ARENA PHARMACEUTICALS INC
Form 10-K
March 16, 2010
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, 2009

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 whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes ¨ No ¨

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§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 $393.7 million as of June 30, 2009, 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 10, 2010, there were 101,125,581 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 2010, 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, 2009.

Table of Contents

ARENA PHARMACEUTICALS, INC.

TABLE OF CONTENTS

INFORMATION RELATING TO FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements, which 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, intend, plan, believe, anticipate, expect, estimate, predict, potential, continue, likely, or opportunity, the negative of these words or ot 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 is an unregistered service mark 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. APD is an abbreviation for Arena Pharmaceuticals Development.

Table of Contents

PART I

Item 1. Business.

We are a clinical-stage biopharmaceutical company focused on discovering, developing and commercializing oral drugs that target G protein-coupled receptors, or GPCRs, in four major therapeutic areas: cardiovascular, central nervous system, inflammatory and metabolic diseases. Our most advanced drug candidate is lorcaserin hydrochloride, or lorcaserin, for weight management, which has completed a pivotal Phase 3 clinical trial program. In December 2009, we submitted a New Drug Application, or NDA, for lorcaserin to the US Food and Drug Administration, or FDA, for regulatory approval, and the FDA has assigned an October 22, 2010 Prescription Drug User Fee Act, or PDUFA, date for their review of our application.

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.

In 2009, we reported positive results from the two trials comprising lorcaserin s pivotal Phase 3 clinical trial program, BLOOM (Behavioral modification and Lorcaserin for Overweight and Obesity Management) and BLOSSOM (Behavioral modification and LOrcaserin Second Study for Obesity Management). In addition to the pivotal program, we are evaluating lorcaserin in obese and overweight patients with type 2 diabetes in our Phase 3 BLOOM-DM (Behavioral modification and Lorcaserin for Overweight and Obesity Management in Diabetes Mellitus) trial. We plan to file the results of BLOOM-DM as a supplement to the NDA.

In addition to lorcaserin, our internal development programs include APD791, APD916 and APD811, all of which are oral drug candidates that we internally discovered. APD791 is a selective inverse agonist of the serotonin 2A receptor intended for the treatment of arterial thrombosis and other related conditions, and it has completed Phase 1a and Phase 1b clinical trials. APD916 is a histamine H3 inverse agonist intended for the treatment of narcolepsy and cataplexy, and we have filed an investigational new drug, or IND, application for this drug candidate. APD811 is a selective agonist of the prostacyclin receptor intended for the treatment of pulmonary arterial hypertension, and it is currently in preclinical development.

Along with our internal programs, we have a clinical-stage collaboration with Ortho-McNeil-Janssen Pharmaceuticals, Inc., or Ortho-McNeil-Janssen, to develop compounds for the treatment of type 2 diabetes and other disorders by targeting the GPR119 receptor.

We intend to commercialize our drug candidates with pharmaceutical companies 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, in our Swiss drug product manufacturing facility. We were incorporated in 1997.

Table of Contents

Our Research and Development Programs

We have developed a pipeline of drug candidates that target attractive market opportunities in several therapeutic areas. Our independent and partnered development-stage programs are as follows:

Development Program (Indication)	Development Status	Commercial Rights
Lorcaserin (weight management)	NDA filed; October 2010 PDUFA date	Arena
APD791 (arterial thrombosis)	Phase 1	Arena
APD597 (type 2 diabetes)	Phase 1	Ortho-McNeil-Janssen
APD916 (narcolepsy and cataplexy)	IND	Arena
APD811 (pulmonary arterial hypertension)	Preclinical	Arena

Note: The above table does not include our earlier-stage programs.

Due to continuing global economic challenges and our financial condition, we are focusing our activities and resources on our lorcaserin program. In addition to this program, we plan to continue our research activities at the reduced level in place since a June 2009 workforce reduction and to selectively initiate clinical trials for drug candidates based on the potential of a particular candidate and the estimated cost of the related clinical trials. Consistent with this approach, we intend to initiate a Phase 1 clinical trial of APD916 in 2010. We will continue to evaluate the focus of our activities and resources in light of changes in our financial condition, the status of our lorcaserin program and the global economic environment. We do not expect this approach to impact the progress of APD597 because Ortho-McNeil-Janssen is controlling and funding the development of this program.

Clinical Development Programs

Lorcaserin

Our most advanced drug candidate, lorcaserin, is for weight management, including weight loss and maintenance of weight loss. In December 2009, after completing a pivotal Phase 3 clinical trial program, we submitted an NDA for lorcaserin to the FDA. The NDA submission is based on a data package from lorcaserin s clinical development program that includes 18 clinical trials totaling 8,576 patients. In February 2010, the FDA accepted our lorcaserin NDA for filing and assigned a PDUFA date of October 22, 2010 for their review of our application.

According to the Centers for Disease Control and Prevention, approximately one-third of US adults were obese in 2007-2008. Studies have shown that a weight loss of 5% to 10% of body weight from baseline can result 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. Patients currently have limited pharmaceutical treatment options to help them lose weight.

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 90-100 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 exceeding the expected therapeutic range.

Table of Contents

Phase 3 Clinical Development.

The lorcaserin Phase 3 pivotal program consists of the BLOOM and BLOSSOM trials, which evaluated 7,190 patients for up to two years. In addition to the pivotal program, we are evaluating the safety and efficacy of lorcaserin for weight management in obese and overweight patients with type 2 diabetes in our Phase 3 BLOOM-DM trial. We plan to file the results of BLOOM-DM as a supplement to the NDA.

We initiated BLOOM in September 2006, and completed enrollment in February 2007 with 3,182 overweight and obese patients in about 100 centers in the United States. BLOOM was a randomized, double-blind and placebo-controlled trial evaluating 10 mg of lorcaserin dosed twice daily 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. All patients received echocardiograms at baseline, Months 6, 12 and 18, and at the end of the trial to assess heart valve function and other parameters over time.

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 completed enrollment in June 2009 with 604 patients.

The BLOSSOM trial evaluated 10 mg of lorcaserin dosed once or twice daily versus placebo over a one-year treatment period in obese patients with or without co-morbid conditions and overweight patients with at least one co-morbid condition at about 100 centers in the United States. The BLOOM-DM trial is evaluating 10 mg of lorcaserin dosed once or twice daily versus placebo over a one-year treatment period in overweight and obese patients with type 2 diabetes being treated with other oral agents at about 60 centers in the United States.

A standardized program of diet and exercise advice was included in the Phase 3 trials in accordance with current FDA guidelines, and the proportion of patients achieving 5% or greater weight loss from baseline at Week 52 is the first of three hierarchically ordered primary efficacy endpoints. The other primary efficacy endpoints are the difference in mean weight change compared to placebo at Week 52 and the proportion of patients achieving 10% or greater weight loss compared to placebo at Week 52. Secondary endpoints include changes in serum lipids, blood pressure, HbA1c levels and other indicators of glycemic control and quality of life.

Under the protocols for BLOSSOM and BLOOOM-DM, all patients receive echocardiograms at baseline, at Month 6 and at the end of the trial to assess heart valve function and other parameters over time. Consistent with our proposal, the FDA allowed us to eliminate the requirement to perform echocardiographic testing prior to enrolling patients in BLOSSOM and BLOOM-DM. As a result, patients with preexisting FDA-defined valvulopathy and other echocardiographic variants and abnormalities were enrolled in these 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 were no such echocardiographically defined exclusion criteria, although serial echocardiograms were obtained in BLOSSOM and are being obtained in BLOOM-DM to extend the lorcaserin safety database.

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.

Phase 3 Results: BLOOM

In BLOOM, lorcaserin patients achieved highly statistically significant categorical and absolute weight loss in Year 1, and over two-thirds of lorcaserin patients that achieved 5% or greater weight loss in Year 1 and

Table of Contents

continued treatment with lorcaserin in Year 2 maintained 5% or greater weight loss. Treatment with lorcaserin also resulted in statistically significant improvements as compared to placebo in multiple secondary endpoints associated with cardiovascular risk. Lorcaserin was very well tolerated, did not result in increased risk of depression or suicidal ideation and was not associated with the development of cardiac valvular insufficiency.

Efficacy

Measurements of efficacy using an intent-to-treat last observation carried forward, or ITT-LOCF, analysis showed that lorcaserin met all primary endpoints. Patients treated with lorcaserin achieved highly statistically significant categorical and average weight loss after one year:

- 47.5% of lorcaserin patients lost at least 5% of their body weight, compared to 20.3% for placebo. This result satisfies one of two alternate efficacy benchmarks in the most recent FDA draft guidance, which provides that a weight-management product can be considered effective if after one year of treatment the proportion of patients who lose at least 5% of baseline body weight in the active-product group is at least 35%, is approximately double the proportion in the placebo-treated group, and the difference between groups is statistically significant.

- 22.6% of lorcaserin patients lost at least 10% of their body weight, compared to 7.7% for placebo.

- Lorcaserin patients achieved an average weight loss of 5.8% of their body weight, or 12.7 pounds, compared to 2.2%, or 4.7 pounds, for placebo.

In addition to the ITT-LOCF data, patients treated with lorcaserin who completed one year of treatment according to the trial s protocol demonstrated the benefits of long-term treatment with lorcaserin:

- 66.4% of lorcaserin patients lost at least 5% of their body weight, compared to 32.1% for placebo, and the average weight loss in this responder population was 26 pounds.

- 36.2% of lorcaserin patients lost at least 10% of their body weight, compared to 13.6% for placebo.

- Lorcaserin patients achieved an average weight loss of 8.2% of their body weight, or 17.9 pounds, compared to 3.4%, or 7.3 pounds, for placebo.

Safety and Tolerability Profile

Treatment with lorcaserin was very well tolerated, resulting in very few adverse events with greater frequency than the placebo group. The most frequent adverse events reported in Year 1 and their rates for lorcaserin and placebo patients, respectively, were as follows: headache (18.0% vs. 11.0%), upper respiratory tract infection (14.8% vs. 11.9%), nasopharyngitis (13.4% vs. 12.0%), sinusitis (7.2% vs. 8.2%) and nausea (7.5% vs. 5.4%). Adverse events of depression, anxiety and suicidal ideation were infrequent and were reported at a similar rate in each treatment group.

The assessment of echocardiograms indicated that lorcaserin was not associated with valvular insufficiency during two years of use, rates of change in individual valvular regurgitation scores and the development of FDA-defined valvulopathy were similar between treatment groups. Rates of new FDA-defined valvulopathy in BLOOM were as follows: lorcaserin 10 mg twice daily (2.7%) and placebo (2.3%) at Week 52 and lorcaserin 10 mg twice daily (2.6%) and placebo (2.7%) at Week 104.

Secondary Endpoints

Treatment with lorcaserin over one year was associated with statistically significant improvements compared to placebo in multiple secondary endpoints, including:

Blood Pressure: systolic blood pressure, diastolic blood pressure and heart rate.

Lipids: total cholesterol, LDL cholesterol and triglycerides.

Table of Contents

Glycemic Parameters: fasting glucose, fasting insulin and insulin resistance.

Inflammatory Markers of Cardiovascular Risk: high-sensitivity C-Reactive Protein, or CRP, and fibrinogen.

Patient Disposition

BLOOM evaluated 3,182 patients with an average BMI of 36.2 and baseline weight of 220 pounds. The Week 52 completion rate was higher for patients on lorcaserin (54.9%) compared to patients on placebo (45.1%). Discontinuation rates for adverse events were similar in the lorcaserin and placebo groups for Year 1 (7.1% vs. 6.7%) and were the same in Year 2 (3.0%).

Phase 3 Results: BLOSSOM

Our BLOSSOM trial confirmed the BLOOM results and completed the lorcaserin Phase 3 pivotal registration program of 7,190 patients evaluated for up to two years. In BLOSSOM, lorcaserin met all primary efficacy and safety endpoints, and patients treated with lorcaserin achieved highly statistically significant categorical and absolute weight loss. Lorcaserin was very well tolerated and was not associated with depression or suicidal ideation. Treatment with lorcaserin also resulted in statistically significant improvements as compared to placebo in multiple secondary endpoints associated with cardiovascular risk.

Efficacy

Measurements of efficacy using an ITT-LOCF analysis showed that lorcaserin met all primary endpoints. Patients treated with 10 mg of lorcaserin dosed twice daily achieved highly statistically significant categorical and average weight loss after one year:

47.2% of lorcaserin patients lost at least 5% of their body weight, compared to 25.0% for placebo. As with BLOOM, this result satisfies one of two alternate efficacy benchmarks in the most recent FDA draft guidance for weight-management products described above in Phase 3 Results: BLOOM Efficacy.

22.6% of lorcaserin patients lost at least 10% of their body weight, compared to 9.7% for placebo.

Lorcaserin patients achieved an average weight loss of 5.9%, or 12.7 pounds, compared to 2.8%, or 6.3 pounds, for placebo.

In addition to the ITT-LOCF data, patients treated with 10 mg of lorcaserin dosed twice daily who completed the one-year trial according to the trial s protocol demonstrated the benefits of long-term treatment with lorcaserin:

63.2% of lorcaserin patients lost at least 5% of their body weight, compared to 34.9% for placebo.

35.1% of lorcaserin patients lost at least 10% of their body weight, compared to 16.1% for placebo.

Lorcaserin patients achieved an average weight loss of 7.9% of their body weight, or 17.0 pounds, compared to 3.9%, or 8.7 pounds, for placebo.

The quartile of lorcaserin patients with the greatest weight loss lost an average of 35.1 pounds, or 16.3%, of their body weight. These patients lost 36% more body weight than the top quartile of placebo patients.

Safety and Tolerability Profile

Lorcaserin was very well tolerated. The most frequent adverse events and their rates for lorcaserin twice daily and placebo patients, respectively, were as follows: headache (15.6% vs. 9.2%), upper respiratory tract

Table of Contents

infection (12.7% vs. 12.6%), nasopharyngitis (12.5% vs. 12.0%), nausea (9.1% vs. 5.3%) and dizziness (8.7% vs. 3.9%). Adverse events of depression, anxiety and suicidal ideation were infrequent and were reported at a similar rate in each treatment group.

Echocardiographic evaluations showed no association between lorcaserin and the development of heart valve insufficiency. Rates of new FDA-defined valvulopathy in BLOSSOM at Week 52 were as follows: lorcaserin 10 mg twice daily (2.0%), 10 mg once daily (1.4%) and placebo (2.0%).

Secondary Endpoints

Treatment with lorcaserin over one year was associated with statistically significant improvements or favorable trends compared to placebo in multiple secondary endpoints, including blood pressure and lipids.

Patient Disposition

BLOSSOM evaluated 4,008 patients with an average BMI of 35.9 and baseline weight of 220 pounds. The Week 52 completion rate was higher for patients on lorcaserin 10 mg twice daily (57.2%) and 10 mg once daily (59.0%) compared to patients on placebo (52.0%). Discontinuation rates for adverse events were low and as follows: lorcaserin 10 mg twice daily (7.2%), 10 mg once daily (6.2%) and placebo (4.6%).

Comparison of BLOOM and BLOSSOM Results

In both BLOOM and BLOSSOM, lorcaserin s excellent tolerability allowed patients to begin treatment on the full dose immediately, without a titration period, and achieve rapid weight loss. In both trials, statistically significant weight loss compared to placebo was shown at the first trial visit, two weeks following randomization. In addition, based on the integrated echocardiographic data set from BLOOM and BLOSSOM, lorcaserin did not increase the risk of cardiac valvulopathy according to criteria requested by the FDA.

The efficacy for the BLOOM and BLOSSOM trials after one year of treatment is summarized in the table below.

	BLOOM		BLOSSOM		
	10 mg BID*	Placebo	10 mg BID*	10 mg QD*	Placebo
³5% weight loss (Per protocol)	66.4%	32.1%	63.2%	53.1%	34.9%
³5% weight loss (ITT-LOCF)	47.5%	20.3%	47.2%	40.2%	25.0%
³10% weight loss (Per protocol)	36.2%	13.6%	35.1%	26.3%	16.1%
³10% weight loss (ITT-LOCF)	22.6%	7.7%	22.6%	17.4%	9.7%
Mean weight loss (Per protocol)	8.2%	3.4%	7.9%	6.5%	3.9%
Mean weight loss (ITT-LOCF)	5.8%	2.2%	5.9%	4.8%	2.8%

* p<0.0001 compared to placebo

Prior Clinical Development of Lorcaserin.

