinical trial at a prospective site.

Even if the results of our development programs are favorable, the development programs of our most advanced drug candidates, including those being developed by our collaborators, may take significantly longer than expected to complete. In addition, the FDA, other regulatory authorities, our collaborators, or we may suspend, delay or terminate our development programs at any time for various reasons, including:

- lack of effectiveness of any drug candidate during clinical trials;
- side effects experienced by study participants or other safety issues;
- slower than expected rates of patient recruitment and enrollment or lower than expected patient retention rates;
- delays or inability to manufacture or obtain sufficient quantities of materials for use in clinical trials;
- inadequacy of or changes in our manufacturing process or compound formulation;

delays in obtaining regulatory approvals to commence a study, or clinical holds, or delays requiring suspension or termination of a study by a regulatory authority, such as the FDA, after a study is commenced;

changes in applicable regulatory policies and regulations;

delays in identifying and reaching agreement on acceptable terms with prospective clinical trial sites;

uncertainty regarding proper dosing;

unfavorable results from ongoing clinical trials and preclinical studies;

failure of our clinical research organizations to comply with all regulatory and contractual requirements or otherwise perform their services in a timely or acceptable manner;

scheduling conflicts with participating clinicians and clinical institutions;

Table of Contents

failure to design appropriate clinical trial protocols;

insufficient data to support regulatory approval;

termination of clinical trials by one or more clinical trial sites;

inability or unwillingness of medical investigators to follow our clinical protocols;

difficulty in maintaining contact with subjects during or after treatment, which may result in incomplete data; or

lack of sufficient funding to continue clinical trials and preclinical studies.

There is typically a high rate of attrition from the failure of drug candidates proceeding through clinical trials, and many companies have experienced significant setbacks in advanced development programs even after promising results in earlier studies or trials. For example, because our drug candidate for insomnia, APD125, did not meet the primary or secondary endpoints of a Phase 2b clinical trial, we are not planning any further clinical development of APD125. We have experienced setbacks in other development programs and may experience additional setbacks in the future. If we or our collaborators abandon or are delayed in our development efforts related to lorcaserin or any other drug candidate, we may not be able to generate sufficient revenues to continue our operations at the current level or become profitable, our reputation in the industry and in the investment community would likely be significantly damaged, additional funding may not be available to us or may not be available on terms you or we believe are favorable, and our stock price would likely decrease significantly.

Our drug candidates are subject to extensive regulation, and we may not receive required regulatory approvals, or timely approvals, for any of our drug candidates.

The clinical development, manufacturing, labeling, packaging, storage, recordkeeping, advertising, promotion, export, marketing and distribution, and other possible activities relating to our drug candidates are, and any resulting drugs will be, subject to extensive regulation by the FDA and other regulatory agencies in the United States. Neither our collaborators nor we are permitted to market our drug candidates in the United States until we receive regulatory approval from the FDA. Neither our collaborators nor we have received marketing approval for any of our drug candidates. Specific preclinical data, chemistry, manufacturing and controls data, a proposed clinical trial protocol and other information must be submitted to the FDA as part of an investigational new drug, or IND, application, and clinical trials may commence only after the IND application becomes effective. To market a new drug in the United States, we must submit to the FDA and obtain FDA approval of a New Drug Application, or NDA. An NDA must be supported by extensive clinical and preclinical data, as well as extensive information regarding chemistry, manufacturing and controls to demonstrate the safety and effectiveness of the drug candidate.

Obtaining approval of an NDA can be a lengthy, expensive and uncertain process. As part of the Prescription Drug User Fee Act, or PDUFA, the FDA has a goal to review and act on a percentage of all submissions in a given time frame. The general review goal for a drug application is 10 months for a standard application and six months for priority review. The FDA has missed a portion of their PDUFA goals, and it is unknown whether the review of an NDA filing for lorcaserin, or for any of our other drug candidates, will be completed within the FDA review goals or will be delayed. Moreover, the duration of the FDA s review may depend on the number and type of other NDAs that are filed with the FDA around the same time period. For example, we believe that at least two companies are planning to file an NDA for a drug candidate for the treatment of obesity at around the time we expect the FDA will review our NDA for lorcaserin, which may impact the review of our NDA. Furthermore, any drug that acts on the CNS, such as lorcaserin, has the potential to be scheduled as a controlled substance by the Drug Enforcement Administration of the United States Department of Justice, or DEA. DEA scheduling is an independent process that can delay drug launch beyond an NDA approval date.

Table of Contents

In addition, failure to comply with FDA and other applicable regulatory requirements may, either before or after product approval, if any, subject our company to administrative or judicially imposed sanctions, including:

- Form 483 notices and Warning Letters;
- civil and criminal penalties;
- injunctions;
- withdrawal of approved products;
- product seizure or detention;
- product recalls;
- total or partial suspension of production;
- imposition of restrictions on operations, including costly new manufacturing requirements; and
- refusal to approve pending NDAs or supplements to approved NDAs.

Regulatory approval of an NDA or NDA supplement is not guaranteed. Despite the time and expense exerted, failure can occur at any stage, and we could encounter problems that cause us to abandon clinical trials or to repeat or perform additional preclinical studies and clinical trials. The number of preclinical studies and clinical trials that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is designed to target and the regulations applicable to any particular drug candidate. The FDA can delay, limit or deny approval of a drug candidate for many reasons, including:

- a drug candidate may not be deemed adequately safe and effective;
- FDA officials may not find the data from preclinical studies and clinical trials sufficient;
- the FDA may not approve the manufacturing processes or facilities;
- the FDA may change its approval policies or adopt new regulations; or
- the FDA may not accept our NDA submission (which is expected to be electronic) due to, among other reasons, the formatting of the submission.

We do not expect any drugs resulting from our research and development efforts to be commercially available until at least late 2010. Our most advanced drug candidates, including lorcaserin, have not completed all preclinical studies and the large, pivotal Phase 3 clinical trials for efficacy and safety that are required for FDA approval. Also, we have not previously filed NDAs with the FDA, either by paper or electronically, nor have we previously conducted Phase 3 clinical trials, which are significantly larger and more complex than earlier-stage trials. This lack of corporate experience may impede our ability to successfully complete these trials and obtain FDA approval in a timely manner, if at all, for our drug candidates for which development and commercialization is our responsibility. Even if we believe that data collected from our preclinical studies and clinical trials of our drug candidates are promising and that our information and procedures regarding chemistry, manufacturing and controls are sufficient, our data may not be sufficient to support approval by the FDA or any other United States or foreign regulatory authority. In addition, we believe that the regulatory review of NDAs for drug candidates intended for widespread use by a large proportion of the general population is becoming increasingly focused on safety. In this regard, it is possible that some of our drug candidates, including lorcaserin, will be subject to increased scrutiny to show adequate safety than would drug candidates for more acute or life-threatening diseases such as cancer. Even if approved, drug candidates may not be approved for all indications requested and such approval may be subject to limitations on the indicated uses for which the drug may be marketed. Our business and reputation may be harmed by any failure or significant delay in receiving regulatory approval for the sale of any drugs resulting from our drug candidates. As a result, we cannot predict when or whether regulatory approval will be obtained for any drug we develop.

Table of Contents

In order to market any drugs outside of the United States, we and our collaborators must comply with numerous and varying regulatory requirements of other countries. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks associated with FDA approval as well as additional, presently unanticipated, risks. Regulatory approval in one country does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one country may negatively impact the regulatory process in others. Failure to obtain regulatory approval in other countries or any delay or setback in obtaining such approval could have the same adverse effects associated with regulatory approval in the United States, including the risk that our drug candidates may not be approved for all indications requested and that such approval may be subject to limitations on the indicated uses for which the drug may be marketed.

The results of preclinical studies and completed clinical trials are not necessarily predictive of future results, and our current drug candidates may not have favorable results in later studies or trials.

Preclinical studies and Phase 1 and Phase 2 clinical trials are not primarily designed to test the efficacy of a drug candidate, but rather to test safety, to study pharmacokinetics and pharmacodynamics, and to understand the drug candidate s side effects at various doses and schedules. To date, long-term safety and efficacy have not yet been demonstrated in clinical trials for any of our drug candidates. Favorable results in our early studies or trials may not be repeated in later studies or trials, including continuing preclinical studies and large-scale clinical trials, and our drug candidates in later-stage trials may fail to show desired safety and efficacy despite having progressed through earlier-stage trials. In particular, preclinical data and the limited clinical results that we have obtained for lorcaserin may not predict results from studies in larger numbers of subjects drawn from more diverse populations treated for longer periods of time. They also may not predict the ability of lorcaserin to achieve or sustain the desired effects in the intended population or to do so safely. Unfavorable results from ongoing preclinical studies or clinical trials could result in delays, modifications or abandonment of ongoing or future clinical trials, or abandonment of a clinical program. Preclinical and clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals or commercialization. Negative or inconclusive results or adverse medical events during a clinical trial could cause a clinical trial to be delayed, repeated or terminated, or a clinical program abandoned. In addition, we may report top-line data from time to time, which is based on a preliminary analysis of key efficacy and safety data, and is subject to change following a more comprehensive review of the data related to the applicable clinical trial.

Many of our research and development programs are in early stages of development, and may not result in the commencement of clinical trials.

Many of our research and development programs are in the discovery or preclinical stage of development. The process of discovering compounds with therapeutic potential is expensive, time consuming and unpredictable. Similarly, the process of conducting preclinical studies of compounds that we discover requires the commitment of a substantial amount of our technical and financial resources and personnel. We may not discover additional compounds with therapeutic potential, and any of the compounds for which we are conducting preclinical studies may not result in the commencement of clinical trials. We cannot be certain that results sufficiently favorable to justify commencement of Phase 1 clinical trials will be obtained in these preclinical investigations. Even if such favorable preclinical results are obtained, our financial resources may not allow us to commence Phase 1 clinical trials. If we are unable to identify and develop new drug candidates, we may not be able to maintain a clinical development pipeline or generate revenues.

Our revenues, for at least the short-term, depend upon the actions of our collaborators and our ability to enter into new collaborations.

We expect that, for at least the next few years, our ability to generate significant revenues will depend upon the success of our existing collaborations and our ability to enter into new collaborations. Future revenues from

Table of Contents

our collaborations with Merck and Ortho-McNeil-Janssen will depend on, in addition to patent reimbursements, milestone and royalty payments, if any. Thus, we will receive little additional revenues from our existing collaborators if our own or our collaborators research, development or, ultimately, marketing efforts are unsuccessful.

Typically, our collaborators (and not us) control the development of partnered compounds into drugs after we have met early preclinical scientific milestones. In addition, we may not have complete access to information about the results and status of our collaborators clinical trials and regulatory programs and strategies. We are not entitled to the more significant milestone payments under our agreements until our collaborators have advanced compounds in clinical testing. Our partners may not devote adequate resources to the development of our compounds and may not develop or implement a successful clinical or regulatory strategy. We cannot guarantee that any development, approval or sales milestones in our existing or future collaborations will be achieved in the future, or that we will receive any payments for the achievement of any milestones. In addition, our existing collaborations, including our collaborations with Merck and Ortho-McNeil-Janssen, may be terminated early in certain circumstances, in which case we may not receive future milestone or royalty payments or patent reimbursements.

Moreover, our ability to enter into new collaborations depends on the outcomes of our preclinical and clinical testing. We do not control these outcomes. In addition, even if our testing is successful, pharmaceutical companies may not partner with us on terms that we believe are acceptable until we have advanced our drug candidates into the clinic and, possibly, through later-stage clinical trials, if at all.

We may engage in new partnerships and other strategic transactions that could impact our liquidity, increase our expenses and present significant distractions to our management.

From time to time we consider strategic transactions, such as out-licensing or in-licensing of compounds or technologies, acquisitions of companies and asset purchases. Additional potential transactions we may consider include a variety of different business arrangements, including strategic partnerships, joint ventures, spin-offs, restructurings, divestitures, business combinations and investments. Any such transaction may require us to incur non-recurring or other charges, may increase our near- and long-term expenditures and may pose significant integration challenges, require additional expertise or disrupt our management or business, which could harm our operations and financial results.

As part of an effort to enter into significant transactions, we conduct business, legal and financial due diligence with the goal of identifying and evaluating material risks involved in the transaction. Despite our efforts, we ultimately may be unsuccessful in ascertaining or evaluating all such risks and, as a result, might not realize the intended advantages of the transaction. If we fail to realize the expected benefits from any transaction we may consummate, whether as a result of unidentified risks, integration difficulties, regulatory setbacks or other events, our business, results of operations and financial condition could be adversely affected.

Drug discovery and development is intensely competitive in the therapeutic areas on which we focus. If our competitors develop treatments that are approved faster, marketed better, less expensive or demonstrated to be more effective or safer than our drug candidates, our commercial opportunities will be reduced or eliminated.

We focus our efforts on GPCRs. Because GPCRs are an important target class for drug discovery efforts, we believe that many pharmaceutical and biotechnology companies and other organizations have internal drug discovery programs focused on GPCRs. Many of the drugs that our collaborators or we are attempting to discover and develop would compete with existing therapies. In addition, many companies are pursuing the development of new drugs that target the same diseases and conditions that we target. Many of our competitors, particularly large pharmaceutical companies, have substantially greater research, development and marketing capabilities and greater financial, scientific and human resources than we do. Companies that complete clinical

Table of Contents

trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before we do for the same indication may achieve a significant competitive advantage, including certain patent and FDA marketing exclusivity rights. In addition, our competitors may develop drugs with fewer side effects, more desirable characteristics (such as route of administration or frequency of dosing) or better efficacy than our drug candidates or drugs, if any, for the same indication. Our competitors may also market generic or other drugs that compete with our drugs at a lower price than our drugs, which may negatively impact our drug sales, if any. Any results from our research and development efforts, or from our joint efforts with our existing or any future collaborators, may not compete successfully with existing or newly discovered products or therapies.

Collaborative relationships may lead to disputes and delays in drug development and commercialization.

We have had conflicts with collaborators and may in the future have conflicts with our prospective, current or past collaborators, such as conflicts concerning the interpretation of preclinical or clinical data, the achievement of milestones, or the ownership of intellectual property. Our collaborators may stop supporting our drug candidates if they develop or obtain rights to competing drug candidates or drugs. If any conflicts arise with Ortho-McNeil-Janssen, Merck or any other prospective, current or past collaborator, such collaborator may act in a manner that is adverse to our interests. Any such disagreement could result in one or more of the following, each of which could delay, or lead to termination of, development or commercialization of our partnered drug candidates, and in turn prevent us from generating revenues:

- unwillingness on the part of a collaborator to pay us research funding, milestone payments or royalties that we believe are due to us under a collaboration;
- uncertainty regarding ownership of intellectual property rights arising from our collaborative activities, which could prevent us from entering into additional collaborations;
- 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 the results of those activities;
- slowing or cessation of a collaborator s development or commercialization efforts with respect to our drug candidates; or
- litigation or arbitration.

Setbacks and consolidation in the pharmaceutical and biotechnology industries, and our or our collaborators inability to obtain third-party coverage and adequate reimbursement, could make partnering more difficult and diminish our revenues.

Setbacks in the pharmaceutical and biotechnology industries, such as those caused by safety concerns relating to high-profile drugs like Avandia, Vioxx and Celebrex, or drug candidates, as well as competition from generic drugs, litigation, and industry consolidation, may have an adverse effect on us. For example, pharmaceutical companies may be less willing to enter into new collaborations or continue existing collaborations if they are integrating a new operation as a result of a merger or acquisition or if their therapeutic areas of focus change following a merger. Moreover, our and our collaborators ability to commercialize any of our drugs that may be approved will depend in part on government regulation and the availability of coverage and adequate reimbursement from third-party payers, including private health insurers and government payers, such as the Medicaid and Medicare programs, increases in government-run, single-payer health insurance plans and compulsory licenses of drugs. Government and third-party payers are increasingly attempting to contain healthcare costs by limiting coverage and reimbursement levels for new drugs. Given the continuing discussion regarding the cost of healthcare, managed care, universal healthcare coverage and other healthcare issues, we cannot predict with certainty what additional healthcare initiatives, if any, will be implemented or the effect any future legislation or regulation will have on our business. These efforts may limit our commercial opportunities by reducing the amount a potential collaborator is willing to pay to license our programs or drug candidates in the future due to a reduction in the potential revenues from drug sales. Moreover, legislation and regulations

Table of Contents

affecting the pricing of pharmaceuticals may change before regulatory agencies approve our drug candidates for marketing. Adoption of such legislation and regulations could further limit pricing approvals for, and reimbursement of, drugs. A government or third-party payer decision not to approve pricing for, or provide adequate coverage and reimbursements of, our drugs, if any, could limit market acceptance of such drugs.

We rely on third parties to conduct our clinical trials and many of our preclinical studies. If those parties do not successfully carry out their contractual duties or meet expected deadlines, our drug candidates may not advance in a timely manner or at all.

In the course of our discovery, preclinical testing and clinical trials, we rely on third parties, including laboratories, investigators, clinical research organizations and manufacturers, to perform critical services for us. For example, we rely on third parties to conduct our clinical trials and many of our preclinical studies. Clinical research organizations are responsible for many aspects of the trials, including finding and enrolling subjects for testing and administering the trials. Although we rely on these third parties to conduct our clinical trials, we are responsible for ensuring that each of our clinical trials is conducted in accordance with its investigational plan and protocol. Moreover, the FDA and foreign regulatory authorities require us to comply with regulations and standards, commonly referred to as good clinical practices, or GCPs, for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical trials. Our reliance on third parties does not relieve us of these responsibilities and requirements. These third parties may not be available when we need them or, if they are available, may not comply with all regulatory and contractual requirements or may not otherwise perform their services in a timely or acceptable manner, and we may need to enter into new arrangements with alternative third parties and our clinical trials may be extended, delayed or terminated. These independent third parties may also have relationships with other commercial entities, some of which may compete with us. In addition, if such third parties fail to perform their obligations in compliance with our clinical trial protocols or GCPs, our clinical trials may not meet regulatory requirements or may need to be repeated. As a result of our dependence on third parties, we may face delays or failures outside of our direct control. These risks also apply to the development activities of our collaborators, and we do not control our collaborators research and development, clinical trials or regulatory activities. We do not expect any drugs resulting from our collaborators research and development efforts to be commercially available for many years, if ever.

We rely on third-party manufacturers and we or such third parties may encounter failures or difficulties that could delay the clinical development or regulatory approval of our drug candidates, or their ultimate commercial production if approved.

We and third parties manufacture our drug candidates. We do not have manufacturing facilities that can produce sufficient quantities of drug candidates for large-scale clinical trials. Accordingly, we must either develop such facilities, which will require substantial additional funds, or rely, at least to some extent, on third-party manufacturers for the production of drug candidates. Furthermore, should we obtain FDA approval for any of our drug candidates, we expect to rely, at least to some extent, on third-party manufacturers for commercial production. Our dependence on others for the manufacture of our drug candidates may adversely affect our ability to develop and deliver such drug candidates on a timely and competitive basis.

Any performance failure on the part of us or a third-party manufacturer could delay clinical development, regulatory approval or, ultimately, sales of our drug candidates. We or third-party manufacturers may encounter difficulties involving production yields, regulatory compliance, quality control and quality assurance, as well as shortages of qualified personnel. Approval of our drug candidates could be delayed, limited or denied if the FDA does not approve our or a third-party manufacturer s processes or facilities. Moreover, the ability to adequately and timely manufacture and supply drug candidates is dependent on the uninterrupted and efficient operation of the manufacturing facilities, which is impacted by many manufacturing variables including:

- availability or contamination of raw materials and components used in the manufacturing process, particularly those for which we have no other source or supplier;

Table of Contents

facility capacity of our facilities or those of our contract manufacturers;

facility contamination by microorganisms or viruses;

compliance with regulatory requirements, including Form 483 notices and Warning Letters;

changes in forecasts of future demand;

timing and actual number of production runs;

production success rates and bulk drug yields; and

timing and outcome of product quality testing.

In addition, we or our third-party manufacturers may encounter delays and problems in manufacturing our drug candidates or drugs for a variety of reasons, including accidents during operation, failure of equipment, delays in receiving materials, natural or other disasters, political or governmental changes, or other factors inherent in operating complex manufacturing facilities. Supply chain management is difficult. Commercially available starting materials, reagents and excipients may become scarce or more expensive to procure, and we may not be able to obtain favorable terms in agreements with subcontractors. We or our third-party manufacturers may not be able to operate our respective manufacturing facilities in a cost-effective manner or in a time frame that is consistent with our expected future manufacturing needs. If we or our third-party manufacturers cease or interrupt production or if our third-party manufacturers and other service providers fail to supply materials, products or services to us for any reason, such interruption could delay progress on our programs, or interrupt the commercial supply, with the potential for additional costs and lost revenues. If this were to occur, we may also need to seek alternative means to fulfill our manufacturing needs.

We may not be able to enter into agreements for the manufacture of our drug candidates with manufacturers whose facilities and procedures comply with applicable law. Manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the DEA and corresponding state and foreign authorities to ensure strict compliance with current Good Manufacturing Practices, or cGMPs, and other applicable government regulations and corresponding foreign standards. We do not have control over a third-party manufacturer s compliance with these regulations and standards. In addition, our Swiss subsidiary, Arena GmbH has contracted with Siegfried to provide safety, health and environmental services and assess compliance, train personnel and oversee Arena GmbH s compliance with the applicable safety, health and environmental regulations. We are, therefore, relying at least in part on Siegfried s judgment, experience and expertise. If we or one of our manufacturers fail to maintain compliance, we or they could be subject to civil or criminal penalties, the production of our drug candidates could be interrupted or suspended, or our product could be recalled or withdrawn, resulting in delays, additional costs and potentially lost revenues.

Our efforts will be seriously jeopardized if we are unable to retain and attract key employees.

Our success depends on the continued contributions of our principal management, development and scientific personnel, and the ability to hire and retain key personnel, particularly in the clinical development area as we transition more of our programs from research into drug development. We face intense competition for such personnel. The loss of services of any principal member of our management or scientific staff, particularly Jack Lief, our President, Chief Executive Officer and Chairman, and Dominic P. Behan, Ph.D., our Senior Vice President and Chief Scientific Officer, could adversely impact our operations and ability to raise additional capital. To our knowledge, neither Mr. Lief nor Dr. Behan plans to leave, retire or otherwise disassociate with us in the near future.

We may incur substantial liabilities from any product liability claims if our insurance coverage for those claims is inadequate.

We develop, test and manufacture drugs that are used by humans. We face an inherent risk of product liability exposure related to the testing of our drug candidates in clinical trials, and will face an even greater risk

29

Table of Contents

if we sell our own drugs commercially. An individual may bring a liability claim against us if one of our drug candidates or drugs causes, or merely appears to have caused, an injury. If we cannot successfully defend ourselves against a product liability claim, we will incur substantial liabilities. Regardless of merit or eventual outcome, liability claims may result in:

- decreased demand for our drug;
- injury to our reputation;
- withdrawal of clinical trial subjects;
- costs of related litigation;
- substantial monetary awards to subjects or other claimants;
- loss of revenues; and
- the inability to commercialize our drug candidates.

We have limited product liability insurance that covers our clinical trials. We intend to expand our insurance coverage to include the sale of drugs if marketing approval is obtained for any of our drug candidates. However, insurance coverage is increasingly expensive. We may not be able to obtain or maintain insurance coverage at a reasonable cost, and we may not have insurance coverage that will be adequate to satisfy any liability that may arise.

Damages awarded in a product liability action could be substantial and could have a negative impact on our financial condition. Whether or not we were ultimately successful in product liability litigation, such litigation would consume substantial amounts of our financial and managerial resources, and might result in adverse publicity, all of which would impair our business.

Even if any of our drug candidates receives regulatory approval, our drug candidates will still be subject to extensive post-marketing regulation.

If we or our collaborators receive regulatory approval for our drug candidates in the United States or other jurisdictions, we will also be subject to ongoing obligations and continued regulatory review from the FDA and other applicable regulatory agencies, such as continued adverse event reporting requirements. We may also be subject to additional FDA post-marketing obligations, all of which may result in significant expense and limit our ability to commercialize such drugs in the United States or other jurisdictions.

