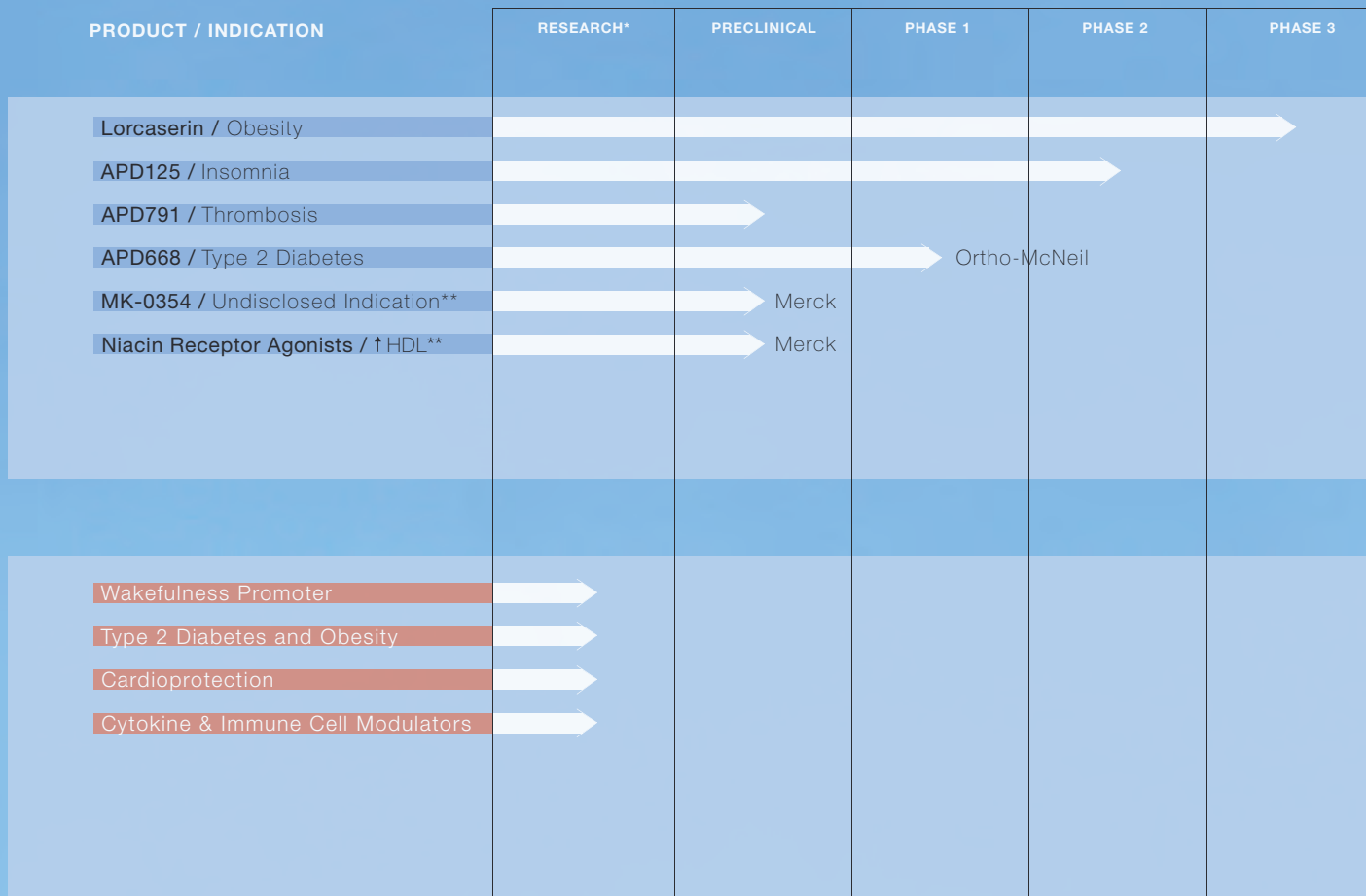


Arena Pharmaceuticals, Inc.





\* Representative of our research programs.

\*\* Merck discontinued development of MK-0354 for the treatment of atherosclerosis after a Phase 2 clinical trial completed in 2006, but is exploring continued development of MK-0354 for an undisclosed indication under our partnership. Merck is also continuing to evaluate other niacin receptor agonists for the treatment of atherosclerosis and other disorders under our partnership.





## Letter

**DEAR STOCKHOLDERS:** The United States Government Accountability Office issued a report on new drug development near the end of last year suggesting that pharmaceutical research and development productivity is declining and that innovation has become stagnant. The report notes that the declines in R&D productivity have occurred despite significant increases in R&D expenses: from 1993 through 2004 annual inflation-adjusted R&D expenses increased 147%, but the number of New Drug Applications submitted to the U.S. Food and Drug Administration for new molecular entities (i.e. new medicines, not improvements of already approved medicines) increased only 7% over this period. The GAO report, and an October 2006 report on pharmaceutical R&D by the Congressional Budget Office noting that “introductions of innovative new drugs have slowed,” are more confirmatory than surprising – it has been apparent for years that pharmaceutical R&D is in poor health. While troubling, these reports are helpful because I think they define the biggest problem, and greatest need, in drug R&D today – innovation.

Although we did not have the benefit of these reports when we founded Arena in 1997, we recognized innovation as a key element to successful drug development and made a conscious effort to facilitate innovation. Innovation is one of the four core values established by Arena employees, and it is a timely topic considering the recent reports. In addition to Innovation, our other core values are Integrity, Excellence and Teamwork.

We believe that business and science need to be equal partners to foster innovation and create significant opportunities to discover and successfully develop new drugs. The success of this partnership in the nearly 10 years since Arena’s founding is illustrated by a number of accomplishments, including the invention and implementation of new technologies, the discovery of new receptors and their therapeutic potential, and the advancement of multiple drug candidates into clinical development. This past September, we reached a significant milestone when we initiated Arena’s first Phase 3 clinical trial. The trial, called BLOOM, is the first of three pivotal trials intended to evaluate the efficacy and safety of lorcaserin for the treatment of obesity. The lorcaserin Phase 3 program, along with our Phase 2 insomnia program that leads the balance of our emerging drug candidate pipeline, represents a level of success and corporate maturity reached only by a minority of companies in our industry.

These achievements, and our general success to date, are not built on a simple commitment to employing innovative technologies in R&D, but rather on a broader corporate commitment to innovation. Our belief is that successful R&D requires innovation throughout the company, particularly in the corporate culture, because we think that innovation begins and ends with people. To have innovation, you need excellent people who are motivated to achieve great things by working together. There is no reasonable alternative in an industry where the complete drug discovery, development and review process can take 15 years and hundreds of millions of dollars.

Therefore, at Arena, innovation begins with how we have chosen to regard our employees and foster an atmosphere that cultivates their best efforts. A key part of that is the assignment of an integrated project team to each drug development program. Each team is responsible for making decisions regarding the direction of its program. This structure promotes two factors that support our goal of fostering innovation. First, by integrating members from different departments on every team, we ensure better access to, and sharing of, expertise and information. Second, this structure requires employee teams to take on decision making and problem solving responsibilities, and discourages teams from inappropriately “passing the baton” to others.



Although people have specific responsibilities related to their team programs, independent initiative, as well as cross-team questioning, is encouraged. We have a quarterly program review process open to employees to support this aspect of our culture. By promoting cross-team interaction we advance information sharing, and deter the creation of corporate silos, thus improving decision making. We also maintain an open environment where employees can walk into my office, or the office of any manager, and comment or ask questions. We believe that our best discovery resources are our fellow employees and encourage employees to pose questions and concerns to their Arena colleagues. Importantly, excellence and high ethical standards for all team related and individual work is the expectation – less is unacceptable.

The dedication to make people a top priority is further reflected by the excellent benefits we offer our regular, full-time employees. For example, all such employees and their eligible dependents qualify for medical insurance premiums fully paid for by Arena. We also provide life and disability insurance, fund medical flexible spending accounts and match 401(k) deferrals up to 6% of each such employee's salary. These employees also receive stock options, providing the opportunity to share in corporate success.

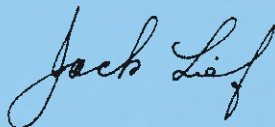
Although our approach may take more effort and dedication, it does not cost more; our expenses are in line with comparable companies, and I think the weight of the evidence strongly suggests that it works. We have some obvious innovation driven successes, such as moving lorcaserin from discovery to Phase 3 in well under the average development time, and the discovery of new receptors like the GDIR for diabetes and the niacin receptor for cardiovascular disease. But there are also less obvious successes: we have a voluntary turnover rate that is nearly half of other biotechnology companies based in San Diego, California, and in an anonymous survey we conducted of Arena employees in 2006, over 70% of respondents stated they were committed to Arena as more than just "a place to work." While these achievements, and others, are not as visible, they are equally valuable, providing the foundation on which our innovation continues to grow and produce.

Our long-term strategic planning, financial strength and other factors have also been critical in building Arena, and I realize there remain many challenges and much more for us to achieve. Over the next several quarters, we are looking forward to BLOOM's Data Safety Monitoring Board performing month 6 and 12 echocardiogram reviews, partnership opportunities, the advancement of our insomnia and anti-thrombotic programs, and the progress of our diabetes partnership with Ortho-McNeil and our cardiovascular partnership with Merck, as well as other events.

I believe we can achieve these milestones by maintaining our approach, focus and values. In conclusion, we will continue to apply our core values to everything that we do, and we will continue to systematically build Arena, our infrastructure, our R&D capabilities and our drug candidate pipeline with a strategic plan that seeks to reach beyond our next corporate milestone to better achieve our long-term goal of bringing new medicines to patients with serious diseases while maximizing value for our stockholders.

Thank you for your continued interest in Arena.

Sincerely,



Jack Lief

President and  
Chief Executive Officer

MARCH 31, 2007



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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

**ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934**

For the fiscal year ended December 31, 2006

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**  
(State or other jurisdiction of  
incorporation or organization)

**23-2908305**  
(I.R.S. Employer  
Identification No.)

**6166 Nancy Ridge Drive, San Diego, CA**  
(Address of principal executive offices)

**92121**  
(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

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

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K (§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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer.

Large accelerated filer  Accelerated filer  Non-accelerated filer

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

The approximate aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately \$536.9 million as of June 30, 2006, 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 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 February 28, 2007, there were 60,816,605 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 2007, 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, 2006.

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# ARENA PHARMACEUTICALS, INC.

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## INFORMATION RELATING TO FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K includes forward-looking statements. These forward-looking statements involve a number of risks and uncertainties. Such forward-looking statements include statements about our strategies, intentions, expectations, goals, objectives, discoveries, collaborations, clinical or other internal or partnered programs, future achievements and other statements that are not historical facts. These forward-looking statements can generally be identified as such because the context of the statement will include words such as “may,” “will,” “intends,” “plans,” “believes,” “anticipates,” “expects,” “estimates,” “predicts,” “potential,” “continue,” “likely,” or “opportunity,” the negative of these words or other similar words. 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 “Item 1A. Risk Factors” and in “Item 7. Management’s Discussion and Analysis of Financial Condition and Results of Operations” of this Annual Report on Form 10-K. In addition, past financial or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we undertake no obligation to publicly revise our forward-looking statements to reflect events or circumstances that arise after the filing of this Annual Report on Form 10-K or documents incorporated by reference herein that include forward-looking statements.