Prior to initiating our pivotal Phase 3 clinical trial program, we 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 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

Table of Contents

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 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 10 mg 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 doses of 10 mg and 15 mg once daily and 10 mg twice daily, respectively, compared to 0.7 pounds for the placebo group. Using an ITT-LOCF 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 and 15 mg once daily and 10 mg 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% or greater weight loss from baseline were 13% (p=0.015), 20% (p<0.001) and 31% (p<0.001) at doses of 10 mg and 15 mg once daily and 10 mg twice daily, respectively, compared to 2% in the placebo group. Lorcaserin was 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. Average weight loss increased progressively at each time point measured throughout the trial for all lorcaserin dose groups and was dose-dependent.

An assessment of echocardiograms at baseline and Day 85 in the Phase 2a trial 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.

Lorcaserin Intellectual Property.

As of February 1, 2010, we owned issued patents that cover compositions of matter for lorcaserin and related compounds and methods of treatment utilizing lorcaserin and related compounds in 62 jurisdictions, including the United States, Japan, Germany, France, the United Kingdom, Italy, Spain and Canada, and had applications pending in approximately 8 other jurisdictions, of which those with the largest pharmaceutical markets were Brazil and Poland. Based on sales statistics provided by IMS Health, the jurisdictions where lorcaserin patents have been issued accounted for more than 93% of global pharmaceutical sales in 2008, while jurisdictions where lorcaserin patents remain pending accounted for more than 3% of global pharmaceutical sales in that same year. The patents on lorcaserin issued by the US Patent and Trademark Office have serial numbers US 6,953,787 and US 7,514,422, while 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 any patent term adjustment or extension regimes of any country or any additional term of exclusivity we might obtain by virtue of the later filed patent applications.

APD791

Our next most advanced internal drug candidate is an anti-thrombotic drug candidate, APD791, which has completed Phase 1a and Phase 1b clinical trials. We are not planning any additional clinical trials for APD791 at

Table of Contents

this time due to our current focus on lorcaserin, the estimated cost of conducting a Phase 2 clinical trial for APD791, and our financial condition, but will consider resuming development of APD791 in the future. 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 14.9 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.

Mechanism of Action 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 was associated with an improved separation, relative to existing therapies, of the dose needed for inhibition of thrombosis versus the dose that increased bleeding, 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, 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 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-

Table of Contents

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-amplified platelet aggregation.

Ortho-McNeil-Janssen Collaboration

We are collaborating with Ortho-McNeil-Janssen on the development of compounds for the treatment of type 2 diabetes and other disorders by targeting GPR119. The International Diabetes Federation estimates that approximately 285 million adults worldwide will have diabetes in 2010, and that approximately 90-95% 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. 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 possibly 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 of Action 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 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 Collaboration 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-

Table of Contents

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 collaboration. Ortho-McNeil-Janssen s Phase 1 program is evaluating 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, 2009, we received $27.5 million from Ortho-McNeil-Janssen in upfront and milestone payments and $17.3 million for patent activities and additional sponsored research. 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 Ortho-McNeil-Janssen develops under the collaboration, 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.

Merck Collaboration

In October 2002, we initiated a collaboration with Merck & Co., Inc., or Merck, on three GPCRs to develop therapeutics for atherosclerosis and other disorders. Under the collaboration, Merck advanced MK-0354, a first generation niacin receptor agonist, and MK-1903, a second generation niacin receptor agonist, into Phase 2 clinical trials. According to Merck, elevation of HDL cholesterol relative to placebo in MK-1903 s Phase 2a clinical trial did not meet the trial s pre-specified primary objective for efficacy. In December 2009, following evaluation of the Phase 2 trial results for MK-1903, Merck discontinued development of MK-1903 and notified us of its election to terminate the agreement, which becomes effective on March 22, 2010. Upon termination, all licenses granted to Merck under the agreement become non-exclusive. According to Merck, no safety signals were implicated as drivers of the decision to discontinue development under the agreement.

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 prostacyclin 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. Prostacyclin receptor agonists are among the treatments administered as standard of care for advanced PAH. Prostacyclin receptor agonists improve mortality and exercise tolerance in PAH patients, but currently available prostacyclin receptor agonists are rapidly metabolized and have poor oral bioavailability. Consequently, currently available prostacyclin receptor agonists need to be administered frequently or continuously through 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 prostacyclin receptor. Agonists of the prostacyclin receptor relax vascular smooth muscle, inhibit platelet aggregation and may inhibit pulmonary vascular remodeling. Prostacyclin receptor agonists improve cardiovascular functioning by counteracting the vasoconstriction that occurs in PAH, and may have other beneficial effects on the pathophysiology of this disease.

Table of Contents

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 prostacyclin 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 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 that will provide therapeutic benefit for heart disease.

Central Nervous System. APD916 is our internally discovered drug candidate for the treatment of narcolepsy and cataplexy. APD916 has completed preclinical development, and we filed an IND for the drug candidate in 2009.

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 narcolepsy and cataplexy.

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 reduce the severity of disease in preclinical autoimmune disease models of multiple sclerosis, such as the experimental autoimmune encephalomyelitis, or EAE, model, and the collagen-induced arthritis, or CIA, animal disease model.

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 these 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 weight management. 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.

Table of Contents

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 collaborators, 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 Focus, 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.

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:

- ***Commercialize lorcaserin.*** We intend to commercialize lorcaserin initially in the US and then in other major markets independently or with a pharmaceutical company or companies.

Table of Contents

Selectively advance our other lead candidates. We intend to selectively advance our pipeline of drug candidates independently or through licensing, collaborations or other opportunities.

Maintain research capabilities to discover and develop additional drug candidates. 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 intend to maintain discovery research capabilities to fuel our pipeline.

Focus on attractive market opportunities. We intend to continue to develop drug candidates with large market opportunities, including obesity and type 2 diabetes, but also consider smaller market opportunities that might offer attractive commercial potential.

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

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 February 1, 2010, we owned, in part or in whole, or had exclusively licensed the following patents: 33 in the United States, 7 in Japan, 23 in Germany, 23 in France, 23 in the United Kingdom, 21 in Italy, 21 in Spain, 6 in Canada, 10 in China, and approximately 787 in other jurisdictions. In addition, as of February 1, 2010, we had approximately 1,123 patent applications before the US Patent and Trademark Office, foreign patent offices and international patent authorities. These patents and patent applications are divided into 103 distinct families of related patents that are directed to chemical compositions of matter, methods of treatment using chemical compositions, research or GPCR genes, CART, Melanophore technology, other novel screening methods or pharmaceutical manufacturing processes. One of our patent families was exclusively in-licensed and contains a single issued patent. Ninety-four of our patent families, which include a total of about 852 patents and 1,061 patent applications, were invented solely by our employees. The remaining 8 of our patent families, which include a total of about 101 patents and 62 patent applications, were the subject of joint inventions by our employees and the employees of other entities. 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 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

Table of Contents

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 in the United States under the brand name alli.

In addition to currently marketed obesity drugs, there are potentially competing obesity drug candidates that are in development at various pharmaceutical and biotechnology companies, including drug candidates in similar stages of development as lorcaserin. Some programs in discovery, preclinical or other stages of development may include serotonin 2C programs. In December 2009, VIVUS, Inc., or VIVUS, submitted an NDA with the FDA for a drug candidate for the treatment of obesity that is a combination of phentermine and topiramate. In March 2010, VIVUS announced that the FDA s target date to complete its review of their NDA is October 28, 2010. In addition, Orexigen Therapeutics, Inc., has stated that it expects to submit, by the end of April 2010, an NDA with the FDA for a drug candidate for the treatment of obesity that is a combination of bupropion and naltrexone.

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 in the therapeutic areas targeted by our principal drug candidates. 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.

Table of Contents

We may rely on collaborators for support of development programs and for the manufacturing and marketing of drug candidates. Such 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 are subject to our agreements. 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 Warning Letters, 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 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 Good Laboratory Practice, or GLP, regulations;
- submission to the FDA of an IND, which must become effective before human clinical trials may begin and be updated annually;
- 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 after completion of all pivotal clinical trials;
- a determination by the FDA within 60 days of its receipt of the NDA to file the NDA for review;
- satisfactory completion of an FDA pre-approval inspection, or PAI, of the manufacturing facilities at which the active pharmaceutical ingredient, or API, and finished drug product, or FDP, are produced and tested 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 in the United States. Prior to commercialization, centrally acting drugs are generally subject to review and potential scheduling by the Drug Enforcement Administration of the US Department of Justice, or DEA.

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.

The results of preclinical tests (which include laboratory evaluation as well as GLP studies to evaluate toxicity in animals) for a particular drug candidate, together with related 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. IND submissions 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

Table of Contents

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 and privacy of individually identifiable information.

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, typically in healthy humans, but in some cases in patients.

Phase 2 Clinical Trials. Studies are generally conducted in a limited patient population to identify possible adverse effects and safety risks, explore the initial efficacy of the product for specific targeted indications and to determine dose range or pharmacodynamics. 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.

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, provide substantial evidence of clinical efficacy and further test for safety in an expanded and diverse patient population at multiple, geographically dispersed clinical trial centers.

Phase 4 Clinical Trials. The FDA may approve an NDA for a drug candidate, but require that the sponsor conduct additional clinical trials to further assess the drug after NDA approval under a post-approval commitment. 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 drug development, preclinical studies and clinical trials are submitted to the FDA as part of an NDA. NDAs also must contain extensive manufacturing and control information. An NDA must be accompanied by a significant user fee, which is waived for the first NDA submitted by a qualifying small business. Once the submission has been accepted for filing, the FDA s goal is to review applications within 10 months of submission or, if the application relates to an unmet medical need in a serious or life-threatening indication, six months from submission. 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 by issuing a Complete Response Letter if the applicable regulatory criteria are not satisfied. A Complete Response Letter may require additional clinical data and/or an additional pivotal Phase 3 clinical trial(s), and/or other significant, expensive and time-consuming requirements related to clinical trials, preclinical studies or manufacturing. Data from clinical trials are not always conclusive and the FDA may interpret data differently than we or our collaborators interpret data. Approval may occur with Risk Evaluation and Mitigation Strategies, or REMS, that limit the labeling, distribution or promotion of a drug product. 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. Products manufactured or distributed pursuant to FDA approvals are subject to continuing regulation by the FDA, including recordkeeping, annual product quality review and

Table of Contents

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 are 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 observation(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 manufacturing facility. Swissmedic, a public service organization of the Swiss federal government, is the central Swiss agency for the authorization and supervision of therapeutic products. Our Swiss manufacturing facility has been inspected by the competent regional authorities (Regionales Heilmittelinspektorat der Nordostschweiz, Basel, Switzerland), acting on behalf of Swissmedic, which issued GMP and production licenses to Arena GmbH for the production of drugs. The production license is valid until July 2012. The FDA has not inspected the Arena GmbH facility since our acquisition of the facility.

DEA Regulation. The 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.

Table of Contents

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

In January 2008, we acquired from Siegfried certain drug product facility assets, including manufacturing facility production licenses, 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 generating revenue from the manufacture of certain drug products for Siegfried. We have also used this facility to produce and package lorcaserin tablets for registration and, if lorcaserin is approved, we plan to use this facility for the commercial production and packaging of lorcaserin. However, this facility has not been inspected by the FDA since our acquisition of the facility, and may be inspected by the FDA prior to approval of our lorcaserin NDA. We also plan to use this facility for producing and packaging tablets and capsules for other programs.

All of our manufacturing services revenues are attributable to Siegfried, which is our only customer for such services. Our revenues of $10.4 million for the year ended December 31, 2009 included $6.6 million, or 63.3% of our total revenues, from Siegfried. 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 recorded no 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 multiple 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, API excipients, components and drug products for our lead development projects. The loss of a primary source of supply would potentially delay our lead development projects and commercialization efforts, including for lorcaserin, and potentially those of current or future 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 (Verordnung über den Verkehr mit Abfällen, VeVA), the Chemicals Ordinance (Chemikalienverordnung, ChemV) and the Ordinance on Protection against Major Accidents (Störfallverordnung, StFV). The competent authorities in Switzerland for the implementation of environmental regulations are BAFU (Bundesamt für Umwelt / Federal Office for the Environment), which is the Swiss federal agency for the environment, and the respective authorities of the Canton of Aargau (Abteilung für Umwelt, AfU). Occupational health and safety is regulated by the EKAS (Eidgenössische Koordinationskommission 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.

Table of Contents

The Registration, Evaluation, Authorization and Restriction of Chemicals Regulation (EC) No 1907/2006, commonly referred to as REACH, is Europe s broad chemicals legislation, which is directly applicable in all EU Member States. REACH creates a new system for gathering information, assessing risks to human health and the environment, and authorizing or restricting the marketing and use of chemicals produced or supplied in the EU. It applies to EU producers, importers and distributors/retailers of products, and users of chemicals in the course of industrial or professional activities. In compliance with REACH, we have registered relevant materials that could be imported into the EU by us or our third-party manufactures for the production of lorcaserin and select components of other of our more advanced drug candidates.

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 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 are the primary source of our expenses. Our research and development expenses include personnel costs, research supplies, facility and equipment costs, clinical and preclinical study fees and manufacturing costs. Such expenses totaled $110.2 million for the year ended December 31, 2009, $204.4 million for the year ended December 31, 2008 and $149.5 million for the year ended December 31, 2007. We include research sponsored by collaborators in our total research and development expenses. We estimated that research expenses funded by collaborators totaled $4.6 million in 2007. Our collaborators did not fund any of our research expenses in 2008 or 2009.

Employees

As of February 28, 2010, we had a total of 358 employees, including 305 in research, development and manufacturing and 53 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, or 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.

Table of Contents

Risks Relating to Our Business

We will need additional funds to conduct our planned research, development and commercialization efforts, we may not be able to obtain such funds and we 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 compounds that could become marketed drugs. We expect that our losses will continue to be substantial for at least the short term and that our operating expenses will also continue to be substantial, even if we or our current or future collaborators are successful in advancing our 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 collaborative or other agreement with a pharmaceutical company or companies to bring our most advanced drug candidate, lorcaserin, to market, if ever, and we may not be able to secure adequate funding or find a pharmaceutical company to commercialize lorcaserin at all or on terms you or we believe are favorable. We also believe that it may be difficult for us to obtain additional financing or enter into strategic relationships on terms that we or third parties, including investors, analysts, or potential collaborators, view as acceptable, if at all. If adequate funding is not available, we will have to eliminate or further postpone or scale back some or all of our research or development programs or delay the advancement of one or more of such programs, including our plans to commercialize lorcaserin.

The current global economic environment poses severe challenges to our business strategy, which relies on access to capital from the markets or 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 collaborators to advance our internal programs, even if we achieve 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, we rely on credit rating agencies to help evaluate the riskiness of investments, and such agencies may not accurately predict such risk. In addition, such 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 lorcaserin and depend on its marketing approval and commercial success.

We are focusing our near-term activities and resources on lorcaserin, and we believe a significant portion of the value of our company relates to our ability to obtain marketing approval for and commercialize this drug candidate. The marketing approval and successful commercialization 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

Table of Contents

others expectations, the market price of our common stock could decline significantly. In 2010, for example, we could learn whether the US Food and Drug Administration, or FDA, refers our New Drug Application, or NDA, for lorcaserin to an advisory committee and, if so, whether that committee s recommendation is positive or negative, and whether the FDA will approve lorcaserin or issue a Complete Response Letter and, if approved, whether the DEA will schedule lorcaserin as a controlled substance and, if so, the level of scheduling.

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.

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 communities, 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. Stock prices of companies in our industry 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 drug candidates and those under collaborative agreements. 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 lorcaserin.

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.

We have significant indebtedness and debt service obligations as a result of our Deerfield secured loan, which may adversely affect our cash flow, cash position and stock price.

We substantially increased our total debt and debt service obligations when we received a $100.0 million loan from Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P., Deerfield Partners, L.P., Deerfield International Limited, Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited, or collectively Deerfield, on July 6, 2009. This loan matures on June 17, 2013, and the outstanding principal accrues interest at a rate of 7.75% per annum on the stated principal balance, payable quarterly in arrears. Our agreement with Deerfield sets forth the following schedule of our required principal repayments: $10.0 million in July 2010, $20.0 million in July 2011, $30.0 million in July 2012, and $40 million at maturity. We may be required to make the scheduled repayments earlier in connection with certain equity issuances. For example, we were required to make the first scheduled repayment of $10.0 million in connection with the closing of our July 2009 public offering. In addition, we are required to make mandatory prepayments of the loan upon certain changes of control and in the event we issue equity securities (other than certain exempted issuances) at a price of less than $2.00 per share.

Table of Contents

On or before June 17, 2011, the lenders may elect to provide us with an additional loan in a principal amount of up to $20.0 million under similar terms as the $100.0 million loan, with the additional loan also maturing on June 17, 2013.