If any of our drug candidates receive US regulatory approval or approval in other jurisdictions, the FDA or other regulatory agencies may still impose significant restrictions on the indicated uses for which such drugs may be marketed or impose ongoing requirements for potentially costly post-approval studies. If the FDA or other regulatory agencies approve any of our drug candidates, the labeling, packaging, adverse event reporting, storage, advertising and promotion for the drug will be subject to extensive regulatory requirements. We and the manufacturers of our products are also required to comply with cGMP regulations, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Further, regulatory agencies must approve these manufacturing facilities before they can be used to manufacture our products, and these facilities are subject to ongoing regulatory inspections. In addition, regulatory agencies subject a drug, its manufacturer and the manufacturer s facilities to continual review and inspections. The subsequent discovery of previously unknown problems with a drug, including adverse events of unanticipated severity or frequency, or problems with the facility where the drug is manufactured, may result in restrictions on the marketing of that drug, up to and including withdrawal of the drug from the market. In the United States, the DEA and comparable state-level agencies also heavily regulate the manufacturing, holding, processing, security, recordkeeping and distribution of drugs that are considered controlled substances. If any of our drug candidates are scheduled by the DEA as

controlled substances (due to abuse potential), we will become subject to the DEA s regulations. The DEA periodically inspects facilities for compliance with its rules and

Table of Contents

regulations. If our manufacturing facilities or those of our suppliers fail to comply with applicable regulatory requirements, it could result in regulatory action and additional costs to us. Failure to comply with applicable FDA and other regulatory requirements may, either before or after product approval, if any, subject our company to administrative or judicially imposed sanctions, including:

- issuance of Form 483 notices or Warning Letters by the FDA or other regulatory agencies;
- imposition of fines and other civil penalties;
- criminal prosecutions;
- injunctions, suspensions or revocations of regulatory approvals;
- suspension of any ongoing clinical trials;
- total or partial suspension of manufacturing;
- delays in commercialization;
- refusal by the FDA to approve pending applications or supplements to approved applications filed by us or our collaborators;
- refusals to permit drugs to be imported into or exported from the United States;
- restrictions on operations, including costly new manufacturing requirements; and
- product recalls or seizures.

The FDA s and other regulatory agencies policies may change and additional government regulations may be enacted that could prevent or delay regulatory approval of our drug candidates or further restrict or regulate post-approval activities. We cannot predict the likelihood, nature or extent of adverse government regulation that may arise from future legislation or administrative action, either in the United States or abroad. If we are not able to maintain regulatory compliance, we might not be permitted to market our drugs and our business could suffer.

Even if we receive regulatory approval to commercialize our drug candidates, our ability to generate revenues from any resulting products will be subject to a variety of risks, many of which are out of our control.

Even if our drug candidates obtain regulatory approval, resulting products may not gain market acceptance among physicians, patients, healthcare payers or the medical community. We believe that the degree of market acceptance and our ability to generate revenues from such products will depend on a number of factors, including:

- timing of market introduction of competitive drugs;

efficacy and safety of our drug candidates;

prevalence and severity of any side effects;

potential or perceived advantages or disadvantages over alternative treatments;

strength of sales, marketing and distribution support;

price of our future products, both in absolute terms and relative to alternative treatments;

the effect of current and future healthcare laws on our drug candidates;

availability of coverage and reimbursement from government and other third-party payers; and

product labeling or product insert requirements of the FDA or other regulatory authorities.

If our approved drugs, if any, fail to achieve market acceptance, we may not be able to generate significant revenue to achieve or sustain profitability.

Table of Contents

In addition, lorcaserin is being assessed for drug abuse potential. If lorcaserin is approved for marketing, regulatory authorities may determine that lorcaserin will be a scheduled drug if it is found to have abuse potential or for other reasons. If lorcaserin were scheduled as a controlled substance by the DEA, we would expect it would be a schedule IV or V drug, which we believe would have little or no impact on our ability to commercialize lorcaserin. However, if lorcaserin were scheduled in a more tightly controlled category, such scheduling could negatively impact the ability to prescribe lorcaserin, a patient s willingness to use it and other aspects of our ability to commercialize it.

We may not be able to effectively integrate or manage our international operations and such difficulty could adversely affect our stock price, business operations, financial condition and results of operations.

In January 2008, we purchased from Siegfried certain drug product facility assets, including a licensed production facility, fixtures, equipment, other personal property and real estate assets and acquired employees in Zofingen, Switzerland. There are significant risks associated with the establishment of foreign operations, including, but not limited to, compliance with local laws and regulations, the protection of our intellectual property, the ability to integrate our corporate culture with local customs and cultures, the distraction to our management and foreign currency exchange rates and the impact of shifts in the United States and local economies on those rates. We will also be manufacturing drug products for Siegfried for at least the next several years and, therefore, be subject to liability for non-performance, product recalls and other claims against manufacturers.

We use biological materials, hazardous materials, chemicals and radioactive compounds.

Our research and development and manufacturing activities involve the use of potentially harmful biological materials as well as materials, chemicals and various radioactive compounds that could be hazardous to human health and safety or the environment. These materials and various wastes resulting from their use are stored at our facility pending ultimate use and disposal. We cannot completely eliminate the risk of contamination, which could cause:

- interruption of our research and development or manufacturing efforts;
- injury to our employees and others;
- environmental damage resulting in costly clean up; and
- liabilities under domestic or foreign federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products.

In such an event, we may be held liable for any resulting damages, and any such liability could exceed our resources. Although we carry insurance in amounts and type that we consider commercially reasonable, we cannot be certain that the coverage or coverage limits of our insurance policies will be adequate and we do not have insurance coverage for losses relating to an interruption of our research and development efforts caused by contamination.

Our operations might be interrupted by the occurrence of a natural disaster or other catastrophic event.

Our US operations, including laboratories, offices and a chemical development facility, are located in the same business park in San Diego. We also have a drug product facility that is located in Zofingen, Switzerland. We depend on our facilities and on our collaborators, contractors and vendors for the continued operation of our business. Natural disasters or other catastrophic events, including terrorist attacks, interruptions in the supply of natural resources, political and governmental changes, wildfires and other fires, explosions, actions of animal rights activists, earthquakes and wars could disrupt our operations or those of our collaborators, contractors and vendors. Even though we believe we carry commercially reasonable business interruption and liability insurance, and our contractors may carry liability insurance that protect us in certain events, we might suffer losses as a result of business interruptions that exceed the coverage available under our and our contractors insurance policies or for which we or our contractors do not have coverage. For example, we are not insured against a

32

Table of Contents

terrorist attack. Any natural disaster or catastrophic event could have a significant negative impact on our operations and financial results. Moreover, any such event could delay our research and development programs.

There may be sales of our stock by our executive officers and directors, and these sales could adversely affect our stock price.

Sales of our stock by our executive officers and directors, or the perception that such sales may occur, could adversely affect the market price of our stock. Some of our executive officers have adopted trading plans under SEC Rule 10b5-1 to dispose of a portion of their stock. Any of our executive officers or directors may adopt such trading plans in the future.

Currency fluctuations may negatively affect our financial condition.

We primarily spend and generate cash in US dollars, and present our consolidated financial statements in US dollars. However, a portion of our expected and potential payments and receipts under our agreements are in foreign currencies, including Swiss francs. For example, payments and receipts under our asset purchase agreement, manufacturing services agreement and long-term API manufacturing agreement with Siegfried are required to be paid in Swiss francs. A fluctuation of the exchange rates of foreign currencies versus the US dollar may, thus, adversely affect our financial results, including cash balances, expenses and revenues. We may enter into hedging transactions to try to reduce our foreign currency exposure in the future, but there is no assurance that such transactions will occur or be successful.

Laws, rules and regulations relating to public companies may be costly and impact our ability to attract and retain directors and executive officers.

Laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002 and rules adopted by the SEC and by the NASDAQ Global Market, as well as the laws and regulations of foreign governments, may result in increased costs to us, particularly as we continue to develop the required capabilities in the United States and abroad to commercialize our products. These laws, rules and regulations could make it more difficult or 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 same or similar 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, on our board committees or as executive officers. We cannot estimate accurately the amount or timing of additional costs we may incur to respond to these laws, rules and regulations.

Risks Relating to Our Intellectual Property

Our success is dependent on intellectual property rights held by us and third parties and our interest in these rights is complex and uncertain.

Our success will depend on our own and on our collaborators abilities to obtain, secure and defend patents. In particular, the patents directed to our most advanced drug candidates and other compounds discovered using our technologies or that are otherwise part of our collaborations are important to commercializing drugs. We have numerous United States and foreign patent applications pending for our technologies. There is no assurance that any of our patent applications will issue, or that any of the patents will be enforceable or will cover a drug or other commercially significant technology or method, or that the patents will be held to be valid for their expected terms.

The procedures for obtaining a patent in the United States and in most foreign countries are complex. These procedures require an analysis of the scientific technology related to the invention and many sophisticated legal issues. Obtaining patent rights outside the United States often requires the translation of highly technical documents and an improper translation may lead to the loss of, or otherwise jeopardize, the patent protection of

Table of Contents

our inventions. Ensuring adequate quality of translators and foreign patent attorneys is often very challenging. Consequently, the process for having our pending patent applications issue as patents will be difficult, complex and time consuming. Our patent position is very uncertain and we do not know when, or if, we will obtain additional patents for our technologies, or if the scope of the patents obtained will be sufficient to protect our drugs, or be considered sufficient by parties reviewing our patent positions pursuant to a potential licensing or financing transaction.

In addition, other entities may challenge the validity or enforceability of our patents and patent applications in litigation or administrative proceedings. Even the issuance of a patent is not conclusive as to its validity or enforceability. We cannot make assurances as to how much protection, if any, will be given to our patents if we attempt to enforce them or they are challenged. It is possible that a competitor or a generic pharmaceutical provider may successfully challenge our patents and those challenges may result in reduction or elimination of our patents coverage.

We also rely on confidentiality agreements and trade secrets to protect our technologies. However, such information is difficult to protect. We require our employees to contractually agree not to improperly use our confidential information or disclose it to others, but we may be unable to determine if our employees have conformed or will conform to their legal obligations under these agreements. We also enter into confidentiality agreements with prospective collaborators, collaborators, service providers and consultants, but we may not be able to adequately protect our trade secrets or other proprietary information in the event of any unauthorized use or disclosure or the lawful development by others of this information. Many of our employees and consultants were, and many of them may currently be, parties to confidentiality agreements with other pharmaceutical and biotechnology companies, and the use of our technologies could violate these agreements. In addition, third parties may independently discover our trade secrets or proprietary information.

Some of our academic institution licensors, research collaborators and scientific advisors have rights to publish data and information to which we have rights. We generally seek to prevent our partners from disclosing scientific discoveries before we have the opportunity to file patent applications on such discoveries. In some of our collaborations, we do not have control over our partners ability to disclose their own discoveries under the collaboration and in some of our academic collaborations we are limited to relatively short periods to review a proposed publication and file a patent application. If we cannot maintain the confidentiality of our technologies and other confidential information in connection with our collaborations, our ability to receive patent protection or protect our proprietary information will be impaired.

The US Patent and Trademark Office has over the last few years tried to enact and/or has proposed changes in the rules governing (i) the duties of patent applicants to disclose information that relates to their applications, (ii) the ability of patent applicants to file unlimited numbers of patent applications and patent claims that concern closely related inventions and/or different aspects of the same invention, and (iii) the manner in which the US Patent and Trademark Office will decide whether to require patent applicants to separate closely related inventions into separate patent applications. Some of these rule changes are being challenged in the courts. It is unclear which of these rule changes, if any, will be allowed by the courts and which of them will continue to be pursued. In addition, the US Congress is considering changes to federal patent laws on several issues including, but not limited to: (i) the information can be used to determine whether an invention is not new and, therefore, not patentable, (ii) the limits on the independent administrative rulemaking authority of the US Patent and Trademark Office, (iii) the duties of patent applicants to disclose information that relates to their applications, (iv) whether, under what circumstances, and how many times a third party can challenge an issued US patent before the US Patent and Trademark Office, (v) whether and under what circumstances patent applicants can lose their ability to enforce their patents in the United States based on their failure to disclose certain information relating to their inventions, and (vi) how damages for patent infringement may be reduced based by a number of factors, including the similarity of a patented invention to preexisting technologies.

Table of Contents

We believe that the United States is by far the largest single market for pharmaceuticals in the world. Because of the critical nature of patent rights to the pharmaceutical industry, changes in US patent rules and laws could have a profound effect on our future profits. Several of the patent rule and law changes that are being considered could significantly weaken patent protections in the United States in general. They may also have a disproportionately large negative impact on the biotechnology and pharmaceutical industries in particular, as well as tilt the balance of market control and distribution of profits between the manufacturers of patented pharmaceutical products and the manufacturers of generic pharmaceutical products towards the generics manufacturers. At present there is considerable uncertainty as to which patent rules and laws will be changed and whether changes to the patent rules will ultimately be enforced or struck down by the courts.

A dispute regarding the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be costly and result in delays or termination of our future research, development, manufacturing and sales activities.

Our commercial success also depends upon our ability to develop and manufacture our drug candidates and market and sell drugs, if any, and conduct our research and development activities without infringing or misappropriating the proprietary rights of others. There are many patents and patent applications filed, and that may be filed, by others relating to drug discovery and development programs that could be determined to be similar, identical or superior to ours or our licensors or collaborators. We may be exposed to future litigation by others based on claims that our drug candidates, technologies or activities infringe the intellectual property rights of others. Numerous US and foreign issued patents and pending patent applications owned by others exist in the area of GPCRs, including some which purport to allow the patent holder to control the use of all drugs that modulate a particular drug target or GPCR, regardless of whether the infringing drug bears any structural resemblance to a chemical compound known to the patent holder at the time of patent filing. Numerous US and foreign issued patents and pending patent applications owned by others also exist in the therapeutic areas in, and for the therapeutic targets for, which we are developing drugs. There are also numerous issued patents and patent applications to chemical compounds or synthetic processes that may be necessary or useful to use in our research, development, manufacturing or commercialization activities. These could materially affect our ability to develop our drug candidates or manufacture, import or sell drugs, and our activities, or those of our licensors or collaborators, could be determined to infringe these patents. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that our drug candidates or technologies may infringe. There also may be existing patents, of which we are not aware, that our drug candidates or technologies may infringe. Further, there may be issued patents or pending patent applications in fields relevant to our business, of which we are or may become aware, that we believe (i) are invalid or we do not infringe; (ii) relate to immaterial portions of our overall drug discovery, development, manufacturing and commercialization efforts; or (iii) in the case of pending patent applications, the resulting patent would not be granted or, if granted, would not likely be enforced in a manner that would materially impact such efforts. We cannot assure you that others holding any of these patents or patent applications will not assert infringement claims against us for damages or seek to enjoin our activities. We also cannot assure you that, in the event of litigation, we will be able to successfully assert any belief we may have as to non-infringement, invalidity or immateriality, or that any infringement claims will be resolved in our favor.

In addition, others may infringe or misappropriate our proprietary rights, and we may have to institute costly legal action to protect our intellectual property rights. We may not be able to afford the costs of enforcing or defending our intellectual property rights against others.

Other organizations, companies and individuals are seeking proprietary positions on genomics information that overlap with the government-sponsored project to sequence the human genome. Our activities, or those of our licensors or collaborators, could be affected by conflicting positions that may exist between any overlapping genomics information made available publicly as a result of the government-sponsored project and genomics information that other organizations, companies or individuals consider to be proprietary. There could also be significant litigation and other administrative proceedings in our industry that affect us regarding patent and other

Table of Contents

intellectual property rights. Any legal action or administrative action against us, or our collaborators, claiming damages or seeking to enjoin commercial activities relating to our drug discovery, development, manufacturing and commercialization activities could:

- require us, or our collaborators, to obtain a license to continue to use, manufacture or market the affected drugs, methods or processes, which may not be available on commercially reasonable terms, if at all;
- prevent us from importing, making, using, selling or offering to sell the subject matter claimed in patents held by others and subject us to potential liability for damages;
- consume a substantial portion of our managerial, scientific and financial resources; or
- be costly, regardless of the outcome.

Furthermore, because of the substantial amount of pre-trial document and witness discovery required in connection with intellectual property litigation, there is a risk that some of our confidential information could be compromised by disclosure during this type of litigation. In addition, during the course of this kind of litigation, there could be public announcements of the results of hearings, motions or other interim proceedings or developments. If securities analysts or investors perceive these results to be negative, it could have a substantial adverse effect on the trading price of our common stock.

We have been contacted from time to time by third parties regarding their intellectual property rights, sometimes asserting that we may need a license to use their technologies. If we fail to obtain any required licenses or make any necessary changes to our technologies, we may be unable to develop or commercialize some or all of our drug candidates.

We cannot protect our intellectual property rights throughout the world.

Filing, prosecuting, defending and enforcing patents on all of our drug discovery technologies and all of our potential drug candidates throughout the world would be prohibitively expensive. Competitors may use our technologies to develop their own drugs in jurisdictions where we have not obtained patent protection. These drugs may compete with our drugs, if any, and may not be covered by any of our patent claims or other intellectual property rights. The laws of some foreign countries do not protect intellectual property rights to the same extent as the laws of the United States, and many companies have encountered significant problems in protecting and defending such rights in foreign jurisdictions. Many countries, including certain countries in Europe, have compulsory licensing laws under which a patent owner may be compelled to grant licenses to third parties (for example, the patent owner has failed to work the invention in that country or the third party has patented improvements). In addition, many countries limit the enforceability of patents against government agencies or government contractors. In these countries, the patent owner may have limited remedies, which could materially diminish the value of the patent. Compulsory licensing of life-saving drugs is also becoming increasingly popular in developing countries either through direct legislation or international initiatives. Such compulsory licenses could be extended to include some of our drug candidates, which could limit our potential revenue opportunities. Moreover, the legal systems of certain countries, particularly certain developing countries, do not favor the aggressive enforcement of patents and other intellectual property protection, particularly those relating to biotechnology and/or pharmaceuticals, which makes it difficult for us to stop the infringement of our patents. Proceedings to enforce our patent rights in foreign jurisdictions could result in substantial cost and divert our efforts and attention from other aspects of our business.

Risks Relating to Our Securities

Our stock price will likely be volatile, and your investment in our stock could decline in value.

Our stock price has fluctuated historically. From January 1, 2007 to March 13, 2009, the market price of our stock was as low as $2.70 per share and as high as $14.78 per share.

Table of Contents

Very few drug candidates being tested will ultimately receive FDA approval, and biotechnology or biopharmaceutical companies may experience a significant drop in stock price based on a clinical trial result or regulatory action. Our stock price may fluctuate significantly depending on a variety of factors, including:

- the success or failure of our clinical-stage development programs or other results or decisions affecting the development of our drug candidates;
- the timing of the discovery of drug leads and the development of our drug candidates;
- the modification or termination of an existing collaboration or the entrance into, or failure to enter into, a new collaboration;
- the timing and receipt by us of milestone and royalty payments or failing to achieve and receive the same;
- changes in our research and development budget or the research and development budgets of our existing or potential collaborators;
- the introduction or withdrawal of drugs by others that target the same diseases and conditions that we or our collaborators target or the introduction of new drug discovery techniques;
- regulatory actions;
- expenses related to, and the results of, litigation and other proceedings relating to intellectual property rights or other matters;
- financing strategy or decisions;
- developments in intellectual property rights or related announcements;
- capital market conditions; and
- accounting changes.

We are not able to control many of these factors. If our financial or scientific results in a particular period do not meet stockholders or analysts expectations, our stock price may decline and such decline could be significant.

There are a substantial number of shares of our common stock eligible for future sale in the public market, and the sale of these shares could cause the market price of our common stock to fall.

There were 74,194,462 shares of our common stock outstanding as of March 13, 2009. We also have outstanding a seven-year warrant we issued in June 2006 to purchase 829,856 shares of our common stock at an exercise price of $15.49 per share and a seven-year warrant we issued in August 2008 to purchase 1,106,344 shares of our common stock at an exercise price of $7.71 per share. In addition, as of March 13, 2009, there were (i) options to purchase 6,463,956 shares of our common stock outstanding under our equity incentive plans at a weighted-average exercise

price of $9.82, (ii) 1,930,600 performance-based restricted stock unit awards outstanding under our 2006 Long-Term Incentive Plan, as amended, or LTIP, (iii) 1,277,279 additional shares of common stock remaining issuable under our LTIP, (iv) 92,493 shares of common stock remaining issuable under our 2001 Employee Stock Purchase Plan, as amended, and (v) 107,919 shares of common stock remaining issuable under our Deferred Compensation Plan.

The shares described above, when issued, will be available for immediate resale in the public market. The market price of our common stock could decline as a result of such resales due to the increased number of shares available for sale in the market.

Table of Contents

Any future equity or debt issuances by us may have dilutive or adverse effects on our existing stockholders.

We have financed our operations, and we expect to continue to finance our operations, primarily by issuing and selling our common stock or securities convertible into or exercisable for shares of our common stock. In light of our need for additional financing, we may issue additional shares of common stock or convertible securities that could dilute your ownership in our company and may include terms that give new investors rights that are superior to yours. Moreover, any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event may have a dilutive impact on your ownership interest, which could cause the market price of our common stock to decline. In addition, we may also raise additional funds through the incurrence of debt, and the holders of any debt we may issue would have rights superior to your rights in the event we are not successful and are forced to seek the protection of bankruptcy laws.

The holders of our stock and other securities may take actions that are contrary to your interests, including selling their stock.

A small number of our stockholders hold a significant amount of our outstanding stock. These stockholders may support competing transactions and have interests that are different from yours. Sales of a large number of shares of our stock by these large stockholders or other stockholders within a short period of time could adversely affect our stock price.

We previously had disagreements with the holders of the warrants we issued in connection with our Series B Convertible Preferred Stock financing regarding whether their original warrants entitled them to receive exchange warrants following the exercise of such warrants in full. We entered into agreements to settle such disagreements. We may be involved with other disagreements with the holders of our stock, warrants or other securities in the future. Such disagreements may lead to litigation which may be expensive and consume management s time, or involve settlements, the terms of which may not be favorable to us.

Our rights agreement and certain provisions in our charter documents and Delaware law could delay or prevent a change in management or a takeover attempt that you may consider to be in your best interest.

We have adopted certain anti-takeover provisions, including a stockholders rights agreement, dated as of October 30, 2002, between us and Computershare Trust Company, Inc., as Rights Agent, as amended. The rights agreement will cause substantial dilution to any person who attempts to acquire us in a manner or on terms not approved by our board of directors.

The rights agreement, as well as other provisions in our certificate of incorporation and bylaws and under Delaware law, could delay or prevent the removal of directors and other management and could make more difficult a merger, tender offer or proxy contest involving us that you may consider to be in your best interest. For example, these provisions:

- allow our board of directors to issue preferred stock without stockholder approval;
- limit who can call a special meeting of stockholders;
- eliminate stockholder action by written consent; and
- establish advance notice requirements for nomination for election to the board of directors or for proposing matters to be acted upon at stockholders meetings.

Item 1B. Unresolved Staff Comments.

None.

Table of Contents

Item 2. Properties.

As set forth in the below table, the principal facilities that we occupy include approximately 345,000 square feet of research, development, warehouse and office space located at various addresses in the same business park on Nancy Ridge Drive in San Diego, California and approximately 72,000 square feet of manufacturing, warehouse and office space located in Zofingen, Switzerland.