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

In this Annual Report on Form 10-K, “Arena Pharmaceuticals,” “Arena,” “we,” “us” and “our” refer to Arena Pharmaceuticals, Inc. and/or our wholly owned subsidiary, BRL Screening, Inc., unless the context otherwise provides.

### PART I

#### Item 1. Business.

We are a clinical-stage biopharmaceutical company focused on discovering, developing and commercializing oral drugs in four major therapeutic areas: cardiovascular, central nervous system, inflammatory and metabolic diseases. Our most advanced drug candidate, lorcaserin hydrochloride, or lorcaserin, is being investigated in a Phase 3 clinical trial program for the treatment of obesity. We have a broad pipeline of novel compounds that target known and orphan G protein-coupled receptors, or GPCRs, and includes compounds being evaluated independently and with our partners, Ortho-McNeil Pharmaceutical, Inc. and Merck & Co., Inc.

In September 2006, we initiated the first of three planned Phase 3 pivotal trials evaluating the efficacy and safety of lorcaserin, our lead drug candidate under investigation for the treatment of obesity. The first trial, known as BLOOM (Behavioral modification and Lorcaserin for Overweight and Obesity Management), is a double-blinded, randomized and placebo-controlled trial. In this trial, we recently completed enrollment of 3,182 overweight and obese patients in approximately 100 centers in the United States. A Phase 2b clinical trial demonstrated that treatment with lorcaserin produced a highly statistically significant, progressive and dose-dependent weight loss over a 12-week period. An assessment of echocardiograms for patients in the Phase 2b trial indicated that lorcaserin had no apparent effect on heart valves or pulmonary artery pressure.

In addition to lorcaserin, our other lead internal development programs include APD125 and APD791. We recently initiated dosing in a Phase 2 clinical trial of APD125, which is an orally available drug candidate that we discovered and believe has the potential to reduce insomnia symptoms and improve sleep maintenance. We expect to initiate a Phase 1 clinical trial of APD791 around the middle of 2007. APD791 is an orally available drug candidate that we discovered and are investigating for the treatment and the prevention of arterial thromboembolic diseases such as acute coronary syndrome.

In addition to internal programs, we have active partnerships with two major pharmaceutical companies: Ortho-McNeil and Merck. Our Ortho-McNeil partnership is focused on diabetes, and our most advanced drug candidate in this partnership is

APD668, an Arena-discovered, orally administered drug candidate that is in clinical development for the treatment of type 2 diabetes. Our Merck partnership is focused on niacin receptor agonists as treatments for atherosclerosis and other disorders, and several orally administered drug candidates are under preclinical evaluation.

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 about 60, or 30%, of the approximately 190 known non-sensory GPCRs. We believe our GPCR-focused technologies and integrated discovery and development capabilities will allow us to continue to build our pipeline of unique and selective drug candidates.

We intend to commercialize our drug candidates independently and with partners. We have not received regulatory approval for, or generated commercial revenues from, marketing or selling any drugs. We were incorporated in 1997.

## Our Research & Development Programs

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

<u>Program (Indication)</u>	<u>Development Status</u>	<u>Next Potential Milestone</u>	<u>Commercial Rights</u>
Lorcaserin (obesity) .....	Phase 3	First DSMB review	Arena
APD125 (insomnia) .....	Phase 2	Complete Phase 2	Arena
APD791 (arterial thrombosis).....	Preclinical	Initiate Phase 1	Arena
APD668 (diabetes).....	Phase 1	Initiate Phase 2	Ortho-McNeil
MK-0354 (undisclosed) (1) .....	Preclinical	Reinitiate clinical trials	Merck
Niacin receptor agonist (atherosclerosis; raise HDL) (1).....	Preclinical	Initiate Phase 1	Merck
Type 2 diabetes & obesity .....	Research	—	Arena
Wakefulness promoter .....	Research	—	Arena
Cardioprotection .....	Research	—	Arena
Cytokine & immune cell modulators .....	Research	—	Arena

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

*(1) Merck discontinued development of MK-0354 for the treatment of atherosclerosis after a Phase 2 clinical trial completed in 2006, but is evaluating MK-0354 for continued development for an undisclosed indication under our partnership. Merck is also continuing to evaluate other niacin receptor agonists for the treatment of atherosclerosis and other disorders under our partnership.*

### Lorcaserin

We are investigating lorcaserin in a Phase 3 clinical trial program for the treatment of obesity. Obesity affects tens of millions of adults and children in the United States and poses serious long-term threats to their health and welfare. Studies have shown that modest weight loss of as little as five percent of initial body weight can result in a meaningful reduction in the risks associated with obesity, such as diabetes. Currently, medical treatment options for obesity are limited.

Lorcaserin is a novel and selective 5-HT<sub>2c</sub> serotonin receptor agonist. Two non-selective, serotonin-acting drugs, fenfluramine and dexfenfluramine (often used in combination with phentermine, the combination of which was commonly referred to as “fen-phen”), although efficacious as appetite suppressants and for treatment of obesity, were withdrawn from the market in 1997 after incidences of heart valve disease and pulmonary hypertension were associated with their usage. The fenfluramines release serotonin and have the potential to activate all 14 serotonin receptors, including the 5-HT<sub>2b</sub> receptor. Stimulation of this receptor has been implicated in the heart valve abnormalities associated with these drugs. Based on our preclinical studies and clinical trial data to date, we believe that lorcaserin stimulates the 5-HT<sub>2c</sub> serotonin receptor more selectively than fenfluramine and dexfenfluramine, and is therefore unlikely to cause the cardiovascular side effects associated with those drugs. This belief is supported by data from our 4 and 12-week clinical trials, in which no apparent effects of the drug were seen on heart valves or pulmonary arterial pressure. However, additional longer-term trials will be needed to confirm these results. This is part of the focus of our Phase 3 clinical trial program, which began with the BLOOM trial we initiated in September 2006.



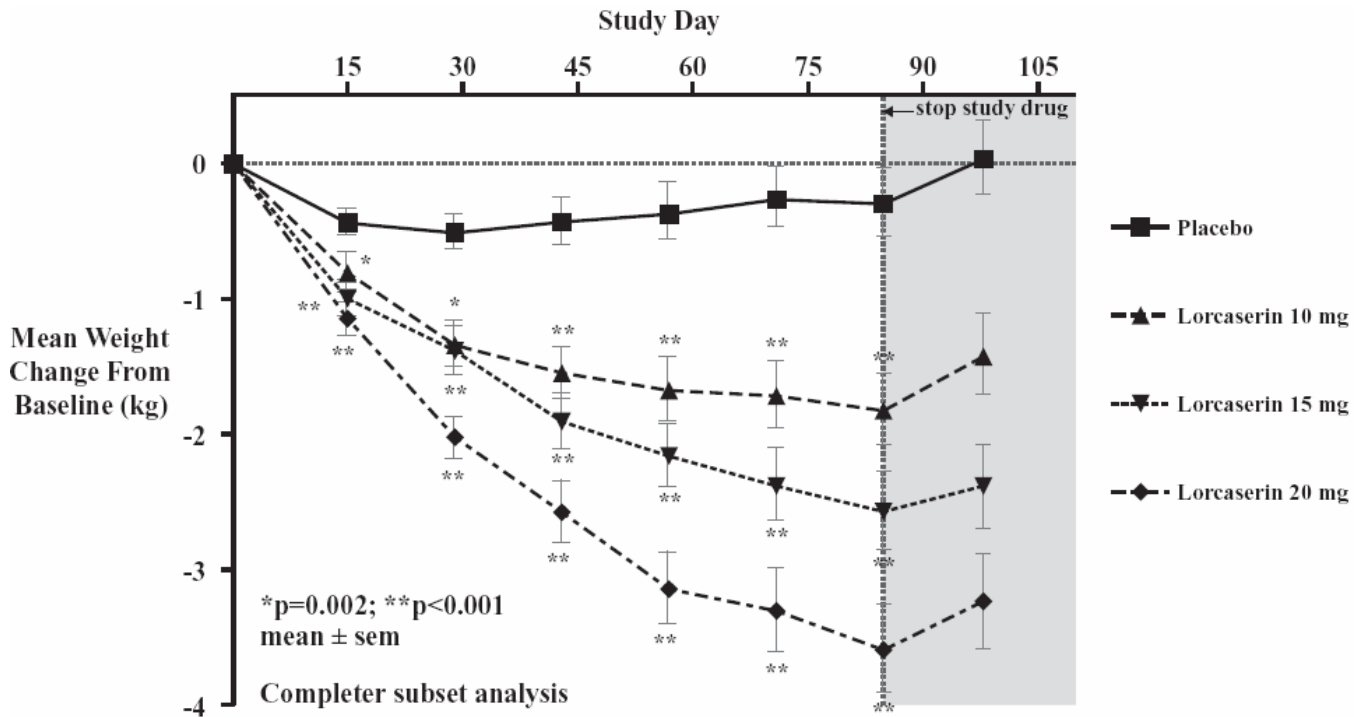
*Mechanism of Action.* We believe lorcaserin selectively stimulates the 5-HT<sub>2c</sub> serotonin receptor, a GPCR located in the hypothalamus. Stimulation of this hypothalamic receptor is strongly associated with feeding behavior and satiety. We conducted preclinical studies examining the activity and 5-HT receptor subtype specificity of lorcaserin. In these studies, lorcaserin demonstrated a high affinity and specificity for the 5-HT<sub>2c</sub> receptor, with approximately 15-fold and 100-fold selectivity over the 5-HT<sub>2a</sub> and 5-HT<sub>2b</sub> receptors, respectively, and no pharmacologic activity at other serotonin receptors.

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

The randomized, double-blinded, multiple-dose, 28-day Phase 2a clinical trial of lorcaserin in obese patients compared doses of 1 mg, 5 mg and 15 mg to placebo. 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 0.9 pounds for the placebo group. Lorcaserin was generally well tolerated at all doses investigated in the trial. An assessment of follow-up echocardiograms taken at the end of dosing and approximately 90 days after patients received their first doses of lorcaserin in the Phase 2a clinical trial indicated no apparent drug effect on heart valves or pulmonary artery pressure.

A randomized, double-blinded, multiple-dose, 12-week Phase 2b clinical trial of lorcaserin in obese patients compared doses of 10 mg and 15 mg once daily and 20 mg (10 mg dosed twice daily) of lorcaserin to placebo. The primary endpoint of the trial, which excluded diet and exercise advice, was weight loss after administration of lorcaserin for 12 weeks. Patients completing the 12-week treatment period with lorcaserin achieved a highly statistically significant ( $p<0.001$ ) mean weight loss of 4.0, 5.7 and 7.9 pounds at daily doses of 10 mg, 15 mg and 20 mg (10 mg dosed twice daily), respectively, compared to 0.7 pounds for the placebo group. Using an intent-to-treat, last-observation-carried-forward analysis, treatment with lorcaserin was also associated with a highly statistically significant ( $p<0.001$ ) mean weight loss of 3.7, 4.8 and 6.8 pounds at daily doses of 10 mg, 15 mg and 20 mg (10 mg dosed twice daily), respectively, in patients taking lorcaserin compared to 0.4 pounds for the placebo group. The proportions of patients completing the 12-week treatment period with lorcaserin who achieved a 5% or greater weight loss from baseline were 13% ( $p=0.015$ ), 20% ( $p<0.001$ ) and 31% ( $p<0.001$ ) at daily doses of 10 mg, 15 mg and 20 mg (10 mg dosed twice daily), respectively, compared to 2% in the placebo group. Lorcaserin was generally well tolerated at all doses investigated in the trial. Adverse events occurring in greater than 5% in any of the dosed groups were headache, nausea, dizziness, vomiting, dry mouth, nasopharyngitis, fatigue and urinary tract infection. As demonstrated by the graph below, average weight loss increased progressively at each time point measured throughout the trial for all lorcaserin dose groups, and was dose-dependent. As we expected, after patients stopped taking lorcaserin, they started to regain weight.