In the future, if we are unable to generate cash from operations sufficient to meet these debt obligations, we will need to obtain additional funds from other sources, which may include one or more financings. However, we may be unable to obtain sufficient additional funds when we need them on favorable terms or at all. The sale of equity or convertible debt securities in the future may be dilutive to our stockholders, and debt-financing arrangements may require us to enter into covenants that would restrict certain business activities or our ability to incur further indebtedness, and may contain other terms that are not favorable to our stockholders or us.

Also, if we are unable to generate cash from operations or obtain additional funds from other sources sufficient to meet these debt obligations, or we need to use existing cash to fund these debt obligations, we may have to delay or curtail some or all of our research, development and commercialization programs or sell or license some or all of our assets. Our indebtedness could have significant additional negative consequences, including, without limitation:

- increasing our vulnerability to general adverse economic conditions;
- limiting our ability to obtain additional funds; and
- placing us at a possible competitive disadvantage to less leveraged competitors and competitors that have better access to capital resources.

If an event of default occurs under our loan documents, including in certain circumstances the warrants issued in connection with the loan transaction, the lenders may declare the outstanding principal balance and accrued but unpaid interest owed to them immediately due and payable, which would have a material adverse affect on our financial position. We may not have sufficient cash to satisfy this obligation. Also, if a default occurs under our secured loan, and we are unable to repay the lenders, the lenders could seek to enforce their rights under their security interests in substantially all of our assets. If this were to happen, we may lose some or all of our assets in order to satisfy our debt, which could cause our business to fail.

If we do not commercialize lorcaserin with a pharmaceutical company or companies or raise additional funds, we may have to commercialize lorcaserin on our own and curtail certain of our activities.

We may not be able to enter into agreements to commercialize lorcaserin on acceptable terms, if at all. If we are unable to enter into such agreements, and we must develop our own commercialization capabilities for lorcaserin, we will require additional capital to develop such capabilities and the marketing and sale of lorcaserin may be delayed or limited. Even if we were able to develop our own commercialization capabilities, we have not previously commercialized a drug, and our limited experience may make us less effective at marketing and selling lorcaserin than a pharmaceutical company. Our lack of corporate experience and adequate resources may impede our effort to successfully commercialize lorcaserin.

We face competition in our search for pharmaceutical companies to commercialize lorcaserin. If our competitors are able to establish commercialization arrangements with companies who have substantially greater resources than we have, our competitors may be more successful in marketing and selling their drugs, and our ability to successfully commercialize our drug candidates will be limited.

In addition, if we do not enter into a commercialization agreement with a pharmaceutical company on favorable terms or raise adequate capital, we will need to significantly curtail future activities and expenditures. Any such reductions may adversely impact our lorcaserin development and commercialization timeline or narrow or slow the development of our pipeline, which we believe would reduce our opportunities for success.

Table of Contents

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. 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.

Neither collaborators nor we are permitted to market our drug candidates in the United States until we receive regulatory approval from the FDA. 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. None of our drug candidates have received marketing approval. To market a new drug in the United States, we must submit to the FDA and obtain FDA approval of an 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 6 months for priority review. The FDA s review goals are subject to change, and it is unknown whether the review of our NDA filing for lorcaserin, or an NDA filing for any of our other drug candidates, will be completed within the FDA s 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 submitted with the FDA around the same time period. We submitted our NDA for lorcaserin in December 2009. VIVUS, Inc., also submitted an NDA with the FDA in December 2009 for a drug candidate for the treatment of obesity. In addition, Orexigen Therapeutics, Inc., has stated that it expects to submit an NDA with the FDA for a drug candidate for the treatment of obesity by the end of April 2010. The review of such NDAs may impact the review of our lorcaserin NDA. Furthermore, any drug that acts on the central nervous system, or CNS, such as lorcaserin, has the potential to be scheduled as a controlled substance by the Drug Enforcement Administration of the US Department of Justice, or DEA. DEA scheduling is an independent process that can delay drug launch beyond an NDA approval date.

Regulatory approval of an NDA or NDA supplement is not guaranteed. The number and types 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. Despite the time and expense exerted in preclinical and clinical studies, 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 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 s interpretation and our interpretation of data from preclinical studies and clinical trials may differ significantly;
- 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 an NDA submission due to, among other reasons, the content or formatting of the submission.

Table of Contents

With respect to lorcaserin, the FDA draft guidance document Developing Products for Weight Management dated February 2007 provides two alternate benchmarks for the development of drugs for the indication of weight management. The guidance provides that, in general, a product can be considered effective for weight management if after one year of treatment either of the following occurs: (1) the difference in mean weight loss between the active-product and placebo-treated groups is at least 5% and the difference is statistically significant, or (2) the proportion of patients who lose at least 5% of baseline body weight in the active-product group is at least 35%, is approximately double the proportion in the placebo-treated group, and the difference between groups is statistically significant. While we believe the results of our pivotal Phase 3 clinical trials of lorcaserin satisfy the latter of the two alternate efficacy benchmarks, the FDA may disagree with our view or may assert that its draft guidance is not binding or impose other approval conditions that could delay or preclude approval of our lorcaserin NDA.

With the exception of our recently submitted lorcaserin NDA, we have not previously submitted NDAs to the FDA. This lack of corporate experience may impede our ability to obtain FDA approval in a timely manner, if at all, for lorcaserin or our other 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 US or foreign regulatory authority, or regulatory interpretation of these data and procedures may be unfavorable. 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, restricted distribution methods or other limitations required by a Risk Evaluation and Mitigation Strategies, or REMS. 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.

To market any drugs outside of the United States, we and current or future 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.

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 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 also require that the sponsor of the NDA conduct additional clinical trials to further assess the drug after NDA approval under a post-approval commitment. Such additional studies may be

Table of Contents

costly and may impact the commercialization of the drug. The FDA or other regulatory agencies may also impose significant restrictions on the indicated uses for which such drug may be marketed.

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 Good Manufacturing Practices, or cGMPs, 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 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 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 our drugs and competitive drugs;

efficacy and safety of our drug candidates;

Table of Contents

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.

In addition, 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. Based on our interpretation of a formal abuse potential clinical trial we conducted, lorcaserin s clinical safety profile and certain other factors, we believe that lorcaserin has a limited abuse potential. If regulatory agencies disagree and lorcaserin were to be 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.

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

We 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 more 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 potential adverse publicity in the marketplace, which could affect clinical enrollment or sales if lorcaserin is approved for commercialization. We have completed two large pivotal lorcaserin trials of one and two years duration, both of which showed no apparent effects on heart valves or pulmonary artery pressures, but these results will need to be reviewed by the FDA.

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. Clinical trials and preclinical studies are needed to demonstrate that 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;

Table of Contents

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 current or future collaborators, may take significantly longer than expected to complete. In addition, the FDA, other regulatory authorities, 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;

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. We have experienced setbacks in our internal and partnered 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.

Table of Contents

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, except lorcaserin. 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. 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 to be abandoned.

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 our preclinical compounds 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 ability to generate significant revenues, for at least the short term, depend upon the actions of our current and future collaborators.

We expect that, for at least the short term, our ability to generate significant revenues will depend upon the success of our existing collaboration with Ortho-McNeil-Janssen Pharmaceuticals, Inc., or Ortho-McNeil-Janssen, and our ability to enter into new collaborations. Future revenues from our collaboration with 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 Ortho-McNeil-Janssen if our own or Ortho-McNeil-Janssen s research, development or, ultimately, marketing efforts are unsuccessful. In addition, we intend to commercialize lorcaserin with a pharmaceutical company or companies, and any such company may not be successful in such efforts.

Typically, collaborators (and not us) control the development of compounds subject to the collaboration after we have met early preclinical scientific milestones. In addition, we may not have complete access to information about the results and status of such collaborators clinical trials and regulatory programs and strategies. We are not entitled to the more significant milestone payments under our agreement with Ortho-McNeil-Janssen until it has advanced compounds in clinical testing.

Our collaborators may not devote adequate resources to the research, development or commercialization of our compounds and may not develop or implement a successful clinical, regulatory or commercialization 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

Table of Contents

milestones. In addition, our collaboration with 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 enter into agreements 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, approval or successful commercialization, if at all.

We may participate in new 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 collaborations, joint ventures, spin-offs, restructurings, divestitures, business combinations and investments. In addition, another entity may pursue us as an acquisition target. Any such transactions 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.

Many of the drugs 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 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, and we may not realize the full commercial potential of our drug candidates.

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, the ownership of intellectual property, or research and development or commercialization strategy. Collaborators may stop supporting our drug candidates or drugs if they develop or

Table of Contents

obtain rights to competing drug candidates or drugs. In addition, collaborators may fail to effectively develop or commercialize our drug candidates, which may result in us not realizing the full commercial potential of our drug candidates. If any conflicts arise with Ortho-McNeil-Janssen 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 drug candidates, and in turn prevent us from generating revenues:

- unwillingness on the part of a collaborator to pay us research funding, milestone payments, royalties or other payments 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 inadequate third-party coverage and reimbursement could make entering into agreements with pharmaceutical companies to collaborate or commercialize our drugs more difficult and diminish our revenues.

Setbacks in the pharmaceutical and biotechnology industries, such as those caused by safety concerns relating to drugs like Meridia, 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, the FDA may be more cautious in approving our drug candidates based on safety concerns relating to adverse events relating to these or other drugs, or 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 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 other companies, including third-party manufacturers, and we or such other companies 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

30

Table of Contents

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, lot release, 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;
- capacity of our facilities or those of our contract manufacturers;
- facility contamination by microorganisms or viruses or cross contamination;
- 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 complex, and involves sourcing from a number of different companies and foreign countries. 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 cGMP 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 Pharmaceuticals GmbH, or Arena GmbH, has contracted with Siegfried Ltd, or 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.

Table of Contents

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 collaborators, and we do not control their research and development, clinical trial or regulatory activities.

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 area of clinical development. We face competition for such personnel. The loss of services of any principal member of our management or scientific staff or other key personnel, particularly Jack Lief, our Chairman, President and Chief Executive Officer, 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 if we sell our own drugs commercially. Whether or not we were ultimately successful in any 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. In addition, damages awarded in a product liability action could be substantial and could have a negative impact on our financial condition.

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. 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;

Table of Contents

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.

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 manufacturing facility production licenses, 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 US and local economies on those rates. We also manufacture drug products for Siegfried and, therefore, are 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 in Zofingen, Switzerland, and we expect that at least for the foreseeable future that this facility will be the sole location for the manufacturing of lorcaserin finished drug product. We depend on our facilities and on collaborators, contractors and vendors for the continued operation of our business, some of whom are located in Europe and Asia. Natural disasters or other catastrophic events, including interruptions in the supply of natural resources, political and governmental

33

Table of Contents

changes, severe weather conditions, wildfires and other fires, explosions, actions of animal rights activists, terrorist attacks, 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 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 and adversely affect, which may include stopping, our commercial production.

Our executive officers and directors may sell shares of their stock, 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. Our executive officers and directors may sell stock in the future, either as part, or outside, of trading plans under Securities and Exchange Commission, or SEC, Rule 10b5-1.

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 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 current or future 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 US 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.

Table of Contents

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 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 collaborators 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 our collaborators 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 Congress is considering changes to federal patent laws on several issues including, but not limited to: (i) the information that 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 owners 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 on a number of factors, including the similarity of a patented invention to preexisting technologies.

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 our industry, changes in US patent laws could have a profound effect on our future profits, if any. Several of the patent 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 our industry in particular, as well as tilt the balance of market control and distribution of profits

Table of Contents

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 laws will be changed and exactly how changes to the patent laws will ultimately be enforced 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 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;

Table of Contents

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, 2008 to March 10, 2010, the market price of our stock was as low as $2.26 per share and as high as $8.68 per share.

Very few drug candidates being tested will ultimately receive FDA approval, and companies in our industry 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:

regulatory actions affecting lorcaserin or other drug candidates or drugs;

the success or failure of our clinical-stage development programs or other results or decisions affecting the development of our drug candidates;

37

Table of Contents

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, development or withdrawal of drug candidates or drugs by others that target the same diseases and conditions that we or our collaborators target or the introduction of new drug discovery techniques;

the success or failure of a perceived competitor s drug candidate or drug;

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 101,125,581 shares of our common stock outstanding as of March 10, 2010. We also had outstanding as of March 10, 2010 a seven-year warrant issued in June 2006 to purchase 960,723 shares of our common stock at an exercise price of $13.38 per share and a seven-year warrant issued in August 2008 to purchase 1,280,768 shares of our common stock at an exercise price of $6.66 per share. Such warrants were adjusted as a result of certain equity sales following their issuance to decrease the exercise price and increase the number of shares issuable upon exercise of the warrants. Certain future equity issuances below the pre-defined warrant adjustment price may result in additional adjustments to any such warrants then outstanding.

In July 2009, in connection with our receipt of a $100.0 million loan, we issued warrants to purchase 28,000,000 shares of our common stock at an exercise price of $5.42 per share. In certain circumstances we may be obligated to issue additional warrants to purchase up to 5,600,000 shares of common stock at an exercise price of $5.42 per share. All of these warrants are exercisable until June 17, 2013.

In addition to our outstanding warrants, as of March 10, 2010, there were (i) options to purchase 7,164,823 shares of our common stock outstanding under our equity incentive plans at a weighted-average exercise price of $8.97, (ii) 1,713,250 performance-based restricted stock unit awards outstanding under our 2006 Long-Term Incentive Plan, as amended, (iii) 6,607,962 additional shares of common stock remaining issuable under our 2009 Long-Term Incentive Plan, (iv) 1,225,742 shares of common stock remaining issuable under our 2009 Employee Stock

Purchase Plan, and (v) 96,669 shares of common stock remaining issuable under our Deferred Compensation Plan.

Table of Contents

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.

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

We have primarily financed our operations, and we expect to continue to finance our operations, 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 funding, 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. For example, in July 2009 we issued debt to Deerfield that is secured by our assets.

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 or have rights to acquire a significant amount of our outstanding stock. These stockholders may support competing transactions and have interests that are different from yours. In addition, 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 may also be involved with 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.

39

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 in San Diego, California and approximately 84,000 square feet of laboratory, manufacturing, warehouse and office space located in the same business park 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.
Zofingen, Switzerland	Lease	We lease from Siegfried a total of approximately 17,000 square feet, consisting of approximately 6,000 square feet of warehouse space, 5,000 square feet of office space, 4,000 square feet of manufacturing space and 2,000 square feet of laboratory space, in various facilities.

Table of Contents

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

Item 3. Legal Proceedings.

None.

Item 4. (Removed and Reserved).

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, 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

	High	Low
Year ended December 31, 2009		
First Quarter	$ 7.42	$ 2.85
Second Quarter	$ 5.64	$ 2.26
Third Quarter	$ 5.93	$ 3.82
Fourth Quarter	$ 4.83	$ 3.26

Holders

As of March 10, 2010, there were approximately 152 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, and we are prohibited from doing so under the Facility Agreement, dated June 17, 2009, between us and Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P., Deerfield Partners, L.P., Deerfield International Limited, Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited. 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.