Location	Own/ Lease	Description
6114 Nancy Ridge Drive	Lease with option to purchase	This chemical development facility consists of approximately 40,000 square feet (which includes approximately 18,000 of internal square feet and approximately 22,000 square feet of integrated external space), of which approximately 5,000 square feet is office space. The remaining approximately 35,000 square feet of space is dedicated to process research and scale-up chemistry, the production of intermediates and other compounds for research and development purposes, and the production of active pharmaceutical ingredients to support our clinical trials. We are using this facility for the production of scale-up lots for our internal research programs, safety studies and clinical trials. We commenced cGMP operations in this facility in 2004. In May 2007, we completed a sale and leaseback of this facility, and have an option to purchase it back.
6118 Nancy Ridge Drive	Lease with option to purchase	This facility of approximately 30,000 square feet consists of approximately 50% laboratory space and 50% office space. In May 2007, we completed a sale and leaseback of this facility, and have an option to purchase it back.
6122-6124-6126 Nancy Ridge Drive	Lease with option to purchase	The portion of this facility we lease consists of approximately 40,000 square feet, of which approximately 24,000 square feet is laboratory space and 16,000 square feet is office space. We have assigned our option to purchase the entire facility, which includes approximately 68,000 square feet, and have an option to purchase the facility back.
6138-6150 Nancy Ridge Drive	Lease with option to purchase	This facility of approximately 55,000 square feet consists of approximately 33,000 square feet of laboratory space and 22,000 square feet of office space. In December 2003, we completed a sale and leaseback of this facility, and have an option to purchase it back.
6154 Nancy Ridge Drive	Lease with option to purchase	This facility of approximately 143,000 square feet consists of approximately 131,000 square feet of office space and 12,000 square feet of warehouse space, including approximately 75,000 square feet of office space that was added in December 2008. In May 2007, we completed a sale and leaseback of the original 68,000 square foot facility. We have an option to purchase the entire 143,000 square feet facility back.
6162 Nancy Ridge Drive	Own	This facility, which is presently unoccupied, includes approximately 20,000 square feet of warehouse and office space.
6166 Nancy Ridge Drive	Lease	This facility of approximately 37,000 square feet consists of approximately 23,000 square feet of laboratory space and 14,000 square feet of office space.
Zofingen, Switzerland	Own	The portion of this facility we own consists of approximately 72,000 square feet, including approximately 38,000 square feet of manufacturing space, 30,000 square feet of warehouse space and 4,000 square feet of office space.

Table of Contents

We expect these facilities to be sufficient for our needs in the near term.

Item 3. Legal Proceedings.

None.

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

No matters were submitted to a vote of security holders during the fourth quarter of the fiscal year covered by this Annual Report on Form 10-K.

Table of Contents

PART II

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

Market information

Our common stock is listed on the NASDAQ Global Market under the symbol ARNA. The following table sets forth, for the periods indicated, the high and low sale prices for our common stock as reported by the NASDAQ Global Market.

	High	Low
Year ended December 31, 2007		
First Quarter	$ 14.58	$ 9.96
Second Quarter	$ 14.74	$ 10.34
Third Quarter	$ 14.78	$ 10.56
Fourth Quarter	$ 11.39	$ 7.76

	High	Low
Year ended December 31, 2008		
First Quarter	$ 8.68	$ 5.95
Second Quarter	$ 7.35	$ 4.55
Third Quarter	$ 6.99	$ 4.99
Fourth Quarter	$ 6.14	$ 2.70

Holders

As of March 13, 2009, there were approximately 161 stockholders of record of our common stock, one of which is Cede & Co., a nominee for Depository Trust Company, or DTC. Shares of common stock that are held by financial institutions as nominees for beneficial owners are deposited into participant accounts at DTC, and are considered to be held of record by Cede & Co. as one stockholder.

Dividends

We have never paid cash dividends on our capital stock. We anticipate that we will retain earnings, if any, to support operations and finance the growth and development of our business and, therefore, do not expect to pay cash dividends in the foreseeable future.

Securities authorized for issuance under equity compensation plans

The following table summarizes our compensation plans under which our equity securities are authorized for issuance as of December 31, 2008:

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders*	8,506,730	$ 7.51	1,317,598**
Equity compensation plans not approved by security holders			
Total*	8,506,730	$ 7.51	1,317,598**

41

Table of Contents

* Includes stock options with a per share weighted-average exercise price of $9.74 and performance-based restricted stock unit awards which have no per share weighted-average exercise price.

** Includes 92,493 shares of common stock available for future issuance under our 2001 Employee Stock Purchase Plan, as amended. In 2003, we set up a deferred compensation plan for our executive officers, whereby they may elect to defer their shares of restricted stock. At December 31, 2008, a total of 107,919 shares of restricted stock were in the plan. All of the shares contributed to this plan were previously granted to such officers under an equity compensation plan approved by our stockholders.

Item 6. Selected Financial Data.

The following Selected Financial Data should be read in conjunction with Item 7. Management s Discussion and Analysis of Financial Condition and Results of Operations and Item 8. Financial Statements and Supplementary Data included below in this Annual Report on Form 10-K.

	Years ended December 31,				
	2008	2007	2006	2005	2004
	(In thousands, except share and per share data)				
Revenues					
Manufacturing services	$ 7,434	$	$	$	$
Collaborative agreements	2,375	19,332	30,569	23,233	13,686
Total revenues	9,809	19,332	30,569	23,233	13,686
Operating Expenses					
Cost of manufacturing services	8,515				
Research and development	204,374	149,524	103,388	79,710	58,579
General and administrative	30,535	26,571	18,466	13,122	11,066
Amortization of acquired technology and other intangibles	2,314	1,537	1,537	1,537	1,825
Total operating expenses	245,738	177,632	123,391	94,369	71,470
Interest and other income (expense), net	(1,644)	15,134	6,574	3,235	(208)
Net loss	(237,573)	(143,166)	(86,248)	(67,901)	(57,992)
Dividends on redeemable convertible preferred stock	(1,912)	(2,114)	(2,031)	(1,813)	(1,437)
Accretion of discount on redeemable convertible preferred stock				(7,372)	(1,852)
Net loss allocable to common stockholders	$ (239,485)	$ (145,280)	$ (88,279)	$ (77,086)	$ (61,281)
Net loss per share allocable to common stockholders, basic and diluted	$ (3.24)	$ (2.31)	$ (1.89)	$ (2.24)	$ (2.40)
Shares used in calculating net loss per share allocable to common stockholders, basic and diluted	73,840,716	62,782,850	46,750,596	34,377,693	25,527,617

Table of Contents

	2008	2007	As of December 31, 2006	2005	2004
			(In thousands)		
Balance Sheet Data:					
Cash and cash equivalents	$ 73,329	$ 386,989	$ 373,044	$ 73,781	$ 58,686
Short-term investments, available-for-sale	36,800	11,196	15,781	54,158	54,628
Accounts receivable	1,823	1,901	310	848	22,590
Total assets	241,331	487,506	468,465	198,129	206,365
Total deferred revenues	4,049	4,049	13,054	24,144	30,070
Total lease financing obligations	63,067	62,307	13,678	13,485	13,259
Redeemable convertible preferred stock		53,922	51,808	49,777	29,092
Deferred compensation				(396)	(780)
Accumulated deficit	(718,936)	(479,451)	(334,171)	(245,892)	(168,806)
Total stockholders equity	117,632	336,377	366,115	99,540	126,723

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

You should read the following discussion and analysis in conjunction with Item 8. Financial Statements and Supplementary Data included below in this Annual Report on Form 10-K, or Annual Report. Operating results are not necessarily indicative of results that may occur in future periods.

This discussion and analysis contains forward-looking statements that involve a number of risks, uncertainties and assumptions. Actual events or results may differ materially from our expectations. Important factors that could cause actual results to differ materially from those stated or implied by our forward-looking statements include, but are not limited to, those set forth in Item 1A. Risk Factors in this Annual Report. All forward-looking statements included in this Annual Report are based on information available to us as of the time we file this Annual Report and, except as required by law, we undertake no obligation to update publicly or revise any forward-looking statements.

OVERVIEW AND RECENT DEVELOPMENTS

We have incurred net losses of $718.9 million from our inception in April 1997 through December 31, 2008, and expect to incur substantial net losses for at least the next several years as we continue our research and development activities, primarily with respect to the clinical program for our lead drug candidate, lorcaserin hydrochloride, or lorcaserin, for the treatment of obesity and prepare for its potential commercialization. We expect that the majority of the external expenses for our Phase 3 lorcaserin program will be expensed by mid-2009. To date, we have generated cash and funded our operations primarily through the sale of common and preferred stock, payments from collaborators and sale leaseback transactions. From our inception through December 31, 2008, we have generated $1.1 billion in cash from these sources, of which $841.3 million was through sales of stock, $149.9 million was through payments from collaborators and $62.1 million was from sale leaseback transactions.

Recent 2009 and 2008 developments include:

Lorcaserin

Announced completion of dosing in BLOOM, a pivotal trial evaluating the efficacy and safety of lorcaserin. Results from the BLOOM trial are expected to be announced around the end of March 2009.

Announced publication of the Phase 2b clinical trial results of lorcaserin in the December 4, 2008 issue of *Obesity*, the official peer reviewed journal of The Obesity Society.

Reported findings from a planned review by an independent Echocardiographic Safety Monitoring Board, or ESMB, in BLOOM. The ESMB s review of unblinded echocardiographic data performed after patients completed 12 months of dosing in the trial confirmed that differences, if any, in the rates of Food and Drug Administration-defined valvulopathy in patients treated with lorcaserin and in the control group did not meet the ESMB s predetermined stopping criteria.

43

Table of Contents

Other

Received net proceeds of $14.6 million as reimbursement for improvements we made to one of our facilities.

Announced the completion of a positive randomized, double-blind, placebo-controlled Phase 1 clinical trial and the initiation of a Phase 2 clinical trial of a second generation oral niacin receptor agonist intended for the treatment of atherosclerosis in partnership with Merck & Co., Inc.

Announced positive results from Phase 1a and Phase 1b clinical trials of APD791 to evaluate the compound s safety, pharmacokinetics and pharmacodynamics. APD791 is our internally discovered oral drug candidate intended for the treatment of arterial thrombosis and other related conditions. In both trials, APD791 inhibited serotonin-mediated amplification of platelet aggregation in a dose-dependent manner. APD791 was also generally well tolerated and rapidly absorbed and exposures were related to dose.

Announced that APD597, an Arena-discovered oral GPR119 agonist for the treatment of type 2 diabetes, was advanced into a Phase 1 clinical trial in partnership with Ortho-McNeil-Janssen Pharmaceuticals, Inc. The advancement of APD597 followed an announcement that initial clinical study results for APD668, a first generation GPR119 agonist discovered by us and investigated for the treatment of type 2 diabetes in partnership with Ortho-McNeil-Janssen, suggest that GPR119 agonists may improve glucose control in patients with type 2 diabetes.

Announced that preliminary data from a Phase 2b clinical trial of APD125, measuring subjective endpoints in patients with primary insomnia, indicated that APD125 did not meet the trial s primary or secondary endpoints. Treatment with APD125 was well tolerated, and there were no reports of serious adverse events or emerging safety findings as compared to placebo. We do not anticipate any further clinical development of APD125.

Entered into strategic cooperation agreements with Siegfried Ltd, or Siegfried, that are primarily related to the manufacturing of lorcaserin. The agreements include a long-term supply agreement for the purchase of lorcaserin active pharmaceutical ingredient, the purchase of certain drug product facility assets, a manufacturing services agreement and a technical services agreement.

At December 31, 2008, we had $110.1 million in cash, cash equivalents and short-term investments. We will need to raise a substantial amount of cash to continue to develop lorcaserin and other drug candidates while sustaining our research efforts. If we are unable to raise enough cash or partner lorcaserin or other of our programs, we would have to significantly reduce our expenses to achieve our goal of filing an NDA for lorcaserin by the end of 2009.

The drug development process is long, uncertain and expensive, and our ability to achieve our goals depends on numerous factors, many of which are out of our control. We will seek to balance the high costs of research to find new drugs and of clinical development and manufacturing to advance our drug candidates against the need to sustain our operations long enough for our collaborators or us to commercialize the results of our efforts. We expect to continue to incur substantial losses, and do not expect to generate positive operating cash flows, for at least the next several years. Accordingly, we will need to raise additional funds through equity, debt or other financing, or through partnering one or more of our more advanced programs. Although we expect our cash used in operations to significantly decrease from the 2008 level due primarily to lower clinical trial expenses, we will continue to use substantial cash as we prepare and file our planned NDA for lorcaserin, continue our other research and development programs and continue to incur general and administrative expenses, including significant amounts to prosecute patents.

Table of Contents

SUMMARY OF REVENUES AND EXPENSES

We are providing the following summary of our revenues, research and development expenses and general and administrative expenses to supplement the more detailed discussion below. The following tables are stated in millions.

Revenues

	Years ended December 31,		
Source of revenue	**2008**	**2007**	**2006**
Manufacturing services agreement with Siegfried	$ 7.4	$	$
Collaboration with Ortho-McNeil-Janssen	2.4	13.4	18.5
Collaboration with Merck		5.9	12.1
Total revenues	$ 9.8	$ 19.3	$ 30.6

Research and development expenses

	Years ended December 31,		
Type of expense	**2008**	**2007**	**2006**
External clinical and preclinical study fees and expenses	$ 123.5	$ 73.5	$ 40.4
Salary and other personnel costs (excluding non-cash share-based compensation)	42.4	39.2	31.1
Facility and equipment costs	16.0	15.1	13.3
Research supplies	10.8	12.3	12.2
Non-cash share-based compensation	5.0	4.2	2.9
Other	6.7	5.2	3.5
Total research and development expenses	$ 204.4	$ 149.5	$ 103.4

General and administrative expenses

	Years ended December 31,		
Type of expense	**2008**	**2007**	**2006**
Salary and other personnel costs (excluding non-cash share-based compensation)	$ 10.6	$ 8.5	$ 6.6
Legal, accounting and other professional fees	9.8	8.7	6.0
Facility and equipment costs	3.6	3.0	2.4
Non-cash share-based compensation	3.5	4.6	2.2
Other	3.0	1.8	1.3
Total general and administrative expenses	$ 30.5	$ 26.6	$ 18.5

YEAR ENDED DECEMBER 31, 2008 COMPARED TO YEAR ENDED DECEMBER 31, 2007

Revenues. We recorded revenues of $9.8 million during the year ended December 31, 2008, compared to $19.3 million during the year ended December 31, 2007. Our revenues recorded during the year ended December 31, 2008 included $7.4 million in manufacturing services revenue under our manufacturing services agreement with Siegfried and $2.4 million for patent activities from our collaborations with Ortho-McNeil-Janssen and Merck. Because the research funding portion of our collaborations with Ortho-McNeil-Janssen and Merck ended in the fourth quarter of 2007, no revenues from amortization of previously achieved milestones and technology access and development fees or research funding were recognized in 2008. All of our revenues recorded during the year ended December 31, 2007 resulted from our collaborations with Ortho-McNeil-Janssen

45

Table of Contents

and Merck, and included $9.5 million in amortization of milestone achievements and technology access and development fees received in prior years, $5.9 million in research funding, and $3.9 million for patent activities. Prior to entering into the manufacturing services agreement with Siegfried in January 2008, we had not recognized any manufacturing services revenue.

If our collaborators pay us before we recognize such payments as current revenues, the payments are recorded as deferred revenues until earned. As of December 31, 2008, we had $4.0 million in deferred revenues, the majority of which was attributable to our license agreement with TaiGen Biotechnology Co., Ltd. and is expected to be recognized as revenue in 2010. Absent any new collaborations or achievement of a milestone in one of our existing collaborations, we expect our 2009 revenues will consist of reimbursement for patent activities from our collaborators and manufacturing services revenue under our manufacturing services agreement with Siegfried. Under such agreement, until at least December 31, 2010, Siegfried may sub-contract to us the manufacture of certain drug products previously manufactured by Siegfried for its customers, and we agreed to perform such manufacturing up to certain specified amounts. Also under such agreement, Siegfried guarantees a minimum level of cost absorption, which we will record as revenues, of CHF 7.0 million in 2009 and CHF 6.6 million in 2010. Using the exchange rate in effect on December 31, 2008, this would translate to approximately $6.6 million and $6.3 million in manufacturing services revenues in 2009 and 2010, respectively.

Revenues from our collaborators for milestones that may be achieved in the future are difficult to predict, and our revenues may vary significantly from quarter to quarter and year to year. We expect that any significant revenues over the next several years will depend on the clinical success of our partnered programs as well as whether we partner lorcaserin or any of our other current or future drug candidates. Ultimately, we expect our revenues in the long term to primarily depend upon the regulatory approval and commercialization of our partnered or internally developed drugs.

Cost of manufacturing services. Cost of manufacturing services is comprised of direct costs associated with manufacturing drug products for Siegfried under our manufacturing services agreement, including related salaries, other personnel costs and machinery depreciation costs. Cost of manufacturing services was $8.5 million for the year ended December 31, 2008. Prior to entering into the manufacturing services agreement with Siegfried in January 2008, we had not recorded any cost of manufacturing services.

Research and development expenses. Research and development expenses, which account for the majority of our expenses, consist primarily of costs associated with external clinical and preclinical study fees, manufacturing costs and other related expenses, and the development of our earlier-stage programs and technologies. Our most significant research and development costs are for clinical trials (including payments to contract research organizations, or CROs), preclinical study fees, salaries and personnel, research supplies, and facility and equipment costs. We expense research and development costs to operations as they are incurred when these expenditures relate to our research and development efforts and have no alternative future uses. Other than external expenses for our clinical and preclinical programs, we generally do not track our research and development expenses by project; rather, we track such expenses by the type of cost incurred.

Research and development expenses increased $54.9 million to $204.4 million for the year ended December 31, 2008, from $149.5 million for the year ended December 31, 2007. The difference was due primarily to (i) a $50.0 million increase in external clinical and preclinical study fees and expenses, including manufacturing costs, due primarily to our Phase 3 clinical trial program for lorcaserin and (ii) an increase of $3.2 million in salary and other personnel costs as we increased the number of our US research and development employees from 349 at the end of 2007 to 358 at the end of 2008. Nearly all of the increase in the number of research and development employees related to the development of lorcaserin. Although we expect to continue to incur substantial research and development expenses in 2009, primarily related to lorcaserin, we expect our research and development expenses will be significantly lower than the 2008 level as the Phase 3 lorcaserin BLOOM and BLOSSOM studies are expected to be completed in the first half of 2009. In addition, based on top-line data from our Phase 2b clinical trial of APD125 announced in December 2008, we are not planning any

Table of Contents

further clinical development of APD125. Unless we can obtain substantial funds through equity or debt financings or partnerships, we will be unable to advance our earlier-stage programs and would have to significantly reduce our research activities.

Included in the $123.5 million total external clinical and preclinical study fees and expenses noted in the table above for the year ended December 31, 2008 was $106.0 million related to our lorcaserin program, $13.5 million related to our APD125 program, $1.4 million related to our APD916 program and $1.1 million related to our APD791 program. Included in the $73.5 million in external clinical and preclinical study fees and expenses for the year ended December 31, 2007 was $51.3 million related to our lorcaserin program, $15.7 million related to our APD125 program and $3.1 million related to our APD791 program.

Cumulatively through December 31, 2008, we have recorded $213.0 million, $43.2 million, $7.3 million and $2.3 million in external clinical and preclinical study fees and other related expenses for lorcaserin, APD125, APD791 and APD916, respectively. While expenditures on current and future clinical development programs are expected to be substantial, they are subject to many uncertainties, including whether we have adequate funds and develop our drug candidates independently or with a partner. As a result of such uncertainties, we cannot predict with any significant degree of certainty the duration and completion costs of our research and development projects or whether, when and to what extent we will generate revenues from the commercialization and sale of any of our drug candidates. The duration and cost of clinical trials may vary significantly over the life of a project as a result of unanticipated events arising during clinical development and a variety of factors, including:

- the nature and number of trials and studies in a clinical program;
- the number of patients who participate in the trials;
- the number of sites included in the trials;
- the rates of patient recruitment and enrollment;
- the duration of patient treatment and follow-up;
- the costs of manufacturing our drug candidates; and
- the costs, requirements, timing of, and the ability to secure regulatory approvals.

However, based upon our current plans, we expect to incur $50.0 million to $60.0 million in external clinical and preclinical study fees and other related expenses, including manufacturing, in 2009, almost all of which relates to lorcaserin. We do not expect to receive regulatory approval for lorcaserin until at least late 2010, if at all.

General and administrative expenses. General and administrative expenses increased $3.9 million to $30.5 million for the year ended December 31, 2008, from $26.6 million for the year ended December 31, 2007. This increase was primarily comprised of (i) an increase of $2.1 million in salary and other personnel costs as we increased our general and administrative employees from 68 at the end of 2007 to 77 at the end of 2008, (ii) a decrease of $1.1 million in non-cash, share-based compensation under Statement of Financial Accounting Standards, or SFAS, No. 123R, Share-Based Payment due to additional compensation expense recognized in 2007 as a result of an employee meeting retirement eligibility criteria under our 2006 Long-Term Incentive Plan, as amended, and (iii) an increase of $0.9 million in patent costs primarily related to our internal programs. To the extent our partners reimburse us for patent activities, the reimbursements are classified as revenues. Such reimbursements totaled $2.4 million in 2008 and $3.9 million in 2007. We expect that partner reimbursements for patent costs will be significantly higher in 2009 than in 2008. Further, we expect that our total general and administrative expenses in 2009 will be comparable to 2008, and that, unless a partner pays for commercialization, marketing and business development expenses related to lorcaserin, our total general and administrative expenses will increase significantly beginning in 2010 due primarily to increases in such expenses. However, if we are unable to obtain adequate funds or rely on a partner to pay for these lorcaserin expenses in 2009, we may have to

significantly reduce our general and administrative expenditures.

Table of Contents

Amortization of acquired technology and other intangibles. We recorded $2.3 million for amortization of acquired technology for the year ended December 31, 2008, compared to $1.5 million for the year ended December 31, 2007. The increased amortization resulted from the assembled workforce we acquired from Siegfried in January 2008. Our patented Melanophore technology, which we acquired in 2001 for $15.4 million, is our primary screening technology and is being amortized over its estimated useful life of 10 years. We expect to record charges of $1.5 million per year for both 2009 and 2010 and $0.3 million in 2011 for amortization of the Melanophore technology. The acquired workforce is being amortized over its estimated benefit of two years, for which we expect to record amortization expense of $0.8 million in 2009.

Interest and other income (expense), net. Interest and other income, net, decreased by $16.8 million to an expense of $1.6 million for the year ended December 31, 2008, compared to income of $15.1 million for the year ended December 31, 2007. This decrease was due primarily to (i) an $11.5 million decrease in interest income attributable to both significantly lower cash balances and interest rates, (ii) a $2.2 million non-cash charge related to a warrant settlement with one of our warrant holders, (iii) a $1.9 million increase in interest expense and financing costs, which included lease payments on our lease financing obligations accounted for in accordance with SFAS No. 66, Accounting for Sales of Real Estate and SFAS No. 98 Accounting for Leases, and (iv) a $1.6 million write-down on our investment in TaiGen Biotechnology Co., Ltd. Due to low interest rates and declining cash balances, we expect our interest income will continue to decrease in 2009.

Dividends on redeemable convertible preferred stock. We recorded a dividend expense of $1.9 million related to our series B redeemable convertible preferred stock, or Series B Preferred, for the year ended December 31, 2008, compared to $2.1 million for the year ended December 31, 2007. Since we redeemed all of the outstanding shares of our Series B Preferred in November 2008, no future dividend expense will be recorded related to such stock.

YEAR ENDED DECEMBER 31, 2007 COMPARED TO YEAR ENDED DECEMBER 31, 2006

Revenues. We recorded revenues of $19.3 million during the year ended December 31, 2007, compared to $30.6 million during the year ended December 31, 2006. All of our revenues recorded during the year ended December 31, 2007 resulted from our collaborations with Ortho-McNeil-Janssen and Merck, and included $9.5 million in amortization of milestone achievements and technology access and development fees received in prior years, $5.9 million in research funding, and $3.9 million for patent activities. All of our revenues during the year ended December 31, 2006 were also from our collaborations with Ortho-McNeil-Janssen and Merck, and included a $5.0 million milestone earned under our Ortho-McNeil-Janssen collaboration and a $4.0 million milestone earned under our Merck collaboration, both of which we recognized immediately in accordance with our revenue recognition policy, $9.6 million in amortization of milestone achievements and technology access and development fees, $8.1 million in research funding, and $3.9 million in additional sponsored research and patent activities.