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



An assessment of echocardiograms at baseline and day 85 indicated no apparent lorcaserin effect on heart valves or pulmonary artery pressure. No changes in valvular regurgitation greater than one category, no significant differences between any treatment group and placebo in number of increases in valve regurgitation at any valve, and no significant increases in pulmonary artery pressure in any group were identified in the echocardiogram results. 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). The U.S. Food and Drug Administration, or FDA, defines valvulopathy as mild or greater aortic valve regurgitation or moderate or greater mitral valve regurgitation. This is one measure used in our Phase 3 program to assess potential effects of lorcaserin on heart valves. As demonstrated by the table below, the incidence of FDA-defined valvulopathy was greater in the placebo group versus the combined lorcaserin treated groups.

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

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

*Phase 3 Clinical Development.* Following our discussions with the FDA, in September 2006 we initiated the first of three planned pivotal Phase 3 clinical trials to evaluate the safety and efficacy of lorcaserin for the treatment of obesity. We recently completed enrollment of 3,182 overweight and obese patients in approximately 100 centers in the United States in the first trial, BLOOM, which is double-blinded, randomized and placebo-controlled.

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

All patients will receive echocardiograms at baseline and follow-up echocardiograms at 6, 12, 18 and 24 months after starting the trial. Echocardiograms will be reviewed by an independent Data Safety Monitoring Board, or DSMB, at 6 and 12 months. Using predetermined safety criteria, the DSMB will review the echocardiographic data and make a judgment as to whether it is appropriate to continue the trial. We completed enrollment in BLOOM in early 2007, and expect the DSMB to perform its month-six review of echocardiograms and make its judgment in the third quarter of 2007.

The complete lorcaserin Phase 3 program is designed to enroll a total of approximately 6,000 patients in three pivotal trials. Assuming a positive month-six safety assessment from the DSMB for the BLOOM trial, we intend to initiate two additional Phase 3 trials enrolling a total of approximately 3,000 patients. In these pivotal trials, we plan to evaluate the 20 mg dose (10 mg dosed twice daily) and a 10 mg once-daily dose, each versus placebo over a one-year treatment period, and for one of the trials to enroll patients with type 2 diabetes. Diet and exercise programs will be part of each of the pivotal trials. In addition to the above planned pivotal trial program, we will conduct several other small trials, including drug interaction and abuse potential studies. Assuming we receive favorable results from the DSMB reviews and the Phase 3 program and other trials, we expect to file a New Drug Application, or NDA, for lorcaserin in 2009.

*Intellectual Property.* As of January 31, 2007, we owned issued patents that cover compositions of matter for lorcaserin and related compounds and methods of treatment utilizing lorcaserin and related compounds in 37 jurisdictions including the United States, Germany, France, the United Kingdom, Italy and Spain, and applications pending in approximately 21 other jurisdictions including Japan, Canada and China. Based on sales statistics provided by IMS Health, the jurisdictions where lorcaserin patents have been issued accounted for more than 69% of global pharmaceutical sales in 2005, while jurisdictions where lorcaserin patents remain pending accounted for more than 22% of global pharmaceutical sales in that same year. The patent on lorcaserin issued by the United States Patent and Trademark Office is serial number US 6,953,787 and the corresponding patent granted by the European Patent Office is serial number EP 1 411 881 B1. 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 extension regimes of any country.

#### *APD125*

We recently initiated our Phase 2 clinical trial of our lead drug candidate for the treatment of insomnia, APD125, which is a novel and selective 5-HT<sub>2a</sub> serotonin receptor inverse agonist. The National Institutes of Health estimated in 2003 that between 30 to 40% of U.S. adults report some level of insomnia and that insomnia is a chronic problem for about 10 percent of the U.S. population. In these cases, the lack of restful sleep impairs the person's ability to carry out their daily responsibilities because they are too tired or have trouble concentrating. However, the great majority of insomnia patients do not seek treatment. Currently marketed therapies for insomnia include Ambien and Ambien CR, marketed by sanofi-aventis, Lunesta, marketed by Sepracor Inc., Sonata, marketed by King Pharmaceuticals, Inc., Rozerem, a melatonin MT1 and MT2 agonist marketed by Takeda Pharmaceuticals North America, Inc., and certain benzodiazepines. With the exception of Rozerem, these therapies work by activating the GABA-A receptor in the brain, causing a general suppressive effect on the central nervous system, or CNS. The GABA-A drugs have side effects including the risk of developing tolerance to the drug and the potential for causing a sensation of dullness and lethargy upon awakening, often referred to as the "hangover effect." In addition, GABA-A drugs are DEA-scheduled controlled substances due to their potential for abuse. Despite these limitations, worldwide sales estimates for insomnia medications were \$3.7 billion in 2005.

*Mechanism and Preclinical Data.* APD125 acts through a different mechanism than currently marketed insomnia drugs. Based on our preclinical data, we believe that by selectively targeting the 5-HT<sub>2a</sub> receptor, APD125 blocks one of several CNS-activating pathways, rather than initiating a general CNS-suppressive effect. Because of the different mechanism of action, APD125 may not have the side effects generally associated with currently marketed GABA-A drugs. Through this novel mechanism, APD125 has the potential to reduce insomnia symptoms and improve sleep maintenance by decreasing the number of awakenings during the night, decreasing the amount of wake time after initial sleep onset and increasing the total amount of time spent asleep, including time in deep sleep, or slow wave sleep (stage 3 and stage 4 sleep), the most restorative type of sleep.

Our preclinical studies have shown that, in animals, APD125 increases both the quality and total time of non-REM (rapid eye movement or dream) sleep, the most restorative phase of the sleep cycle in humans, while having no effect on REM sleep. The total increase in non-REM sleep time was manifested by fewer bouts of longer duration, indicating an increase in sleep consolidation. In addition, animals treated with APD125 showed during non-REM sleep an increase in delta power, a brain wave activity associated with increased sleep intensity. The improvements in non-REM duration and quality observed with APD125 administration were at least as robust as those observed with a prototypic GABA-A hypnotic control drug, Ambien. However, unlike Ambien, APD125 did not adversely affect REM sleep in these studies.

*Prior Clinical Development.* We have completed multiple Phase 1 clinical studies of APD125 in healthy volunteers. This Phase 1 program consisted of three randomized, double-blinded and placebo-controlled trials evaluating the single and multiple dose safety and pharmacokinetics of APD125 in normal volunteers. Additionally, the program evaluated the pharmacodynamics of nighttime dosing by assessing effects on sleep patterns in normal volunteers using polysomnography.

In this Phase 1 clinical trial program, APD125 was well tolerated at single doses up to 160 mg and repeated doses up to 80 mg. At 40 mg, the maximum concentration in the body, or C<sub>max</sub>, of APD125 plateaued; there were no significant differences in C<sub>max</sub> among the 40 mg, 80 mg and 160 mg doses. At 80 mg, the total overall exposure, or area under the curve, of APD125 also plateaued; the pharmacokinetics at the 160 mg dose were generally similar to the 80 mg dose. At doses from 10-40 mg, APD125 caused a robust and highly statistically significant (p=0.0002) increase in the amount of deep, or slow wave, sleep in volunteers with normal sleep/wake patterns. In addition, other statistically significant signals indicative of improved sleep maintenance were seen, including statistically significant increases in stage 3 and stage 4 sleep, reductions in stage 1 sleep, reductions in the number of awakenings and an increase in delta power, the deepest form of slow wave sleep. Adverse events were infrequent and APD125 was well tolerated. Based on our Phase 1 results, we do not expect APD125 to be limited by next-day impairment of psychomotor skills or memory.

We believe that our clinical and preclinical data suggest that APD125 has the potential to improve the treatment of insomnia over GABA-A drugs.

*Phase 2 Clinical Development.* In March 2007, we initiated dosing in a Phase 2 clinical trial of APD125. The Phase 2 clinical trial of APD125 is a randomized, double-blinded, placebo-controlled study evaluating the safety and efficacy of nighttime dosing in patients with chronic insomnia. The trial will evaluate standard measurements of sleep, such as wake after sleep onset (WASO), number of awakenings, total sleep time and latency to persistent sleep. The trial employs a cross-over design and is expected to enroll a total of approximately 100 male and female patients in about 25 clinical sites in the United States. We expect results from this trial around the end of 2007.

*Intellectual Property.* As of January 31, 2007, we owned issued patents that cover compositions of matter for APD125 and related compounds and methods of treatment utilizing APD125 and related compounds in 35 jurisdictions including Germany, France, the United Kingdom, Italy and Spain, and applications pending in approximately 38 other jurisdictions and international patent authorities including the United States, Japan, Canada and China. Based on sales statistics provided by IMS Health, the jurisdictions where APD125 patents have been issued accounted for more than 27% of global pharmaceutical sales in 2005, while jurisdictions where APD125 patents remain pending accounted for more than 66% of global pharmaceutical sales in that same year. The patent on APD125 issued by the European Patent Office is serial number EP 1 558 582 B1. The earliest priority date for the patents on APD125 is 2003. The terms of these patents are capable of continuing into 2024 in most jurisdictions without taking into account any patent term extension regimes of any country.

### *APD791*

Our lead anti-thrombotic drug candidate, APD791, a novel, orally available and selective inverse agonist of the 5-HT<sub>2a</sub> serotonin receptor, is in preclinical development. APD791 is intended to lower the risk of arterial thrombosis 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. 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 over 12 million people alive in 2003 had survived either a myocardial infarction or a stroke. To reduce the risk of future events, many patients receive daily anti-thrombotic therapy. Worldwide sales of Plavix, a leading anti-thrombotic marketed by Bristol-Myers Squibb and sanofi-aventis, totaled \$6.0 billion in 2006, making it the second best selling drug in any therapeutic category.

*Mechanism and Preclinical Data.* APD791 is a novel, orally available and selective inverse agonist of the 5-HT<sub>2a</sub> serotonin receptor. Serotonin activation of the 5-HT<sub>2a</sub> 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, based on preclinical studies, promotes platelet aggregation, vasoconstriction and intimal hyperplasia. By blocking activation of the 5-HT<sub>2a</sub> receptor on platelets and in other cardiovascular tissues, APD791 may curb platelet aggregation,



vasoconstriction and intimal hyperplasia in the clinical setting, thereby reducing the risk of thrombosis. We believe APD791 represents a new approach to reducing the risk of arterial thrombo-embolic disease.

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

*Development Plan.* We advanced APD791 into preclinical development in December 2005 and plan to initiate clinical development around the middle of 2007.

*Intellectual Property.* As of January 31, 2007, we had patent applications covering compositions of matter for APD791 and related methods of treatment pending before the World Intellectual Property Organization, or WIPO (designating all contracting states), and in 20 additional jurisdictions that are not contracting states of the WIPO.