Table of Contents

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,				
	2009	2008	2007	2006	2005
	(In thousands, except share and per share data)				
Revenues					
Manufacturing services	$ 6,579	$ 7,434	$	$	$
Collaborative agreements	3,808	2,375	19,332	30,569	23,233
Total revenues	10,387	9,809	19,332	30,569	23,233
Operating Expenses					
Cost of manufacturing services	6,536	8,515			
Research and development	110,159	204,374	149,524	103,388	79,710
General and administrative	25,247	30,535	26,571	18,466	13,122
Restructuring charges	3,324				
Amortization of acquired technology and other intangibles	3,508	2,314	1,537	1,537	1,537
Total operating expenses	148,774	245,738	177,632	123,391	94,369
Interest and other income (expense), net	(14,817)	(1,644)	15,134	6,574	3,235
Net loss	(153,204)	(237,573)	(143,166)	(86,248)	(67,901)
Dividends on redeemable convertible preferred stock		(1,912)	(2,114)	(2,031)	(1,813)
Accretion of discount on redeemable convertible preferred stock					(7,372)
Net loss allocable to common stockholders	$ (153,204)	$ (239,485)	$ (145,280)	$ (88,279)	$ (77,086)
Net loss per share allocable to common stockholders, basic and diluted	$ (1.82)	$ (3.24)	$ (2.31)	$ (1.89)	$ (2.24)
Shares used in calculating net loss per share allocable to common stockholders, basic and diluted	84,341,362	73,840,716	62,782,850	46,750,596	34,377,693

	As of December 31,				
	2009	2008	2007	2006	2005
			(In thousands)		
Balance Sheet Data:					
Cash and cash equivalents	$ 94,733	$ 73,329	$ 386,989	$ 373,044	$ 73,781
Short-term investments, available-for-sale	20,716	36,800	11,196	15,781	54,158
Total assets	236,278	241,331	487,506	468,465	198,129
Total deferred revenues	4,086	4,049	4,049	13,054	24,144
Total lease financing obligations	77,486	63,067	62,307	13,678	13,485
Total derivative liabilities	6,642				
Total notes payable	57,049	8,567			
Redeemable convertible preferred stock			53,922	51,808	49,777
Accumulated deficit	(864,587)	(718,936)	(479,451)	(334,171)	(245,892)
Total stockholders equity	74,567	117,632	336,377	366,115	99,540

43

Table of Contents

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 $857.0 million from our inception in April 1997 through December 31, 2009, and expect to incur substantial net losses as we prepare for the potential commercialization of our lead drug candidate, lorcaserin hydrochloride, or lorcaserin, and continue select earlier-stage research and development programs. In December 2009, we submitted a New Drug Application, or NDA, with the US Food and Drug Administration, or FDA, for regulatory approval of lorcaserin, and the FDA has assigned an October 22, 2010 Prescription Drug User Fee Act, or PDUFA, date for their review of our application. We have generated cash and funded our operations to date primarily through the sale of common and preferred stock, the issuance of debt and related financial instruments, payments from collaborators and sale leaseback transactions. From our inception through December 31, 2009, we have generated $1.2 billion in cash from these sources, of which $906.7 million was through sales of stock, $161.2 million was through payments from collaborators, $96.9 million was through the issuance of debt, warrants and related financial instruments and $77.1 million was from sale leaseback transactions. At December 31, 2009, we had $115.4 million in cash, cash equivalents and short-term investments.

Recent developments include:

Lorcaserin

Submitted an NDA for lorcaserin and the FDA has assigned a PDUFA date of October 22, 2010 for review of our application. The NDA is based on a data package from lorcaserin s development program that includes 18 clinical trials totaling 8,576 patients. The pivotal Phase 3 clinical trial program, BLOOM (Behavioral modification and Lorcaserin for Overweight and Obesity Management) and BLOSSOM (Behavioral modification and LOrcaserin Second Study for Obesity Management), evaluated nearly 7,200 patients treated for up to two years. In both trials, lorcaserin produced highly statistically significant weight loss with excellent safety and tolerability.

Presented favorable data from a clinical trial evaluating the abuse potential of lorcaserin in a poster session at the 48th Annual Meeting of the American College of Neuropsychopharmacology. Investigational drugs that act through mechanisms in the brain are generally required to undergo an evaluation to determine abuse potential. The clinical trial compared the relative abuse potential of lorcaserin against three comparators: placebo, zolpidem, a schedule IV controlled substance, and ketamine, a schedule III controlled substance. Data from the trial demonstrate that the risk for abuse associated with lorcaserin is very low and less than that of zolpidem or ketamine.

Presented results from the BLOSSOM trial and additional positive data from the BLOOM trial at the 27th Annual Scientific Meeting of The Obesity Society. The BLOSSOM data demonstrate improvements in patients body composition, cardiovascular risk factors and quality of life. The
BLOOM data demonstrate that treatment with lorcaserin resulted in statistically significant

Table of Contents

improvements in markers of cardiovascular risk and glycemic parameters and was not associated with depression or suicidal ideation. Lorcaserin patients who completed Year 1 of the BLOOM trial according to protocol lost 31% of their excess body weight.

Announced positive top-line results from the BLOSSOM trial. Lorcaserin patients achieved highly statistically significant categorical and absolute weight loss over one year of treatment. About two-thirds (63.2%) of lorcaserin patients who received lorcaserin 10 mg twice daily and completed the trial according to the protocol lost at least 5% of their weight and more than one-third (35.1%) of these lorcaserin patients lost at least 10% of their weight. The average weight loss for these lorcaserin patients was 17.0 pounds, and the top quartile lost an average of 35.1 pounds. Lorcaserin was very well tolerated and adverse events of depression, anxiety and suicidal ideation were infrequent and were reported at a similar rate in each treatment group. The incidence of new FDA-defined valvulopathy from the integrated echocardiographic data set from BLOOM and BLOSSOM was similar to that of placebo.

Completed enrollment in BLOOM-DM (Behavioral modification and Lorcaserin for Overweight and Obesity Management in Diabetes Mellitus), a one-year trial evaluating lorcaserin in obese and overweight patients with type 2 diabetes. We plan to file the results of BLOOM-DM as a supplement to the lorcaserin NDA.

Presented positive results from the BLOOM trial at the 69th Scientific Sessions of the American Diabetes Association. Lorcaserin patients achieved highly statistically significant categorical and absolute weight loss in Year 1, and over two-thirds (67.9%) of lorcaserin patients that achieved 5% or greater weight loss in Year 1 and continued treatment with lorcaserin in Year 2 maintained 5% or greater weight loss. About two-thirds (66.4%) of lorcaserin patients who completed one year of treatment according to the trial s protocol lost at least 5% of their weight and the average weight loss in this responder population was 26 pounds. More than one-third (36.2%) of lorcaserin patients who completed one year of treatment according to the trial s protocol lost at least 10% of their weight. Treatment with lorcaserin also resulted in statistically significant improvements as compared to placebo in multiple secondary endpoints associated with cardiovascular risk. Lorcaserin was very well tolerated, did not result in increased risk of depression or suicidal ideation compared to placebo and was not associated with development of cardiac valvular insufficiency.

Other Developments

Received aggregate net proceeds of $24.2 million from the sale of approximately 8.3 million shares of common stock in March 2010, and aggregate net proceeds of $14.7 million from the sale of approximately 5.7 million shares of common stock in April 2009, both under an equity financing commitment with Azimuth Opportunity Ltd, or Azimuth.

Through an affiliate, Merck and Co., Inc., or Merck, discontinued development of MK-1903, an investigational niacin receptor agonist to treat atherosclerosis being developed under its research and development collaboration with us, and notified us of its decision to discontinue the collaboration.

Completed a public offering in July 2009 of 12.5 million shares of common stock, resulting in net proceeds to us of $49.7 million.

Completed a reduction in our US workforce of approximately 31%, or a total of approximately 130 employees.

Received net proceeds of $95.6 million from a $100.0 million loan provided by Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P., Deerfield Partners, L.P., Deerfield International Limited, Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited, or collectively Deerfield. The outstanding principal accrues interest until maturity in June 2013 at a rate of 7.75% per annum. In connection with the loan, we issued Deerfield warrants for 28,000,000 shares of our common stock at an exercise price of $5.42 per share. On or

Table of Contents

before June 17, 2011, Deerfield may make a one-time election to provide us with up to an additional $20.0 million under similar terms, with the additional loan also maturing in June 2013. For each additional $1.0 million in funding, we will issue Deerfield additional warrants for 280,000 shares of our common stock at an exercise price of $5.42 per share. We repaid Deerfield the first scheduled principal repayment of $10.0 million upon completion of our public offering in July 2009.

Ortho-McNeil-Janssen Pharmaceuticals, Inc., or Ortho-McNeil-Janssen, completed a Phase 1 clinical trial in healthy volunteers evaluating the safety, tolerability, pharmacokinetics and pharmacodynamics of single ascending doses of APD597, a novel oral drug candidate that targets GPR119 for the treatment of type 2 diabetes. Ortho-McNeil-Janssen has initiated another clinical trial evaluating multiple ascending doses of APD597.

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

The drug development and approval 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 continue to seek to balance the high costs of research to find new drugs and the 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. To date, we have not generated any revenues from the sale of any of our drug candidates. We do not expect any of our drug candidates to be commercially available until at least late 2010, if at all. We expect to continue to incur substantial losses, and do not expect to generate positive operating cash flows, for at least the short term. Accordingly, we will need to raise additional funds through agreements with pharmaceutical companies for one or more of our drug candidates or programs, or equity, debt or other financing. Although we expect our cash used in operations to be significantly lower in 2010 compared to 2009 due to lower clinical trial expenses and cost savings from the workforce reduction we completed in June 2009, we will continue to use substantial cash as we prepare for the launch and commercialization of lorcaserin, continue select earlier-stage research and development programs and continue to incur general and administrative expenses, including significant amounts to prosecute patents.

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 dollar values in the following tables are in millions.

Revenues

	Years ended December 31,			% change from	% change from
Source of revenue	**2009**	**2008**	**2007**	**2008 to 2009**	**2007 to 2008**
Manufacturing services agreement	$ 6.6	$ 7.4	$	(11.5)%	N/A
Collaborative agreements	3.8	2.4	19.3	60.3%	(87.7)%
Total revenues	$ 10.4	$ 9.8	$ 19.3	5.9%	(49.3)%

Table of Contents

Research and development expenses

Type of expense	Years ended December 31, 2009	2008	2007	% change from 2008 to 2009	% change from 2007 to 2008
External clinical and preclinical study fees and expenses	$ 45.7	$ 123.5	$ 73.5	(63.0)%	68.1%
Salary and other personnel costs (excluding non-cash share-based compensation)	35.5	42.4	39.2	(16.5)%	8.3%
Facility and equipment costs	15.4	16.0	15.1	(3.7)%	5.7%
Research supplies	4.6	10.8	12.3	(57.1)%	(12.6)%
Non-cash share-based compensation	4.1	5.0	4.2	(17.9)%	18.5%
Other	4.9	6.7	5.2	(27.4)%	28.4%
Total research and development expenses	$ 110.2	$ 204.4	$ 149.5	(46.1)%	36.7%

General and administrative expenses

Type of expense	Years ended December 31, 2009	2008	2007	% change from 2008 to 2009	% change from 2007 to 2008
Salary and other personnel costs (excluding non-cash share-based compensation)	$ 9.1	$ 10.6	$ 8.5	(14.1)%	24.5%
Legal, accounting and other professional fees	7.9	9.8	8.7	(19.0)%	13.8%
Facility and equipment costs	3.5	3.6	3.0	(1.4)%	21.1%
Non-cash share-based compensation	2.8	3.5	4.6	(21.8)%	(23.8)%
Other	1.9	3.0	1.8	(37.0)%	63.1%
Total general and administrative expenses	$ 25.2	$ 30.5	$ 26.6	(17.3)%	14.9%

YEAR ENDED DECEMBER 31, 2009 COMPARED TO YEAR ENDED DECEMBER 31, 2008

Revenues. We recorded revenues of $10.4 million during the year ended December 31, 2009, compared to $9.8 million during the year ended December 31, 2008. Our revenues recorded during the year ended December 31, 2009 included $6.6 million in manufacturing services revenue under our manufacturing services agreement with Siegfried Ltd, or Siegfried, and $3.8 million for patent activities and additional sponsored research from our collaborations with Ortho-McNeil-Janssen and Merck. 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. In December 2009, Merck notified us of its decision to discontinue our collaboration to develop therapeutics for atherosclerosis and other disorders.

When collaborators pay us before we recognize such payments as current revenues, we record the payments as deferred revenues until earned. As of December 31, 2009, we had $4.1 million in deferred revenues, the majority of which was attributable to our license agreement with TaiGen Biotechnology Co., Ltd., or TaiGen, and is expected to be recognized as revenue in 2010. Absent any new collaborations or achievement of a milestone in a collaboration, we expect our 2010 revenues will consist of reimbursement for patent activities from Ortho-McNeil-Janssen, recognition of the TaiGen deferred revenues and manufacturing services revenue under our agreement with Siegfried. Under such agreement, until at least December 31, 2010, Siegfried may sub-contract to us the manufacture of certain drug products it previously manufactured 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 6.6 million in 2010. Using the exchange rate in effect on December 31, 2009, this would translate to approximately $6.4 million in manufacturing services revenues in 2010.

Table of Contents

Revenues from 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 for at least the short term will depend on whether we enter into an agreement with a pharmaceutical company or companies to commercialize lorcaserin or to collaborate on any of our other current or future drug candidates, as well as the clinical success of our collaboration with Ortho-McNeil-Janssen. Ultimately, we expect our revenues in the long term to primarily depend upon the regulatory approval and commercialization of the drug candidates we discover.

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 $6.5 million and $8.5 million for the years ended December 31, 2009 and 2008, respectively.

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 decreased by $94.2 million to $110.2 million for the year ended December 31, 2009, from $204.4 million for the year ended December 31, 2008. This difference was due primarily to decreases of (i) $77.7 million in external clinical and preclinical study fees and expenses due primarily to completing our BLOOM and BLOSSOM lorcaserin trials in 2009, and prioritizing our spending towards activities that supported the lorcaserin NDA filing, (ii) $7.0 million in salary and other personnel costs as a result of the workforce reduction we completed in June 2009 and (iii) $6.2 million in research supplies due to having less research personnel and our cost-containment efforts. Although we expect to continue to incur substantial research and development expenses in 2010, primarily related to lorcaserin, we expect our research and development expenses will be significantly lower than the 2009 level due primarily to completion of our BLOOM and BLOSSOM trials. We expect to incur substantial manufacturing costs for lorcaserin in 2010 and beyond, whether we market and commercialize lorcaserin independently or with a pharmaceutical company or companies. We also expect to initiate clinical trials for APD916, our drug candidate for the treatment of narcolepsy and cataplexy, in 2010, but any such Phase 1 trial would involve substantially fewer patients and lower costs than the more expensive Phase 3 trials for lorcaserin.

Included in the $45.7 million total external clinical and preclinical study fees and expenses noted in the table above for the year ended December 31, 2009 was $43.3 million related to our lorcaserin program, $1.3 million related to our APD811 program and $0.5 million related to our APD125 program. APD811 is our lead drug candidate for the treatment of pulmonary arterial hypertension, and we previously studied APD125 for insomnia. Included in the $123.5 million total external clinical and preclinical study fees and expenses 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 the program for our anti-thrombotic drug candidate, APD791.

Cumulatively through December 31, 2009, we have recorded $256.2 million, $43.7 million, $7.3 million, $2.3 million and $1.4 million in external clinical and preclinical study fees and other related expenses for lorcaserin, APD125, APD791, APD916 and APD811, 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 collaborator. As a

Table of Contents

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.

Based upon our current plans, we expect our total research and development expenses, including manufacturing expenses for lorcaserin, will be lower in 2010 than they were in 2009.

General and administrative expenses. General and administrative expenses decreased by $5.3 million to $25.2 million for the year ended December 31, 2009, from $30.5 million for the year ended December 31, 2008. This difference was due primarily to decreases of (i) $1.9 million in legal and other professional fees, primarily patent fees, (ii) $1.5 million in salary and other personnel costs as a result of our 2009 workforce reduction and (iii) $0.7 million in market research expenses. To the extent we are reimbursed for patent activities, we classify the reimbursements, which totaled $3.7 million in 2009 and $2.4 million in 2008, as revenues. We expect that, unless another company pays for commercialization, marketing and business development expenses related to lorcaserin, our 2010 general and administrative expenses will increase significantly due primarily to such expenses. However, if we are unable to rely on another company to pay for these lorcaserin expenses or obtain adequate funding from other sources, we may have to reduce our general and administrative expenses that are unrelated to lorcaserin in 2010.

Restructuring charges. We recorded a charge of $3.3 million in the year ended December 31, 2009 in connection with a reduction of our US workforce of approximately 31%, or a total of approximately 130 employees, that we completed in June 2009.

Amortization of acquired technology and other intangibles. We recorded $3.5 million for amortization of acquired technology and other intangibles for the year ended December 31, 2009, compared to $2.3 million for the year ended December 31, 2008. The increased amortization related to the manufacturing facility production licenses we acquired from Siegfried in January 2008, which are being amortized over their estimated useful life of 20 years. Using the exchange rate in effect on December 31, 2009, we expect to record amortization expense of approximately $0.6 million per year for these licenses. We also expect to record the remaining amortization expense of $1.5 million in 2010 and $0.3 million in 2011 related to the Melanophore technology, our primary screening technology, which is being amortized over its estimated useful life of 10 years.

Interest and other expense, net. Interest and other expense, net, increased by $13.2 million to $14.8 million for the year ended December 31, 2009, from $1.6 million for the year ended December 31, 2008. This increase in expense was due primarily to (i) an $11.2 million increase in interest expense related to the loan we received from Deerfield in July 2009, (ii) a $6.7 million decrease in interest income attributable to lower interest rates and, for much of the year, cash balances and (iii) a $2.5 million non-cash loss on extinguishment of debt resulting from our $10.0

million repayment on the Deerfield loan. This increase was partially offset by (i) a $5.4 million non-cash gain from the revaluation of our derivative liabilities and (ii) a $2.2 million non-cash warrant settlement that we recorded in 2008. We expect our interest expense will continue to be substantial as a result of the Deerfield loan and payments on our lease financing obligations.