Research and development expenses. Research and development expenses for the year ended December 31, 2007 increased $46.1 million to $149.5 million, from $103.4 million for the year ended December 31, 2006. The difference was due primarily to (i) a $33.1 million increase in external clinical and preclinical study fees and expenses, including manufacturing costs, as we continued the first of our three Phase 3 clinical trials and initiated the second and third clinical trials for lorcaserin, and completed a Phase 2a clinical trial of APD125 and a Phase 1a clinical trial of APD791, and (ii) an increase in total personnel costs of $9.4 million as we increased the number of our research and development employees from 301 at the end of 2006 to 349 at the end of 2007 and recorded an increase of $1.3 million to $4.2 million in non-cash, share-based compensation related to the expensing of share-based compensation under SFAS No. 123R. Included in the $73.5 million in external clinical and preclinical study fees and expenses for the year ended December 31, 2007 was $51.3 million related to our lorcaserin program, $15.7 million related to our APD125 program and $3.1 million related to our APD791 program. Included in the $40.4 million in external clinical and preclinical study fees and expenses for the year ended December 31, 2006 was $30.2 million related to our lorcaserin program, $4.9 million related to our APD125 program and $2.9 million related to our APD791 program.

Table of Contents

General and administrative expenses. General and administrative expenses for the year ended December 31, 2007 increased $8.1 million to $26.6 million, from $18.5 million for the year ended December 31, 2006. This increase was due primarily to (i) total personnel costs increasing by $4.3 million as we increased our general and administrative employees from 54 at the end of 2006 to 68 at the end of 2007 and recorded an increase of $2.5 million to $4.6 million in non-cash, share-based compensation under SFAS No. 123R, and (ii) an increase of $1.9 million in patent costs primarily related to our partnered programs. Reimbursements from our partners totaled $3.9 million in 2007 and $2.1 million in 2006.

Amortization of acquired technology. We recorded $1.5 million for amortization of acquired technology for both of the years ended December 31, 2007 and 2006 related to our patented Melanophore technology.

Interest and other income, net. Interest and other income, net, increased by $8.5 million to $15.1 million for the year ended December 31, 2007, compared to $6.6 million for the year ended December 31, 2006. This increase was due primarily to (i) a $6.1 million increase in interest income, (ii) a $4.6 million non-cash charge in 2006 related to a warrant settlement with one of our warrant holders, and (iii) a $1.9 million increase in interest expense and financing costs.

Dividends on redeemable convertible preferred stock. We recorded a dividend expense of $2.1 million related to the then-outstanding Series B Preferred for the year ended December 31, 2007, compared to $2.0 million for the year ended December 31, 2006.

LIQUIDITY AND CAPITAL RESOURCES

Short term

Our sources of liquidity include our cash balances and short-term investments. As of December 31, 2008, we had $110.1 million in cash and cash equivalents and short-term investments. Other potential sources of near-term liquidity include (i) equity, debt or other financing, (ii) the out-licensing of our drug candidates, internal drug programs and technologies, (iii) the sale of facilities that we own, and (iv) milestone payments from our collaborators. Although we will continue to be opportunistic in our efforts to obtain cash, we believe that our ability to obtain cash has been reduced, in part due to the global economic challenges. There is no guarantee that the current conditions will improve or that funding will be available when needed or that, if available, such funding will be available on terms that we or our stockholders view as favorable.

To date, we have obtained cash and funded our operations primarily through the sale of common and preferred stock, payments from collaborators and sale leaseback transactions. From our inception through December 31, 2008, we have obtained $1.1 billion in cash from these sources, of which $841.3 million was through sales of stock, $149.9 million was through payments from our current and past collaborators and $62.1 million was from sale leaseback transactions. In the first quarter of 2009, we received $14.6 million in net proceeds as reimbursement for improvements we made to one of our facilities.

We are prioritizing our available cash towards funding activities that support completing our lorcaserin Phase 3 program and filing an NDA, which, assuming positive data from our pivotal Phase 3 program, we expect to file by the end of 2009. In connection with prioritizing lorcaserin activities, we are deferring the initiation of any new clinical trials for our other clinical and earlier-stage programs and continuing our cost-containment efforts. Even with such efforts, we may not have sufficient cash to meet all of our objectives over the next 12 months which, in addition to our primary focus of lorcaserin, include continuing to improve and develop our manufacturing capabilities, including our manufacturing facilities in Switzerland, and maintaining our research discovery capabilities. If we do not generate sufficient funding in 2009, we will postpone, scale back, or eliminate some or all of our research programs and may delay the timeline on the lorcaserin development program to meet our working capital requirements through December 31, 2009. We will continue to monitor and evaluate the level of our research, development and manufacturing expenditures, and may further adjust such

Table of Contents

expenditures based upon a variety of factors, such as our available cash, the results and progress in our clinical and earlier-stage programs, the time and costs related to clinical trials and regulatory decisions, our ability to obtain additional cash and partner programs, and the global economic environment.

We expect that our research and development expenditures will continue to be substantial as we continue our Phase 3 clinical trial program for lorcaserin and maintain our research and development capabilities. We also expect that the majority of the external expenses for our Phase 3 lorcaserin program will be expensed by mid-2009, which we expect will result in a significant decrease in our research and development expenditures. A large portion of these external clinical trial expenses are expected to be paid through CROs. Our contracts with the primary CROs for our Phase 3 lorcaserin program can be terminated if we give either, depending on the contract, five or 30 days prior written notice, or less in certain circumstances. In addition to the clinical trial costs, we expect to incur significant manufacturing and other pre-launch costs for lorcaserin.

In January 2008, we entered into strategic cooperation agreements with Siegfried that are primarily related to the manufacturing of lorcaserin, and which are expected to be necessary for our planned NDA submission to the FDA and for commercialization of lorcaserin after regulatory marketing approval. The agreements include an asset purchase agreement for the purchase from Siegfried of certain drug product facility assets, including a licensed production facility, fixtures, equipment, other personal property and real estate assets in Zofingen, Switzerland. We paid CHF 21.8 million, or $19.6 million, of the cash purchase price in January 2008, and will pay the remaining cash portion of the purchase price of CHF 10.0 million in three equal installments in the third, fourth and fifth years after closing. This transaction also included a long-term supply agreement, a manufacturing services agreement and a technical services agreement. In 2009 we expect to recognize, in Swiss francs, CHF 7.0 million or, based on the exchange rate in effect on December 31, 2008, $6.6 million in revenues from our manufacturing services agreement with Siegfried, and that such revenues will be more than offset by related costs and expenses.

Long term

We will need to obtain substantial amounts of cash to achieve our objectives of internally developing drugs, which take many years and potentially several hundreds of millions of dollars to develop, and continuing our research programs. If we decide to market and commercialize lorcaserin or any other drug candidate independently or with a partner, we may need to invest heavily in associated marketing and commercialization costs. Such costs will be substantial and some will need to be incurred prior to receiving marketing approval. We do not currently have adequate internal liquidity to meet these objectives in the long term. To do so, we will need to continue our out-licensing activities and look to other external sources of liquidity, including the public and private financial markets and strategic partners.

The length of time that our current cash and cash equivalents, short-term investments and any available borrowings will sustain our operations will be based on, among other things, our prioritization decisions regarding funding for our programs, our progress in our clinical and earlier-stage programs, the time and costs related to current and planned clinical trials and regulatory decisions, our research, development, manufacturing and commercialization costs (including personnel costs), the progress in our collaborations, costs associated with intellectual property, our capital expenditures, and costs associated with securing any in-licensing opportunities. We do not know whether adequate funding will be available to us or, if available, that such funding will be available on acceptable terms. Any significant shortfall in funding could result in the partial or full curtailment of our development and/or research efforts, which, in turn, will affect our development pipeline and ability to obtain cash in the future.

In addition to the public and private financial markets, potential sources of liquidity in the long term are milestone and royalty payments from existing and future collaborators and revenues from sales of any drugs we own.

Table of Contents

We evaluate from time to time potential acquisitions and in-licensing opportunities. Any such transaction may impact our liquidity as well as affect our expenses if, for example, our operating expenses increase as a result of such license or acquisition or we use our cash to finance the license or acquisition.

Sources and Uses of Our Cash

Net cash used in operating activities was $191.4 million during the year ended December 31, 2008, and was used primarily to fund our net losses in the period, adjusted for non-cash expenses. Non-cash expenses included $11.7 million in depreciation and amortization expense, $8.5 million in share-based compensation, $2.3 million in amortization of acquired technology and other intangibles, $2.2 million for a warrant settlement charge related to a disagreement with one of our warrant holders, and $1.6 million from a write-down on our investment in TaiGen Biotechnology Co., as well as changes in operating assets and liabilities. Net cash used in operating activities during the year ended December 31, 2007 was $128.1 million, and was used primarily to fund our net losses in the period, adjusted for non-cash expenses. Non-cash expenses included $8.8 million in share-based compensation, $7.8 million in depreciation and amortization expense, $1.5 million in amortization of acquired technology, as well as changes in operating assets and liabilities. Net cash used in operating activities during the year ended December 31, 2006 was $71.0 million, and was used primarily to fund our net losses in the period, adjusted for non-cash expenses. Non-cash expenses included $7.4 million in depreciation and amortization expense, $5.0 million in share-based compensation, $4.6 million for a warrant settlement charge related to a disagreement with the other of our two warrant holders, $1.5 million in amortization of acquired technology, as well as changes in operating assets and liabilities. We expect net cash used in operating activities in the next 12 months will be less than that used in the last 12 months as we complete our Phase 3 lorcaserin BLOOM and BLOSSOM studies and prioritize our spending towards activities that support filing an NDA for lorcaserin.

Net cash of $68.5 million was used in investing activities during the year ended December 31, 2008, and was primarily the result of net purchases of short-term investments of $25.9 million, $23.2 million used for equipment and improvements to our facilities and $19.6 million used for the purchase of our drug product facility in Switzerland. Net cash of $12.6 million was used in investing activities during the year ended December 31, 2007, and was primarily the result of $14.2 million used for improvements to our facilities and purchases of equipment and $3.2 million used to purchase a facility on our San Diego campus, partially offset by net proceeds from short-term investments of $5.0 million. Net cash of $25.1 million was provided by investing activities during the year ended December 31, 2006, and was primarily the result of net proceeds from short-term investments of $39.1 million, partially offset by $3.6 million used to purchase a facility on our San Diego campus and $10.6 million used for equipment and improvements to our facilities. We expect that our capital expenditures in 2009 will be substantially less than in 2008. In the first quarter of 2009, we received $14.6 million in net proceeds as reimbursement for improvements we made to one of our facilities.

Net cash of $53.3 million was used in financing activities during the year ended December 31, 2008, due primarily to the payment of $55.8 million for the redemption of all of the outstanding shares of our Series B Preferred in November 2008. This was partially offset by net proceeds of $1.7 million received from option exercises and purchases under our employee stock purchase plan and additional proceeds of $1.0 million received as reimbursement for certain improvements made to one of our facilities. Net cash of $154.7 million was provided by financing activities during the year ended December 31, 2007. This was due primarily to net proceeds of $103.2 million we received in November 2007 from the sale of our common stock, as well as net proceeds of $48.5 million we received in May 2007 from our lease financing transaction and net proceeds of $3.5 million received from option exercises, purchases under our employee stock purchase plan, and from the equity component of the $1.0 million payment we received from Merck in February 2007, which were partially offset by $0.5 million in principal payments on our lease financing obligations. Net cash of $345.2 million was provided by financing activities during the year ended December 31, 2006 due primarily to net proceeds of $165.1 million and $169.0 million we received in December 2006 and February 2006, respectively, from the sale of our common stock, as well as proceeds of $8.3 million from the exercise of warrants to purchase our common stock in March 2006.

Table of Contents

Contractual Obligations Table

The following table summarizes our contractual obligations as of December 31, 2008:

		Payments due by period			
Contractual Obligations	**Total**	**Less than 1 year**	**1-3 years**	**3-5 years**	**More than 5 Years**
			(in thousands)		
Financing obligations	$ 127,687	$ 5,816	$ 13,156	$ 13,823	$ 94,892
Note payable to Siegfried	9,369		3,123	6,246	
Purchase obligations	578	578			
Operating leases	4,733	1,101	2,486	1,146	
Total	$ 142,367	$ 7,495	$ 18,765	$ 21,215	$ 94,892

In December 2003, we completed the sale and leaseback of one of our properties for total consideration of $13.0 million, and, in May 2007, we completed the sale and leaseback of three of our properties and assigned an option to purchase a fourth property for total consideration of $50.1 million. We have accounted for these transactions in accordance with SFAS No. 66, Accounting for Sales of Real Estate and SFAS No. 98, Accounting for Leases. Our option to repurchase these properties in the future is considered continued involvement under SFAS No. 66 and, therefore, we have applied the financing method under SFAS No. 98. Under the financing method, the book value of the properties and related accumulated depreciation remain on our balance sheet and no sale is recognized. Instead, the sales price of the properties is recorded as a financing obligation and a portion of each lease payment is recorded as interest expense. At December 31, 2008, we expect interest expense over the term of these leases to total $74.6 million. We have included our lease obligations related to these properties in the above table as financing obligations. At December 31, 2008, in accordance with SFAS No. 98, our total financing obligation for both of these transactions was $63.1 million. The aggregate residual value of the facilities at the end of the lease terms is $10.0 million. In the first quarter of 2009, we received $14.6 million in net proceeds as reimbursement for improvements we made to one of our facilities included in the May 2007 sale and leaseback transaction. This additional financing obligation, totaling $33.5 million, is not included in the above table

In January 2008, we entered into strategic cooperation agreements with Siegfried. The agreements include an asset purchase agreement for the purchase from Siegfried of certain drug product facility assets, including a licensed production facility, fixtures, equipment, other personal property and real estate assets in Zofingen, Switzerland. We paid CHF 21.8 million, or $19.6 million, of the cash purchase price in January 2008, and will pay the remaining cash portion of the purchase price of CHF 10.0 million in three equal installments in the third, fourth and fifth years after closing. The amount payable will be affected by the exchange rate between the Swiss franc and the US dollar at the time each cash payment is made.

We have entered into agreements with CROs to conduct our clinical trials, and expect to continue to enter into such agreements. We will make payments to these sites and organizations primarily based upon the number of subjects enrolled and the length of their participation in the trials.

In determining the amount of our purchase obligations for contracts, we have included only the minimum obligation we have under our contracts (which analysis often assumed that such contracts were terminated on December 31, 2008) and did not include any amount which was previously paid, accrued, expensed or associated with a contingent event, such as a change in control or termination of a key employee.

The following is a summary of our significant collaborations:

Merck & Co., Inc.

In October 2002, we entered into a research and licensing agreement with Merck to collaborate on three G protein-coupled receptors, or GPCRs, to develop therapeutics for atherosclerosis and related disorders. We

Table of Contents

believe one or more of these GPCRs plays a role in regulating plasma lipid profiles, including HDL cholesterol, the so-called good cholesterol, and is responsible for the HDL-raising activity of niacin. In October 2004, we extended and expanded this collaboration, and Merck selected one of our compounds for preclinical development. In February 2007, we amended the terms of the collaboration to reduce the number of our research employees funded under the collaboration in exchange for Merck making a $1.0 million investment in our common stock at approximately a 70% premium to the then current market price. Merck s obligation to provide research funding ended in October 2007, after which date we have not performed research services or had significant involvement.

In September 2006, Merck discontinued development of MK-0354, a niacin receptor agonist discovered by us, based on the results of a completed Phase 2 clinical trial of MK-0354. In October 2008, we announced that Merck completed a Phase 1 program of a second generation oral niacin receptor agonist under this collaboration. In February 2009, Merck initiated a randomized, double-blind, placebo-controlled Phase 2 clinical trial of this niacin receptor agonist.

From the inception of this collaboration through December 31, 2008, we have received $18.0 million from Merck in upfront and milestone payments, and equity investments totaling $8.5 million. We may receive additional milestone payments of up to $28.0 million for Merck s clinical and marketing achievements, as well as royalty payments associated with Merck s commercialization of any products discovered under the collaboration. In addition, prior to the end of the research portion of the collaboration, we received research funding from Merck totaling $27.5 million. Our agreement with Merck will continue until the expiration of all royalty obligations under the agreement, unless the agreement is terminated early by either party. Either Merck or we can terminate our agreement if the other party breaches its material obligations under the agreement by causes and reasons within its control, has not cured such breach within 90 days of receiving a letter requesting such cure, and there is no dispute as to whether such breach has occurred. The non-breaching party in such a termination would receive the rights to continue the program. In addition, Merck can terminate the agreement at anytime by giving 90 days notice, but all milestones and royalties would still be payable as provided in the agreement.

As part of the extension and expansion of our collaboration with Merck in October 2004, Merck purchased $7.5 million of our common stock at approximately a 70% premium to the then current market price. We performed an evaluation on this Merck stock purchase and determined that $3.9 million of this $7.5 million purchase price was an upfront payment related to the collaboration extension and expansion. Accordingly, we recognized the $3.9 million upfront payment, as well as the remaining portion of the unamortized upfront payment at October 2004 of $1.3 million, over the extended collaboration term of three years. Additionally, in October 2004, we achieved a $1.0 million milestone under the collaboration which we also recognized over the extended collaboration term of three years because the milestone was reasonably assured to be achieved at the time we extended and expanded this collaboration. In connection with the February 2007 amendment of the collaborative agreement with Merck, we performed an evaluation on Merck s related stock purchase and determined that $0.5 million of the $1.0 million purchase price was an upfront payment related to the collaboration amendment. Accordingly, we recognized this upfront payment and the unamortized portion of the previously received upfront payments over the remaining term of the research portion of the collaboration, which was through October 2007.

For the year ended December 31, 2008, we recognized $46,000 of revenues under the Merck agreement, all of which was reimbursement for patent activities. For the year ended December 31, 2007, we recognized revenues of $5.9 million, which included $3.6 million in research funding, $2.2 million from amortization of milestones and technology access and development fees received in prior years, and $0.1 million for patent activities. For the year ended December 31, 2006, we recognized revenues of $12.1 million, which included $5.7 million in research funding, $4.0 million from a milestone earned, $2.1 million from amortization of milestones and technology access and development fees received in prior years, and $0.3 million for additional sponsored research and patent activities. At December 31, 2008, there were no deferred revenues remaining under this agreement.

Table of Contents

Ortho-McNeil-Janssen Pharmaceuticals, Inc.

In December 2004, we entered into a collaboration and license agreement with Ortho-McNeil-Janssen to further develop compounds for the potential treatment of type 2 diabetes and other disorders. In January 2005, we received a non-refundable $17.5 million upfront payment and two milestone payments of $2.5 million each, and, in February 2006, we received a $5.0 million milestone payment related to Ortho-McNeil-Janssen s initiation of a Phase 1 clinical trial of the then lead drug candidate, APD668. We recognized the upfront payment ratably over three years. We also recognized the two milestone payments received in January 2005 over three years as their achievability was reasonably assured at the time we entered into the collaboration. In September 2006, Ortho-McNeil-Janssen exercised its option to extend the research portion of the collaboration through December 2007, after which date we have not performed research services or had significant involvement. After putting APD668 on hold, in December 2008 Ortho-McNeil-Janssen initiated a Phase 1 clinical trial of APD597, a potentially more potent Arena-discovered GPR119 agonist. We are eligible to receive a total of $295.0 million in milestone payments for each compound, as well as royalty payments associated with Ortho-McNeil-Janssen s commercialization of any products discovered under the collaboration. These milestones include development and approval milestone payments of up to $132.5 million for the first indication and $62.5 million for the second indication for each compound, and up to $100.0 million in sales milestone payments for each product resulting from the collaboration. From the inception of this collaboration through December 31, 2008, we have received $27.5 million from Ortho-McNeil-Janssen in upfront and milestone payments. In addition, prior to the end of the research portion of the collaboration, we received research funding from Ortho-McNeil-Janssen totaling $7.2 million.

Our agreement with Ortho-McNeil-Janssen will continue until the expiration of Ortho-McNeil-Janssen s payment obligations under the agreement, unless the agreement is terminated earlier by either party. We and Ortho-McNeil-Janssen each have the right to terminate the agreement early on 60 days prior written notice if the other party commits an uncured material breach of its obligations. Ortho-McNeil-Janssen may terminate the agreement at any time by providing at least 60 days prior written notice. Upon termination of the agreement, all rights to the compounds developed under the collaboration will revert to us.

For the year ended December 31, 2008, we recognized $2.3 million of revenues under the Ortho-McNeil-Janssen agreement, all of which was reimbursement for patent activities. For the year ended December 31, 2007, we recognized revenues of $13.4 million, which included $7.3 million from amortization of milestones and technology access and development fees received in prior years, $3.8 million for patent activities, and $2.3 million in research funding. For the year ended December 31, 2006, we recognized revenues of $18.5 million, which included $7.5 million from amortization of milestones and technology access and development fees received in prior years, $5.0 million from a milestone earned, $2.4 million in research funding, and $3.6 million for additional sponsored research and patent activities. At December 31, 2008, there were no deferred revenues remaining under this agreement.

New accounting standards

On January 1, 2008, we adopted SFAS No. 157, Fair Value Measurements, which defines fair value, establishes a framework for measuring fair value in accordance with US generally accepted accounting principles, or GAAP, and expands disclosures about fair value measurements. The adoption of SFAS No. 157 did not have a material impact on our consolidated financial statements.

On January 1, 2008, we adopted SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities Including an amendment of SFAS No. 115, which allows an entity to voluntarily choose to measure certain financial assets and liabilities at fair value. The adoption of SFAS No. 159 did not have a material impact on our consolidated financial statements as we did not elect the fair value option to account for any of our financial assets and liabilities.

Table of Contents

On January 1, 2008, we adopted Emerging Issues Task Force, or EITF, Issue No. 07-3, Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities. EITF Issue No. 07-3 requires that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities be deferred and capitalized. Such amounts should be recognized as an expense as the related goods are delivered or the related services are performed or such time when the entity does not expect the goods to be delivered or services to be performed. The adoption of EITF Issue No. 07-3 did not have a material impact on our consolidated financial statements.

In December 2007, the Financial Accounting Standards Board, or FASB, issued SFAS No. 141R, Business Combinations, which establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree. SFAS No. 141R also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. SFAS No. 141R applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008, and interim periods within those fiscal years. We do not expect the adoption of SFAS No. 141R to have a material impact on our consolidated financial statements.

CRITICAL ACCOUNTING POLICIES AND MANAGEMENT ESTIMATES

The SEC defines critical accounting policies as those that are, in management s view, important to the portrayal of our financial condition and results of operations and demanding of management s judgment. Our discussion and analysis of financial condition and results of operations is based on our consolidated financial statements, which have been prepared in accordance with GAAP. The preparation of these financial statements requires us to make estimates and judgments that affect the reported amounts of assets, liabilities, revenues and expenses and related disclosures. We base our estimates on historical experience and on various assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from those estimates.

Our critical accounting policies include:

Clinical trial expenses. We accrue clinical trial expenses based on work performed. In determining the amount to accrue, we rely on estimates of total costs incurred based on the enrollment of subjects, the completion of trials and other events. We follow this method because we believe reasonably dependable estimates of the costs applicable to various stages of a clinical trial can be made. However, the actual costs and timing of clinical trials are highly uncertain, subject to risks and may change depending on a number of factors. Differences between the actual clinical trial costs and the estimated clinical trial costs that we have accrued in any prior period are recorded in the subsequent period in which the actual costs become known. Historically, these differences have not been material and we have not had to make material adjustments in the amounts recorded in a subsequent period; however, material differences could occur in the future.

Revenue recognition. Our revenue recognition policies are in accordance with SEC Staff Accounting Bulletin, or SAB, No. 101, Revenue Recognition in Financial Statements, as amended by SAB No. 104, Revenue Recognition, and EITF Issue No. 00-21, Revenue Arrangements with Multiple Deliverables, which provide guidance on revenue recognition in financial statements. Some of our agreements contain upfront technology access fees, research funding, milestone achievements and royalties.