#### *Ortho-McNeil Collaboration*

In our partnership with Ortho-McNeil, we are developing compounds for the potential treatment of type 2 diabetes and other disorders by targeting an orphan GPCR, the Glucose-Dependent Insulinotropic Receptor, or the GDIR. The GDIR is a novel receptor discovered by Arena that, in our preclinical models, demonstrated the ability to stimulate insulin production in response to increases in blood glucose. Under this partnership, Ortho-McNeil advanced APD668, a novel, orally administered drug candidate discovered by Arena, into a Phase 1 clinical trial in February 2006. Diabetes is a major worldwide disease. Based on 2003 data, the International Diabetes Federation estimated that in 2005 there were 194 million adults with diabetes worldwide, an increase of over 40% since 1995. These figures included approximately 23 million in the United States and approximately 48 million in the European region. Approximately 90%, or 175 million, of diabetics worldwide suffer from type 2 diabetes, which is characterized by inadequate response to insulin and/or inadequate secretion of insulin as blood glucose levels rise. Therapies for type 2 diabetes are directed toward correcting the body's inadequate response with oral or injectable medications, or directly modifying insulin levels through injection of insulin or insulin analogs.

Oral medications for type 2 diabetes include insulin releasers such as glyburide, insulin sensitizers such as Actos and Avandia, inhibitors of glucose production by the liver such as metformin, DPP-IV inhibitors like Januvia, as well as Precose and Glyset, which slow the uptake of glucose from the intestine. The worldwide market for diabetes medications exceeded \$10.0 billion in 2004, of which oral drugs exceeded \$6.0 billion. However, a significant portion of type 2 diabetics fail oral medication and require injected insulin therapy. Current oral medications for type 2 diabetes have a number of side effects, including hypoglycemia, weight gain and edema. Numerous pharmaceutical and biotechnology companies are seeking to develop insulin sensitizers, novel insulin formulations and other therapeutics to improve the treatment of diabetes.

*Mechanism and Preclinical Data.* We have found the GDIR to be expressed in beta cells, the cells in the pancreas responsible for producing insulin in response to increases in blood glucose. We believe the GDIR represents a novel mechanism for generating a new class of drugs for diabetes that may offer advantages over current approaches. Our preclinical results indicate that stimulating the GDIR allows beta cells to produce insulin more efficiently in response to changes in blood glucose levels. In addition, we have demonstrated in our preclinical studies that the GDIR stimulates incretin hormone release and thus may enhance glucose homeostasis by this additional mechanism. We have also found in these studies that stimulation of the GDIR leads to increased levels and activity of intracellular factors thought to be involved in the preservation of beta cells. Our preclinical studies suggest that the GDIR is amenable to oral small molecule drug development, and we have discovered potent, selective and orally available small molecule agonists of the GDIR that improve glucose tolerance and lower blood glucose levels in animal models of diabetes. The GDIR mechanism is glucose dependent, so that in our animal studies our compounds only lowered blood glucose when it rose above normal levels, such as after a meal. Our preclinical results indicate these compounds do not lower normal fasting baseline glucose levels in animal models and, therefore, do not cause hypoglycemia, unlike the glucose-insensitive sulphonylureas.

*Development and Partnership Status.* In December 2004, we entered into a collaboration and license agreement with Ortho-McNeil 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's initiation of a Phase 1 clinical trial of APD668. In September 2006, Ortho-McNeil exercised its option to extend the research term of the agreement, committing to

research funding of \$2.4 million through December 20, 2007, beyond which date we will no longer have significant involvement or perform services. From the inception of this collaboration through December 31, 2006, we received \$27.5 million from Ortho-McNeil in upfront and milestone payments and \$5.5 million in research funding. We are eligible to receive a total of \$295.0 million in milestone payments for each compound, as well as royalty payments associated with Ortho-McNeil's commercialization of any products discovered under the agreement. 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 our partnership with Merck, we are collaborating on three GPCRs to develop therapeutics for atherosclerosis and other disorders. We believe one or more of these GPCRs plays a role in regulating plasma lipid profiles, including HDL cholesterol, the so-called "good cholesterol," and is responsible for the HDL-raising activity of niacin. There are very successful drugs available for lowering LDL cholesterol. However, development of novel, effective therapies to increase HDL cholesterol remains a major focus of research. We believe that such therapies may reduce the risk of atherosclerotic heart disease and compete in the large dyslipidemia market.

In September 2006, we announced that Merck completed a Phase 2 clinical trial of MK-0354, a niacin receptor agonist discovered by us and intended for the treatment of atherosclerosis and related disorders. Based on the results of this trial, Merck discontinued development of MK-0354 for atherosclerosis, but is exploring continued development of the drug candidate under our partnership for an undisclosed indication. Merck also continues to evaluate other niacin receptor agonists under our partnership for atherosclerosis and related disorders. In February 2007, we amended our Merck collaboration to reduce the number of Arena research employees funded under the collaboration in exchange for Merck making a \$1.0 million equity investment in Arena equal to the reduction in their research funding obligation and at approximately a 70% premium to the then current market price.

From the inception of this collaboration through December 31, 2006, we received \$18.0 million from Merck in upfront and milestone payments, and an equity investment of \$7.5 million. We may receive additional milestone payments of up to \$28.0 million for Merck's clinical and marketing achievements, as well as royalty payments associated with Merck's commercialization of any products discovered under the agreement. In addition, we received research funding from Merck through December 31, 2006 totaling \$25.3 million and, under our amended agreement, Merck is obligated to pay us a total of \$3.6 million for collaboration research from January 1, 2007 to October 21, 2007, beyond which date we will no longer have significant involvement or perform services.

#### *Other Research and Development Programs*

*Cardiovascular.* Acute myocardial infarction, which is commonly known as a heart attack, is often followed in survivors by heart failure. Myocardial infarction and heart failure are often a direct consequence of atherosclerosis, and both remain major causes of death. We have identified certain GPCRs that we believe play a role in the processes related to atherosclerosis and are seeking to identify small molecules directed at these GPCR targets that we believe could provide cardio-protection following myocardial infarction.

*CNS Disorders.* Many GPCRs are predominately found in the brain or the CNS, and, therefore, we believe targeting GPCRs provides an opportunity to selectively treat various CNS diseases. Many approved drugs for indications ranging from insomnia and narcolepsy to depression, schizophrenia and Parkinson's disease target GPCRs. Our discovery efforts in CNS disorders are focused on indications with large market opportunities where current therapies have significant limitations.

*Inflammatory Disorders.* We are developing small molecule therapeutics that target GPCRs involved in the inflammatory process. We have identified GPCRs that are found in specific immune cell types. We believe these GPCRs modulate the inflammatory process, and we are applying our screening technologies to these targets to identify small molecules that could activate or inhibit these GPCRs. Some of the GPCRs we are targeting are expressed on T and B cells and macrophages, and could be important in the modulation of key cytokines that mediate inflammatory processes such as TNF-alpha.

*Other Diabetes Programs.* For metabolic diseases, we are working on a series of orphan GPCR targets in addition to the GDIR in order to develop orally available therapies to treat type 1 and type 2 diabetes. For example, we are 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. In order to treat general metabolic disease, we have prioritized GPCRs that have the potential to modulate blood glucose and lipid levels.

*Other Obesity Programs.* In addition to lorcaserin and other compounds that act on the 5-HT<sub>2c</sub> serotonin receptor, we have discovery programs focused on several different GPCRs implicated in obesity. Our drug discovery efforts are directed at identifying novel drug candidates that target GPCRs in the CNS and peripheral tissues to reduce fat mass in humans. We have identified both known and orphan GPCRs expressed in the hypothalamus, an area of the brain known to be critical for regulating satiety and metabolism, that we believe regulate food intake and weight. We have also identified GPCRs in fat cells that may represent targets for obesity. We have identified early lead compounds for obesity targets other than the 5-HT<sub>2c</sub> serotonin receptor, and are currently evaluating these compounds for their ability to reduce food intake and body weight.

## **Our Proprietary GPCR Technologies and Programs**

Our drug candidates have resulted from our GPCR-focused drug discovery technologies and capabilities, including Constitutively Activated Receptor Technology, or CART, and our Melanophore technology, and our overall approach to drug discovery and development. 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 orphan GPCRs offer significant promise for the development of novel GPCR-based therapeutics, and, therefore, are an important focus of our discovery research.

Traditional ligand-based drug screening methods require the time-consuming identification and use of the receptor’s native ligand to discover small molecule compounds that will bind at, or close to, the native ligand’s binding site on the receptor. In contrast, we have developed technologies that do not require the use of the native ligand. Instead, we are able to activate a GPCR so that the G protein signals without the presence of the native ligand by using CART and our other technologies. Applying our technologies to constitutively activate GPCRs assists in discovering drug-like compounds by stimulating the GPCR to mimic the biological response that occurs when the native ligand binds to the receptor. These technologies help avoid a major bottleneck in drug discovery efforts at orphan receptors by eliminating the step of first identifying the native ligand. We have found that our constitutive activation technologies can be applied broadly to GPCRs.

Our constitutive activation 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 constitutive activation technologies offer several key advantages for drug discovery over traditional screening techniques that require the use of the native ligand including:

- not requiring prior identification of 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 constitutive activation technologies in combination with our patented Melanophore technology. Our Melanophore technology is a broadly applicable high-throughput screen for GPCRs. When a GPCR is activated (either by a ligand or independent of a ligand through constitutive activation), the GPCR couples to one or more G proteins, including those belonging to the Gs, Gq, and Gi/o classes. Melanophore technology can detect GPCRs that couple to major G protein classes. We believe our Melanophore technology is, therefore, also well-suited for studies of orphan receptors whose coupling parameters are unknown. We believe Melanophore technology provides us with a robust, reproducible, high-throughput and low-cost means for identifying and optimizing GPCR agonists, antagonists and inverse agonists, and is sensitive enough to detect the constitutive activity of many GPCRs.

## Our Strategy

The key elements of our scientific and business strategy are to:

- **Advance our lead programs.** We intend to continue to advance our current drug candidates, with a partner or independently, through clinical development and, if successful, to commercialization.
- **Discover and develop additional small molecule drug candidates targeting GPCRs.** We intend to continue to discover and develop orally bio-available, small molecule compounds for GPCRs identified or validated through our research efforts.
- **Focus on attractive market opportunities.** Obesity, insomnia, diabetes, atherosclerosis and arterial thrombosis each represent large market opportunities. We intend to continue to focus on these and other markets with attractive commercial potential.
- **Recognize significant economic value for our drug candidates under development.** We intend to maximize the value of our drug candidates through both independent development and licensing and other partnership opportunities with pharmaceutical and larger biotechnology companies.
- **Continue to build our development capabilities.** To capitalize on our discoveries, we plan to continue to expand our clinical development capabilities as our drug candidates enter into, and move through, clinical trials.
- **Maintain strong discovery research capabilities.** Our proprietary technologies, our drug discovery infrastructure and the integrated approach to research used by our scientists, have allowed us to identify a number of GPCR targets and novel compounds. We believe these and other discoveries will continue to fuel our pipeline.

## Intellectual Property

Our success depends in large part on our ability to protect our proprietary technology, 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 agreements, licensing agreements and other agreements, to establish and protect our proprietary rights.

As of January 31, 2007, we owned, in part or in whole, or had exclusively licensed the following patents: 21 in the United States, 1 in Japan, 6 in Germany, 6 in France, 6 in the United Kingdom, 6 in Italy, 6 in Spain, 1 in China, and approximately 171 in other jurisdictions. In addition, as of January 31, 2007, we had approximately 758 patent applications before the United States Patent and Trademark Office, foreign patent offices and international patent authorities. These patents and patent applications are divided into 95 distinct families of related patents that are directed to CART, Melanophore technology, other novel screening methods, chemical compositions of matter, methods of treatment using chemical compositions, or GPCR genes. One of our patent families was exclusively in-licensed and contains a single issued patent. Eighty-seven of our patent families, which include a total of about 167 patents and 626 patent applications, were invented solely by our employees. The remaining 7 of our patent families, which include a total of about 56 patents and 132 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 U.S. 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 U.S. 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 are scheduled to end in 2012. Because the time from filing to issuance of patent applications relating to our business is often more than three years, the resulting term of our pending patent applications, if any, on our drug candidates and technologies may be substantially less than 20 years. In the United States, Europe 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.