Table of Contents

Dividends on redeemable convertible preferred stock. Because we redeemed all of the outstanding shares of our Series B Convertible Preferred Stock, or Series B Preferred, in November 2008, we recorded no dividend expense related to such stock in the year ended December 31, 2009.

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 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 both of these collaborations 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 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 recorded no manufacturing services revenue.

Cost of manufacturing services. 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 recorded no cost of manufacturing services.

Research and development expenses. Research and development expenses increased by $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. Nearly all of the increase in the number of research and development employees related to the development of lorcaserin. 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 lorcaserin, $13.5 million related to APD125, $1.4 million related to APD916 and $1.1 million related to APD791. 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 lorcaserin, $15.7 million related to APD125 and $3.1 million related to APD791.

General and administrative expenses. General and administrative expenses increased by $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 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. Patent reimbursements, which are classified as revenues, totaled $2.4 million in 2008 and $3.9 million in 2007.

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 related to the assembled workforce we acquired from Siegfried in January 2008.

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

Table of Contents

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 Series B Preferred warrant holders, (iii) a $1.9 million increase in interest expense and financing costs, which included lease payments on our lease financing obligations and (iv) a $1.6 million write-down on our investment in TaiGen.

Dividends on redeemable convertible preferred stock. We recorded a dividend expense of $1.9 million related to our previously outstanding Series B Preferred for the year ended December 31, 2008, compared to $2.1 million for the year ended December 31, 2007.

LIQUIDITY AND CAPITAL RESOURCES

Short term

Our sources of liquidity include our cash balances and short-term investments. As of December 31, 2009, we had $115.4 million in cash and cash equivalents and short-term investments. In March 2010, we received aggregate net proceeds of $24.2 million under an equity financing commitment. Other potential sources of near-term liquidity include (i) entering into a commercialization agreement for lorcaserin or a collaboration for one of our other drug candidates or drug programs, (ii) equity, debt or other financing, (iii) the sale of facilities we own, and (iv) milestone payments from Ortho-McNeil-Janssen. In addition, on or before June 17, 2011, Deerfield can make a one-time election to loan us up to an additional $20.0 million under similar terms as the initial $100.0 million loan.

To date, we have obtained cash and funded our operations primarily through the sale of common and preferred stock, the issuance of a note and related financial instruments, payments from collaborators and sale leaseback transactions. Although we will continue to be opportunistic in our efforts to obtain cash, we believe that our ability to obtain cash has been reduced based on ongoing uncertainties in the global economic market as well as our stock price. There is no guarantee that additional funding will be available or that, if available, such funding will be adequate or available on terms that we or our stockholders view as favorable. In addition, as a result of our outstanding loan with Deerfield, our ability to engage in financing transactions is subject to certain limitations and certain financing transactions, if consummated, may accelerate our repayment obligations to Deerfield.

In 2009, due to our then current financial condition and the global economic environment, we significantly decreased the number of our employees, the number of our research programs and our then planned activities. We are continuing our cost-containment efforts and are prioritizing our available cash towards funding activities in support of the further development, approval and commercialization of lorcaserin. Although nearly all of the external expenses for our two pivotal Phase 3 lorcaserin trials have been expensed, we expect that our research and development expenditures will continue to be high in 2010, but substantially less than they were in 2009. In addition to costs related to our ongoing lorcaserin BLOOM-DM trial, we expect to incur substantial manufacturing costs and other pre-launch and commercialization costs for lorcaserin in 2010 and beyond, whether we decide to market and commercialize lorcaserin independently or with a pharmaceutical company or companies.

In addition to our lorcaserin program, we plan to continue our research activities at the reduced level in place since our June 2009 workforce reduction and to selectively initiate clinical trials for drug candidates based on the potential of a particular candidate and the estimated cost of the related clinical trials. Consistent with such approach, we expect to initiate a Phase 1 clinical trial for APD916 in 2010. We expect that our expenditures for clinical programs will be substantially less in 2010 then they were in 2009.

We will continue to monitor and evaluate the level of our research, development and manufacturing expenditures, and may further adjust such expenditures based upon a variety of factors, such as our available cash, our ability to obtain additional cash, the results and progress in our clinical and earlier-stage programs, the time and costs related to clinical trials and regulatory decisions, as well as the global economic environment.

Table of Contents

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. If we market and commercialize lorcaserin or any other drug candidate independently or with a pharmaceutical company or companies, we may need to invest heavily in associated manufacturing, 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 seeking collaborators for our drug candidates and programs 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, progress in our clinical and earlier-stage programs, the time and costs related to current and future clinical trials and regulatory decisions, our research, development, manufacturing and commercialization costs (including personnel costs), our progress in any programs under partnerships or 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 will result in additional curtailment of our development and/or research activities, 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. Another potential source of liquidity is an additional loan of up to $20.0 million from Deerfield if they elect, in their sole discretion, to make this additional loan.

Although our December 31, 2009 consolidated balance sheet reflects a balance of $47.9 million for our note payable to Deerfield due to the requirement to separately value the components of the note, warrants and related financial instruments, the principal balance outstanding on this loan was $90.0 million at December 31, 2009. The remaining principal repayments on the Deerfield loan are scheduled as follows: $20.0 million in July 2011, $30.0 million in July 2012, and $40.0 million in June 2013. At any time we may prepay any or all of the outstanding principal at par, and we may be required to make the scheduled repayments earlier in connection with certain equity issuances. In addition, we are required to make mandatory prepayments of the loan under certain circumstances.

We evaluate from time to time potential acquisitions and in-licensing and other 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. 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 lorcaserin s commercialization. We paid CHF 21.8 million, or $19.6 million, of the cash purchase price in January 2008, and are scheduled to pay the remaining cash portion of the purchase price of CHF 10.0 million in three equal installments in January 2011, January 2012 and January 2013.

Sources and Uses of Our Cash

Net cash used in operating activities decreased by $35.5 million in 2009 to $155.9 million. This decrease resulted from our lower net loss in 2009, due primarily to completing our BLOOM and BLOSSOM lorcaserin trials in 2009, offset by changes in our operating assets and liabilities. Net cash used in operating activities during 2008 increased by $63.3 million to $191.4 million. This resulted from the increase in our net loss from 2007 to 2008, due primarily to expenses for our lorcaserin trials. Our non-cash expenses in 2008 also increased by

Table of Contents

$9.3 million compared to 2007, due primarily to a $3.8 million increase in depreciation and amortization expense, $2.2 million in warrant settlement charges related to a settlement with one of our Series B Preferred warrant holders, and $1.6 million from a write-down on our investment in TaiGen, as well as changes in our operating assets and liabilities. Net cash used in operating activities in 2007 increased by $57.1 million to $128.1 million due primarily to the increase in our net losses from 2006 to 2007.

Net cash of $11.4 million was provided by investing activities in 2009, and was primarily attributable to net proceeds of $16.3 million from our short-term investments, which were partially offset by $5.3 million used for purchases of equipment and improvements to our facilities. Net cash of $68.5 million was used in investing activities in 2008, and was primarily the result of net purchases of short-term investments of $25.9 million, $23.2 million used for purchases of 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 in 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. We expect that our capital expenditures in 2010 will be higher than in 2009 primarily as a result of capital expenditures for our manufacturing facility in Switzerland.

Net cash provided by financing activities was $166.7 million in 2009, and was primarily attributable to net financing proceeds of $96.9 million from the issuance of a note, warrants and related financial instruments to Deerfield, net proceeds of $49.7 million from the sale of 12,500,000 shares of common stock at $4.17 per share, $15.0 million in reimbursements for improvements made to one of our leased facilities and net proceeds of $14.7 million from the sale of 5,745,591 shares of common stock under our equity financing commitment with Azimuth. Such proceeds were partially offset by the $10.0 million of principal we repaid to Deerfield. Net cash of $53.3 million was used in financing activities in 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 in 2007, due primarily to net proceeds of $103.2 million we received from the sale of common stock and $48.5 million we received from our lease financing transaction.

CONTRACTUAL OBLIGATIONS

The following table summarizes our contractual obligations as of December 31, 2009:

		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	$ 153,228	$ 7,329	$ 16,578	$ 17,417	$ 111,904
Note payable to Siegfried	9,710		6,473	3,237	
Note payable to Deerfield	108,908	6,975	60,515	41,418	
Purchase obligations	3,430	3,399	31		
Operating leases	3,702	1,298	2,148	256	
Total	$ 278,978	$ 19,001	$ 85,745	$ 62,328	$ 111,904

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. Our option to repurchase these properties in the future is considered continued involvement under the applicable accounting rules and, therefore, we have applied the financing method which requires that the book value of the properties and related accumulated depreciation remain on our balance sheet with no sale recognized. Instead, the sales price of the

Table of Contents

properties is recorded as a financing obligation and a portion of each lease payment is recorded as interest expense. As of December 31, 2009, we expected interest expense over the term of these leases to total $85.7 million. We have included our lease obligations related to these properties in the above table as financing obligations. The aggregate residual value of the facilities at the end of the lease terms is $10.0 million.

In January 2008, we acquired from Siegfried certain drug product facility assets, including manufacturing facility production licenses, 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 January 2011, January 2012 and January 2013. The amount recorded will be affected by the exchange rate between the Swiss franc and the US dollar at the time each cash payment is made.

In July 2009, we received net proceeds of $95.6 million from the issuance of a note, warrants and related financial instruments to Deerfield. Upon the closing of a public offering also in July 2009, we were required to repay the first scheduled payment of $10.0 million of the Deerfield loan. The remaining principal repayments on the Deerfield loan are scheduled as follows: $20.0 million in July 2011, $30.0 million in July 2012, and $40.0 million in June 2013. At any time we may prepay any or all of the outstanding principal at par, and we may be required to make the scheduled repayments earlier in connection with certain equity issuances. In addition, we are required to make mandatory prepayments of the loan under certain circumstances. Our consolidated balance sheet at December 31, 2009 reflects a balance of $47.9 million for our note payable to Deerfield, due to the requirement to separately value the components of the note, warrants and related financial instruments. As of December 31, 2009, we expected interest expense of $18.9 million to be paid in cash over the term of the loan.

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, 2009) and did not include any amount that was previously paid, accrued, expensed or associated with a contingent event, such as a change in control or termination of a key employee.

Off-Balance Sheet Arrangements

We do not have, and did not have as of December 31, 2009, any off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

Collaborations

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. 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. In December 2008, we announced that Ortho-McNeil-Janssen initiated a Phase 1 clinical trial of APD597, a potentially more potent Arena-discovered drug candidate, and it has initiated single and multiple ascending dose studies of APD597. We are eligible to receive a total of $295.0 million in milestone payments for each compound Ortho-McNeil-Janssen develops under the collaboration, as well as royalty payments associated with Ortho-McNeil-Janssen s commercialization of any products discovered under the collaboration. These milestones include development

Table of Contents

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, 2009, we received $27.5 million from Ortho-McNeil-Janssen in upfront and milestone payments, $7.2 million in research funding and $17.3 million for patent activities and additional sponsored research.

In 2009, we recognized $3.8 million of revenues under the Ortho-McNeil-Janssen agreement, of which $3.7 million was reimbursement for patent activities and $0.1 million was for additional sponsored research. In 2008, we recognized revenues of $2.3 million, all of which was reimbursement for patent activities. In 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.

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 also 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.

Merck & Co., Inc.

In October 2002, we initiated a collaboration with Merck on three GPCRs to develop therapeutics for atherosclerosis and other disorders. Under the collaboration, Merck advanced MK-0354, a first generation niacin receptor agonist, and MK-1903, a second generation niacin receptor agonist, into Phase 2 trials. In December 2009, following evaluation of the Phase 2 trial results of MK-1903, Merck discontinued development of MK-1903 and notified us of its election to terminate the agreement, which becomes effective on March 22, 2010. Upon termination, all licenses granted to Merck under the agreement become non-exclusive.

From the inception of this collaboration through December 31, 2009, we received $18.0 million from Merck in upfront and milestone payments, $27.5 million in research funding, equity investments totaling $8.5 million and $0.5 million for patent activities. In both 2009 and 2008, we recognized $46,000 of revenues under the Merck agreement, all of which was reimbursement for patent activities. In 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.

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.

While our significant accounting policies are described in more detail in Note 1 to our consolidated financial statements, we believe the following accounting policies are critical in the preparation of our financial statements:

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

Table of Contents

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; however, material differences could occur in the future.

Derivative liabilities. We account for our warrants and other derivative financial instruments as either equity or liabilities based upon the characteristics and provisions of each instrument. Warrants classified as equity are recorded as additional paid-in capital on our consolidated balance sheet and no further adjustments to their valuation are made. Some of our warrants were determined to be ineligible for equity classification because of provisions that may result in an adjustment to their exercise price. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as liabilities are recorded on our consolidated balance sheet at their fair value on the date of issuance and are revalued on each subsequent balance sheet date until such instruments are exercised or expire, with any changes in the fair value between reporting periods recorded as other income or expense. We estimate the fair value of these liabilities using option pricing models that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for expected volatility, expected life and risk-free interest rate. Changes in the assumptions used could have a material impact on the resulting fair value.

Revenue recognition. 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 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. We recognize compensation expense for all of our share-based awards based on the grant-date fair value, using the Black-Scholes option pricing model. In 2009, we recorded total non-cash, share-based compensation expense of $7.1 million. Determination of the grant-date fair value of share-based awards using the Black-Scholes option pricing model is affected by our stock price on the date of grant, as well as assumptions regarding other subjective variables. These assumptions include, but are not limited to, our expected stock price volatility over the term of the awards, the risk-free interest rate and the expected term of awards. Changes in these assumptions could have a material impact on the compensation expense we recognize.

As compensation expense recognized is based on awards ultimately expected to vest, we reduce the expense recognized based on an estimated forfeiture rate at the time of grant. 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.

Table of Contents

Accounting for lease financing obligations. We account for our sale and leaseback transactions using the financing method because our options to repurchase these properties in the future are considered continued involvement requiring such method. 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.

NEW ACCOUNTING STANDARDS

In October 2009, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2009-13, Multiple-Deliverable Revenue Arrangements. ASU 2009-13 is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Early adoption is permitted. We are evaluating the impact, if any, the adoption of ASU 2009-13 will have on our consolidated financial statements, but do not expect the adoption of this guidance to have a material impact on our consolidated financial statements.

INCOME TAXES

As of December 31, 2009, we had $500.5 million of Federal net operating loss carryforwards reported on our tax returns and $36.1 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 primary market risk exposure as it affects our cash equivalents and short-term investments is interest rate risk. Our management establishes and oversees the implementation of a board-approved policy covering our investments. We manage our interest rate 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, however, due to our financial condition and the current interest rate environment, 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. 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, 2009, we would expect future interest income from our portfolio to decline by approximately $1.2 million over the next 12 months. As of December 31, 2008, this same hypothetical reduction in interest rates would also have resulted in a $1.2 million decline in interest income over the following 12 months. The model we use is not intended to forecast actual losses in

Table of Contents

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.

Our note payable to Deerfield is not subject to market risk due to its fixed interest rate.

We have a wholly owned subsidiary in Switzerland, which exposes us to foreign currency exchange risk. The functional currency of our subsidiary in Switzerland is the Swiss franc. Accordingly, all assets and liabilities of our subsidiary, including our note payable to Siegfried, 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. Foreign currency transaction gains and losses, which have totaled a loss of $15,000 and have not been material for us to date, are included in our results of operations. 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, 2009 and 2008, and the related consolidated statements of operations, stockholders equity, and cash flows for each of the three years in the period ended December 31, 2009. 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, 2009 and 2008, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2009, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 8 to the consolidated financial statements, the Company changed its method of determining whether equity-linked financial instruments are indexed to the Company s own stock, with the adoption of the amendments to the FASB Accounting Standards Codification Topic 815-40, *Contracts in Entity s Own Equity*, effective January 1, 2009.

We also have 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, 2009, 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 16, 2010 expressed an unqualified opinion thereon.

/s/ Ernst & Young LLP

San Diego, California

March 16, 2010

Table of Contents

ARENA PHARMACEUTICALS, INC.