Revenue from a milestone achievement is recognized when earned, as evidenced by acknowledgment from our collaborator, provided that (i) the milestone event is substantive and its achievability was not reasonably assured at the inception of the agreement, (ii) the milestone represents the culmination of an earnings process, (iii) the milestone payment is non-refundable, and (iv) our performance obligations after the milestone achievement will continue to be funded by our collaborator at a level comparable to the level before the milestone achievement. If all of these criteria are not met, the milestone achievement is recognized over the remaining minimum period of our

Table of Contents

performance obligations under the agreement. We defer non-refundable upfront fees under our collaborations and recognize them over the period in which we have significant involvement or perform services, using various factors specific to each collaboration. Amounts we receive for research funding for a specified number of full-time researchers are recognized as revenue as the services are performed. Advance payments we receive in excess of amounts earned are classified as deferred revenues until earned.

We manufacture drug products under a manufacturing services agreement for a single customer, Siegfried. Upon Siegfried s acceptance of drug products manufactured by us, we recognize manufacturing services revenues at agreed upon prices for such drug products. We have also contracted with Siegfried for them to provide us with administrative and other services in exchange for a fee paid to Siegfried. We determined that we are receiving an identifiable benefit for these services from Siegfried, and are recording such fees in the operating expense section of our consolidated statement of operations.

Share-based compensation. On January 1, 2006, we adopted SFAS No. 123R using the modified-prospective transition method. Compensation expense recognized subsequent to adoption includes: (i) compensation expense for all share-based awards granted prior to, but unvested as of, January 1, 2006, based on the grant-date fair value, estimated in accordance with the original provision of SFAS No. 123 using the Black-Scholes option pricing model, and (ii) compensation expense for all share-based awards granted subsequent to January 1, 2006, based on the grant-date fair value, estimated in accordance with the provisions of SFAS No. 123R using the Black-Scholes option pricing model.

The determination of the grant-date fair value of share-based awards using the Black-Scholes option pricing model is based on the exercise price of the award and our stock price on the date of grant, as well as assumptions for expected volatility, the expected life of options granted and the risk-free interest rate. Changes in the assumptions can have a material impact on the compensation expense we recognize. Expected volatility for awards granted after adoption of SFAS No. 123R is based on a combination of 75% historical volatility of our common stock and 25% market-based implied volatilities from traded options on our common stock, with historical volatility being more heavily weighted due to the low volume of traded options on our common stock. The expected life of options granted under SFAS No. 123R is determined based on historical experience of similar awards, giving consideration to the contractual terms of the share-based awards, vesting schedules and post-vesting cancellations. The risk-free interest rates are based on the US Treasury yield curve, with a remaining term approximately equal to the expected term used in the option pricing model.

As compensation expense recognized is based on awards ultimately expected to vest, it is reduced for estimated forfeitures. SFAS No. 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. If actual forfeitures vary from estimates, we will recognize the difference in compensation expense in the period the actual forfeitures occur or when options vest.

For the year ended December 31, 2008, we recorded total non-cash, share-based compensation expense of $8.5 million.

Accounting for lease financing obligations. We have accounted for our sale and leaseback transactions in accordance with SFAS Nos. 66 and 98. Our option to repurchase these properties in the future is considered continued involvement under SFAS No. 66 and, therefore, we have applied the financing method under SFAS No. 98. Under the financing method, the book value of the properties and related accumulated depreciation remain on our balance sheet and no sale is recognized. Instead, the sales price of the properties is recorded as a financing obligation, and a portion of each lease payment is recorded as interest expense. We estimated the borrowing rate that we use to impute interest expense on our lease payments.

The above listing is not intended to be a comprehensive list of all of our accounting policies. In many cases, the accounting treatment of a particular transaction is specifically dictated by GAAP. See our audited consolidated financial statements and notes thereto included elsewhere in this Annual Report, which contain additional accounting policies and other disclosures required by GAAP.

Table of Contents

INCOME TAXES

As of December 31, 2008, we had $407.6 million of Federal net operating loss carryforwards reported on our tax returns and $32.3 million of Federal research and development tax credit carryforwards for income tax purposes which expire on various dates beginning in 2012. These amounts reflect different treatment of expenses for financial reporting and for tax purposes. US tax law contains provisions that may limit our ability to use net operating loss and tax credit carryforwards in any year, including if there has been a significant ownership change.

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

Our management establishes and oversees the implementation of board-approved policies covering our investments. We manage our market risk in accordance with our investment guidelines which (i) emphasize preservation of principal over other portfolio considerations, (ii) require our investments to be placed in US government, agency and government-sponsored enterprise obligations and in corporate debt instruments that are rated investment grade, (iii) establish parameters for diversification in our investment portfolio, and (iv) require investments to be placed with maturities that maintain safety and liquidity. We target our portfolio to have an average duration of no more than two years although, due to our financial condition, our average duration is significantly shorter than two years. We do not invest in derivative instruments or auction rate securities, or any financial instruments for trading purposes. Our primary market risk exposure as it affects our cash equivalents and short-term investments is interest rate risk. We monitor our interest rate risk on a periodic basis and we ensure that our cash equivalents and short-term investments are invested in accordance with our investments guidelines. We also monitor credit ratings and the duration of our financial investments, which we believe enhances the preservation of our capital.

We model interest rate exposure by a sensitivity analysis that assumes a hypothetical parallel shift downward in the US Treasury yield curve of 100 basis points. Under these assumptions, if the yield curve were to shift lower by 100 basis points from the level existing at December 31, 2008, we would expect future interest income from our portfolio to decline by approximately $1.1 million over the next 12 months. As of December 31, 2007, this same hypothetical reduction in interest rates would have resulted in a decline in interest income of approximately $4.0 million over the 12 months following December 31, 2007. The difference in these two estimates is due to the difference in our cash and cash equivalents, short-term investments, and securities available-for-sale between the two periods.

The model we use is not intended to forecast actual losses in interest income, but is used as a risk estimation and investment management tool. These hypothetical changes and assumptions are likely to be different from what actually occurs in the future. Furthermore, such computations do not incorporate any actions our management may take if the hypothetical interest rate changes actually occur. As a result, the impact on actual earnings may differ from those quantified herein.

We have a wholly owned subsidiary in Switzerland, which exposes us to foreign exchange risk. The functional currency of our subsidiary in Switzerland is the Swiss franc. Accordingly, all assets and liabilities of our subsidiary are translated to US dollars based on the applicable exchange rate on the balance sheet date. Revenue and expense components are translated to US dollars at weighted-average exchange rates in effect during the period. Gains and losses resulting from foreign currency translation are reported as a separate component of accumulated other comprehensive gain or loss in the stockholders equity section of our consolidated balance sheets. Other foreign currency transaction gains and losses are included in results of operations and, to date, have not been significant for us. We have not hedged exposures denominated in foreign currencies, but may do so in the future.

Table of Contents

Item 8. Financial Statements and Supplementary Data.

ARENA PHARMACEUTICALS, INC.

INDEX TO FINANCIAL STATEMENTS

Table of Contents

REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM

The Board of Directors and Stockholders of Arena Pharmaceuticals, Inc.

We have audited the accompanying consolidated balance sheets of Arena Pharmaceuticals, Inc. as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders equity, and cash flows for each of the three years in the period ended December 31, 2008. These financial statements are the responsibility of the Company s management. Our responsibility is to express an opinion on these financial statements based on our 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 audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the financial statements referred to above present fairly, in all material respects, the consolidated financial position of Arena Pharmaceuticals, Inc. at December 31, 2008 and 2007, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2008, in conformity with U.S. generally accepted accounting principles.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Arena Pharmaceuticals, Inc. s internal control over financial reporting as of December 31, 2008, based on the criteria established in Internal Control-Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission and our report dated March 13, 2009 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California

March 13, 2009

Table of Contents

ARENA PHARMACEUTICALS, INC.

Consolidated Balance Sheets

(In thousands, except share and per share data)

	December 31, 2008	December 31, 2007
Assets		
Current assets:		
Cash and cash equivalents	$ 73,329	$ 386,989
Short-term investments, available-for-sale	36,800	11,196
Accounts receivable	1,823	1,901
Prepaid expenses and other current assets	5,031	9,162
Total current assets	116,983	409,248
Land, property and equipment, net	102,740	65,940
Acquired technology and other intangibles, net	16,262	4,875
Other non-current assets	5,346	7,443
Total assets	$ 241,331	$ 487,506
Liabilities and Stockholders Equity		
Current liabilities:		
Accounts payable, accrued compensation and other accrued liabilities	$ 20,747	$ 10,292
Accrued clinical and preclinical study fees	26,042	19,766
Current portion of lease financing obligations	410	231
Total current liabilities	47,199	30,289
Deferred rent	693	793
Deferred revenues	4,049	4,049
Note payable to Siegfried	8,567	
Lease financing obligations, less current portion	62,657	62,076
Deferred income taxes	534	
Commitments		
Series B redeemable convertible preferred stock, $.0001 par value: 4,650 shares authorized at December 31, 2008 and 2007; 0 and 4,650 shares issued and outstanding at December 31, 2008 and 2007, respectively; liquidation preference $46,500 at December 31, 2007		53,922
Stockholders equity:		
Series A preferred stock, $.0001 par value: 350,000 shares authorized at December 31, 2008 and 2007; no shares issued and outstanding at December 31, 2008 and 2007		
Common stock, $.0001 par value: 142,500,000 shares authorized at December 31, 2008 and 2007; 74,134,462 and 72,260,254 shares issued and outstanding at December 31, 2008 and 2007, respectively	8	8
Additional paid-in capital	859,374	838,913
Treasury stock, at cost 3,000,000 shares at December 31, 2008 and 2007	(23,070)	(23,070)
Accumulated other comprehensive income (loss)	256	(23)
Accumulated deficit	(718,936)	(479,451)
Total stockholders equity	117,632	336,377
Total liabilities and stockholders equity	$ 241,331	$ 487,506

See accompanying notes.

Table of Contents

ARENA PHARMACEUTICALS, INC.

Consolidated Statements of Operations

(In thousands, except share and per share data)

	Years ended December 31,		
	2008	**2007**	**2006**
Revenues:			
Manufacturing services	$ 7,434	$	$
Collaborative agreements	2,375	19,332	30,569
Total revenues	9,809	19,332	30,569
Operating Expenses:			
Cost of manufacturing services	8,515		
Research and development	204,374	149,524	103,388
General and administrative	30,535	26,571	18,466
Amortization of acquired technology and other intangibles	2,314	1,537	1,537
Total operating expenses	245,738	177,632	123,391
Loss from operations	(235,929)	(158,300)	(92,822)
Interest and Other Income (Expense):			
Interest income	7,370	18,850	12,691
Interest expense	(5,675)	(3,746)	(1,838)
Warrant settlement expense	(2,236)		(4,554)
Other	(1,103)	30	275
Total interest and other income (expense), net	(1,644)	15,134	6,574
Net loss	(237,573)	(143,166)	(86,248)
Dividends on redeemable convertible preferred stock	(1,912)	(2,114)	(2,031)
Net loss allocable to common stockholders	$ (239,485)	$ (145,280)	$ (88,279)
Net loss per share allocable to common stockholders, basic and diluted	$ (3.24)	$ (2.31)	$ (1.89)
Shares used in calculating net loss per share allocable to common stockholders, basic and diluted	73,840,716	62,782,850	46,750,596

See accompanying notes.

Table of Contents

ARENA PHARMACEUTICALS, INC.

Consolidated Statements of Stockholders Equity

(In thousands, except share data)

	Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Deferred Compensation	Accumulated Deficit	Total Stockholders Equity
	Shares	Amount						
Balance at December 31, 2005	**35,490,571**	**$ 4**	**$ 368,933**	**$ (23,070)**	**$ (39)**	**$ (396)**	**$ (245,892)**	**$ 99,540**
Issuance of common stock upon exercise of options	180,364		1,184					1,184
Issuance of common stock under the employee stock purchase plan	307,086		1,649					1,649
Issuance of restricted stock	81,000							
Issuance of common stock upon exercise of warrants	829,856		8,298					8,298
Issuance of common stock in public offering, net of offering costs of $10,809	10,637,524	1	168,964					168,965
Issuance of common stock in public offering, net of offering costs of $9,574	13,225,000	1	165,127					165,128
Issuance of warrants in settlement			4,554					4,554
Share-based compensation expense, net of forfeitures			4,298					4,298
Reclassification of deferred compensation			(396)			396		
Compensation expense related to restricted stock			752					752
Dividends on redeemable convertible preferred stock							(2,031)	(2,031)
Restricted shares released from deferred compensation plan	20,000							
Net loss							(86,248)	(86,248)
Net unrealized gain on available-for-sale securities and investments					26			26
Net comprehensive loss								(86,222)
Balance at December 31, 2006	**60,771,401**	**6**	**723,363**	**(23,070)**	**(13)**		**(334,171)**	**366,115**
Issuance of common stock upon exercise of options	206,571		1,230					1,230
Issuance of common stock under the employee stock purchase plan	235,726		1,862					1,862
Issuance of common to Merck	40,306		480					480
Issuance of common stock in public offering, net of offering costs of $5,847	11,000,000	2	103,162					103,164
Share-based compensation expense, net of forfeitures			8,556					8,556
Compensation expense related to restricted stock			260					260
Dividends on redeemable convertible preferred stock							(2,114)	(2,114)
Restricted shares released from deferred compensation plan	6,250							
Net loss							(143,166)	(143,166)
					11			11

Net unrealized gain on available-for-sale securities and investments							
Translation loss					(21)		(21)
Net comprehensive loss							(143,176)
Balance at December 31, 2007	**72,260,254**	**8**	**838,913**	**(23,070)**	**(23)**	**(479,451)**	**336,377**

Table of Contents

	Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Deferred Compensation	Accumulated Deficit	Total Stockholders Equity
	Shares	Amount						
Issuance of common stock upon exercise of options	28,625		133					133
Issuance of common stock under the employee stock purchase plan	357,101		1,600					1,600
Issuance of common stock to Siegfried	1,488,482		8,000					8,000
Share-based compensation expense, net of forfeitures			8,375					8,375
Compensation expense related to restricted stock			117					117
Issuance of warrants in settlement			2,236					2,236
Dividends on redeemable convertible preferred stock							(1,912)	(1,912)
Net loss							(237,573)	(237,573)
Net unrealized gain on available-for-sale securities and investments					37			37
Translation gain					242			242
Net comprehensive loss								(237,294)
Balance at December 31, 2008	**74,134,462**	**$ 8**	**$ 859,374**	**$ (23,070)**	**$ 256**	**$**	**$ (718,936)**	**$ 117,632**

See accompanying notes.

Table of Contents

ARENA PHARMACEUTICALS, INC.

Consolidated Statements of Cash Flows

(In thousands)

	Years ended December 31,		
	2008	**2007**	**2006**
Operating Activities			
Net loss	$ (237,573)	$ (143,166)	$ (86,248)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	11,665	7,848	7,361
Share-based compensation	8,492	8,816	5,050
Amortization of acquired technology and other intangibles	2,314	1,537	1,537
Warrant settlement charge	2,236		4,554
Investment write-down	1,607		
Amortization/accretion of short-term investment premium/discount	333	(398)	(717)
Amortization of prepaid financing costs	333	305	
Amortization of lease financing obligations		(361)	
Accretion of note payable to Siegfried	239		
(Gain)/Loss on disposal of equipment	(37)	114	8
Changes in assets and liabilities:			
Accounts receivable	61	(1,591)	538
Prepaid expenses and other current assets	4,119	1,389	(4,830)
Accounts payable and accrued liabilities	14,338	7,111	12,672
Deferred rent	(100)	(70)	(45)
Deferred revenues		(9,005)	(11,090)
Deferred interest expense		(677)	193
Deferred income taxes	534		
Net cash used in operating activities	(191,439)	(128,148)	(71,017)
Investing Activities			
Purchases of short-term investments, available-for-sale	(65,023)	(60,998)	(17,976)
Proceeds from sales/maturities of short-term investments, available-for-sale	39,123	65,992	57,096
Purchase of drug product facility	(19,573)		
Purchases of land, property and equipment	(23,217)	(17,423)	(14,231)
Proceeds from sale of equipment	38	21	1
Deposits, restricted cash and other non-current assets	179	(188)	166
Net cash provided by (used in) investing activities	(68,473)	(12,596)	25,056
Financing Activities			
Principal payments on lease financing obligations	(240)	(481)	
Redemption of redeemable convertible preferred stock	(55,834)		
Proceeds from lease financing	1,000	48,455	
Proceeds from exercise of warrants			8,298
Proceeds from issuance of common stock	1,733	106,736	336,926
Net cash provided by (used in) financing activities	(53,341)	154,710	345,224
Effect of exchange rate changes on cash	(407)	(21)	
Net increase (decrease) in cash and cash equivalents	(313,660)	13,945	299,263
Cash and cash equivalents at beginning of year	386,989	373,044	73,781
Cash and cash equivalents at end of year	$ 73,329	$ 386,989	$ 373,044
Supplemental Disclosure Of Cash Flow Information:			
Interest paid, net of capitalized interest	$ 5,851	$ 4,295	$ 1,499

Unrealized gain on short-term investments, available-for-sale	$ 37	$ 11	$ 26
Supplemental Disclosure Of Non-Cash Investing and Financing Information:			
Purchases of land, property and equipment included in accounts payable and accrued liabilities	$ 1,776	$	$

See accompanying notes.

Table of Contents

ARENA PHARMACEUTICALS, INC.

Notes to Consolidated Financial Statements

(1) THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

The Company

Arena Pharmaceuticals, Inc., or the Company, was incorporated on April 14, 1997, and commenced operations in July 1997. The Company operates in one business segment and is a clinical-stage biopharmaceutical company with a pipeline of internally discovered small molecule drug candidates that target G protein-coupled receptors, or GPCRs, and are being developed internally or with partners. The Company s lead drug candidate, lorcaserin hydrochloride, or lorcaserin, is in a Phase 3 clinical program for the treatment of obesity.

Basis of Presentation

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

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. A going concern basis of accounting contemplates the recovery of the Company s assets and the satisfaction of its liabilities in the normal course of business.

To achieve its strategic goals, including the filing a New Drug Application for lorcaserin, the Company will need to generate additional funds, which may be achieved through various activities, including selling its equity or assets, achieving milestones under its existing collaborations, or entering into new strategic collaborations or debt financing. However, the Company may not be successful in generating additional funds and there is no guarantee that funding will be available when needed or that, if available, such funding will be available on terms that the Company or its stockholders view as favorable. If the Company does not generate sufficient funding in 2009, the Company will postpone, scale back, or eliminate some or all of its research programs and may delay the timeline on the lorcaserin development program to meet its working capital requirements through December 31, 2009. If management does not make these adjustments in a timely manner, the Company s financial condition could be adversely impacted and its ability to operate as a going concern may be adversely affected.

Financial Statement Preparation

The preparation of financial statements in conformity with US generally accepted accounting principles, or GAAP, requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and 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 those estimates.

Reclassifications

Certain prior year amounts have been reclassified to conform to the current year presentation.

Cash and Cash Equivalents

Cash and cash equivalents consist of cash and highly liquid investments with remaining maturities of three months or less when purchased.

Short-term Investments, Available-for-Sale

In accordance with Statement of Financial Accounting Standards, or SFAS, No. 115, Accounting for Certain Debt and Equity Securities, short-term investments are classified as available-for-sale. The Company defines short-term investments as income-yielding securities that can be readily converted to cash. These

Table of Contents

securities are carried at fair value, with unrealized gains and losses reported as a separate component of accumulated other comprehensive gain or loss. The cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included in interest income. Realized gains and losses and declines in securities judged to be other than temporary are included in other income or expense. The cost of securities sold is based on the specific identification method. Interest and dividends on available-for-sale securities are included in interest income.

Fair Value of Financial Instruments

Cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities are carried at cost, which management believes approximates fair value due to the short-term maturity of these instruments. Short-term investments are carried at fair value. Based on borrowing rates currently available to the Company for loans with similar terms, management believes the carrying value of the lease financing obligations and note payable to Siegfried approximate fair value.

Concentration of Credit Risk and Major Customers

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist primarily of cash, cash equivalents and short-term investments. The Company limits its exposure to credit loss by, in accordance with its board-approved investment policy, placing its cash and investments in US government, agency and government-sponsored enterprise obligations and in corporate debt instruments that are rated investment grade.

The Company manufactures drug products for Siegfried Ltd, or Siegfried, under a manufacturing services agreement, and all of the Company s manufacturing services revenues are attributable to Siegfried. For the year ended December 31, 2008, 75.8% of the Company s total revenues were attributable to Siegfried, while 23.7% and 0.5% were attributable to Ortho-McNeil-Janssen Pharmaceuticals, Inc., or Ortho-McNeil-Janssen, and Merck & Co., Inc., or Merck, respectively. For the year ended December 31, 2007, 69.5% of the Company s total revenues were attributable to Ortho-McNeil-Janssen, and 30.5% were attributable to Merck. For the year ended December 31, 2006, 60.6% of the Company s total revenues were attributable to Ortho-McNeil-Janssen, and 39.4% were attributable to Merck. Ortho-McNeil-Janssen accounted for 38.8%, 98.0% and 89.6% of accounts receivable as of December 31, 2008, 2007 and 2006, respectively, while 61.0% of the Company s accounts receivable as of December 31, 2008 were attributable to Siegfried.

Property and Equipment

Property and equipment are stated at cost and depreciated over the estimated useful lives of the assets (generally three to seven years) using the straight-line method. Buildings and building improvements are stated at cost and depreciated over an estimated useful life of approximately 20 years using the straight-line method. Leasehold improvements are stated at cost and amortized over the shorter of the estimated useful lives of the assets or the lease term. Capital improvements are stated at cost and amortized over the estimated useful lives of the assets. Capitalized interest on qualifying construction projects is added to the cost of the underlying assets and is amortized over the estimated useful lives of the related assets.

Acquired Technology and Other Intangibles

The Company has intangible assets in connection with its February 2001 acquisition of Bunsen Rush Laboratories, Inc., or Bunsen Rush, and its Melanophore technology, as well as certain assets acquired from Siegfried in January 2008, including a licensed production facility and an assembled workforce. In accordance with SFAS No. 142, Goodwill and Other Intangible Assets, the Company measures such assets based on their fair value when acquired. The useful life of the Company s intangible assets is determined based on the period over which the asset is expected to contribute directly or indirectly to the Company s future cash flows. An

Table of Contents

intangible asset with a finite useful life is amortized over its estimated useful life; an intangible asset with an indefinite useful life is not amortized. The Company amortizes its intangible assets using the straight-line method over estimated useful lives ranging from two to 10 years.

The Company will continue to evaluate the carrying value of the Melanophore technology, the licensed production facility and the acquired workforce. If, in the future, the Company determines that any of its intangible assets have become impaired or such assets are no longer being used, the Company may record a write-down of the carrying value or accelerate such amortization.

Long-lived Assets

In accordance with SFAS No. 144, Accounting for the Impairment or Disposal of Long-Lived Assets, the Company reviews its long-lived intangible assets for impairment annually and when circumstances indicate that the carrying amount of an asset may not be recoverable. This review is based on various analyses, including undiscounted cash flow projections. If impairment is indicated, the Company measures the impairment loss by comparing the fair value of the asset to the carrying value. No impairments or write-offs of long-lived assets were recorded in the years ended December 31, 2008, 2007 or 2006.

Deferred Rent

For financial reporting purposes, rent expense is recognized on a straight-line basis over the term of the lease. The difference between rent expense and amounts paid under lease agreements is recorded as deferred rent in the liability section of the accompanying consolidated balance sheets.

Foreign Currency Translation

The functional currency of the Company s wholly owned subsidiary in Switzerland is the Swiss franc. Accordingly, all assets and liabilities of this subsidiary are translated to US dollars based on the applicable exchange rate on the balance sheet date. Revenue and expense components are translated to US dollars at weighted-average exchange rates in effect during the period. Gains and losses resulting from foreign currency translation are reported as a separate component of accumulated other comprehensive gain or loss in the stockholders equity section of the Company s consolidated balance sheets. Other foreign currency transaction gains and losses are included in results of operations and, to date, have not been significant.

Share-based Compensation

On January 1, 2006, the Company adopted SFAS No. 123R, Share-Based Payment, using the modified-prospective transition method. Under this method, prior period results are not restated. Compensation expense recognized subsequent to adoption includes: (i) compensation expense for all share-based awards granted prior to, but unvested as of, January 1, 2006, based on the grant-date fair value, estimated in accordance with the original provisions of SFAS No. 123, and (ii) compensation expense for all share-based awards granted subsequent to January 1, 2006, based on the grant-date fair value, estimated in accordance with the provisions of SFAS No. 123R. Compensation expense related to share-based awards, which is recognized on a straight-line basis over the vesting period, is included in research and development and general and administrative expenses, as appropriate, in the accompanying consolidated statements of operations.