We seek patent protection for our key inventions, including clinical candidates and drug candidates we identify, routes for chemical synthesis, CART, new receptors that we discover, and genetically altered receptors. It has generally been possible to obtain broad composition of matter patents on novel chemical compounds. It has also generally been possible to obtain broad method patents for techniques and procedures for screening and drug-identification technologies. It has generally been more difficult to obtain broad composition of matter patents for nucleic acid and amino acid sequences. However, it has been possible to obtain patents that protect specific sequences and functional equivalents of those sequences. Furthermore, intellectual property law allows for separate and distinct patents for novel, altered genetic sequences that have improved properties over previously disclosed sequences. We believe that we can obtain patents on certain of our CART-activated receptor sequences because they are not functional equivalents of the natural version of the receptor.

In addition to patent protection, we rely on trade secrets, proprietary know-how, and continuing technological advances to develop and maintain our competitive position. To maintain the confidentiality of our trade secrets and proprietary information, all of our employees are required to enter into and adhere to an employee confidentiality and invention assignment agreement, laboratory notebook policy, and invention disclosure protocol, as a condition of employment. Additionally, our employee confidentiality and invention assignment agreement requires 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 U.S. prescription drug unit of the Roche Group, which markets orlistat under the brand name Xenical. Also, GlaxoSmithKline Consumer Healthcare is marketing an over-the-counter low-dose version of orlistat under the brand name alli in the United States. Another potential competitor is sanofi-aventis, which markets rimonabant under the brand name Acomplia in Europe. Rimonabant is pending marketing approval in the United States. In addition, we believe that there are potentially competing obesity programs that may be in development at various pharmaceutical and biotechnology companies, including 5-HT<sub>2c</sub> programs.

In addition to the marketed compounds described above under the APD125 discussion, Neurocrine Biosciences, Inc. and others are developing new GABA active compounds for the treatment of insomnia. We believe sanofi-aventis, Eli Lilly and Company, and other companies are developing other potentially competing programs for insomnia, including programs targeting the 5-HT<sub>2a</sub> receptor.

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

We expect to encounter significant competition for the principal drug candidates that we are developing. Companies that complete clinical trials, obtain regulatory approvals and commence commercial sales of their drug candidates before us may

achieve a significant competitive advantage. Furthermore, we may be competing against companies with substantially greater manufacturing, marketing, distribution and selling capabilities, and any drug candidate that we successfully develop may compete with existing therapies that have long histories of safe and effective use.

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

## **Government Regulation**

We plan to develop and commercialize selected drug candidates by ourselves and license other candidates to partners for further development and commercialization. Our and our collaborators' ongoing drug development activities are subject to the laws and regulations of governmental authorities in the United States and other countries in which these drug candidates may be tested or in which drugs may be marketed. The regulatory review and approval process, which includes preclinical testing and clinical trials of each drug candidate, is lengthy and uncertain. Before marketing in the United States, any pharmaceutical or therapeutic product must undergo rigorous preclinical testing and clinical trials and an extensive regulatory approval process implemented by the FDA under the federal Food, Drug and Cosmetic Act. Moreover, the FDA imposes substantial requirements on new product research and the clinical development, manufacture and marketing of pharmaceutical products, including preclinical testing and clinical trials to establish the safety and effectiveness of these products. In the United States, we are also subject to other federal, state and local environmental and safety laws and regulations, including regulation of the use and care of laboratory animals. In addition, the state of California imposes licensing requirements on facilities manufacturing drugs for clinical trials or for commercial market.

Many other countries have similar requirements for testing, approval and marketing, including in the European Union, or the EU. Before commencing clinical trial investigations in humans in Europe, we and/or our collaborators must submit the appropriate applications to applicable authorities in member countries.

Before commencing clinical investigations in humans in the United States, we and/or our collaborators must submit an investigational new drug, or IND, application to the FDA. Clinical trials are typically conducted in three sequential phases, although the phases may overlap or be combined. Phase 1 generally represents the initial administration of the drug candidate to a small group of either healthy volunteers or patients to test for safety and tolerability, absorption, distribution, metabolism, elimination and clinical pharmacology. Phase 2 generally involves studies in patients to begin to assess the effectiveness of the drug candidate, to ascertain dose tolerance and the optimal dose range and to gather additional data relating to safety and potential adverse effects. Once a drug candidate is found to have some effectiveness and an acceptable safety profile in the targeted patient population, Phase 3 studies generally are initiated to establish safety and effectiveness in an expanded patient population and at multiple clinical study sites. The FDA may require further post-marketing studies, referred to as Phase 4 studies. The FDA reviews both the clinical plans and the results of the trials and we, our collaborators or the FDA may decide that clinical trials should be discontinued at any time if any significant safety or other issues are identified. Clinical testing must meet requirements for institutional review board or ethics committee oversight, informed consent, good clinical practices and other FDA or other regulatory authority oversight.

The length of time necessary to complete clinical trials varies significantly and is difficult to predict. Clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals. Additional factors that may cause delay, termination or increased cost of our or our collaborators' clinical trials include, among other factors:

- slow patient enrollment;
- the eligibility criteria for the study;
- competition with clinical trials for other drug candidates;
- lack of sufficient clinical supplies of the drug candidate;

- lack of effectiveness of the drug candidate being tested;
- adverse medical effects or side effects in treated patients;
- unfavorable results from ongoing preclinical studies;
- inadequately trained or insufficient personnel at a study site to assist in overseeing and monitoring the clinical trial;
- delays in approval from a study site's institutional review board; and
- longer treatment time required to demonstrate effectiveness or to determine the appropriate dose for the drug candidate.

If preclinical and clinical studies are successful, the results, together with other information about the drug candidate and its manufacture, are submitted to the FDA in the form of an NDA to request marketing approval. Before receiving FDA approval to market a drug candidate, we or our collaborators must demonstrate that the drug candidate is appropriately safe and effective through clinical trials in the patient population that will be treated. The approval process is likely to require substantial time and effort and there can be no assurance that any approval will be granted on a timely basis, if at all.

Additional animal studies or clinical trials may be requested during the FDA review period that may delay marketing approval. As part of the approval process, each manufacturing facility must be inspected by the FDA. Among the conditions of approval is the requirement that a manufacturer's quality control and manufacturing procedures conform with federally mandated current good manufacturing practices, or cGMPs. Both before and after approval, manufacturers must expend time, money and effort to ensure compliance with cGMPs, and the FDA conducts periodic inspections to certify such compliance. Violations may result in the issuance of warning letters, restrictions on the drug or manufacturer, including costly recalls or withdrawal of the drug from the market, or other enforcement action.

If regulatory approval of a drug candidate is granted by the FDA, this approval will be limited to those specific conditions for which the drug candidate, as demonstrated through clinical studies, has an appropriate safety and efficacy profile, as determined by the FDA. After FDA approval for the initial indication, further clinical trials would be necessary to gain FDA approval to use the drug for additional indications. Marketing or promoting a drug for an unapproved indication is prohibited. The FDA requires that adverse effects be reported to the FDA and may also require post-marketing surveillance or testing to monitor for adverse effects, which can involve significant expense. Even after FDA approvals are obtained, a marketed drug is subject to their continual review and may include labeling requirements. Later discovery of previously unknown information or failure to comply with the applicable regulatory requirements may result in restrictions on the marketing of a drug or withdrawal of the drug from the market, as well as possible civil or criminal sanctions. Furthermore, failure to obtain reimbursement coverage from governmental or third-party insurers may adversely impact successful commercialization.

We have a chemical development facility that we are using for process research, the scale-up and production of intermediates and other compounds for research and development purposes, and the production of active pharmaceutical ingredients, or API, for use in human clinical trials. California law prohibits the shipment of a drug candidate or drug from a manufacturing facility in California for any clinical testing or commercial use prior to satisfaction of manufacturing licensing requirements. Our facility was inspected and licensed by the California Department of Health Services and we believe it is in compliance with state regulatory requirements for the manufacture and distribution of API.

#### **Sources and Availability of Raw Materials, Intermediates, and Clinical Supplies**

We generally purchase raw materials, intermediates and clinical supplies from commercial sources. Substantially all such materials are obtainable from a number of sources, so that, in general, the loss of any one source of supply would not have a material adverse effect on us. However, currently we have a primary source of supply for some key intermediates, API and finished drug products for our lead development projects. The loss of a primary source of supply would potentially delay our lead development projects, lorcaserin, APD125 and APD791, and potentially those of our collaborators.

## **Compliance with Environmental Regulations**

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 present federal, state or local regulations. We may be subject to further such regulations in the future. Our research and development programs involve the controlled use of hazardous materials, chemicals, biological materials and various radioactive compounds.

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

## **Research and Development Expenses**

Research and development activities, which include personnel costs, research supplies, facility and equipment costs and preclinical and clinical study fees, are the primary source of our expenses. Such expenses related to the development and improvement of our technology and drug candidates totaled \$103.4 million for the year ended December 31, 2006, \$79.7 million for the year ended December 31, 2005 and \$58.6 million for the year ended December 31, 2004. Research that was sponsored by our collaborators is included in our total research and development expenses. We estimate that research expenses incurred on projects sponsored by our collaborators totaled \$7.7 million for the year ended December 31, 2006, \$8.7 million for the year ended December 31, 2005 and \$3.4 million for the year ended December 31, 2004.

## **Employees**

As of February 28, 2007, we had a total of 371 employees, including 315 in research and development and 56 in administration, which includes finance, legal, facilities and other general support areas. None of our employees is covered by a collective bargaining agreement. We consider our relationship with our employees to be good.

## **Available Information**

Our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K and all amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Securities Exchange Act of 1934 (the "Exchange Act") are available free of charge on our website ([www.arenapharm.com](http://www.arenapharm.com)) as soon as reasonably practicable after they are 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 common stock. If any of the following events actually occur, our business, operating results, prospects or financial condition could be materially and adversely affected. This could cause the trading price of our common stock to decline and you may lose all or part of your investment. Moreover, the risks described below are not the only ones that we face. Additional risks not presently known to us or that we currently deem immaterial may also affect our business, operating results, prospects or financial condition.*

### ***Risks Relating to Our Business***

**We will need additional funds to conduct our planned research and development efforts, and we may not be able to obtain such funds.**

We had losses of \$88.3 million for the year ended December 31, 2006, and we had an accumulated deficit of \$334.2 million from our inception in April 1997 through December 31, 2006. Our losses have resulted in large part 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 operating expenses over the next several years will be significant and that we will continue to have significant operating losses for at least the next several years, even if we or our collaborators are successful in advancing our compounds or partnered compounds.

We do not have any commercially available 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 a marketed drug. We have substantially less money than we need to develop a compound into a marketed drug. Additional funding may not be available to us or may not be available on terms that you or we believe are favorable. If additional funding is not available, we may have to delay, reduce the scope of or eliminate one or more of our research or development programs.