Consolidated Balance Sheets

(In thousands, except share and per share data)

	December 31, 2009	December 31, 2008
Assets		
Current assets:		
Cash and cash equivalents	$ 94,733	$ 73,329
Short-term investments, available-for-sale	20,716	36,800
Accounts receivable	1,415	1,823
Prepaid expenses and other current assets	4,409	5,031
Total current assets	121,273	116,983
Land, property and equipment, net	95,445	102,740
Acquired technology and other intangibles, net	13,123	16,262
Other non-current assets	6,437	5,346
Total assets	$ 236,278	$ 241,331
Liabilities and Stockholders Equity		
Current liabilities:		
Accounts payable and other accrued liabilities	$ 9,677	$ 16,989
Accrued compensation	3,928	3,758
Accrued clinical and preclinical study fees	2,279	26,042
Deferred revenues	4,086	
Current portion of lease financing obligations	717	410
Total current liabilities	20,687	47,199
Deferred rent	564	693
Deferred revenues		4,049
Derivative liabilities	6,642	
Note payable to Siegfried	9,143	8,567
Note payable to Deerfield (see Note below)	47,906	
Lease financing obligations, less current portion	76,769	62,657
Deferred income taxes		534
Commitments		
Stockholders equity:		
Series A preferred stock, $.0001 par value: 350,000 shares authorized at December 31, 2009 and 2008; no shares issued and outstanding at December 31, 2009 and 2008		
Common stock, $.0001 par value: 242,500,000 shares authorized at December 31, 2009 and 142,500,000 shares authorized at December 31, 2008; 92,813,899 and 74,134,462 shares issued and outstanding at December 31, 2009 and 2008, respectively	10	8
Additional paid-in capital	961,269	859,374
Treasury stock, at cost 3,000,000 shares at December 31, 2009 and 2008	(23,070)	(23,070)
Accumulated other comprehensive income	945	256
Accumulated deficit	(864,587)	(718,936)
Total stockholders equity	74,567	117,632

Total liabilities and stockholders equity	$ 236,278	$ 241,331

Note: The outstanding principal balance of the note payable to Deerfield at December 31, 2009 was $90.0 million. See Note 7.

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,		
	2009	**2008**	**2007**
Revenues:			
Manufacturing services	$ 6,579	$ 7,434	$
Collaborative agreements	3,808	2,375	19,332
Total revenues	10,387	9,809	19,332
Operating Expenses:			
Cost of manufacturing services	6,536	8,515	
Research and development	110,159	204,374	149,524
General and administrative	25,247	30,535	26,571
Restructuring charges	3,324		
Amortization of acquired technology and other intangibles	3,508	2,314	1,537
Total operating expenses	148,774	245,738	177,632
Loss from operations	(138,387)	(235,929)	(158,300)
Interest and Other Income (Expense):			
Interest income	689	7,370	18,850
Interest expense	(18,718)	(5,454)	(3,520)
Gain from valuation of derivative liabilities	5,418		
Warrant settlement provision		(2,236)	
Loss on extinguishment of debt	(2,479)		
Other	273	(1,324)	(196)
Total interest and other income (expense), net	(14,817)	(1,644)	15,134
Net loss	(153,204)	(237,573)	(143,166)
Dividends on redeemable convertible preferred stock		(1,912)	(2,114)
Net loss allocable to common stockholders	$ (153,204)	$ (239,485)	$ (145,280)
Net loss per share allocable to common stockholders, basic and diluted	$ (1.82)	$ (3.24)	$ (2.31)
Shares used in calculating net loss per share allocable to common stockholders, basic and diluted	84,341,362	73,840,716	62,782,850

See accompanying notes.

Table of Contents

ARENA PHARMACEUTICALS, INC.

Consolidated Statements of Stockholders Equity

(In thousands, except share data)

	Common Stock						
	Shares	Amount	Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders Equity
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 employee stock purchase plan	235,726		1,862				1,862
Issuance of common stock 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)
Net unrealized gain on available-for-sale securities and investments					11		11
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**
Issuance of common stock upon exercise of options	28,625		133				133
Issuance of common stock under 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**
Cumulative effect of adoption of new accounting standard			(9,671)			7,553	(2,118)
Issuance of common stock upon exercise of options	63,500		38				38
Issuance of common stock under employee stock purchase plans	364,096		949				949
	5,745,591	1	14,654				14,655

Issuance of common stock under equity financing commitment							
Issuance of common stock in public offering, net of offering costs of $2,400	12,500,000	1	49,724				49,725
Issuance of warrants to Deerfield			39,052				39,052
Share-based compensation expense, net of forfeitures			7,149				7,149
Restricted shares released from deferred compensation plan	6,250						
Net loss						(153,204)	(153,204)
Net unrealized gain on available-for-sale securities and investments, net of taxes					155		155
Translation gain					534		534
Net comprehensive loss							(152,515)
Balance at December 31, 2009	**92,813,899**	**$ 10**	**$ 961,269**	**$ (23,070)**	**$ 945**	**$ (864,587)**	**$ 74,567**

See accompanying notes.

Table of Contents

ARENA PHARMACEUTICALS, INC.

Consolidated Statements of Cash Flows

(In thousands)

	Years ended December 31,		
	2009	**2008**	**2007**
Operating Activities			
Net loss	$ (153,204)	$ (237,573)	$ (143,166)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	11,018	11,665	7,848
Amortization of acquired technology and other intangibles	3,508	2,314	1,537
Share-based compensation	7,149	8,492	8,816
Deferred income tax provision (benefit)	(534)	534	
Tax effect of other comprehensive income	(93)		
Gain from valuation of derivative liabilities	(5,418)		
Warrant settlement provision		2,236	
Investment write-down		1,607	
Amortization/accretion of short-term investment premium/discount	69	333	(398)
Amortization of prepaid financing costs	338	333	305
Amortization of lease financing obligations			(361)
Accretion of note payable to Deerfield	7,555		
Loss on extinguishment of debt	2,479		
Accretion of note payable to Siegfried	251	239	
(Gain)/Loss on disposal of equipment	313	(37)	114
Changes in assets and liabilities:			
Accounts receivable	430	61	(1,591)
Prepaid expenses and other assets	(929)	4,119	1,389
Accounts payable and accrued liabilities	(28,765)	14,338	7,111
Deferred rent	(129)	(100)	(70)
Deferred revenues	37		(9,005)
Deferred interest expense			(677)
Net cash used in operating activities	(155,925)	(191,439)	(128,148)
Investing Activities			
Purchases of short-term investments, available-for-sale	(20,433)	(65,023)	(60,998)
Proceeds from sales/maturities of short-term investments, available-for-sale	36,696	39,123	65,992
Purchase of drug product facility		(19,573)	
Purchases of land, property and equipment	(5,331)	(23,217)	(17,423)
Proceeds from sale of equipment	263	38	21
Deposits, restricted cash and other non-current assets	170	179	(188)
Net cash provided by (used in) investing activities	11,365	(68,473)	(12,596)
Financing Activities			
Principal payments on lease financing obligations	(581)	(240)	(481)
Proceeds from lease financing	15,000	1,000	48,455
Proceeds from issuance of note payable, warrants and related financial instruments to Deerfield	96,865		
Principal payments on note payable to Deerfield	(10,000)		
Redemption of redeemable convertible preferred stock		(55,834)	
Proceeds from issuance of common stock	65,368	1,733	106,736
Net cash provided by (used in) financing activities	166,652	(53,341)	154,710
Effect of exchange rate changes on cash	(688)	(407)	(21)
Net increase (decrease) in cash and cash equivalents	21,404	(313,660)	13,945
Cash and cash equivalents at beginning of year	73,329	386,989	373,044

Cash and cash equivalents at end of year	$ 94,733	$ 73,329	$ 386,989
Supplemental Disclosure Of Cash Flow Information:			
Interest paid, net of capitalized interest	$ 10,297	$ 5,851	$ 4,295
Unrealized gain on short-term investments, available-for-sale	$ 248	$ 37	$ 11
Supplemental Disclosure Of Non-Cash Investing and Financing Information:			
Purchases of land, property and equipment included in accounts payable and accrued liabilities	$ 79	$ 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 Arena, was incorporated on April 14, 1997, and commenced operations in July 1997. We are 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 a collaborator. We operate in one business segment. In December 2009, we submitted a New Drug Application, or NDA, with the US Food and Drug Administration, or FDA, for our lead drug candidate, lorcaserin hydrochloride, or lorcaserin, for weight management, including weight loss and maintenance of weight loss.

Basis of Presentation

The accompanying consolidated financial statements reflect all of our activities, including those of our wholly owned subsidiaries. All material intercompany accounts and transactions have been eliminated in consolidation.

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.

We evaluated subsequent events after the balance sheet date of December 31, 2009 and through the date and time we issued our financial statements.

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

We define short-term investments as income-yielding securities that can be readily converted to cash, and classify such investments as available-for-sale. We carry these securities at fair value, and report unrealized gains and losses as a separate component of accumulated other comprehensive income 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 we believe approximates fair value due to the short-term maturity of these instruments. Short-term

Table of Contents

investments are carried at fair value. Based on borrowing rates currently available to us for loans with similar terms, we believe the carrying value of the lease financing obligations, note payable to Siegfried, note payable to Deerfield and derivative liabilities approximate fair value.

Concentration of Credit Risk and Major Customers

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

We manufacture drug products for Siegfried Ltd, or Siegfried, under a manufacturing services agreement, and all of our manufacturing services revenues are attributable to Siegfried. For the year ended December 31, 2009, 63.3% of our total revenues were attributable to Siegfried, while 36.2% 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, 2008, 75.8% of our total revenues were attributable to Siegfried, while 23.7% and 0.5% were attributable to Ortho-McNeil-Janssen and Merck, respectively. For the year ended December 31, 2007, 69.5% of our total revenues were attributable to Ortho-McNeil-Janssen and 30.5% were attributable to Merck. Ortho-McNeil-Janssen accounted for 34.7%, 38.8% and 98.0% of our accounts receivable as of December 31, 2009, 2008 and 2007, respectively, while 64.7% and 61.0% of our accounts receivable as of December 31, 2009 and 2008, respectively, 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 15 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

We have intangible assets in connection with certain assets we acquired from Siegfried in January 2008, including manufacturing facility production licenses and an assembled workforce, as well as our February 2001 acquisition of Bunsen Rush Laboratories, Inc., or Bunsen Rush, and its Melanophore technology. These assets are measured based on their fair value at acquisition. The useful life of our intangible assets is determined based on the period over which the asset is expected to contribute directly or indirectly to our future cash flows. An intangible asset with a finite useful life is amortized over its estimated useful life. We amortize our intangible assets using the straight-line method over estimated useful lives ranging from two to 20 years.

We will continue to evaluate the carrying value of the Melanophore technology and manufacturing facility production licenses. If, in the future, we determine that any of our intangible assets have become impaired or such assets are no longer being used, we may record a write-down of the carrying value or accelerate such amortization.

Long-lived Assets

If indicators of impairment exist, we assess the recoverability of the affected long-lived assets by determining whether the carrying value of such assets can be recovered through undiscounted cash flow projections. If impairment is indicated, we measure the impairment loss by comparing the fair value of the asset to the carrying value.

Table of Contents

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 our consolidated balance sheets.

Derivative Liabilities

We account for our warrants and other derivative financial instruments as either equity or liabilities based upon the characteristics and provisions of each instrument. Warrants classified as equity are recorded as additional paid-in capital on our consolidated balance sheet and no further adjustments to their valuation are made. Some of our warrants were determined to be ineligible for equity classification because of provisions that may result in an adjustment to their exercise price. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as liabilities are recorded on our consolidated balance sheet at their fair value on the date of issuance and are revalued on each subsequent balance sheet date until such instruments are exercised or expire, with any changes in the fair value between reporting periods recorded as other income or expense. We estimate the fair value of these liabilities using option pricing models that are based on the individual characteristics of the warrants or instruments on the valuation date, as well as assumptions for expected volatility, expected life and risk-free interest rate.

Foreign Currency Translation

The functional currency of our 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 income or loss in the stockholders equity section of our consolidated balance sheets. Foreign currency transaction gains and losses are included in our results of operations and, to date, have not been material.

Share-based Compensation

Compensation expense for all share-based awards, which we recognize on a straight-line basis over the vesting period, is estimated based on the grant-date fair value. Such compensation expense is included in the applicable expense line item on our consolidated statements of operations.

We measure the value of restricted stock awards based on the fair value of the stock on the grant date, and increase additional paid-in capital as compensation expense is recognized over the applicable vesting period. The restrictions generally lapse in equal annual installments over a vesting period of two, three or four years.

We recorded total share-based compensation expense for all share-based awards of $7.1 million, $8.5 million and $8.8 million during the years ended December 31, 2009, 2008 and 2007, respectively.

Revenue Recognition

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

Table of Contents

remaining minimum period of our 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. 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 statements 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 our research and development efforts and have no alternative future uses.

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; however, material differences could occur in the future.

Patent Costs

We record costs related to filing and prosecuting patent applications in general and administrative expenses as incurred, as recoverability of such expenditures is uncertain.

Comprehensive Income (Loss)

We report all components of comprehensive income (loss), including foreign currency translation gain and loss and unrealized gains and losses on investment securities, 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

We compute basic and diluted net loss per share using the weighted-average number of shares of common stock outstanding during the period, less any shares subject to repurchase or forfeiture.

Because no shares of our common stock were subject to repurchase or forfeiture, no such shares were excluded from the calculation of basic and diluted net loss per share for the year ended December 31, 2009. For the years ended December 31, 2008 and 2007, there were 29,000 and 99,811 shares, respectively, of common

Table of Contents

stock excluded from our calculation of basic and diluted net loss per share because they were subject to repurchase or forfeiture. Because we are in a net loss position, we have excluded all unvested performance-based restricted stock unit awards, which are subject to forfeiture, outstanding stock options, preferred stock and warrants from our calculation of basic and diluted net loss per share allocable to common stockholders because these securities are antidilutive for all years presented. Had they been dilutive, such shares would have been included in our computation of diluted net loss per share allocable to common stockholders.

New Accounting Guidance

In October 2009, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2009-13, Multiple-Deliverable Revenue Arrangements. ASU 2009-13 is effective prospectively for revenue arrangements entered into or materially modified in fiscal years beginning on or after June 15, 2010. Early adoption is permitted. We are evaluating the impact, if any, the adoption of ASU 2009-13 will have on our consolidated financial statements, but do not expect the adoption of this guidance to have a material impact on our consolidated financial statements.

(2) Available-For-Sale Securities

The following table summarizes the investment categories comprising our available-for-sale securities at December 31, 2009 and 2008, in thousands:

	Maturity in Years	Amortized Cost	Gross Unrealized Gains	Gross Unrealized Losses	Estimated Fair Value
December 31, 2009					
US government and agency obligations	Less than 1	$ 20,433	$ 283	$	$ 20,716
Total available-for-sale securities		$ 20,433	$ 283	$	$ 20,716
December 31, 2008					
US government and agency obligations	Less than 1	$ 29,024	$ 54	$	$ 29,078
Corporate debt securities	Less than 1	7,741	12	(31)	7,722
Total available-for-sale securities		$ 36,765	$ 66	$ (31)	$ 36,800

(3) Fair Value Disclosures

We measure our financial assets and liabilities at fair value, which is defined as the exit price, or the amount that would be received from selling an asset or paid to transfer a liability in an orderly transaction between market participants at the measurement date.

We use the following three-level valuation hierarchy that maximizes the use of observable inputs and minimizes the use of unobservable inputs to value our financial assets and liabilities:

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 our own assumptions.

Table of Contents

The following table presents our valuation hierarchy for our financial assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2009, in thousands:

		Fair Value Measurements at December 31, 2009		
	Balance at December 31, 2009	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
Assets:				
Money market funds(1)	$ 86,857	$ 86,857	$	$
US government and agency obligations(2)	20,716	20,716		
Liabilities:				
Warrants and other derivative instruments	$ 6,642	$	$	$ 6,642

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

(2) Included in short-term investments, available-for-sale on our consolidated balance sheet.

The following table presents the activity for our derivative liabilities during the year ended December 31, 2009, in thousands:

	Significant Unobservable Inputs (Level 3)
Balance at January 1, 2009 after reclassification from additional paid-in capital upon adoption of new guidance	$ 2,118
Deerfield derivative liabilities	9,942
Gain from valuation of derivative liabilities	(5,418)
Balance at December 31, 2009	$ 6,642

(4) Land, Property and Equipment

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

	December 31,	
	2009	2008
Land, building and capital improvements	$ 77,858	$ 59,935
Leasehold improvements	19,208	35,317
Machinery and equipment	47,079	47,300
Computers and software	7,783	8,926
Furniture and office equipment	2,514	2,487
	154,442	153,965
Less accumulated depreciation and amortization	(58,997)	(51,225)
Net land, property and equipment	$ 95,445	$ 102,740

Depreciation expense was $8.8 million, $8.0 million and $7.8 million for the years ended December 31, 2009, 2008 and 2007, respectively. We capitalized interest of $0.9 million related to construction of a facility during the year ended December 31, 2008, and that balance was included in leasehold improvements.