The Company measures the value of restricted stock awards based on the fair value of the stock on the grant date. The restrictions generally lapse in equal annual installments over a vesting period of two, three or four years. In accordance with SFAS No. 123R, stockholders equity is credited as compensation expense is recognized over the applicable vesting period.

The Company recorded total share-based compensation expense for all share-based awards of $8.5 million, $8.8 million and $5.0 million during the years ended December 31, 2008, 2007 and 2006, respectively.

Table of Contents

Revenue Recognition

The Company s revenue recognition policies are in accordance with SEC Staff Accounting Bulletin, or SAB, No. 101, Revenue Recognition in Financial Statements, as amended by SAB No. 104, Revenue Recognition, and EITF Issue No. 00-21, Revenue Arrangements with Multiple Deliverables, which provide guidance on revenue recognition in financial statements. Some of the Company s agreements contain upfront technology access fees, research funding, milestone achievements and royalties. Revenue from a milestone achievement is recognized when earned, as evidenced by acknowledgment from the Company s collaborator, provided that (i) the milestone event is substantive and its achievability was not reasonably assured at the inception of the agreement, (ii) the milestone represents the culmination of an earnings process, (iii) the milestone payment is non-refundable, and (iv) the Company s performance obligations after the milestone achievement will continue to be funded by the collaborator at a level comparable to the level before the milestone achievement. If all of these criteria are not met, the milestone is recognized over the remaining minimum period of the Company s performance obligations under the agreement. Non-refundable upfront fees under the Company s collaborations are deferred and recognized over the period in which the Company has significant involvement or performs services, using various factors specific to each collaboration. Amounts received for research funding for a specified number of full-time researchers are recognized as revenue as the services are performed. Advance payments received in excess of amounts earned are classified as deferred revenues until earned.

The Company manufactures drug products under a manufacturing services agreement for a single customer, Siegfried. Upon Siegfried s acceptance of drug products manufactured by the Company, manufacturing services revenues are recognized at agreed upon prices for such drug products. The Company has also contracted with Siegfried for them to provide administrative and other services to the Company in exchange for a fee paid to Siegfried. The Company determined that it is receiving an identifiable benefit for these services from Siegfried, and is recording such fees in the operating expense section of its consolidated statement of operations.

Research and Development Costs

Research and development expenses, which consist primarily of costs associated with external clinical and preclinical study fees, manufacturing costs and other related expenses, and the development of earlier-stage programs and technologies, are expensed to operations as incurred when these expenditures relate to the Company s research and development efforts and have no alternative future uses.

Clinical Trial Expenses

The Company accrues clinical trial expenses based on work performed. In determining the amount to accrue, the Company relies on estimates of total costs incurred based on the enrollment of subjects, the completion of trials and other events. The Company follows this method because it believes reasonably dependable estimates of the costs applicable to various stages of a clinical trial can be made. However, the actual costs and timing of clinical trials are highly uncertain, subject to risks and may change depending on a number of factors. Differences between the actual clinical trial costs and the estimated clinical trial costs that have been accrued in any prior period are recorded in the subsequent period in which the actual costs become known. Historically, these differences have not been material and the Company has not had to make material adjustments in the amounts recorded in a subsequent period.

Patent Costs

Costs related to filing and prosecuting patent applications are recorded in general and administrative expenses as incurred, as recoverability of such expenditures is uncertain.

Table of Contents

Comprehensive Income (Loss)

In accordance with SFAS No. 130, Reporting Comprehensive Income, all components of comprehensive income (loss), including foreign currency translation gain and loss and unrealized gains and losses on investment securities, are reported in the financial statements in the period in which they are recognized. Comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources.

Net Loss Per Share

Basic and diluted net loss per share allocable to common stockholders are presented in conformity with SFAS No. 128, Earnings per Share. In accordance with SFAS No. 128, basic and diluted net loss per share have been computed using the weighted-average number of shares of common stock outstanding during the period, less any shares subject to repurchase or forfeiture.

The total number of shares of common stock outstanding excluded from the calculation of basic and diluted net loss per share because they were subject to repurchase or forfeiture was 29,000, 99,811 and 71,420 for the years ended December 31, 2008, 2007 and 2006, respectively. Had they been dilutive, such shares would have been included in the computation of diluted net loss per share allocable to common stockholders. In addition, because the Company is in a net loss position, the Company has excluded all unvested performance-based restricted stock unit awards, which are subject to forfeiture, outstanding stock options, preferred stock and warrants from the calculation of basic and diluted net loss per share allocable to common stockholders because these securities are antidilutive for all years presented.

Effect of New Accounting Standards

On January 1, 2008, the Company adopted SFAS No. 157, Fair Value Measurements, which defines fair value, establishes a framework for measuring fair value in accordance with GAAP and expands disclosures about fair value measurements. The adoption of SFAS No. 157 did not have a material impact on the Company s consolidated financial statements.

On January 1, 2008, the Company adopted SFAS No. 159, The Fair Value Option for Financial Assets and Financial Liabilities Including an amendment of SFAS No. 115, which allows an entity to voluntarily choose to measure certain financial assets and liabilities at fair value. The adoption of SFAS No. 159 did not have a material impact on the Company s consolidated financial statements as the fair value option was not elected to account for any of its financial assets and liabilities.

On January 1, 2008, the Company adopted EITF Issue No. 07-3, Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities. EITF Issue No. 07-3 requires that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities be deferred and capitalized. Such amounts should be recognized as an expense as the related goods are delivered or the related services are performed or such time when the entity does not expect the goods to be delivered or services to be performed. The adoption of EITF Issue No. 07-3 did not have a material impact on the Company s consolidated financial statements.

In December 2007, the Financial Accounting Standards Board, or FASB, issued SFAS No. 141R, Business Combinations, which establishes principles and requirements for how an acquirer recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any noncontrolling interest in the acquiree. SFAS No. 141R also establishes disclosure requirements to enable the evaluation of the nature and financial effects of the business combination. SFAS No. 141R applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008, and interim periods within those fiscal years. The Company does not expect the adoption of SFAS No. 141R to have a material impact on its consolidated financial statements.

Table of Contents

(2) AVAILABLE-FOR-SALE SECURITIES

The following table summarizes the investment categories comprising available-for-sale securities at December 31, 2008 and 2007, in thousands:

December 31, 2008	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Federal agency notes	$ 29,024	$ 54	$	$ 29,078
Corporate debt securities	7,741	12	(31)	7,722
Total available-for-sale securities	$ 36,765	$ 66	$ (31)	$ 36,800

December 31, 2007	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
Federal agency notes	$ 1,276	$ 4	$	$ 1,280
Corporate debt securities	9,922		(6)	9,916
Total available-for-sale securities	$ 11,198	$ 4	$ (6)	$ 11,196

The contractual maturities for all of the Company s available-for-sale securities at December 31, 2008 were less than one year. Proceeds from the sales of available-for-sale securities totaled $39.1 million, $66.0 million and $57.1 million in 2008, 2007 and 2006, respectively.

(3) FAIR VALUE DISCLOSURES

On January 1, 2008, the Company adopted SFAS No. 157, which defines fair value, establishes a framework for measuring fair value in accordance with GAAP and expands disclosures about fair value measurements. SFAS No. 157 defines fair value as the exchange price that would be received to sell an asset or paid to transfer a liability, based upon an exit price, in an orderly transaction between market participants at the measurement date.

SFAS No. 157 establishes a three-level valuation hierarchy of valuation techniques that is based on observable and unobservable inputs.

Level 1	observable inputs such as unadjusted quoted prices in active markets for identical instruments.
Level 2	quoted prices for similar instruments in active markets or inputs that are observable for the asset or liability, either directly or indirectly.
Level 3	unobservable inputs based on the Company s own assumptions.

In accordance with SFAS No. 157, the following table presents the Company s valuation hierarchy for its financial assets measured at fair value on a recurring basis as of December 31, 2008, in thousands:

		Fair Value Measurements at December 31, 2008		
	Balance at December 31, 2008	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Money market funds and cash equivalents(1)	$ 39,565	$ 39,565	$	$
US government, agency and government-sponsored enterprise obligations(2)	38,278		38,278	
Corporate debt instruments(2)	7,722		7,722	

(1) Included in cash and cash equivalents on the accompanying consolidated balance sheet.

(2) Included in either cash and cash equivalents or short-term investments, available-for-sale on the accompanying consolidated balance sheet.

Table of Contents

(4) ACQUIRED TECHNOLOGY AND OTHER INTANGIBLES

In February 2001, the Company acquired Bunsen Rush for $15.0 million in cash and assumed $0.4 million in liabilities. The Company allocated $15.4 million to the patented Melanophore technology, its primary screening technology, acquired in such transaction. Acquired technology from the Company s acquisition of Bunsen Rush is being amortized over its estimated useful life of 10 years, which was determined based on an analysis, as of the acquisition date, of the conditions in, and the economic outlook for, the pharmaceutical and biotechnology industries and the patent life of the technology. Accumulated amortization from such acquired technology totaled $12.0 million and $10.5 million at December 31, 2008 and 2007, respectively. As of December 31, 2008, the Company expects to record charges of $1.5 million per year in both 2009 and 2010 and $0.3 million in 2011 for amortization of this technology.

In January 2008, the Company acquired certain assets from Siegfried, including a licensed production facility and an assembled workforce valued, as of December 31, 2008, at $12.1 million and $1.6 million, respectively. The Company determined that the licensed production facility has an indefinite useful life since the facility is qualified to produce and package tablets broadly and is not a specific-purpose manufacturing plant. The licensed production facility will be tested for impairment annually in accordance with SFAS No. 142. If, in the future, the Company determines that the nature of the licensed production facility has changed to a finite useful life, amortization would begin to be recorded over the estimated useful life of the facility. The acquired workforce is being amortized over its estimated benefit of two years, which was determined based on an analysis as of the acquisition date. Accumulated amortization from the acquired workforce totaled $0.8 million at December 31, 2008. As of December 31, 2008 and using the exchange rate in effect on December 31, 2008, the Company expects to record expense of $0.8 million in 2009 for amortization of the acquired workforce.

Acquired technology and other intangibles consisted of the following at December 31, 2008, in thousands:

	Gross Carrying Amount	Accumulated Amortization	Net
Amortizable intangible assets			
Acquired technology from Bunsen Rush	$ 15,378	$ (12,040)	$ 3,338
Acquired workforce from Siegfried	1,572	(786)	786
	$ 16,950	$ (12,826)	4,124
Indefinite-lived intangible assets			
Acquired licensed production facility from Siegfried			12,138
Total identifiable intangible assets			$ 16,262

Acquired technology and other intangibles of $4.9 million, net of $10.5 million of accumulated amortization, was recorded at December 31, 2007, which consisted solely of the acquired technology from Bunsen Rush.

Amortization expense of $1.5 million was recorded in each of the years ended December 31, 2008, 2007 and 2006 for the acquired technology from Bunsen Rush. Amortization expense of $0.8 million for the acquired workforce from Siegfried was recorded for the year ended December 31, 2008.

Table of Contents

(5) LAND, PROPERTY AND EQUIPMENT

Land, property and equipment consisted of the following, in thousands:

	December 31,	
	2008	2007
Land, building and capital improvements	$ 59,935	$ 50,917
Leasehold improvements	35,317	16,818
Machinery and equipment	47,300	29,613
Computers and software	8,926	7,061
Furniture and office equipment	2,487	1,632
	153,965	106,041
Less accumulated depreciation and amortization	(51,225)	(40,101)
Net land, property and equipment	$ 102,740	$ 65,940

Depreciation expense was $8.0 million, $7.8 million and $7.4 million for the years ended December 31, 2008, 2007 and 2006, respectively. Included in leasehold improvements at December 31, 2008 was $0.9 million of capitalized interest related to construction of a facility. No capitalized interest was recorded for the year ended December 31, 2007.

(6) ACCOUNTS PAYABLE, ACCRUED COMPENSATION AND OTHER ACCRUED LIABILITIES

Accounts payable, accrued compensation and other accrued liabilities consisted of the following, in thousands:

	December 31,	
	2008	2007
Accounts payable	$ 12,936	$ 4,161
Accrued compensation	3,758	3,136
Other accrued liabilities	4,053	2,995
Total	$ 20,747	$ 10,292

(7) COMMITMENTS

Leases

The following table summarizes the Company s real property leasing arrangements and essential provisions as of December 31, 2008:

Address on		
Nancy Ridge Drive,		
San Diego, California		**Description of Arrangements**
6166	Lease	In 1997, the Company began leasing this property under a lease that included an option to buy the property for $2.1 million. In 1998, the Company assigned the option to another company in exchange for $0.7 million in cash, and such company exercised the option and leased the property to the Company under a lease that expires in 2013. The $0.7 million is being recognized on a straight-line basis as a reduction in the rent expense on the underlying lease.

The Company has two five-year options to extend the lease term beyond 2013. The new lease terms stipulate annual increases in monthly rental payments of 2.75% beginning in April 2000.

Table of Contents

Address on Nancy Ridge Drive, San Diego, California		Description of Arrangements
6122-6124-6126	Lease with option to purchase	In 2002, the Company leased a property located at 6124-6126 Nancy Ridge Drive. Under the terms of this lease, effective April 2003, monthly rental payments increased by 2% and are subject to a 2% annual increase thereafter. In 2005, the Company amended this lease to include additional square footage in a contiguous building, 6122 Nancy Ridge Drive. As discussed in the below section on 6114, 6118, 6154 Nancy Ridge Drive, the Company assigned its option to buy this entire building for $7.9 million when the lease ends in March 2012, and has an option to purchase the property back.
6138-6150	Lease with option to purchase	In 2003, the Company completed the sale and leaseback of this property. The sales price for this property was $13.0 million and net proceeds to the Company were $12.6 million. The Company has accounted for this transaction in accordance with SFAS No. 66 Accounting for Sales of Real Estate and SFAS No. 98 Accounting for Leases. The Company s option to repurchase this property in the future is considered continued involvement under SFAS No. 66 and, therefore, the Company has applied the financing method under SFAS No. 98. Under the financing method, the book value of the property and related accumulated depreciation remain on the Company s balance sheet and no sale is recognized. Instead, the sales price of the property is recorded as a financing obligation and a portion of each lease payment is recorded as interest expense. The term of the lease, which became effective in December 2003, is 15 years, with monthly rental payments increasing by 2.5% annually, beginning in January 2005. The Company has the right to repurchase this property through year 14 of the lease. The Company recorded interest expense of $1.3 million, $0.4 million and $1.6 million in the years ended December 31, 2008, 2007 and 2006, respectively, related to this lease. At December 31, 2008, in accordance with SFAS No. 98, the total financing obligation on the accompanying consolidated balance sheets related to this transaction was $12.3 million.
6114, 6118, 6154	Lease with option to purchase	In May 2007, the Company completed the sale and leaseback of these properties. The total consideration for these properties and the assignment of the option to purchase the property located at 6122-6124-6126 Nancy Ridge Drive was $50.1 million, resulting in net proceeds to the Company of $48.5 million after financing costs and commissions. Concurrently with the closing of the transaction, the Company leased back the three properties under leases with 20-year terms and two consecutive options to extend such terms for five years each. In addition, subject to certain restrictions, the Company has the option to repurchase all of the properties included in the transaction on the 10th, 15th or 20th anniversary of the execution date of the leases, and earlier if the leases are terminated under certain circumstances. The Company has accounted for this transaction in accordance with SFAS No. 66 and SFAS No. 98. The Company s option to repurchase this property in the future is considered continued involvement under SFAS No. 66 and, therefore, the Company has applied the financing method under SFAS No. 98. Initial base rent for the three properties (net of taxes, insurance and maintenance costs (i.e. triple net) for which the Company is responsible) that were purchased as part of this transaction is an aggregate of $4.5 million annually, subject to an annual increase of 2.5% and other specified adjustments. The Company recorded interest expense of $3.9 million and $3.1 million in the years ended December 31, 2008 and 2007, respectively, related to this transaction. The interest expense recorded in the year ended December 31, 2008 included $0.9 million of capitalized interest related to the expansion of this facility. At December 31, 2008, in accordance with SFAS No. 98, the total financing obligation related to this transaction was $50.8 million.

Table of Contents

In accordance with the lease terms for three of the above-listed properties, the Company is required to maintain deposits for the benefit of the landlord throughout the term of the leases. A total of $1.3 million is recorded in other non-current assets on the accompanying consolidated balance sheets related to these leases.

The Company recognizes rent expense on a straight-line basis over the term of each lease. Rent expense was $1.1 million in each of the years ended December 31, 2008, 2007 and 2006.

At December 31, 2008 the Company expects interest expense over the terms of the leases related to the facilities accounted for under SFAS No. 66 and SFAS No. 98 to total $74.6 million. As of December 31, 2008, the total financing obligation for these facilities was $63.1 million. The aggregate residual value of the facilities at the end of the lease terms is $10.0 million.

Annual future obligations as of December 31, 2008 are as follows, in thousands:

Year ending December 31,	Financing Obligations	Operating Leases
2009	$ 5,816	$ 1,101
2010	6,497	1,228
2011	6,659	1,258
2012	6,826	890
2013	6,997	256
Thereafter	94,892	
Total minimum lease payments	127,687	$ 4,733
Less amounts representing interest	(74,610)	
Add amounts representing residual value	9,990	
Lease financing obligations	63,067	
Less current portion	(410)	
	$ 62,657	

(8) ASSET ACQUISITION FROM SIEGFRIED LTD AND RELATED AGREEMENTS

On January 9, 2008, the Company acquired from Siegfried certain drug product facility assets, including a licensed production facility, fixtures, equipment, other personal property and real estate assets in Zofingen, Switzerland, under an Asset Purchase Agreement between Siegfried and the Company s wholly owned Swiss subsidiary, Arena Pharmaceuticals GmbH, or Arena GmbH. This facility is being used to manufacture the Company s own proprietary drug candidates and certain drug products for Siegfried. This transaction was determined not to be an acquisition of a business since a self-sustaining integrated set of activities and assets was not acquired and the revenue stream of Arena GmbH is significantly different than it was as part of Siegfried.

The purchase price under such agreement, in Swiss francs, was CHF 31.8 million in cash and 1,488,482 shares of the Company s common stock, which were issued to Siegfried in January 2008. The Company paid CHF 21.8 million, or $19.6 million, of the cash purchase price in January 2008, and will pay the remaining CHF 10.0 million cash portion of the purchase price in three equal installments in the third, fourth and fifth years after closing. The present value of this liability, which is classified as a long-term note payable to Siegfried on the accompanying consolidated balance sheet, was the US dollar equivalent of $8.6 million at December 31, 2008.

Table of Contents

This transaction, including the cash payment made in January 2008, the value of the common stock when it was issued and the present value of the remaining cash payments, was recorded as follows, in thousands, translated into US dollars at the exchange rate in effect when the transaction closed on January 9, 2008:

Tangible assets		
Fixtures, equipment and personal property	$ 16,760	
Real estate	5,659	
Total tangible assets		$ 22,419
Intangible assets		
Licensed production facility	11,620	
Acquired workforce	1,505	
Total intangible assets		13,125
Total assets acquired		$ 35,544

At December 31, 2008, the balances of the acquired assets are translated into US dollars at the applicable exchange rate on the balance sheet date.

In connection with this transaction, the Company and Siegfried also entered into a long-term supply agreement for the active pharmaceutical ingredient of lorcaserin, a manufacturing services agreement and a technical services agreement.

Pursuant to the manufacturing services agreement, the Company recognized $7.4 million of revenue in the year ended December 31, 2008 for manufacturing drug products for Siegfried. Upon Siegfried s acceptance of drug products manufactured by the Company, the Company recognizes manufacturing services revenues at agreed upon prices for such drug products. The related cost to manufacture the drug products was $8.5 million in the year ended December 31, 2008.

The Company also recorded expenses of $2.3 million for services incurred under the technical services agreement in the year ended December 31, 2008. The technical services agreement provides the Company with administrative and other services to operate the facility. The Company determined that it is receiving an identifiable benefit for these services and is recording such fees in the operating expense section of the accompanying consolidated statement of operations.

(9) REDEEMABLE CONVERTIBLE PREFERRED STOCK AND WARRANTS

In December 2003, the Company sold to two institutional investors 3,500 shares of its series B-1 redeemable convertible preferred stock, or Series B-1 Preferred, together with (i) seven-year warrants to purchase up to 1,486,200 shares of common stock at an exercise price of $10.00 per share, and (ii) unit warrants giving such investors the right to purchase from the Company for a period of approximately 16 months from December 24, 2003, at their option, up to $11.5 million of its series B-2 redeemable convertible preferred stock, or Series B-2 Preferred, and collectively with the Series B-1 Preferred, Series B Preferred, and additional seven-year warrants to purchase up to 450,000 shares of common stock at an initial exercise price of $10.00 per share. The aggregate purchase price was $35.0 million, and the Company received $34.2 million in net cash proceeds after closing costs. In addition, the Company issued 45,000 shares of common stock, valued at $0.3 million based on the fair value of the common stock on the date of the closing of the Series B-1 Preferred, as a finder s fee. In April 2005, the investors exercised their unit warrants in full, resulting in aggregate gross proceeds to the Company of $11.5 million.

The redemption price for the Series B Preferred, which accrued dividends at 4% annually, was such shares stated value, plus accrued but unpaid dividends thereon to the date of payment and any applicable penalties. The stated value was the original holder s investment plus any dividends settled by increasing the stated value at the

Table of Contents

time the dividend was payable. On October 28, 2008, the Company received redemption notices from the two holders of the Series B Preferred who elected to have all of their outstanding shares of Series B Preferred redeemed by the Company on November 13, 2008. The Company redeemed all of such shares for an aggregate cash redemption price of $55.8 million, such that no shares of Series B Preferred were outstanding at December 31, 2008.

On March 31, 2006, following the Company s call notice to one of the two warrant holders, Smithfield Fiduciary LLC, an affiliate of Highbridge Capital Management, LLC, such holder exercised its warrants to purchase 829,856 shares of the Company s common stock, resulting in an aggregate purchase price and net cash proceeds to the Company of $8.3 million. In connection with this exercise in full of its warrants, Smithfield claimed that it was entitled to receive exchange warrants that would include a provision that could require the Company to issue additional exchange warrants in the future. The Company disagreed with this interpretation. On June 30, 2006, the Company entered into a Settlement Agreement and Release with Smithfield. As part of the Settlement Agreement and Release, (a) Smithfield and the Company provided each other with a release of any claims relating to (i) Smithfield s demand for, and the Company s non-issuance of, exchange warrants, and (ii) any breach or default under certain of the agreements on account of the foregoing, (b) the Company issued Smithfield a seven-year warrant to purchase 829,856 shares of the Company s common stock at an initial exercise price of $15.49 per share, and (c) the Company filed a registration statement covering the sale of the shares of common stock issuable under the new warrant. The new warrant does not contain any right for the Company, or for the holder to require the Company, to call the warrant, nor does it provide the holder the right to receive any exchange warrants in the future. The Company recorded a $4.6 million non-cash charge related to the warrant settlement in the second quarter of 2006. As of December 31, 2008, this warrant to purchase 829,856 shares of the Company s common stock remained outstanding.

On August 14, 2008, the Company entered into an Exchange Agreement with Mainfield Enterprises, Inc., the other warrant holder that previously held warrants acquired in connection with the Series B Preferred financing. The warrants previously held by Mainfield were seven-year warrants to purchase a total of 1,106,344 shares of the Company s common stock at an exercise price of $10.00 per share. These warrants contained a provision that, under certain circumstances, required the Company to issue exchange warrants. The Company and Mainfield disagreed under what circumstances the Company was obligated to issue exchange warrants, and entered into the Exchange Agreement to resolve this disagreement. Pursuant to the Exchange Agreement, (a) the Company canceled the warrants previously held by Mainfield, (b) in exchange for the cancellation of these warrants, the Company issued Mainfield a seven-year warrant to purchase 1,106,344 shares of the Company s common stock at an exercise price of $7.71 per share, and (c) Mainfield and the Company provided each other with a release of certain claims. This new warrant does not contain any right for the Company, or for the holder to require the Company, to call the warrant, nor does it provide the holder the right to receive any exchange warrants in the future. The Company recorded a $2.0 million non-cash provision related to the warrant settlement in the quarter ended June 30, 2008 and recorded an additional $0.2 million non-cash charge in the quarter ended September 30, 2008 when the Exchange Agreement was entered into. As of December 31, 2008, this warrant to purchase 1,106,344 shares of the Company s common stock remained outstanding.