**Our stock price could decline significantly based on the results and timing of clinical trials and nonclinical studies of, and decisions affecting, our lead drug candidates.**

Results of clinical trials and nonclinical studies of our lead drug candidates may not be viewed favorably by us or third parties, including investors, analysts and potential collaborators. The same may be true of how we design the clinical trials of our lead drug candidates and regulatory decisions affecting those clinical trials. Biotechnology company stock prices have declined significantly when such results and decisions were unfavorable or perceived negatively or when a drug candidate did not otherwise meet expectations.

We have commenced a Phase 3 clinical trial program of our obesity drug candidate, lorcaserin, and a Phase 2 clinical trial of our insomnia drug candidate, APD125. Results from these trials may be negative, may not meet expectations or may be perceived negatively. The design of these trials (which may change significantly and be more expensive than currently anticipated depending on our clinical results and regulatory decisions) may also be viewed negatively by third parties. We may not be successful in completing these trials on our projected timetable, if at all.

Failure to initiate or delays in our clinical trials of lorcaserin, APD125, APD668, APD791 or any of our other drug candidates, or unfavorable results or decisions or negative perceptions regarding any of such trials, could cause our stock price to decline significantly.

**Clinical trials for our drug candidates are expensive, time consuming, uncertain and susceptible to change, interruption, delay or termination.**

Clinical trials are very expensive, time consuming and difficult to design and implement. Even if the results of our clinical trials are favorable, we estimate that the clinical trials of our most advanced drug candidates, including those being developed by our collaborators, will continue for several years and may take significantly longer than expected to complete. In addition, the U.S. Food and Drug Administration, or FDA, other regulatory authorities, our collaborators, or we may suspend, delay or terminate our clinical trials 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 agency, 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 fail to perform their services in a timely or acceptable manner;
- scheduling conflicts with participating clinicians and clinical institutions;
- failure to construct appropriate clinical trial protocols;
- insufficient data to support regulatory approval;
- inability or unwillingness of medical investigators to follow our clinical protocols; or
- difficulty in maintaining contact with subjects during or after treatment, which may result in incomplete data.

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 clinical trials even after promising results in earlier trials. We may experience similar setbacks in our clinical trials. If we or our collaborators abandon or are delayed in our development efforts related to lorcaserin, APD125, APD668, APD791 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, it may not be possible to complete financings, and our stock price would likely decrease significantly.

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

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

We do not expect any drugs resulting from our research and development efforts to be commercially available for several years, if ever. Our most advanced drug candidates, including lorcaserin and APD125, have not completed the large, pivotal Phase 3 clinical trials for efficacy and safety that are required for FDA approval. Also, we have not previously filed NDAs with the FDA, nor have we previously conducted large-scale Phase 3 clinical trials, which are significantly larger and more complex than earlier-stage trials. This lack of experience may impede our ability to successfully complete these trials and obtain FDA approval in a timely manner, if at all, for our drug candidates for which development and commercialization is our responsibility. Even if we believe the data collected from clinical trials of our drug candidates are promising, such data may not be sufficient to support approval by the FDA or any other U.S. or foreign regulatory authority. As a result, we cannot predict when or whether regulatory approval will be obtained for any drug we develop. 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.

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

drug candidates may not be approved for all indications requested and that such approval may be subject to limitations on the indicated uses for which the drug may be marketed.

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

Preclinical studies and Phase 1 and Phase 2 clinical trials are not primarily designed to test the efficacy of a drug candidate, but rather to test safety, to study pharmacokinetics and pharmacodynamics, and to understand the drug candidate's side effects at various doses and schedules. To date, long-term safety and efficacy have not yet been demonstrated in clinical trials for any of our drug candidates. Favorable results in our early studies or trials may not be repeated in later studies or trials, including continuing preclinical studies and large-scale clinical trials, and our drug candidates in later-stage trials may fail to show desired safety and efficacy despite having progressed through earlier-stage trials. In particular, preclinical data and the limited clinical results that we have obtained for lorcaserin and APD125 may not predict results from studies in larger numbers of subjects drawn from more diverse populations treated for longer periods of time. They also may not predict the ability of lorcaserin or APD125 to achieve or sustain the desired effects in the intended population or to do so safely. Unfavorable results from ongoing preclinical studies or clinical trials could result in delays, modifications or abandonment of ongoing or future clinical trials. 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. In addition, we may report top-line data from time to time, which is based on a preliminary analysis of key efficacy and safety data, and is subject to change following a more comprehensive review of the data related to the applicable clinical trial.

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

We have developed lorcaserin to more selectively stimulate the 5-HT<sub>2c</sub> serotonin receptor because we believe this may avoid the cardiovascular side effects associated with fenfluramine and dexfenfluramine, two serotonin-releasing agents and non-selective serotonin receptor agonists, both of which 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 this belief, however, or lorcaserin's selectivity profile may not avoid these undesired 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 ultimately sales if lorcaserin is approved for sale.

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

Many of our research and development programs are in the discovery or preclinical stage of development. The process of discovering compounds with therapeutic potential is expensive, time consuming and unpredictable. Similarly, the process of conducting preclinical studies of compounds that we discover requires the commitment of a substantial amount of our technical and financial resources and personnel. We may not discover additional compounds with therapeutic potential, and any of the compounds for which we are conducting preclinical studies may not result in the commencement of clinical trials. We cannot be certain that results sufficiently favorable to justify commencement of Phase 1 studies will be obtained in these preclinical investigations. 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.

**The technologies on which we rely may not result in the discovery or development of commercially viable drugs or could become obsolete.**

Our GPCR technologies include technologies that allow us to discover drug-like compounds that act on receptor subtypes of known GPCRs and novel GPCRs where the native ligands have not been identified. These methods of identifying, prioritizing and screening molecular targets are unproven, and may not result in the regulatory approval and commercialization of any therapeutic products. We do not believe that there are any drugs on the market that have been discovered or developed using our proprietary technologies. If we are unable to identify additional drug candidates using our proprietary drug discovery technologies, we may not be able to maintain a clinical development pipeline or generate revenues.

Another company, organization or individual could have, or could develop, a technology targeting GPCRs to discover and develop compounds into drugs more effectively or efficiently than our screening and other technologies. Such a technology could render our technologies, in particular our constitutively activated receptor technology, or CART, and Melanophore technology, obsolete or noncompetitive.

**If we are not successful in achieving milestones under our collaborations or in advancing our programs, we may have to curtail some of our activities.**

We may not be successful in achieving additional milestones under our niacin receptor agonist collaboration with Merck or our diabetes collaboration with Ortho-McNeil or in developing or partnering lorcaserin or APD125 or any of our other more advanced programs. If we do not receive additional funding from partners, we will need to raise capital through the capital markets or by licensing some or all of our programs on financial terms that are unfavorable to us. Also, without additional capital or funding from partners, we would need to re-evaluate our strategy of moving multiple drug discovery and development programs forward while at the same time maintaining our research and discovery capabilities. Based on such evaluation, we may need to significantly curtail some of our current and planned programs and expenditures. We do not know what programs, if any, we would need to curtail, but we believe narrowing our pipeline would reduce our opportunities for success.

**Our revenues depend upon the actions of our existing and potential collaborators.**

Our revenues were \$30.6 million for the year ended December 31, 2006. We expect that, for at least the next few years, our revenues will depend upon the success of our existing collaborations and on our ability to enter into new collaborations. We will receive little additional revenues from our existing collaborators if our own or our collaborators' research, development or, ultimately, marketing efforts are unsuccessful, or if our agreements are terminated early. Typically, our collaborators (and not us) control the development of compounds into drugs after we have met early preclinical scientific milestones. In addition, we may not have complete access to information about the results and status of our collaborators' clinical trials and regulatory programs and strategies. We are not entitled to the more significant milestone payments under our agreements until our collaborators have advanced compounds in clinical testing. Our partners may not devote adequate resources to the development of our compounds and may not develop or implement a successful clinical or regulatory strategy. Only two of our partners, Merck and Ortho-McNeil, have advanced our drug candidates into clinical testing and paid us the applicable milestone payments. We cannot guarantee that any other development, approval or sales milestones in our existing or future collaborations will be achieved, or that we will receive any payments for the achievement of any future milestones.

For the year ended December 31, 2006, 100% of our revenues were from our collaborations with Merck and Ortho-McNeil. Absent any new collaborators, we expect all of our revenues for 2007 to be derived from our collaborations with Merck and Ortho-McNeil. Our revenues will be materially impacted if:

- our agreement with either Merck or Ortho-McNeil is terminated;
- our collaborators do not devote their time and financial resources to develop compounds under our collaborations;
- our collaborators dispute whether we have achieved a milestone, rights to a particular receptor or compound, or other terms of our agreements;
- our collaborators use alternative technologies to our technologies and compete with us in developing drugs; or
- our collaborators experience failures in the discovery or development of compounds identified with our technologies or in the clinic or marketplace with other products that cause them to discontinue or slow down our collaboration.

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

## **Our collaboration agreements with Merck and Ortho-McNeil may be terminated in certain circumstances.**

The term of our amended collaborative research program with Merck is until October 21, 2007. Merck can terminate this program: (i) for “Technical Grounds”, by giving 30 days prior notice, if both Merck and we agree that Technical Grounds have occurred; or (ii) in the event of our change in control (as defined in the agreement), by giving 30 days prior notice. Technical Grounds include circumstances where: (1) our joint research committee (a committee comprised of an equal number of Merck and our representatives) concludes that (a) a significant adverse event affecting all the targets, all program compounds and all active compounds under the program has arisen during the conduct of the program, or (b) continuation of the program is no longer scientifically promising because the role of all the targets proves incorrect, or none of the targets are valid as a suitable target for development of a pharmaceutical product; or (2) Merck’s patent department, upon consultation with our patent attorneys, makes a reasonable determination that valid third-party patent rights block the achievement of significant program goals.

In addition, either party can terminate the agreement if the other party breaches its material obligations under the agreement by causes and reasons within its control, has not cured such breach within 90 days of receiving a letter requesting such cure, and there is no dispute as to whether such breach has occurred. In lieu of terminating the agreement, however, Merck can terminate the research program and certain other aspects of the agreement after giving 90 days prior notice if we materially breach our obligations during the course of the program and fail to cure such breach, if such default cannot be cured within such 90-day period, or if we do not commence and diligently continue good faith efforts to cure such default during such period.

The term of the research program under our agreement with Ortho-McNeil is until December 20, 2007. We and Ortho-McNeil each have the right to terminate the agreement early if the other party commits an uncured material breach of its obligations. Further, Ortho-McNeil may terminate the agreement without cause during the term of the research program, provided that in such event it pays us the balance of its research funding obligation for the initial term of the research program in a lump sum, unless the termination is due to a change of control of Arena (as defined in the agreement), in which case Ortho-McNeil may terminate either the agreement or the research program under the agreement without the payment of additional research funding to us. At any time after the end of the research program, Ortho-McNeil may terminate the agreement by providing us 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.

## **We may have conflicts with our prospective, current or past collaborators that could delay or prevent the development or commercialization of our drug candidates.**

We may have conflicts with our prospective, current or past collaborators, such as conflicts concerning the interpretation of preclinical or clinical data, the achievement of milestones, or the ownership of intellectual property. If any conflicts arise with Ortho-McNeil, Merck or any other prospective, current or past collaborator, such collaborator may act in a manner that is adverse to our interests. Any such disagreement could result in one or more of the following, each of which could delay or prevent the 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 or royalties that we believe are due to us under a collaboration;
- uncertainty regarding ownership of intellectual property rights arising from our collaborative activities, which could prevent us from entering into additional collaborations;
- unwillingness on the part of a collaborator to keep us informed regarding the progress of its development and commercialization activities or to permit public disclosure of the results of those activities; or
- slowing or cessation of a collaborator’s development or commercialization efforts with respect to our drug candidates.