Table of Contents

(5) Acquired Technology and Other Intangibles

In February 2001, we acquired Bunsen Rush for $15.0 million in cash and assumed $0.4 million in liabilities. We allocated $15.4 million to the patented Melanophore technology, our primary screening technology, acquired in such transaction. We are amortizing the Melanophore technology 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.

In January 2008, we acquired certain assets from Siegfried, including manufacturing facility production licenses and an assembled workforce originally valued at $12.1 million and $1.6 million, respectively. We amortized the acquired workforce over its estimated benefit of two years, which was determined based on an analysis as of the acquisition date. The manufacturing facility production licenses, which are necessary for us to produce and package tablets and other dosage forms broadly, were believed to have an indefinite useful life as of the acquisition date. We further evaluated the manufacturing facility production licenses and, in 2009, determined that an estimated useful life of 20 years as of the acquisition date was more appropriate. Due to the relatively nominal amount of amortization related to the manufacturing facility production licenses that would have been expensed in 2008 had it been treated as an amortizing asset, we recorded both the 2008 and 2009 amortization expense in 2009. This amortization also resulted in the reversal of $0.5 million of tax expense recorded in 2008 for a combined immaterial net increase to our net loss of $66,000 in 2009.

Acquired technology and other intangibles, net, consisted of the following at December 31, 2009 and 2008, in thousands:

December 31, 2009	Gross Carrying Amount	Accumulated Amortization	Net
Acquired technology from Bunsen Rush	$ 15,378	$ (13,577)	$ 1,801
Acquired manufacturing facility production licenses from Siegfried	12,580	(1,258)	11,322
Acquired workforce from Siegfried	1,629	(1,629)	
Total identifiable intangible assets, net	$ 29,587	$ (16,464)	$ 13,123

December 31, 2008	Gross Carrying Amount	Accumulated Amortization	Net
Acquired technology from Bunsen Rush	$ 15,378	$ (12,040)	$ 3,338
Acquired manufacturing facility production licenses from Siegfried	12,138		12,138
Acquired workforce from Siegfried	1,572	(786)	786
Total identifiable intangible assets, net	$ 29,088	$ (12,826)	$ 16,262

We recorded amortization expense of $1.5 million in each of the years ended December 31, 2009, 2008 and 2007 for the acquired technology from Bunsen Rush, $1.3 million in the year ended December 31, 2009 for the manufacturing facility production licenses acquired from Siegfried and $0.8 million for both of the years ended December 31, 2009 and 2008 for the acquired workforce from Siegfried.

Table of Contents

(6) Commitments

Leases

The following table summarizes our real property leasing arrangements and essential provisions as of December 31, 2009:

		Description of Arrangements
6166 Nancy Ridge Drive, San Diego, California	Lease	In 1997, we began leasing this property under a lease that included an option to buy the property for $2.1 million. In 1998, we 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 us 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. We have 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.
6122-6124-6126 Nancy Ridge Drive, San Diego, California	Lease with option to purchase	In 2002, we 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, we 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, we assigned our option to buy this entire building for $7.9 million when the lease ends in March 2012, and have an option to purchase the property back.
6138-6150 Nancy Ridge Drive, San Diego, California	Lease with option to purchase	In 2003, we completed the sale and leaseback of this property. The sales price for this property was $13.0 million and net proceeds to us were $12.6 million. We have accounted for this transaction using the financing method because our option to repurchase this property in the future is considered continued involvement requiring such method. Under the financing method, the book value of the property and related accumulated depreciation remain on our 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. We have the right to repurchase this property through year 14 of the lease. We recorded interest expense of $1.2 million, $1.3 million and $0.4 million in the years ended December 31, 2009, 2008 and 2007, respectively, related to this lease. At December 31, 2009, the total financing obligation on our consolidated balance sheets related to this transaction was $11.9 million.

Table of Contents

		Description of Arrangements
6114, 6118, 6154 Nancy Ridge Drive, San Diego, California	Lease with option to purchase	In May 2007, we 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 us of $48.5 million after financing costs and commissions. Concurrently with the closing of the transaction, we 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, we have 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. We have accounted for this transaction using the financing method because our option to repurchase this property in the future is considered continued involvement requiring such method. Initial base rent for the three properties (net of taxes, insurance and maintenance costs (i.e. triple net) for which we are 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. We recorded interest expense of $6.0 million, $3.9 million and $3.1 million in the years ended December 31, 2009, 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, 2009, the total financing obligation related to this transaction was $65.6 million.
Zofingen, Switzerland	Lease	We lease from Siegfried approximately 17,000 square feet in various facilities that can be terminated with 12 months written notice under an agreement that expires in 2032. The agreement stipulates that the annual rental payments are indexed to the Swiss Consumer Price Index after 2008.

In accordance with the lease terms for three of the above-listed properties, we are required to maintain deposits for the benefit of the landlord throughout the term of the leases. A total of $1.4 million and $1.3 million was recorded in other non-current assets on our consolidated balance sheets as of December 31, 2009 and 2008, respectively, related to such leases.

We recognize rent expense on a straight-line basis over the term of each lease. Rent expense was $1.2 million in both of the years ended December 31, 2009 and 2008 and was $1.1 million in the year ended December 31, 2007.

At December 31, 2009, we expected interest expense over the terms of the leases related to our facilities to total $85.7 million. As of December 31, 2009, the total financing obligation for these facilities was $77.5 million. The aggregate residual value of the facilities at the end of the lease terms is $10.0 million.

Table of Contents

Annual future obligations as of December 31, 2009 are as follows, in thousands:

Year ending December 31,	Financing Obligations	Operating Leases
2010	$ 7,329	$ 1,298
2011	8,187	1,258
2012	8,391	890
2013	8,601	256
2014	8,816	
Thereafter	111,904	
Total minimum lease payments	153,228	$ 3,702
Less amounts representing interest	(85,732)	
Add amounts representing residual value	9,990	
Lease financing obligations	77,486	
Less current portion	(717)	
	$ 76,769	

(7) Note Payable to Deerfield

In June 2009, we entered into a Facility Agreement with Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P., Deerfield Partners, L.P., Deerfield International Limited, Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited, or collectively Deerfield, pursuant to which Deerfield agreed to provide us with a $100.0 million secured loan and we agreed to issue Deerfield warrants to purchase an aggregate of 28,000,000 shares of our common stock at an exercise price of $5.42 per share upon the closing of such loan. In July 2009, we received net proceeds of $95.6 million from this loan and issued the warrants to Deerfield. On or before June 17, 2011, Deerfield may make a one-time election, which we refer to as the Deerfield Additional Loan Election, to loan us up to an additional $20.0 million under the Facility Agreement, with the additional loan maturing on the same date as the original loan, June 17, 2013. For each additional $1.0 million that Deerfield loans us under the Facility Agreement, we will issue Deerfield warrants for 280,000 shares of common stock at an exercise price of $5.42 per share. All of the warrants issued or issuable in connection with the Facility Agreement are exercisable until June 17, 2013. Under certain circumstances, Deerfield also has the right to require us to accelerate principal payments under the loan. At any time we may prepay any or all of the outstanding principal at par, and we may be required to make the scheduled repayments earlier in connection with certain equity issuances. At December 31, 2009, the outstanding principal balance on the Deerfield loan was $90.0 million.

In accordance with relevant guidance, we separately valued four components under the Facility Agreement at the July 6, 2009 issuance date, as follows:

(1) The $100.0 million loan was valued at $47.9 million on a relative fair value basis and is recorded as a long-term liability on our consolidated balance sheet.

(2) The warrants to purchase an aggregate of 28,000,000 shares of our common stock, net of issuance costs, were valued at $39.1 million on a relative fair value basis. The relative fair value of the warrants is recorded as additional paid-in capital on our consolidated balance sheet, and the resulting debt discount is being accreted to interest expense over the term of the loan or until paid using the effective interest rate method. These warrants were valued at the date of issuance using an option pricing model and the following assumptions: expected life of 3.95 years, risk-free interest rate of 2.0%, expected volatility of 66% and no dividend yield. Because these warrants are eligible for equity classification, no adjustments to the recorded value will be made on an ongoing basis.

(3) The Deerfield Additional Loan Election, including the 5,600,000 contingently issuable warrants to purchase up to 5,600,000 shares of our common stock, was valued at $9.5 million. The Deerfield

Table of Contents

Additional Loan Election is classified as a long-term liability on the consolidated balance sheet and, accordingly, will be revalued on each subsequent balance sheet date until it is exercised or expires, with any changes in the fair value between reporting periods recorded in the interest and other income (expense) section of our consolidated statements of operations (see Note 8). This allocation of proceeds under the Facility Agreement resulted in additional debt discount that is being accreted to interest expense over the term of the loan or until paid using the effective interest rate method.

(4) Deerfield s ability to accelerate principal payments under the loan was valued at $0.5 million. The acceleration right is classified as a long-term liability on our consolidated balance sheet and, accordingly, will be revalued on each subsequent balance sheet date until it is exercised or expires, with any changes in the fair value between reporting periods recorded in the interest and other income (expense) section of our consolidated statements of operations (see Note 8). This allocation of proceeds under the Facility Agreement resulted in additional debt discount that is being accreted to interest expense over the term of the loan or until paid using the effective interest rate method.

The table below reconciles the $47.9 million recorded value of the loan to the $90.0 million outstanding principal balance of the loan as of December 31, 2009, in thousands:

Recorded value of note payable to Deerfield	$ 47,906
Accretion of remaining debt discount over term of loan or until paid	42,094
Outstanding principal balance of note payable to Deerfield	$ 90,000

The loan matures on June 17, 2013, and the outstanding principal accrues interest at a rate of 7.75% per annum on the stated principal balance, payable quarterly in arrears. Total interest expense of $11.2 million, including accretion of the debt discount attributable to the warrants and the other derivative financial instruments and amortization of capitalized issuance costs, was recognized in connection with this loan in the year ended December 31, 2009. As of December 31, 2009, we expected interest expense of $18.9 million to be paid in cash over the term of the loan. The current effective annual interest rate on the loan is 33.6%.

As a result of the closing of our public offering of common stock in July 2009, we were required to repay Deerfield $10.0 million that was originally scheduled to be repaid in July 2010. In connection with this $10.0 million repayment, we retired a proportional share of the debt discount and issuance costs directly related to the repaid debt and recorded a loss on extinguishment of debt of $2.5 million in 2009. The remainder of required scheduled principal repayments is as follows: $20.0 million in July 2011, $30.0 million in July 2012, and $40.0 million at maturity.

(8) Derivative Liabilities

In June 2006 and August 2008, we issued seven-year warrants, which we refer to as the Series B warrants, to purchase 829,856 and 1,106,344 shares of our common stock, respectively, at an exercise price of $15.49 and $7.71 per share, respectively. The Series B warrants are related to our Series B Convertible Preferred Stock, which we redeemed in 2008 and is no longer outstanding. The warrants contain an anti-dilution provision and, as a result of subsequent equity issuances at prices below the adjustment price of $6.72 defined in the warrants, including the issuance of warrants to Deerfield (see Note 7), as of December 31, 2009 the number of shares issuable upon exercise of the outstanding June 2006 and August 2008 Series B warrants was increased to 916,213 and 1,222,050, respectively, and the exercise price was reduced to $14.03 and $6.98 per share, respectively.

In January 2009, we adopted amendments to the authoritative guidance related to contracts in an entity s own equity. These amendments provide a new two-step model to be applied in determining whether a financial instrument or an embedded feature in a financial instrument is indexed to an issuer s own stock that would qualify such financial instruments or embedded features for a scope exception. This scope exception specifies

Table of Contents

that a contract that would otherwise meet the definition of a derivative but is both (i) indexed to the company s own stock and (ii) classified in the stockholders equity section of the balance sheet would not be considered a derivative financial instrument. Our adoption of these amendments resulted in the determination that our Series B warrants are ineligible for equity classification as a result of provisions in the Series B warrants that may result in an adjustment to the warrant exercise price. As such, upon adoption of the new amendments and as a result of provisions in the Series B warrants that may result in an adjustment to the warrant exercise price, we recorded a $9.7 million adjustment to equity, a $2.1 million long-term liability for the fair value of the Series B warrants and a $7.6 million adjustment to the opening accumulated deficit balance as a cumulative effect of a change in accounting principle. We have revalued these warrants on each subsequent balance sheet date, and will continue to do so until they are exercised or expire, with any changes in the fair value between reporting periods recorded as other income or expense. The June 2006 Series B warrants were valued at December 31, 2009 using an option pricing model and the following assumptions: expected life of 3.50 years, risk-free interest rate of 2.0%, expected volatility of 68% and no dividend yield. The August 2008 Series B warrants were valued at December 31, 2009 using an option pricing model and the following assumptions: expected life of 5.62 years, risk-free interest rate of 2.9%, expected volatility of 61% and no dividend yield.

We separately valued the Deerfield Additional Loan Election, including the 5,600,000 contingently issuable warrants to purchase up to 5,600,000 shares of our common stock, as of the July 6, 2009 issuance date of the Deerfield loan (see Note 7). The value of the Deerfield Additional Loan Election is classified as a long-term liability on our consolidated balance sheet and, accordingly, will be revalued on each subsequent balance sheet date until it is exercised or expires, with any changes in the fair value between reporting periods recorded as other income or expense. In July 2009, the Deerfield Additional Loan Election was valued using an option pricing model and the following assumptions: expected life of 2 to 3 years, risk-free interest rate of 2.0%, expected volatility of 66% and no dividend yield. At December 31, 2009, these warrants were revalued using an option pricing model and the following assumptions: expected life of 2 to 3 years, risk-free interest rate of 1.9%, expected volatility of 69% and no dividend yield.

We also separately valued Deerfield s right to require us to accelerate principal payments of the loan under certain circumstances at $0.5 million as of the July 6, 2009 issuance date of the Deerfield loan (see Note 7). The value of this acceleration right is classified as a long-term liability on our consolidated balance sheet and, accordingly, will be revalued on each subsequent balance sheet date, with any changes in the fair value between reporting periods recorded as other income or expense. In July 2009 and at December 31, 2009, this acceleration right was valued using a discounted cash flow model.

Our derivative liabilities consisted of the following, as of December 31, 2009, in thousands:

Series B warrants	$ 2,386
Deerfield Additional Loan Election	3,831
Deerfield acceleration right	425
Total derivative liabilities	$ 6,642

The change in the fair value of our derivative liabilities is recorded in the interest and other income (expense) section of our consolidated statements of operations. The following table presents the gain (loss) we recorded in the year ended December 31, 2009, in thousands:

	Year ended December 31, 2009
Series B warrants	$ (268)
Deerfield Additional Loan Election	5,652
Deerfield acceleration right	34
Total gain due to revaluation of derivative liabilities	$ 5,418

Table of Contents

(9) Asset Acquisition from Siegfried Ltd and Related Agreements

In January 2008, we acquired from Siegfried certain drug product facility assets, including manufacturing facility production licenses, fixtures, equipment, other personal property and real estate assets in Zofingen, Switzerland, under an Asset Purchase Agreement between Siegfried and our wholly owned Swiss subsidiary, Arena Pharmaceuticals GmbH, or Arena GmbH. These assets are being used to manufacture lorcaserin 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 our common stock, which were issued to Siegfried in January 2008. We 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 January 2011, January 2012 and January 2013. The present value of this liability, which is classified as a long-term note payable to Siegfried on our consolidated balance sheet, was the US dollar equivalent of $9.1 million and $8.6 million at December 31, 2009 and 2008, respectively.

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		
Manufacturing facility production licenses	11,620	
Acquired workforce	1,505	
Total intangible assets		13,125
Total assets acquired		$ 35,544

At December 31, 2009 and 2008, the balances of these acquired assets are translated into US dollars at the applicable exchange rate on the balance sheet date.

In connection with this transaction, we 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, we recognized revenue of $6.6 million and $7.4 million in the years ended December 31, 2009 and 2008, respectively, for manufacturing drug products for Siegfried. Upon Siegfried s acceptance of drug products manufactured by us, we recognize manufacturing services revenues at agreed upon prices for such drug products. The related cost to manufacture the drug products was $6.5 million and $8.5 million in the years ended December 31, 2009 and 2008, respectively.