(10) STOCKHOLDERS EQUITY

Preferred Stock

In October 2002, and in conjunction with the stockholders rights plan (see Stockholders Rights Plan below in this note), the Company s board of directors created a series of preferred stock, consisting of 350,000 shares with a par value of $.0001 per share, designated as Series A Junior Participating Preferred Stock, or the Series A Preferred Stock. Such number of shares may be increased or decreased by the Company s board of directors, provided that no decrease shall reduce the number of shares of Series A Preferred Stock to a number less than the number of shares then outstanding, plus the number of shares reserved for issuance upon the exercise of outstanding options, rights or warrants or upon the conversion of any outstanding securities issued by the Company convertible into Series A Preferred Stock. As of December 31, 2008 and 2007, no shares of Series A Preferred Stock were issued or outstanding.

Table of Contents

Treasury Stock

In October 2003, Biotechnology Value Fund, L.P. and certain of its affiliates accepted the Company s offer of $23.1 million to purchase from them 3,000,000 shares of the Company s common stock at a cash price of $7.69 per share.

Equity Compensation Plans

In June 2006, the Company s stockholders approved the Company s 2006 Long-Term Incentive Plan, as amended, or the 2006 LTIP, which provides for the grant of up to a total of 6,000,000 shares of common stock (subject to certain adjustments described in the 2006 LTIP) to designated employees, certain consultants and advisors who perform services for the Company, and non-employee members of the Company s board of directors as stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards and performance awards. Effective in June 2006, the Company s Amended and Restated 1998 Equity Compensation Plan, Amended and Restated 2000 Equity Compensation Plan and 2002 Equity Compensation Plan, or the Prior Plans, were terminated. However, notwithstanding such termination, all outstanding awards under the Prior Plans will continue to be governed under the terms of the Prior Plans. The 6,000,000 shares of common stock authorized for issuance under the 2006 LTIP is increased by the number of shares subject to any stock awards under the Prior Plans that are forfeited, expire or otherwise terminate without the issuance of such shares and as otherwise provided in the 2006 LTIP. As of December 31, 2008, a total of 1,225,105 shares of common stock were available for future grant under the 2006 LTIP.

Stock options generally vest 25% per year over four years and are exercisable for up to 10 years from the date of grant. Restricted common stock generally vests over a two, three or four-year period and the recipient, at the date of grant, has all rights of a stockholder, subject to certain restrictions on transferability and a risk of forfeiture. The Company issues new shares of common stock upon the exercise of stock options, for purchases made under the 2001 Employee Stock Purchase Plan, as amended, or Purchase Plan, and for grants of restricted stock.

In the event of termination of service, unvested restricted stock is subject to forfeiture and restricted common stock issued from the exercise of unvested stock options is subject to repurchase at the original purchase price. In the event the Company elects to not buy back any such unvested shares, any related compensation will be expensed immediately. In accordance with SFAS No. 128, the Company has excluded all unvested restricted stock and restricted common stock issued from the exercise of unvested stock options from its calculation of basic and diluted net loss per share.

In 2003, the Company set up a deferred compensation plan for its executive officers, whereby executive officers elected to contribute their shares of restricted stock into the plan. A total of 107,919 shares of restricted stock had been contributed to the plan at December 31, 2008 and 2007, and 114,169 shares of restricted stock had been contributed to the plan at December 31, 2006.

The following table summarizes the Company s stock option activities under the Prior Plans and the 2006 LTIP, or collectively, the Equity Compensation Plans, for the year ended December 31, 2008:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2007	5,514,002	$ 10.43		
Granted	1,363,500	6.89		
Exercised	(28,625)	4.65		
Forfeited/cancelled/expired	(292,247)	9.95		
Outstanding at December 31, 2008	6,556,630	$ 9.74	6.54	$ 420
Vested and expected to vest at December 31, 2008	6,307,421	$ 9.73	6.47	$ 419
Vested and exercisable at December 31, 2008	3,826,554	$ 9.49	5.27	$ 408

Table of Contents

The aggregate intrinsic value in the above table is calculated as the difference between the closing price of the Company s common stock at December 31, 2008 of $4.17 per share and the exercise price of stock options that had strike prices below the closing price. The intrinsic value of all stock options exercised during the years ended December 31, 2008, 2007 and 2006 was $0.1 million, $1.2 million and $1.7 million, respectively.

Stock options exercisable pursuant to the terms of the Prior Plans can be exercised prior to vesting; however, unvested shares are subject to repurchase at the original purchase price if a grantee terminates employment prior to vesting. At December 31, 2008, there were no shares of common stock outstanding that were issued upon the exercise of unvested stock options. At December 31, 2007 and 2006, 312 and 924 shares of common stock issued upon the exercise of stock options were subject to repurchase at the original purchase price at a weighted-average price of $6.16 and $6.11 per share, respectively.

The Company granted 1,690,500 and 371,800 performance-based restricted stock unit awards under the 2006 LTIP in February 2007 and March 2008, respectively. The awards provide employees until February 26, 2012 to achieve four specific drug development and strategic performance goals. A fixed number of awards will be earned for each goal that is successfully achieved. Once earned, the awards will remain unvested until the performance period is complete. The awards that have been earned at February 26, 2012 will vest and be settled in shares of the Company s common stock, with the holder receiving one share of common stock for each award earned and vested. Termination of employment prior to vesting will result in the forfeiture of any earned (as well as unearned) awards, except for in limited circumstances such as termination due to death, disability or a change in control. No compensation expense was recognized related to these awards during the years ended December 31, 2008 and 2007 as management believed achievement of the performance goals was not probable at December 31, 2008 and 2007. The following table summarizes activity with respect to such awards during the year ended December 31, 2008:

	Performance Units	Weighted-Average Grant-Date Fair Value
Outstanding at December 31, 2007	1,635,600	$ 13.50
Granted	371,800	6.99
Vested		
Forfeited/cancelled	(57,300)	11.97
Outstanding at December 31, 2008	1,950,100	$ 12.30
Vested at December 31, 2008		

The following table summarizes the Company s unvested restricted stock activity, excluding shares contributed to the Company s deferred compensation plan, during the year ended December 31, 2008:

Unvested Restricted Stock	Shares	Weighted-Average Grant-Date Fair Value
Unvested at December 31, 2007	58,000	$ 16.11
Granted		
Vested	(29,000)	16.11
Forfeited		
Unvested at December 31, 2008	29,000	$ 16.11

The total grant-date fair value of restricted stock vested was $0.5 million during each of the years ended December 31, 2008 and 2007 and $0.3 million during the year ended December 31, 2006.

Table of Contents

Share-based Compensation

The Company uses the Black-Scholes option pricing model to estimate the grant-date fair value of share-based awards in determining the share-based compensation expense recognized under SFAS No. 123R. The table below sets forth the weighted-average assumptions and estimated fair value of stock options granted under the Equity Compensation Plans during the years ended December 31, 2008, 2007 and 2006:

	December 31,		
	2008	2007	2006
Risk-free interest rate	2.5%	4.6%	4.6%
Dividend yield	0%	0%	0%
Expected volatility	57%	64%	70%
Expected life (years)	5.50	5.39	5.19
Weighted-average estimated fair value of stock options granted	$ 3.64	$ 7.82	$ 8.35

The table below sets forth the weighted-average assumptions and estimated fair value of the options to purchase stock granted under the Purchase Plan for multiple offering periods during the years ended December 31, 2008, 2007 and 2006:

	December 31,		
	2008	2007	2006
Risk-free interest rate	0.9% - 3.3%	3.8% - 5.3%	1.7% - 5.3%
Dividend yield	0%	0%	0%
Expected volatility	53% - 63%	66% - 72%	65% - 75%
Expected life (years)	0.25 - 2.0	0.25 - 2.0	0.25 - 2.0
Weighted-average estimated fair value of options granted under the Purchase Plan	$2.05 to $2.85	$2.18 to $5.46	$1.99 to $7.29

Expected volatility for awards granted after adoption of SFAS No. 123R is based on a combination of 75% historical volatility of the Company s common stock and 25% market-based implied volatilities from traded options on its common stock, with historical volatility being more heavily weighted due to low volume of traded options on its common stock. The expected life of options granted under SFAS No. 123R is determined based on historical experience of similar awards, giving consideration to the contractual terms of the share-based awards, vesting schedules and post-vesting terminations. The risk-free interest rates are based on the US Treasury yield curve, with a remaining term approximately equal to the expected term used in the option pricing model.

SFAS No. 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures of unvested options were estimated to be 5.1%, 5.4% and 6.7% for the years ended December 31, 2008, 2007 and 2006 based on historical experience. As a result, the Company reduced its share-based compensation expense by $0.3 million for the year ended December 31, 2008 and $0.4 million for each of the years ended December 31, 2007 and 2006. If actual forfeitures vary from estimates, the Company will recognize the difference in compensation expense in the period the actual forfeitures occur or when stock options vest.

The Company recognized share-based compensation expense in accordance with SFAS No. 123R as follows, in thousands, except per share data:

	December 31,		
	2008	2007	2006
Research and development	$ 4,967	$ 4,190	$ 2,901
General and administrative	3,525	4,626	2,149
Total share-based compensation expense and impact on net loss allocable to common stockholders	$ 8,492	$ 8,816	$ 5,050
Impact on net loss per share allocable to common stockholders, basic and diluted	$ 0.11	$ 0.14	$ 0.11

79

Table of Contents

At December 31, 2008, total unrecognized estimated compensation cost, excluding estimated forfeitures, related to unvested stock options was $11.2 million, which is expected to be recognized over a weighted-average remaining requisite service period of 2.29 years. At December 31, 2008, total unrecognized estimated compensation cost related to restricted stock was nominal and is expected to be recognized over a weighted-average remaining requisite service period of 1.5 months.

Cash of $0.1 million was received from stock option exercises during the year ended December 31, 2008. Cash of $1.6 million was received from stock purchases under the Purchase Plan during the year ended December 31, 2008. Tax benefits recognized related to share-based compensation and related cash flow impacts were not material during the year ended December 31, 2008 because the Company is in a net operating loss position.

Employee Stock Purchase Plan

The Purchase Plan qualifies under Section 423 of the Internal Revenue Service and permits substantially all employees to purchase shares of the Company s common stock at a discount to market. Under the Purchase Plan, employees can choose to have up to 15% of their annual compensation withheld to purchase shares of common stock, subject to certain limitations. The shares of common stock may be purchased over an offering period with a maximum duration of two years at 85% of the lower of the fair market value of the common stock on the first day of the applicable offering period or on the last day of the three-month purchase period. In June 2006, the Company s stockholders approved an increase in the aggregate number of shares of common stock that may be issued pursuant to the Purchase Plan from 1,000,000 to 1,500,000. During the years ended December 31, 2008, 2007 and 2006, 357,101, 235,726 and 307,086 shares, respectively, were purchased under to the Purchase Plan. As of December 31, 2008, a total of 1,407,507 shares had been issued under the Purchase Plan.

Common Shares Reserved for Future Issuance

The following shares of common stock are reserved for future issuance at December 31, 2008:

Equity Compensation Plans	9,731,835
Deferred compensation plan	107,919
Warrants	1,936,200
Purchase Plan	92,493
Total	11,868,447

Stockholders Rights Plan

In October 2002, the Company s board of directors adopted a stockholders rights plan, or the Rights Agreement, under which all stockholders of record as of November 13, 2002 received rights to purchase shares of the Series A Preferred Stock, or the Rights. Each Right entitles the registered holder to purchase from the Company one one-hundredth of a share of the Series A Preferred Stock at an initial exercise price of $36.00 per share, subject to adjustment. The Rights are not exercisable until the 10th day after such time as a person or group acquires beneficial ownership of 10% or more, or announces a tender offer for 10% or more, of the Company s common stock. At such time, all holders of the Rights, other than the acquiror, will be entitled to purchase shares of the Company s common stock at a 50% discount to the then current market price.

The Rights will trade with the Company s common stock, unless and until they are separated due to a person or group acquiring beneficial ownership of 10% or more, or announcing a tender offer for 10% or more, of the Company s common stock. The Company s board of directors may terminate the Rights Agreement at any time or redeem the Rights prior to the time a person acquires 10% or more of the common stock.

Table of Contents

In November 2006, the Rights Agreement was amended to provide, among other things, that the triggering percentage for when a Beneficial Owner (as defined in the Rights Agreement) of the Company s common stock would be an Acquiring Person (as further defined in the Amendment) increased from 10% to 15%.

(11) COLLABORATIONS

Merck & Co., Inc.

In October 2002, the Company entered into a research and licensing agreement with Merck to collaborate on three G protein-coupled receptors, or GPCRs, to develop therapeutics for atherosclerosis and related disorders. The Company believes one or more of these GPCRs plays a role in regulating plasma lipid profiles, including HDL cholesterol, the so-called good cholesterol, and is responsible for the HDL-raising activity of niacin. In October 2004, Merck extended and expanded the collaboration and selected one of the Company s compounds for preclinical development. In February 2007, the Company amended the terms of the collaboration to reduce the number of the Company s research employees funded under the collaboration in exchange for Merck making a $1.0 million investment in the Company s common stock at approximately a 70% premium to the then current market price. In September 2006, the Company announced that Merck completed a Phase 2 clinical trial of MK-0354, a niacin receptor agonist discovered by the Company and intended for the treatment of atherosclerosis and related disorders. From the inception of this collaboration through December 31, 2008, the Company has received $18.0 million from Merck in upfront and milestone payments, and equity investments totaling $8.5 million. The Company may receive additional milestone payments of up to $28.0 million for Merck s clinical and marketing achievements, as well as royalty payments associated with Merck s commercialization of any products discovered under the collaboration. In addition, prior to the end of the research portion of the collaboration, the Company received research funding from Merck totaling $27.5 million. Merck s obligation to provide research funding ended in October 2007, after which date the Company has not performed research services or had significant involvement.

The agreement with Merck will continue until the expiration of all royalty obligations under the agreement, unless the agreement is terminated early by either party. Either Merck or the Company can terminate the agreement if the other party breaches its material obligations under the agreement by causes and reasons within its control, has not cured such breach within 90 days of receiving a letter requesting such cure, and there is no dispute as to whether such breach has occurred. The non-breaching party in such a termination would receive the rights to continue the program. In addition, Merck can terminate the agreement at anytime by giving 90 days notice, but all milestones and royalties would still be payable as provided in the agreement.

As part of the extension and expansion of the collaboration with Merck in October 2004, Merck purchased $7.5 million of the Company s common stock at approximately a 70% premium to the then current market price. The Company performed an evaluation on this stock purchase and determined that $3.9 million of the $7.5 million purchase price was an upfront payment related to the collaboration extension and expansion. Accordingly, the Company recognized the $3.9 million upfront payment, as well as the remaining portion of the unamortized upfront payment at October 2004 of $1.3 million, over the extended collaboration term of three years. Additionally, in October 2004, the Company achieved a $1.0 million milestone under the collaboration which the Company also recognized over the extended collaboration term of three years because the milestone was reasonably assured to be achieved at the time the Company extended and expanded its collaboration with Merck. In connection with the February 2007 amendment of the collaborative agreement with Merck, the Company performed an evaluation on Merck s related stock purchase and determined that $0.5 million of the $1.0 million purchase price was an upfront payment related to the collaboration amendment. Accordingly, the Company recognized this upfront payment and the unamortized portion of the previously received upfront payments over the remaining term of the research portion of the collaboration.

Table of Contents

For the year ended December 31, 2008, the Company recognized $46,000 of revenues under the Merck agreement, all of which was reimbursement for patent activities. For the year ended December 31, 2007, the Company recognized revenues of $5.9 million, which included $3.6 million in research funding, $2.2 million from amortization of milestones and technology access and development fees received in prior years and $0.1 million for patent activities. For the year ended December 31, 2006, the Company recognized revenues of $12.1 million, which included $5.7 million in research funding, $4.0 million from a milestone earned, $2.1 million from amortization of milestones and technology access and development fees received in prior years and $0.3 million for additional sponsored research and patent activities. At December 31, 2008, there were no deferred revenues remaining under this agreement.

Ortho-McNeil-Janssen Pharmaceuticals, Inc.

In December 2004, the Company entered into a collaboration and license agreement with Ortho-McNeil-Janssen to further develop compounds for the potential treatment of type 2 diabetes and other disorders. In January 2005, the Company received a non-refundable $17.5 million upfront payment and two milestone payments of $2.5 million each and, in February 2006, the Company received a $5.0 million milestone payment related to Ortho-McNeil-Janssen s initiation of a Phase 1 clinical trial of the then lead drug candidate, APD668. In September 2006, Ortho-McNeil-Janssen exercised its option to extend the research portion of the collaboration through December 2007, after which date the Company has not performed research services or had significant involvement. After putting APD668 on hold, in December 2008 Ortho-McNeil-Janssen initiated a Phase 1 clinical trial of APD597, a potentially more potent Arena-discovered GPR119 agonist. The Company is eligible to receive a total of $295.0 million in milestone payments for each compound, as well as royalty payments associated with Ortho-McNeil-Janssen s commercialization of any products discovered under the collaboration. These milestones include development and approval milestone payments of up to $132.5 million for the first indication and $62.5 million for the second indication for each compound, and up to $100.0 million in sales milestone payments for each product resulting from the collaboration. From the inception of this collaboration through December 31, 2008, the Company has received $27.5 million from Ortho-McNeil-Janssen in upfront and milestone payments. In addition, prior to the end of the research portion of the collaboration, the Company received research funding from Ortho-McNeil-Janssen totaling $7.2 million. The Company recognized the upfront payment ratably over three years, and also recognized with the two milestone payments received in January 2005 over three years as their achievability was reasonably assured at the time the Company entered into the collaboration.

The agreement with Ortho-McNeil-Janssen will continue until the expiration of Ortho-McNeil-Janssen s payment obligations under the agreement, unless the agreement is terminated earlier by either party. The Company and Ortho-McNeil-Janssen each have the right to terminate the agreement early on 60 days prior written notice if the other party commits an uncured material breach of its obligations. Ortho-McNeil-Janssen may terminate the agreement at any time by providing at least 60 days prior written notice. Upon termination of the agreement, all rights to the compounds developed under the collaboration will revert to the Company.

For the year ended December 31, 2008, the Company recognized $2.3 million of revenues under the Ortho-McNeil-Janssen agreement, all of which was reimbursement for patent activities. For the year ended December 31, 2007, the Company recognized revenues of $13.4 million, which included $7.3 million from amortization of milestones and technology access and development fees received in prior years, $3.8 million for patent activities and $2.3 million in research funding. For the year ended December 31, 2006, the Company recognized revenues of $18.5 million, which included $7.5 million from amortization of milestones and technology access and development fees received in prior years, $5.0 million from a milestone earned, $2.4 million in research funding and $3.6 million for additional sponsored research and patent activities. At December 31, 2008, there were no deferred revenues remaining under this agreement.

Table of Contents

(12) EMPLOYEE BENEFIT PLAN

The Company has a defined contribution retirement plan for its US employees that complies with Section 401(k) of the Internal Revenue Code. All employees of the Company are eligible to participate in the plan. The Company matches 100% of each participant s voluntary contributions, subject to a maximum Company contribution of 6% of the participant s compensation. The Company s matching portion, which totaled $2.1 million in the year ended December 31, 2008 and $1.4 million in each of the years ended December 31, 2007 and 2006, vests over a five-year period from the date of hire.

(13) INCOME TAXES

In July 2006, the FASB issued FASB Interpretation No., or FIN, 48, Accounting for Uncertainty in Income Taxes An Interpretation of SFAS No. 109, which clarifies the accounting for uncertainty in income taxes recognized in an entity s financial statements in accordance with SFAS No. 109, Accounting for Income Taxes, and prescribes a recognition threshold and measurement attributes for financial statement disclosure of tax positions taken or expected to be taken on a tax return. Under FIN 48, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. FIN 48 also provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN 48 is effective for fiscal years beginning after December 15, 2006.

The Company adopted the provisions of FIN 48 on January 1, 2007. The total amount of unrecognized tax benefits as of the date of adoption was $8.6 million, which remains unchanged at December 31, 2008 given that it relates to matters that would be subject to a valuation reserve. Pursuant to Sections 382 and 383 of the Internal Revenue Code, annual use of the Company s net operating loss and credit carryforwards could be limited in the event of cumulative changes in ownership of more than 50%. Such a change occurred in prior years, and the Company is currently undergoing a Section 382/383 analysis. Until this analysis has been completed, the Company has removed, as of December 31, 2008, the deferred tax assets of $160.6 million for net operating losses reported on its tax returns and of $45.8 million for research and development credits from its deferred tax asset schedule. As of December 31, 2007, the Company had removed the deferred tax assets of $133.1 million for net operating losses and of $36.5 million for research and development credits from its deferred tax asset schedule. As such, the Company has recorded a corresponding decrease to its valuation allowance for each year.

The Company s practice is to recognize interest and/or penalties related to income tax matters in income tax expense. The Company did not have any accrued interest or penalties included in its consolidated balance sheets at December 31, 2008 or 2007, and did not recognize any interest and/or penalties in its consolidated statement of operations during the years ended December 31, 2008 or 2007.

The Company is subject to income taxation in the United States at the federal and state levels. The Company s tax years for 1997 and later are subject to examination by the United States and California tax authorities due to the carryforward of unutilized net operating losses and research and development credits. The Company is also subject to foreign income taxes in the countries in which it operates. The Company is currently not under examination by any taxing authorities.

The adoption of FIN 48 did not impact the Company s financial condition, results of operations or cash flows. At December 31, 2008 and 2007, the Company had net deferred tax assets of $16.9 million and $13.9 million, respectively. The deferred tax assets are primarily comprised of deferred revenues, SFAS No. 123R expense, depreciation and capitalized research and development costs. Due to uncertainties surrounding the Company s ability to generate future taxable income to realize these assets, the Company has not recognized these assets and a full valuation allowance has been established to offset the Company s net deferred tax assets. The future utilization of the Company s NOL and R&D credit carryforwards to offset future taxable income may be subject to a substantial annual limitation as a result of ownership changes that may have occurred previously or that could occur in the future. The Company has not yet determined when such an ownership

Table of Contents

change occurred; however, the Company is in the process of completing a Section 382/383 analysis regarding the limitation of the NOL and R&D credit carryforwards. Until this analysis has been completed, the Company has removed the deferred tax assets associated with these carryforwards from its deferred tax asset schedule and has recorded a corresponding decrease to their valuation allowance. When the Section 382/383 analysis is completed, the Company plans to update its unrecognized tax benefits under FIN 48. The Company expects the Section 382/383 analysis to be completed within the next twelve months.

The provision for income taxes (benefit), reported in total interest and other income (expense), net, is as follows, in thousands:

	December 31,		
	2008	2007	2006
Current:			
Federal	$ (254)	$	$
Deferred:			
Foreign	534		
	$ 280	$	$

During the year ended December 31, 2008, the Company recorded a tax benefit from the monetization of the research and development tax credit and incurred a deferred expense related to deductions taken for income tax purposes related to indefinite lived assets for which the related deferred tax liability is not available to offset deferred tax assets. The Company also has losses attributable to foreign operations with either no tax requirements or rates lower than US Federal rates primarily relating to research and development expenses charged to such foreign operations.