## **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 or demonstrated to be more effective or safer than our drug candidates, our commercial opportunities will be reduced or eliminated.**

We focus our efforts on GPCRs. Because GPCRs are an important target class for drug discovery efforts, we believe that many pharmaceutical and biotechnology companies and other organizations have internal drug discovery programs focused on

GPCRs. Many of the drugs that our collaborators or we are attempting to discover and develop would compete with existing therapies. In addition, many companies are pursuing the development of new drugs that target the same diseases and conditions that we target. Many of our competitors, particularly large pharmaceutical companies, have substantially greater research and development 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 greater efficacy than our drug candidates or drugs, if any, for the same indication. 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.

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

Setbacks in the pharmaceutical and biotechnology industries, such as those caused by safety concerns relating to high-profile drugs like Vioxx and Celebrex, or drug candidates such as torcetrapib, as well as competition from generic drugs, litigation, and industry consolidation may have an adverse effect on us. For example, pharmaceutical companies may be less willing to enter into new collaborations or continue existing collaborations if they are integrating a new operation as a result of a merger or acquisition or if their therapeutic areas of focus change following a merger. Moreover, our and our collaborators' ability to commercialize future drugs will depend in part on government regulation and the availability of coverage and adequate reimbursement from third-party payers, including government payers, such as the Medicaid and Medicare programs. Government and third-party payers are increasingly attempting to contain healthcare costs by limiting coverage and reimbursement levels for new drugs. 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.

**We rely on third parties to conduct our clinical trials. 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 contract clinical sites to conduct our clinical trials for lorcaserin and APD125. Clinical research organizations are responsible for many aspects of the trials, including finding and enrolling subjects for testing and administering the trials. 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. These independent third parties may also have relationships with other commercial entities, some of which may compete with us. As a result of our dependence on third parties, we may face delays or failures outside of our direct control. These risks also apply to the development activities of our collaborators, and we do not control our collaborators' research and development, clinical trials or regulatory activities. We do not expect any drugs resulting from our collaborators' research and development efforts to be commercially available for many years, if ever.

**We or a third-party manufacturer 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. Should we obtain FDA approval for any of our drug candidates, we expect to rely, in whole or in part, on third-party manufacturers for commercial production. Any performance failure on the part of us or a third-party manufacturer could delay clinical development or regulatory approval of our drug candidates. We or third-party manufacturers may encounter difficulties involving production yields, regulatory compliance, quality control and quality assurance, as well as shortages of qualified personnel. Approval of our drug candidates could be delayed, limited or denied if the FDA does not approve our or a third-party manufacturer's processes or facilities. Manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the Drug Enforcement Administration of the U.S. Department of Justice, or DEA, and corresponding state and foreign authorities to ensure strict compliance with current good manufacturing practices 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. If one of our manufacturers fails to maintain compliance, 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.



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

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

Our success depends on the continued contributions of our principal management, development and scientific personnel, and the ability to hire and retain key personnel, particularly in the clinical development area as we transition more of our programs from research into drug development. We face intense competition for such personnel. The loss of services of any principal member of our management or scientific staff, particularly Jack Lief, our President 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 encounter significant delays or problems with our chemical development facility.**

We have a chemical development facility for process research, scale-up and production of intermediates and other compounds for research and development purposes, and production of active pharmaceutical ingredients for use in clinical trials. We may encounter delays and problems in operating our chemical development facility due to:

- governmental approvals, permits and regulation of the facility;
- accidents during operation of the facility;
- failure of equipment for the facility;
- delays in receiving raw materials from suppliers;
- natural or other disasters; or
- other factors inherent in operating a complex manufacturing facility.

We may not be able to operate our chemical development facility in a cost-effective manner or in a time frame that is consistent with our expected future manufacturing needs. If this were to occur, we would need to seek alternative means to fulfill our manufacturing needs, which could delay progress on our programs.

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

Our research and development 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 efforts;
- injury to our employees and others;
- environmental damage resulting in costly clean up; and

- liabilities under 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.

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

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

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

We have limited product liability insurance that covers our clinical trials. We intend to expand our insurance coverage to include the sale of drugs if marketing approval is obtained for any of our drug candidates. However, insurance coverage is increasingly expensive. We may not be able to 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.

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

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

**New accounting pronouncements may impact our future results of operations.**

In December 2004, the Financial Accounting Standards Board, or FASB, issued Statement of Financial Accounting Standards, or SFAS No. 123R, "Share-Based Payment." This statement, which became effective for us on January 1, 2006 and changed how we account for share-based compensation, will negatively impact our results of operations and may negatively impact our stock price.

Through December 31, 2005, we accounted for share-based awards to employees and directors using the intrinsic value method. Under this method, we generally did not recognize any compensation expense related to stock option grants we issued under our equity compensation plans or the discounts provided under our employee stock purchase plan.

On January 1, 2006, we adopted SFAS No. 123R using the modified-prospective transition method. Under this method, prior period results are not restated. Compensation expense recognized subsequent to adoption includes: (i) compensation expense for all share-based awards granted prior to, but unvested as of, January 1, 2006, based on the grant-date fair value, estimated in accordance with the original provisions of SFAS No. 123, and (ii) compensation expense for all share-based awards granted subsequent to January 1, 2006, based on the grant-date fair value, estimated in accordance with the provisions of SFAS No. 123R. SFAS No. 123R also requires the benefits of tax deductions in excess of recognized compensation cost to be reported as a financing cash flow, rather than as an operating cash flow. SFAS No. 123R may also delay when we may become profitable.

Future changes in U.S. generally accepted accounting principles, or GAAP, including pronouncements relating to revenue recognition, might have a significant effect on our reported results, including reporting of transactions completed before the effective date of such pronouncements.

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

If we or our collaborators receive regulatory approval for our drug candidates, we will also be subject to ongoing FDA obligations and continued regulatory review, 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.

If any of our drug candidates receive United States regulatory approval, the FDA may still impose significant restrictions on the indicated uses for which such drugs may be marketed or impose ongoing requirements for potentially costly post-approval studies. 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. Failure to comply with applicable regulatory requirements may result in:

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

The FDA's 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.

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

Laws and regulations affecting public companies, including the provisions of the Sarbanes-Oxley Act of 2002 and rules adopted by the Securities and Exchange Commission, or SEC, and by the NASDAQ Global Market, may result in increased costs to us. 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, our board committees or as executive officers. We cannot predict or estimate the amount or timing of additional costs we may incur to respond to these laws, rules and regulations.

***Risks Relating to Our Intellectual Property***

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

Our success will depend on our own and on our collaborators' abilities to obtain, secure and defend patents. In particular, the patents directed to our most advanced drug candidates and other compounds discovered using our technologies or that are otherwise part of our collaborations are important to commercializing drugs. We have numerous U.S. and foreign patent applications pending for our technologies, including patent applications on drug lead discovery techniques using CART, genetically altered GPCRs, GPCRs that we have discovered, new uses for previously discovered GPCRs, and compounds discovered using CART and Melanophore and other technologies. 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 patents issue 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.

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.

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.

In 2000, the United States Patent and Trademark Office began issuing broad patent claims that could allow patent holders 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. We believe that the question of whether these new patent claims are valid is controversial and the subject of litigation. Whether we or our competitors are able to obtain and enforce such patent claims, particularly as they apply to the GPCRs that are the subject of our drug development activities, may have a significant impact on our potential revenues from any drugs that we are able to develop.

We also rely on confidentiality agreements and trade secrets to protect our technologies. However, such information is difficult to protect. We require our employees to contractually agree not to improperly use our confidential information or disclose it to others, but we may be unable to determine if our employees have conformed or will conform to their legal obligations under these agreements. We also enter into confidentiality agreements with prospective collaborators, collaborators, service providers and consultants, but we may not be able to adequately protect our trade secrets or other proprietary information in the event of

any unauthorized use or disclosure or the lawful development by others of this information. Many of our employees and consultants were, and many of them may currently be, parties to confidentiality agreements with other pharmaceutical and biotechnology companies, and the use of our technologies could violate these agreements. In addition, third parties may independently discover our trade secrets or proprietary information.

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

**A dispute regarding the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be costly and result in delays in our research and development 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 United States 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 United States 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. These could materially affect our ability to develop our drug candidates 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 and pending patent applications in fields relevant to our business, of which we are or may become aware, that we believe we do not infringe or that we believe are invalid or relate to immaterial portions of our overall drug discovery and development 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 seeking 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 and development programs could:

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

- consume a substantial portion of our managerial, scientific and financial resources; or
- be costly, regardless of the outcome.

Furthermore, because of the substantial amount of pre-trial document and witness discovery required in connection with intellectual property litigation, there is 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 and defending 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, 2005 to February 28, 2007, the market price of our stock was as low as \$4.85 per share and as high as \$20.68 per share.

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

- the success or failure of, or other results or decisions affecting, our clinical trials;
- the timing of the discovery of drug leads and the development of our drug candidates;
- the entrance into a new collaboration or the modification or termination of an existing 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 of new drug discovery techniques or the introduction or withdrawal of drugs by others that target the same diseases and conditions that we or our collaborators target;
- regulatory actions;
- expenses related to, and the results of, litigation and other proceedings relating to intellectual property rights or other matters; and
- accounting changes, including the expense impact of SFAS No. 123R.

We are not able to control all 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.

### **Holders of our Series B Preferred can require us to redeem their Series B Preferred.**

On December 24, 2003, we completed a private placement of (i) 3,500 shares of our series B-1 redeemable convertible preferred stock, or Series B-1 Preferred, (ii) seven-year warrants to purchase 1,486,200 shares of our common stock at an exercise price of \$10.00 per share (subject to weighted-average adjustment in certain circumstances) and (iii) unit warrants to purchase \$11.5 million of our series B-2 redeemable convertible preferred stock, or Series B-2 Preferred (the Series B-1 Preferred and the Series B-2 Preferred are collectively referred to as the Series B Preferred), and additional seven-year warrants to purchase 450,000 shares of our common stock at an exercise price of \$10.00 per share (subject to weighted-average adjustment in certain circumstances). On April 22, 2005, the investors exercised their unit warrants in full.

The holders of our Series B-1 Preferred can require us at any time to redeem all or some of their shares of Series B-1 Preferred at such shares' stated value, plus accrued but unpaid dividends thereon to the date of payment and any applicable penalties. The stated value is the original holder's investment plus any dividends settled by increasing the stated value at the time the dividend is payable. The aggregate redemption price of our Series B-1 Preferred at December 31, 2006 was approximately \$39.5 million, and accrues interest at 4% annually.

The holders of our Series B-2 Preferred will be entitled to require us to redeem their shares of Series B-2 Preferred at such shares' stated value, plus accrued but unpaid dividends thereon to the date of payment and any applicable penalties if, in the future, the average of the closing prices of our common stock for any 30 consecutive trading days is below \$7.00 per share, which is the conversion price for the Series B-2 Preferred. The aggregate redemption price of our Series B-2 Preferred at December 31, 2006 was approximately \$12.3 million, and accrues interest at 4% annually.