We also recorded expenses of $2.3 million for services incurred under the technical services agreement in both of the years ended December 31, 2009 and 2008. The technical services agreement provides us with administrative and other services to operate the facility. We determined that we are receiving an identifiable benefit for these services and are recording such fees in the operating expense section of the accompanying consolidated statements of operations.

Table of Contents

(10) Stockholders Equity

Preferred Stock

In October 2002, and in conjunction with the stockholders rights plan (see Stockholders Rights Plan below in this note), our 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 our 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 of our outstanding securities convertible into Series A Preferred Stock. As of December 31, 2009 and 2008, no shares of Series A Preferred Stock were issued or outstanding.

Treasury Stock

In October 2003, Biotechnology Value Fund, L.P. and certain of its affiliates accepted our offer of $23.1 million to purchase from them 3,000,000 shares of our common stock at a cash price of $7.69 per share, which shares are recorded on our consolidated balance sheets as treasury stock.

Equity Compensation Plans

In June 2009, our stockholders approved our 2009 Long-Term Incentive Plan, or 2009 LTIP. When our 2006 Long-Term Incentive Plan, as amended, or 2006 LTIP, was adopted, our Amended and Restated 1998 Equity Compensation Plan, Amended and Restated 2000 Equity Compensation Plan, and 2002 Equity Compensation Plan (or together with the 2006 LTIP, the Prior Plans) were terminated. Upon stockholder approval of the 2009 LTIP, the 2006 LTIP was also terminated. However, notwithstanding such termination of the Prior Plans, all outstanding awards under the Prior Plans will continue to be governed under the terms of the Prior Plans.

There were 6,488,112 shares available for issuance under the 2009 LTIP as of the date of stockholder approval in June 2009 and 6,572,781 shares available for issuance at December 31, 2009. Such shares may be granted as incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards and performance awards. Subject to certain limited exceptions, (i) stock options and stock appreciation rights granted under the 2009 LTIP reduce the available number of shares by one share for every share issued while awards other than stock options and stock appreciation rights granted under the 2009 LTIP reduce the available number of shares by 1.3 shares for every share issued, and (ii) shares that are released from awards granted under the Prior Plans or the 2009 LTIP because the awards expire, are forfeited or are settled for cash will increase the number of shares available under the 2009 LTIP by one share for each share released from a stock option or stock appreciation right and by 1.3 shares for each share released from a restricted stock award or restricted stock unit award.

Stock options granted under the 2009 LTIP generally vest 25% a year over four years and are exercisable for up to 10 years from the date of grant. The recipient of a restricted stock award has all rights of a stockholder at the date of grant, subject to certain restrictions on transferability and a risk of forfeiture. The minimum performance period under a performance award is 12 months. Neither the exercise price of an option nor the grant price of a stock appreciation right may be less than 100% of the fair market value of the common stock on the date such option or stock appreciation right is granted, except in specified situations. The 2009 LTIP prohibits repricings of options and stock appreciation rights (other than to reflect stock splits, spin-offs or certain other corporate events) unless stockholder approval is obtained.

In the event of termination of service, unvested restricted stock is subject to forfeiture. In accordance with relevant guidance, we have excluded all unvested restricted stock from our calculation of basic and diluted net loss per share.

Table of Contents

In 2003, we set up a deferred compensation plan for our executive officers, whereby executive officers elected to contribute their shares of restricted stock into the plan. At December 31, 2009, there were 101,669 shares of restricted stock in the plan and, at December 31, 2008 and 2007, there were 107,919 shares of restricted stock in the plan.

The following table summarizes our stock option activities under the Prior Plans and the 2009 LTIP, or collectively, our Equity Compensation Plans, for the year ended December 31, 2009:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2008	6,556,630	$ 9.74		
Granted	1,250,019	4.02		
Exercised	(63,500)	0.60		
Forfeited/cancelled/expired	(516,325)	8.31		
Outstanding at December 31, 2009	7,226,824	$ 8.94	5.95	$ 144
Vested and expected to vest at December 31, 2009	6,755,985	$ 8.98	5.80	$ 143
Vested and exercisable at December 31, 2009	4,743,049	$ 9.65	4.74	$ 138

The aggregate intrinsic value in the above table is calculated as the difference between the closing price of our common stock at December 31, 2009 of $3.55 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, 2009, 2008 and 2007 was $38,000, $0.1 million and $1.2 million, respectively.

We 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 our 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 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, 2009, 2008 and 2007 as management believed achievement of the performance goals was not probable at such dates. The following table summarizes activity with respect to such awards during the year ended December 31, 2009:

	Performance Units	Weighted-Average Grant-Date Fair Value
Outstanding at December 31, 2008	1,950,100	$ 12.30
Granted		
Vested		
Forfeited/cancelled	(235,750)	11.32
Outstanding at December 31, 2009	1,714,350	$ 12.44
Vested at December 31, 2009		

79

Table of Contents

The following table summarizes our unvested restricted stock activity, excluding shares contributed to our deferred compensation plan, during the year ended December 31, 2009:

Unvested Restricted Stock	Shares	Weighted-Average Grant-Date Fair Value
Unvested at December 31, 2008	29,000	$ 16.11
Granted		
Vested	(29,000)	16.11
Forfeited		
Unvested at December 31, 2009		$

The total grant-date fair value of restricted stock vested was $0.5 million during each of the years ended December 31, 2009, 2008 and 2007.

Employee Stock Purchase Plans

In June 2009, our stockholders approved our 2009 Employee Stock Purchase Plan, or 2009 ESPP, which provides for the issuance of up to 1,500,000 shares of our common stock and qualifies under Section 423 of the Internal Revenue Code. As of December 31, 2009, a total of 274,258 shares had been issued under the 2009 ESPP, and 1,225,742 shares of common stock were available for issuance under the 2009 ESPP.

Upon stockholder approval of the 2009 ESPP, our 2001 Employee Stock Purchase Plan, as amended, or 2001 ESPP, was terminated. However, notwithstanding such termination of the 2001 ESPP, all offering periods existing under the 2001 ESPP on the effective date of the 2009 ESPP continue in effect under the 2009 ESPP, but in accordance with the terms of the 2001 ESPP.

Under the 2009 ESPP, substantially all US employees can choose to have up to 15% of their compensation withheld to purchase up to 625 shares of common stock per purchase period, subject to certain limitations. The shares of common stock may be purchased over an offering period with a maximum duration of 24 months and at a price of not less than 85% of the lesser of the fair market value of the common stock on (i) the first trading day of the applicable offering period or (ii) the last trading day of the applicable three-month purchase period.

During the years ended December 31, 2009, 2008 and 2007, 364,096, 357,101 and 235,726 shares, respectively, were purchased under our employee stock purchase plans.

Share-based Compensation

We use the Black-Scholes option pricing model to estimate the grant-date fair value of share-based awards in determining our share-based compensation expense. The table below sets forth the weighted-average assumptions and estimated fair value of stock options we granted under our Equity Compensation Plans during the years ended December 31, 2009, 2008 and 2007:

	December 31,		
	2009	2008	2007
Risk-free interest rate	2.0%	2.5%	4.6%
Dividend yield	0%	0%	0%
Expected volatility	86%	57%	64%
Expected life (years)	5.72	5.50	5.39
Weighted-average estimated fair value of stock options granted	$ 2.87	$ 3.64	$ 7.82

Table of Contents

The table below sets forth the weighted-average assumptions and estimated fair value of the options to purchase stock granted under our employee stock purchase plans for multiple offering periods during the years ended December 31, 2009, 2008 and 2007:

	December 31,		
	2009	2008	2007
Risk-free interest rate	0.1% - 3.3%	0.9% - 3.3%	3.8% - 5.3%
Dividend yield	0%	0%	0%
Expected volatility	53% - 82%	53% - 63%	66% - 72%
Expected life (years)	0.25 - 2.0	0.25 - 2.0	0.25 - 2.0
Weighted-average estimated fair value of options granted under our employee stock purchase plans	$1.45 to $2.85	$2.05 to $2.85	$2.18 to $5.46

Expected volatility 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 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.

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Based on historical experience, forfeitures of unvested options were estimated to be 6.4% in the first quarter of 2009 and 8.5% for the balance of 2009. For the years ended December 31, 2008 and 2007, forfeitures were estimated to be 5.1% and 5.4%, respectively. As a result, we reduced our share-based compensation expense by $0.5 million, $0.3 million and $0.4 million for the years ended December 31, 2009, 2008 and 2007, respectively. If actual forfeitures vary from estimates, we will recognize the difference in compensation expense in the period the actual forfeitures occur or when stock options vest.

We recognized share-based compensation expense as follows, in thousands, except per share data:

	December 31,		
	2009	2008	2007
Research and development	$ 4,078	$ 4,967	$ 4,190
General and administrative	2,765	3,525	4,626
Restructuring charges	306		
Total share-based compensation expense and impact on net loss allocable to common stockholders	$ 7,149	$ 8,492	$ 8,816
Impact on net loss per share allocable to common stockholders, basic and diluted	$ 0.08	$ 0.11	$ 0.14

At December 31, 2009, total unrecognized estimated compensation cost, excluding estimated forfeitures, related to unvested stock options was $7.6 million, which is expected to be recognized over a weighted-average remaining requisite service period of 2.05 years.

Cash of $38,000 was received from stock option exercises during the year ended December 31, 2009. Cash of $0.9 million was received from stock purchases under the employee stock purchase plans during the year ended December 31, 2009. Tax benefits recognized and related to share-based compensation and related cash flow impacts were not material during the year ended December 31, 2009 because we are in a net operating loss position.

Table of Contents

Warrants

In July 2009, we issued to Deerfield warrants to purchase an aggregate of 28,000,000 shares of our common stock at an exercise price of $5.42 per share in connection with our receipt of a $100.0 million loan. We valued these warrants, which are recorded as additional paid-in capital on our consolidated balance sheet, at $39.1 million on a relative fair value basis as of the July 6, 2009 issuance date, net of allocated issuance costs (see Note 7).

In June 2006 and August 2008, we issued our Series B warrants (see Note 8). These warrants contain an anti-dilution provision and, as a result of subsequent equity issuances at prices below the adjustment price of $6.72 defined in the warrants, as of December 31, 2009 the outstanding June 2006 and August 2008 Series B warrants were exercisable for 916,213 and 1,222,050 shares, respectively, at exercise prices of $14.03 and $6.98 per share, respectively.

The following table presents a summary of our outstanding warrants as of December 31, 2009:

	Balance Sheet Classification	Number of Warrants	Exercise Price	Expiration Date
Deerfield warrants	Equity	28,000,000	$ 5.42	June 17, 2013
Series B warrants	Liability	1,222,050	$ 6.98	August 14, 2015
Series B warrants	Liability	916,213	$ 14.03	June 30, 2013
Total number of warrants outstanding		30,138,263		

Common Shares Reserved for Future Issuance

The following shares of our common stock are reserved for future issuance at December 31, 2009:

Outstanding warrants	30,138,263
Contingently issuable warrants	5,600,000
Equity Compensation Plans	15,513,955
2009 ESPP	1,225,742
Deferred compensation plan	101,669
Total	52,579,629

Stockholders Rights Plan

In October 2002, our 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 us 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 our common stock. At such time, all holders of the Rights, other than the acquiror, will be entitled to purchase shares of our common stock at a 50% discount to the then current market price.

The Rights will trade with our 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 our common stock. Our 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.

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 our common stock would be an Acquiring Person (as further defined in the Amendment) increased from 10% to 15%.

82

Table of Contents

(11) Collaborations

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. 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. In December 2008, we announced that Ortho-McNeil-Janssen initiated a Phase 1 clinical trial of APD597, a potentially more potent Arena-discovered drug candidate, and it has initiated single and multiple ascending dose studies of APD597. We are eligible to receive a total of $295.0 million in milestone payments for each compound Ortho-McNeil-Janssen develops under the collaboration, 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, 2009, we received $27.5 million from Ortho-McNeil-Janssen in upfront and milestone payments, $7.2 million in research funding and $17.3 million for patent activities and additional sponsored research.

For the year ended December 31, 2009, we recognized $3.8 million of revenues under the Ortho-McNeil-Janssen agreement, of which $3.7 million was reimbursement for patent activities and $0.1 million was for additional sponsored research. For the year ended December 31, 2008, we recognized revenues of $2.3 million, 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.

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 also 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.

Merck & Co., Inc.

In October 2002, we initiated a collaboration with Merck on three GPCRs to develop therapeutics for atherosclerosis and other disorders. Under the collaboration, Merck advanced MK-0354, a first generation niacin receptor agonist, and MK-1903, a second generation niacin receptor agonist, into Phase 2 trials. In December 2009, following evaluation of the Phase 2 trial results of MK-1903, Merck discontinued development of MK-1903 and notified us of its election to terminate the agreement, which becomes effective on March 22, 2010. Upon termination, all licenses granted to Merck under the agreement become non-exclusive. From the inception of this collaboration through December 31, 2009, we received $18.0 million from Merck in upfront and milestone payments, $27.5 million in research funding, equity investments totaling $8.5 million and $0.5 million for patent activities.

For both of the years ended December 31, 2009 and 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,

Table of Contents

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.

(12) Employee Benefit Plan

All of our US employees are eligible to participate in our defined contribution retirement plan that complies with Section 401(k) of the Internal Revenue Code. We match 100% of each participant s voluntary contributions, subject to a maximum of 6% of the participant s compensation. Our matching portion, which totaled $1.8 million in the year ended December 31, 2009, $2.1 million in the year ended December 31, 2008 and $1.4 million in the year ended December 31, 2007, vests over a five-year period from the date of hire.

(13) Income Taxes

We recognize the impact of an uncertain income tax position on the income tax return 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. Pursuant to Sections 382 and 383 of the Internal Revenue Code, annual use of our net operating loss and credit carryforwards could be limited in the event of cumulative changes in ownership of more than 50%. We are currently undergoing a Section 382/383 analysis, and have determined that such a change has occurred in prior years. Because this analysis has not been completed, at December 31, 2009, we removed deferred tax assets of $188.1 million for net operating losses, or NOL, and $51.1 million for research and development credits from our deferred tax asset schedule. At December 31, 2008, we removed deferred tax assets of $160.6 million for NOL and $45.8 million for research and development credits from our deferred tax asset schedule. As such, we have recorded a corresponding decrease to our valuation allowance for each year. When the Section 382/383 analysis is completed, we will update our unrecognized tax benefits in accordance with the relevant authoritative guidance. We expect the Section 382/383 analysis to be completed within the next twelve months.

Our practice is to recognize interest and/or penalties related to income tax matters in income tax expense. We did not have any accrued interest or penalties included in our consolidated balance sheets at December 31, 2009 or 2008, and did not recognize any interest and/or penalties in our consolidated statements of operations during the years ended December 31, 2009 or 2008.

Arena Pharmaceuticals, Inc. and our US subsidiaries are subject to income taxation in the United States at the federal and state levels. Our tax years for 1997 and later are subject to examination by the US and California tax authorities due to the carryforward of unutilized NOL and research and development credits. We are also subject to foreign income taxes in the countries in which we operate. To our knowledge, we are not currently under examination by any taxing authorities.

Our Swiss subsidiary, Arena GmbH, has been granted a conditional incentive tax holiday for its operations in Switzerland that is expected to exempt it from a majority of the potential Swiss income taxes. Should this tax holiday come into effect, it would continue for a period of up to 10 years, not to extend beyond December 31, 2022.

At December 31, 2009 and 2008, we had net deferred tax assets of $15.4 million and $16.9 million, respectively. The deferred tax assets are primarily comprised of deferred revenues, share-based compensation expense, depreciation, foreign NOL and capitalized research and development costs. Due to uncertainties surrounding our ability to generate future taxable income to realize these assets, at December 31, 2009, we established a full valuation allowance to offset our net deferred tax assets. At December 31, 2008, we recognized a deferred tax liability of $0.5 million related to the tax amortization of an intangible asset which was originally believed to have an indefinite life for financial statement purposes (see Note 5), and established a valuation allowance to offset all of the remaining net deferred tax assets.

Table of Contents

We are required to allocate our total income tax benefit of $0.6 million between continuing operations and other comprehensive income in our consolidated financial statements. Accordingly, we have charged $0.1 million directly to other comprehensive income and recorded a tax benefit of $0.7 million in continuing operations.

Our provision (benefit) for income taxes, reported in total interest and other income (expense), net, consists of the following, in thousands:

	December 31,		
	2009	2008	2007
Current:			
Federal	$ (68)	$ (254)	$
Deferred:			
Federal	(84)		
State	(9)		
Foreign	(534)	534	