Significant components of the Company s deferred tax assets at December 31, 2008 and 2007 are shown below, in thousands. A valuation allowance of $17.4 million and $13.9 million has been recognized to offset the net deferred tax assets as of December 31, 2008 and 2007, respectively, as realization of such assets is uncertain. The Company has a deferred tax liability of $0.5 million related to the tax amortization of an intangible asset with an indefinite life for book purposes. This deferred tax liability cannot be considered a source of taxable income to support the realization of the deferred tax asset because the reversal of this deferred tax liability is considered indefinite. Such amounts compose the entire balance of the net deferred tax liability of $0.5 million at December 31, 2008. The valuation allowance increased by $3.5 million in 2008 compared to 2007, primarily due to an increase in SFAS No. 123R expense, foreign NOLs and temporary timing differences.

	December 31,	
	2008	2007
Deferred tax assets:		
Foreign net operating loss carryforwards	$ 1,624	$
Capitalized R&D (state)	1,510	1,920
Deferred revenues	6,942	7,426
Depreciation	2,679	2,030
SFAS No. 123R expense	3,349	2,383
Other, net	2,761	2,065
Total deferred tax assets	18,865	15,824
Deferred tax liabilities:		
Marketable securities	(97)	
Acquired intangible amortization	(1,864)	(1,942)
Total deferred tax liabilities	(1,961)	(1,942)
Net deferred tax assets	16,904	13,882
Valuation allowance	(17,438)	(13,882)
Net deferred tax assets	$ (534)	$

84

Table of Contents

At December 31, 2008, the Company had Federal tax net operating loss carryforwards of $407.6 million that will begin to expire in 2017 unless previously utilized. At the same date, the Company had state tax net operating loss carryforwards of $408.2 million, which will begin to expire in 2010. At December 31, 2008, $9.1 million of net operating loss carryforwards related to stock option exercises, which will result in an increase to additional paid-in capital and a decrease in income taxes payable at the time when the tax loss carryforwards are utilized. The Company also had Federal and California research and development tax credit carryforwards of $32.3 million and $20.4 million, respectively. The Federal research and development credit carryforwards will begin to expire in 2012 unless previously utilized. The California research and development credit carryforwards carry forward indefinitely.

The Company s income from continuing operations before provision (benefit) for income taxes were subject to taxes in the following jurisdictions for the following periods, in thousands:

	December 31,		
	2008	2007	2006
United States	$ (77,034)	$ (107,503)	$ (86,248)
Foreign	(160,259)	(35,663)	
	$ (237,293)	$ (143,166)	$ (86,248)

The provision for income taxes on earnings subject to income taxes differs from the statutory Federal rate at December 31, 2008, 2007 and 2006, due to the following, in thousands:

	December 31,		
	2008	2007	2006
Statutory Federal rate	$ (80,680)	$ (49,395)	$ (30,014)
State income tax, net of Federal benefit	(4,603)	(6,391)	(5,146)
Permanent items and other	(1,608)	3,053	739
SFAS No. 123R expense	2,307	1,589	1,208
Foreign losses at lower effective rates	53,060	12,125	
Research and development credit	(10,023)	(8,321)	(5,353)
Dividends and accretion on preferred stock		842	809
Warrant settlement	890		
Removal of NOLs and R&D credits	36,749	169,599	
Indefinite life intangible amortization	534		
Valuation allowance and other	3,654	(123,101)	37,757
Provision for income taxes	$ 280	$	$

(14) SUBSEQUENT EVENT

In late February 2009, the Company received gross proceeds of $15.0 million as reimbursement for improvements made to one of the Company s facilities. The Company paid applicable commissions of $0.4 million in early March 2009, resulting in net proceeds to the Company of $14.6 million.

Table of Contents

(15) QUARTERLY FINANCIAL DATA (UNAUDITED)

The following table presents quarterly data for the years ended December 31, 2008 and 2007, in thousands, except per share data:

2008	Quarter ended December 31	Quarter ended September 30	Quarter ended June 30	Quarter ended March 31	Year ended December 31
Revenues	$ 2,698	$ 1,857	$ 2,645	$ 2,609	$ 9,809
Net loss	(62,212)	(55,627)	(65,269)	(54,465)	(237,573)
Net loss allocable to common stockholders	(62,481)	(56,184)	(65,815)	(55,005)	(239,485)
Net loss per share allocable to common stockholders, basic and diluted	$ (0.84)	$ (0.76)	$ (0.89)	$ (0.75)	$ (3.24)

2007	Quarter ended December 31	Quarter ended September 30	Quarter ended June 30	Quarter ended March 31	Year ended December 31
Revenues	$ 4,569	$ 5,041	$ 4,811	$ 4,911	$ 19,332
Net loss	(40,386)	(32,278)	(38,608)	(31,895)	(143,166)
Net loss allocable to common stockholders	(40,926)	(32,813)	(39,132)	(32,409)	(145,280)
Net loss per share allocable to common stockholders, basic and diluted	$ (0.60)	$ (0.54)	$ (0.64)	$ (0.53)	$ (2.31)

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

None.

Item 9A. Controls and Procedures.

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective as of the end of the period covered by this annual report.

Management s Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining for us adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our CEO and VP, Finance and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2008.

The registered public accounting firm that audited the financial statements included in this Annual Report on Form 10-K has issued an attestation report on our internal control over financial reporting, and such report is included below.

Changes in Internal Control Over Financial Reporting

There was no change in our internal control over financial reporting during the fourth quarter of the period covered by this Annual Report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

Table of Contents

Report of Independent Registered Public Accounting Firm

The Board of Directors and Stockholders of Arena Pharmaceuticals, Inc.

We have audited Arena Pharmaceuticals, Inc. s 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 (the COSO criteria). Arena Pharmaceuticals, Inc. s management is responsible for maintaining effective internal control over financial reporting, and for its assessment of the effectiveness of internal control over financial reporting included in the accompanying Management s Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on the company s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, testing and evaluating the design and operating effectiveness of internal control based on the assessed risk, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

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 (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) 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 (3) 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.

In our opinion, Arena Pharmaceuticals, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2008, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets as of December 31, 2008 and 2007, and the related consolidated statements of operations, stockholders equity and cash flows for each of the three years in the period ended December 31, 2008 of Arena Pharmaceuticals, Inc. and our report dated March 13, 2009 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California

March 13, 2009

Table of Contents

PART III

Item 10. Directors, Executive Officers and Corporate Governance.

We have adopted a Code of Business Conduct and Ethics that applies to our directors and employees (including our principal executive officer, principal financial officer, principal accounting officer and controller), and have posted the text of the policy on our website (*www.arenapharm.com*) in connection with Investor materials. In addition, we intend to promptly disclose (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 on our website in the future.

The other information required by this item is incorporated herein by reference from the information under the captions Election of Directors, Compensation and Other Information Concerning Executive Officers, Directors and Certain Stockholders and Section 16(a) Beneficial Ownership Reporting Compliance contained in our proxy statement for the annual meeting of stockholders to be held in June 2009, or the Proxy Statement.

Item 11. Executive Compensation.

The information required by this item is incorporated herein by reference from the information under the captions Compensation and Other Information Concerning Executive Officers, Directors and Certain Stockholders, Compensation Committee Interlocks and Insider Participation and Compensation Committee Report contained in the Proxy Statement.

Item 12. Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters.

Information relating to securities authorized for issuance under our equity compensation plans is set forth in Item 5. Market for Registrant s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities above in this Annual Report. The other information required by this item is incorporated herein by reference from the information under the caption Security Ownership of Certain Beneficial Owners and Management contained in the Proxy Statement.

Item 13. Certain Relationships and Related Transactions, and Director Independence.

The information required by this item is incorporated herein by reference from the information under the captions Certain Relationships and Related Transactions and Election of Directors contained in the Proxy Statement.

Item 14. Principal Accountant Fees and Services.

The information required by this item is incorporated herein by reference from the information under the captions Independent Auditors Fees and Pre-approval Policies and Procedures contained in the Proxy Statement.

Table of Contents

PART IV

Item 15. Exhibits, Financial Statement Schedules.

(a) 1. **FINANCIAL STATEMENTS.**
Reference is made to the Index to Financial Statements under Item 8, Part II hereof.

2. **FINANCIAL STATEMENT SCHEDULES.**
The Financial Statement Schedules have been omitted either because they are not required or because the information has been included in the financial statements or the notes thereto included in this annual report.

3. **EXHIBITS**

EXHIBIT NO.	DESCRIPTION
2.1*	Agreement of Purchase and Sale, dated as of March 21, 2007, by and between Arena and BMR-6114-6154 Nancy Ridge Drive LLP (as assignee of BioMed Realty, L.P.) (incorporated by reference to Exhibit 2.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on May 8, 2007, Commission File No. 000-31161)
3.1	Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 3.1 to Arena s quarterly report on Form 10-Q for the quarter ended June 30, 2002, filed with the Securities and Exchange Commission on August 14, 2002, Commission File No. 000-31161)
3.2	Certificate of Amendment of the Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 4.2 to Arena s registration statement on Form S-8, filed with the Securities and Exchange Commission on June 28, 2006, Commission File No. 333-135398)
3.3	Amended and Restated Bylaws of Arena (incorporated by reference to Exhibit 3.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on October 4, 2007, Commission File No. 000-31161)
3.4	Certificate of Designations of Series A Junior Participating Preferred Stock of Arena, dated November 4, 2002 (incorporated by reference to Exhibit 3.3 to Arena s quarterly report on Form 10-Q for the quarter ended September 30, 2002, filed with the Securities and Exchange Commission on November 14, 2002, Commission File No. 000-31161)
3.5	Certificate of Designations of Series B-1 Convertible Preferred Stock and Series B-2 Convertible Preferred Stock of Arena, dated December 24, 2003 (incorporated by reference to Exhibit 3.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
4.1	Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on November 1, 2002, Commission File No. 000-31161)
4.2	Amendment No. 1, dated December 24, 2003, to Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
4.3	Amendment No. 2, dated November 16, 2006, to Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.3 to Amendment No. 2 to Arena s registration statement on Form 8-A filed with the Securities and Exchange Commission on November 16, 2006, Commission File No. 000-31161)

89

Table of Contents

EXHIBIT NO.	DESCRIPTION
4.4	Form of common stock certificates (incorporated by reference to Exhibit 4.2 to Arena s registration statement on Form S-1, as amended, filed with the Securities and Exchange Commission on July 19, 2000, Commission File No. 333-3594)
10.1**	1998 Equity Compensation Plan (incorporated by reference to Exhibit 10.1 to Arena s registration statement on Form S-1, as amended, filed with the Securities and Exchange Commission on June 22, 2000, Commission File No. 333-3594)
10.2**	Amended and Restated 2000 Equity Compensation Plan (incorporated by reference to Exhibit 10.2 to Arena s annual report on Form 10-K for the year ended December 31, 2001, filed with the Securities and Exchange Commission on March 15, 2002, Commission File No. 000-31161)
10.3**	2001 Arena Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.5 to Arena s quarterly report on Form 10-Q for the quarter ended June 30, 2006, filed with the Securities and Exchange Commission on August 4, 2006, Commission File No. 000-31161)
10.4**	2002 Equity Compensation Plan (incorporated by reference to Exhibit A to Arena s proxy statement regarding Arena s June 11, 2002, Annual Stockholders Meeting, filed with the Securities and Exchange Commission on April 23, 2002, Commission File No. 000-31161)
10.5+	Research Collaboration and License Agreement, dated effective as of October 21, 2002, by and between Arena and Merck & Co., Inc. (incorporated by reference to Exhibit 10.20 to Arena s annual report on Form 10-K for the year ended December 31, 2002, filed with the Securities and Exchange Commission on March 28, 2003, Commission File No. 000-31161)
10.6+	First Amendment to Research Collaboration and License Agreement, dated as of October 20, 2004, by and between Arena and Merck (incorporated by reference to Exhibit 10.19 to Arena s annual report on Form 10-K for the year ended December 31, 2004, filed with the Securities and Exchange Commission on March 2, 2005, Commission File No. 000-31161)
10.7	Second Amendment to Research Collaboration and License Agreement, dated as of February 20, 2007, by and between Arena and Merck (incorporated by reference to Exhibit 10.7 to Arena s annual report on Form 10-K for the year ended December 31, 2007, filed with the Securities and Exchange Commission on March 5, 2008, Commission File No. 000-31161)
10.8	Registration Rights Agreement dated December 24, 2003, among Arena and the investor signatories thereto (incorporated by reference to Exhibit 10.2 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
10.9	Form of Warrant dated December 24, 2003 (incorporated by reference to Exhibit 10.3 to Arena s report on Form 8-K filed with the Securities and Exchange Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
10.10	Settlement Agreement and Release, dated as of June 30, 2006, between Arena and Smithfield Fiduciary LLC. (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)
10.11	Amendment to Registration Rights Agreement, dated as of June 30, 2006, between Arena and Smithfield Fiduciary LLC. (incorporated by reference to Exhibit 10.2 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)
10.12	Amendment to Registration Rights Agreement, dated as of June 30, 2006, between Arena and Mainfield Enterprises, Inc. (incorporated by reference to Exhibit 10.3 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)

Table of Contents

EXHIBIT NO.	DESCRIPTION
10.13	Purchase and Sale Agreement and Joint Escrow Instructions, dated December 22, 2003, between Arena and ARE Nancy Ridge No. 3, LLC (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Securities and Exchange Commission on January 6, 2004, Commission File No. 000-31161)
10.14	Lease Agreement, dated December 30, 2003, between Arena and ARE Nancy Ridge No. 3, LLC (incorporated by reference to Exhibit 10.2 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on January 6, 2004, Commission File No. 000-31161)
10.15**	Arena s Deferred Compensation Plan, effective November 11, 2003, between Arena and participating executive officers (incorporated by reference to Exhibit 10.29 to Arena s annual report on Form 10-K for the year ended December 31, 2003, filed with the Securities and Exchange Commission on March 1, 2004, Commission File No. 000-31161)
10.16+	Collaboration and License Agreement, dated as of December 20, 2004, by and between Arena and Ortho-McNeil-Janssen Pharmaceuticals, Inc. (incorporated by reference to Exhibit 10.20 to Arena s annual report on Form 10-K for the year ended December 31, 2004, filed with the Securities and Exchange Commission on March 2, 2005, Commission File No. 000-31161)
10.17**	Form of stock option grant for non-employee directors under Arena s 2002 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on January 21, 2005, Commission File No. 000-31161)
10.18**	2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on April 13, 2007, Commission File No. 000-31161)
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10.20**	Form of Stock Option Grant Agreement Director under the Arena 2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.2 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
10.21**	Form of Incentive Stock Option Grant Agreement under the Arena 2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.3 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
10.22**	Form of Restricted Stock Grant Agreement under the Arena 2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.4 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
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10.24	Form of Performance-Based Restricted Stock Grant Agreement for non-executive employees under the Arena 2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on March 1, 2007, Commission File No. 000-31161)
10.25**	Form of Performance-Based Restricted Stock Grant Agreement for executive officers under the Arena 2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.2 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on March 1, 2007, Commission File No. 000-31161)

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EXHIBIT NO.	DESCRIPTION
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10.28**	Form of Indemnification Agreement between Arena and individuals serving as its directors and executive officers (incorporated by reference to Exhibit 10.3 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on June 18, 2007, Commission File No. 000-31161)
10.29	Lease agreement between BMR-6114-6154 Nancy Ridge Drive LLC and Arena for 6114 Nancy Ridge Drive, San Diego, California (incorporated by reference to Exhibit 10.5 to Arena s quarterly report on Form 10-Q for the quarter ended June 30, 2007, filed with the Securities and Exchange Commission on August 9, 2007, Commission File No. 000-31161)
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10.34*	Asset Purchase Agreement, dated as of December 18, 2007, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.38 to Arena s annual report on Form 10-K for the year ended December 31, 2007, filed with the Securities and Exchange Commission on March 5, 2008, Commission File No. 000-31161)
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10.38**	Amended and Restated Severance Benefit Plan, providing benefits for specified Arena executive officers, dated effective December 30, 2008 (incorporated by reference to Exhibit 10.1 to Arena s Form 8-K filed with the Securities and Exchange Commission on December 31, 2008, Commission File No. 000-31161)

Table of Contents

EXHIBIT NO.	DESCRIPTION
10.39**	Form of Amended and Restated Termination Protection Agreement, dated December 30, 2008, by and among Arena and the employees listed on Schedule 1 thereto (incorporated by reference to Exhibit 10.2 to Arena s Form 8-K filed with the Securities and Exchange Commission on December 31, 2008, Commission File No. 000-31161)
10.40**	2009 Annual Incentive Plan for Arena s executive officers (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on January 29, 2009, Commission File No. 000-31161)
21.1	Subsidiaries of the registrant
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 and Rule 13a-14(B) promulgated under the Securities Exchange Act of 1934

+ Confidential treatment has been granted for portions of this document.

* Exhibits and schedules to this agreement have been omitted pursuant to the rules of the Securities and Exchange Commission. We will submit copies of such exhibits and schedules to the Securities and Exchange Commission upon request.

** Management contract or compensatory plan or arrangement.

(b) **EXHIBITS**
See Item 15(a)(3) above.

(c) **FINANCIAL STATEMENT SCHEDULES**
See Item 15(a)(2) above.

Table of Contents

SIGNATURES

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

Arena Pharmaceuticals, Inc.,

a Delaware corporation

Date: March 16, 2009

By: /s/ JACK LIEF
Jack Lief

President and Chief Executive Officer

Pursuant to the requirements of the Securities 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.

	Signatures	Title	Date
By:	/s/ JACK LIEF **Jack Lief**	Chairman, President and Chief Executive Officer	March 16, 2009
By:	/s/ ROBERT E. HOFFMAN **Robert E. Hoffman, CPA**	Vice President, Finance and Chief Financial Officer (principal financial and accounting officer)	March 16, 2009
By:	/s/ DOMINIC P. BEHAN **Dominic P. Behan, Ph.D.**	Director	March 16, 2009
By:	/s/ DONALD D. BELCHER **Donald D. Belcher**	Director	March 16, 2009
By:	/s/ SCOTT H. BICE **Scott H. Bice**	Director	March 16, 2009
By:	/s/ HARRY F. HIXSON, JR. **Harry F. Hixson, Jr., Ph.D.**	Director	March 16, 2009
By:	/s/ J. CLAYBURN LA FORCE, JR. **J. Clayburn La Force, Jr., Ph.D.**	Director	March 16, 2009
By:	/s/ TINA S. NOVA **Tina S. Nova, Ph.D.**	Director	March 16, 2009
By:	/s/ PHILLIP M. SCHNEIDER **Phillip M. Schneider**	Director	March 16, 2009
By:	/s/ CHRISTINE A. WHITE	Director	March 16, 2009

	Christine A. White, M.D.			
By:	/s/ RANDALL E. WOODS	Director		March 16, 2009
	Randall E. Woods			

Table of Contents

EXHIBIT INDEX

EXHIBIT NO.	DESCRIPTION
2.1*	Agreement of Purchase and Sale, dated as of March 21, 2007, by and between Arena and BMR-6114-6154 Nancy Ridge Drive LLP (as assignee of BioMed Realty, L.P.) (incorporated by reference to Exhibit 2.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on May 8, 2007, Commission File No. 000-31161)
3.1	Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 3.1 to Arena s quarterly report on Form 10-Q for the quarter ended June 30, 2002, filed with the Securities and Exchange Commission on August 14, 2002, Commission File No. 000-31161)
3.2	Certificate of Amendment of the Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 4.2 to Arena s registration statement on Form S-8, filed with the Securities and Exchange Commission on June 28, 2006, Commission File No. 333-135398)
3.3	Amended and Restated Bylaws of Arena (incorporated by reference to Exhibit 3.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on October 4, 2007, Commission File No. 000-31161)
3.4	Certificate of Designations of Series A Junior Participating Preferred Stock of Arena, dated November 4, 2002 (incorporated by reference to Exhibit 3.3 to Arena s quarterly report on Form 10-Q for the quarter ended September 30, 2002, filed with the Securities and Exchange Commission on November 14, 2002, Commission File No. 000-31161)
3.5	Certificate of Designations of Series B-1 Convertible Preferred Stock and Series B-2 Convertible Preferred Stock of Arena, dated December 24, 2003 (incorporated by reference to Exhibit 3.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
4.1	Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on November 1, 2002, Commission File No. 000-31161)
4.2	Amendment No. 1, dated December 24, 2003, to Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
4.3	Amendment No. 2, dated November 16, 2006, to Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.3 to Amendment No. 2 to Arena s registration statement on Form 8-A filed with the Securities and Exchange Commission on November 16, 2006, Commission File No. 000-31161)
4.4	Form of common stock certificates (incorporated by reference to Exhibit 4.2 to Arena s registration statement on Form S-1, as amended, filed with the Securities and Exchange Commission on July 19, 2000, Commission File No. 333-3594)
10.1**	1998 Equity Compensation Plan (incorporated by reference to Exhibit 10.1 to Arena s registration statement on Form S-1, as amended, filed with the Securities and Exchange Commission on June 22, 2000, Commission File No. 333-3594)
10.2**	Amended and Restated 2000 Equity Compensation Plan (incorporated by reference to Exhibit 10.2 to Arena s annual report on Form 10-K for the year ended December 31, 2001, filed with the Securities and Exchange Commission on March 15, 2002, Commission File No. 000-31161)
10.3**	2001 Arena Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.5 to Arena s quarterly report on Form 10-Q for the quarter ended June 30, 2006, filed with the Securities and Exchange Commission on August 4, 2006, Commission File No. 000-31161)

Table of Contents

EXHIBIT NO.	DESCRIPTION
10.4**	2002 Equity Compensation Plan (incorporated by reference to Exhibit A to Arena s proxy statement regarding Arena s June 11, 2002, Annual Stockholders Meeting, filed with the Securities and Exchange Commission on April 23, 2002, Commission File No. 000-31161)
10.5+	Research Collaboration and License Agreement, dated effective as of October 21, 2002, by and between Arena and Merck & Co., Inc. (incorporated by reference to Exhibit 10.20 to Arena s annual report on Form 10-K for the year ended December 31, 2002, filed with the Securities and Exchange Commission on March 28, 2003, Commission File No. 000-31161)
10.6+	First Amendment to Research Collaboration and License Agreement, dated as of October 20, 2004, by and between Arena and Merck (incorporated by reference to Exhibit 10.19 to Arena s annual report on Form 10-K for the year ended December 31, 2004, filed with the Securities and Exchange Commission on March 2, 2005, Commission File No. 000-31161)
10.7	Second Amendment to Research Collaboration and License Agreement, dated as of February 20, 2007, by and between Arena and Merck (incorporated by reference to Exhibit 10.7 to Arena s annual report on Form 10-K for the year ended December 31, 2007, filed with the Securities and Exchange Commission on March 5, 2008, Commission File No. 000-31161)
10.8	Registration Rights Agreement dated December 24, 2003, among Arena and the investor signatories thereto (incorporated by reference to Exhibit 10.2 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
10.9	Form of Warrant dated December 24, 2003 (incorporated by reference to Exhibit 10.3 to Arena s report on Form 8-K filed with the Securities and Exchange Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
10.10	Settlement Agreement and Release, dated as of June 30, 2006, between Arena and Smithfield Fiduciary LLC. (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)
10.11	Amendment to Registration Rights Agreement, dated as of June 30, 2006, between Arena and Smithfield Fiduciary LLC. (incorporated by reference to Exhibit 10.2 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)
10.12	Amendment to Registration Rights Agreement, dated as of June 30, 2006, between Arena and Mainfield Enterprises, Inc. (incorporated by reference to Exhibit 10.3 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)
10.13	Purchase and Sale Agreement and Joint Escrow Instructions, dated December 22, 2003, between Arena and ARE Nancy Ridge No. 3, LLC (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Securities and Exchange Commission on January 6, 2004, Commission File No. 000-31161)
10.14	Lease Agreement, dated December 30, 2003, between Arena and ARE Nancy Ridge No. 3, LLC (incorporated by reference to Exhibit 10.2 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on January 6, 2004, Commission File No. 000-31161)
10.15**	Arena s Deferred Compensation Plan, effective November 11, 2003, between Arena and participating executive officers (incorporated by reference to Exhibit 10.29 to Arena s annual report on Form 10-K for the year ended December 31, 2003, filed with the Securities and Exchange Commission on March 1, 2004, Commission File No. 000-31161)
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10.18**	2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to Arena s report on Form 8-K filed with the Securities and Exchange Commission on April 13, 2007, Commission File No. 000-31161)
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