Also, the holders of the Series B-2 Preferred may require us to redeem their shares if we issue common stock or common stock equivalents for an effective net price to us per share less than approximately \$5.33 (excluding, among other things, certain common stock and common stock equivalents issued or issuable (i) to our officers, directors, employees or consultants, (ii) in connection with certain strategic partnerships or joint ventures, and (iii) in connection with certain mergers and acquisitions). "Effective net price" is not defined in the Certificate of Designations governing our Series B-2 Preferred. The holders of our Series B-2 Preferred may assert that effective net price should be calculated as the amount we receive after paying any discounts and other expenses related to any such issuance.

At the option of any holder of any Series B Preferred, any Series B Preferred held by such holder may be converted into common stock based on the applicable conversion price then in effect for such shares of Series B Preferred.

In addition to the foregoing redemption rights, at any time following the occurrence of a "Triggering Event," a holder of the Series B Preferred may require us to repurchase all or any portion of the Series B Preferred then held by such holder at a price per share equal to the greater of 115% of the stated value or the market value (as calculated under the Certificate of Designations for the Series B-1 Preferred and the Series B-2 Preferred) of such shares of Series B Preferred plus all accrued but unpaid dividends thereon to the date of payment. "Triggering Event" is specifically defined in the Certificate of Designations for the Series B-1 Preferred and the Series B-2 Preferred, and includes any of the following events: (i) immediately prior to a bankruptcy event; (ii) we fail for any reason to timely deliver a certificate evidencing any securities to a purchaser or the exercise or conversion rights of the holders are otherwise suspended for other than a permissible reason; (iii) any of certain events of default (as set forth in the Registration Rights Agreement with the Series B Preferred holders) occur and remain uncured for 60 days; (iv) we fail to make any cash payment required under the Series B Preferred transaction documents and such failure is not timely cured; (v) the issuance of a going concern opinion by our independent registered public accounting firm that is not

timely cured; (vi) we breach a section of the Series B Preferred purchase agreement relating to indebtedness and subordination; or (vii) we default in the timely performance of any other obligation under the Series B Preferred transaction documents and such default is not timely cured.

We will also be required to redeem any shares of the Series B Preferred that remain outstanding on the fifth anniversary of their issuance at a price equal to the amount of the original holder's original investment, plus all accrued but unpaid dividends thereon to the date of such payment.

If we are required to redeem all or some of the currently outstanding shares of our Series B Preferred, we may be able to pay a portion of the redemption price using shares of our common stock if certain enumerated conditions are satisfied, including:

- we have sufficient number of shares of common stock available for issuance;
- the shares of common stock to be issued are registered under an effective registration statement or are otherwise available for sale under Rule 144(k) under the Securities Act of 1933, as amended, or Securities Act;
- our common stock is listed on the NASDAQ Global Market or other eligible market;
- the shares to be issued can be issued without violating the rules of the NASDAQ Global Market or any applicable trading market or a provision of our Certificate of Designations for the Series B Preferred; and
- no bankruptcy event has occurred.

If we are permitted to satisfy a portion of a redemption by using shares of our common stock, and if we elect to do so, the number of shares to be issued to holders of Series B Preferred will be determined by dividing their cash redemption price by the lesser of the conversion price or 95% of the average of the volume weighted-average price of our common stock for either 10 or 15 trading days.

There can be no assurance that if we have to redeem our Series B Preferred, that we will be able to pay a portion of the redemption price using shares of our common stock. If we use common stock to redeem a portion of the Series B Preferred, your ownership interest may be significantly diluted. If we are required or elect to redeem shares of the Series B Preferred using cash, we may not have sufficient cash to redeem these shares or to continue our planned research and discovery activities. In such event we may try to raise additional capital by issuing new stock, but there can be no assurance that capital will be available on acceptable terms or at all.

**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 60,816,605 shares of our common stock outstanding as of February 28, 2007. The outstanding shares of our Series B-1 Preferred are convertible into up to 5,266,809 shares of common stock at \$7.50 per share of common stock. The outstanding shares of our Series B-2 Preferred are convertible into up to 1,758,161 shares of common stock at \$7.00 per share of common stock. Holders of Series B Preferred are entitled to receive a 4% annual dividend that is payable by issuing common stock or by increasing the amount of common stock that is issuable upon conversion of the Series B Preferred. In connection with the Series B Preferred financing, we issued warrants to acquire 1,936,200 shares of common stock at an exercise price of \$10.00 per share to the two purchasers in our Series B Preferred financing. As of February 28, 2007, 1,106,344 of such warrants are outstanding. Such warrants provide that if the closing price of our common stock is equal to or above \$14.00 per share for 30 consecutive trading days, upon 10 trading days' prior written notice, we will have the right to, and the warrant holders will have the right to require us to, call and cancel any unexercised portion of the warrants (subject to certain conditions). Following such a call notice, we would be obligated to issue to the warrant holder an exchange warrant entitling the holder to purchase shares of our common stock equal to the "Call Amount" (as such term is defined in the warrants). This exchange warrant would contain the same terms and conditions as the original warrant, except that the maturity date would be seven years from the date of issuance of such exchange warrant and the exercise price would be equal to 130% of the average of the volume weighted-average price of our common stock for the five trading days preceding the original warrant cancellation date.

On March 31, 2006, following our call notice to one of our two warrant holders, Smithfield Fiduciary LLC, such holder exercised its warrants to purchase 829,856 shares of our common stock. In connection with this exercise in full of its warrants, Smithfield claimed that it was entitled to receive exchange warrants that would include a provision that could require us to issue

additional exchange warrants in the future. We disagreed with this interpretation and, on June 30, 2006, we entered into a Settlement Agreement and Release with Smithfield. As part of the Settlement Agreement and Release, (a) Smithfield and we provided each other with a release of any claims relating to (i) Smithfield's demand for, and our non-issuance of, exchange warrants, and (ii) any breach or default under certain of our agreements on account of the foregoing, (b) we issued Smithfield a seven-year warrant to purchase 829,856 shares of our common stock at an initial exercise price of \$15.49 per share, and (c) we filed a registration statement covering the sale of the shares of common stock issuable under the new warrant. The new warrant does not contain any right for us, or for the holder to require us, to call the warrant, nor does it provide the holder the right to receive any exchange warrants in the future.

In addition, as of February 28, 2007, there were 5,619,958 options to purchase shares of our common stock issued and outstanding under our equity incentive plans at a weighted-average exercise price of \$10.24, 1,690,500 performance unit awards outstanding under our 2006 Long-Term Incentive Plan, 2,651,675 additional shares of common stock issuable under our 2006 Long-Term Incentive Plan, 685,320 shares of common stock issuable under our 2001 Employee Stock Purchase Plan, as amended, and 114,169 shares of common stock issuable under our Deferred Compensation Plan. A substantial number of the shares described above, when issued upon exercise, 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 financed our operations, and we expect to continue to finance our operations, primarily by issuing and selling our common stock or securities convertible into or exercisable for shares of our common stock. In light of our need for additional financing, we may issue additional shares of common stock or additional 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. The terms of our Series B Preferred limit our ability to engage in certain equity issuances.

We may also raise additional funds through the incurrence of debt, and the holders of any debt we may issue would have rights superior to your rights in the event we are not successful and are forced to seek the protection of bankruptcy laws. The terms of our Series B Preferred limit our ability to incur debt.

**Our largest stockholders may take actions that are contrary to your interests, including selling their stock.**

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

**We may have disagreements with our warrant holders.**

We previously had a disagreement with one of our two warrant holders regarding whether such holder was entitled to receive exchange warrants following the exercise of its warrants in full. Although we entered into a Settlement Agreement and Release with this holder, we may have a similar dispute with the other warrant holder. Moreover, we may be involved with other disagreements with our warrant holders 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.

**Provisions of our Series B Preferred may prevent or make it more difficult for us to raise funds or take certain other actions.**

Provisions of our Series B Preferred require us to obtain approval of the preferred stockholders, or otherwise trigger rights of first refusal or payment provisions, to (i) offer or sell new securities, other than in specified underwritten offerings or strategic partnerships or joint venture and certain other exceptions, (ii) sell or issue common stock or securities issuable into common stock below certain prices, (iii) incur debt or allow liens on our property, other than certain permitted debt and liens, (iv) amend our certificate of incorporation so as to affect adversely any rights of the preferred stockholders, (v) authorize or create a new class of stock that will be senior or equal to the Series B Preferred in terms of dividends, redemption or distribution of assets, or (vi) take certain other actions. These provisions may make it more difficult for us to take certain corporate actions and could delay, discourage or prevent future financings.

**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 and Certificate of Designations for the Series B Preferred, 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.

## Item 2. Properties.

As set forth in the below table, the facilities that we occupy include approximately 247,000 square feet of research, development, warehouse and office space located at 6114, 6118, 6122-6124-6126, 6138-6150, 6154 and 6166 Nancy Ridge Drive in San Diego, California.

Address on Nancy Ridge Drive, San Diego, California	Own/ Lease	Description
6114 .....	Own	This facility was a 13,000 square foot warehouse facility when we purchased it. We converted this facility into an approximately 40,000 square foot (which includes approximately 18,000 of internal square feet of space and approximately 22,000 square feet of integrated external space) chemical development facility of which approximately 5,000 square feet is office space. The remaining 35,000 square feet, which include engineering support areas, are 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 the second quarter of 2004.
6118 .....	Own	This facility includes approximately 21,000 square feet of office and warehouse space. We purchased this facility in May 2006 and leased it back to the previous owner through December 31, 2006. We do not currently occupy this facility, but are in the process of expanding and building it out to approximately 30,000 square feet, primarily for office space.
6122-6124-6126.....	Lease with option to purchase	In March 2002, we entered into a lease for the facility at 6124-6126, which is approximately 31,000 square feet of space, consisting of approximately 17,000 square feet of laboratory space and approximately 14,000 square feet of office space. In October 2005, we amended the lease for this facility to include approximately 10,000 additional square feet of unimproved space at 6122 Nancy Ridge Drive, a building that is contiguous with the 6124-6126 Nancy Ridge Drive facility. We converted this additional space at 6122 Nancy Ridge Drive into approximately 4,000 square feet of office space and approximately 6,000 square feet of laboratory space. We sublease to another company approximately 2,000 square feet of office space in this facility. We have an option to purchase the entire facility, which includes approximately 68,000 square feet of space.
6138-6150.....	Lease with option to purchase	This facility includes approximately 55,000 square feet of space, consisting of approximately 33,000 square feet of laboratory space and approximately 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 .....	Own	This facility includes approximately 55,000 square feet, which consists of approximately 39,000 square feet of warehouse space and approximately 16,000 square feet of office space. We are planning to further improve and substantially expand this facility.
6166 .....	Lease	This facility includes approximately 37,000 square feet of space, of which approximately 23,000 square feet is laboratory space and approximately 14,000 square feet is office space.

We expect to need additional space depending on the success of our clinical programs and whether we partner or internally develop our programs. In addition, as a potential source of additional near-term liquidity, we are exploring the potential sale and leaseback of any or all of the facilities we own, as well as the assignment of our option to purchase one of the facilities we lease. As of December 31, 2006, the facilities we own had a carrying value on our balance sheet of approximately \$30.7 million, and we estimate the aggregate fair market value of these facilities to be in excess of their carrying value. We anticipate that a sale and leaseback involving these facilities, as well as the assignment of our option to purchase one of our leased facilities, would include a right by us to repurchase the facilities in the future.

**Item 3. Legal Proceedings.**

None.

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

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



## 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 and its predecessor, the NASDAQ National Market.

	<u>High</u>	<u>Low</u>
Year ended December 31, 2005		
First Quarter .....	\$ 6.80	\$ 4.95
Second Quarter .....	\$ 7.49	\$ 4.85
Third Quarter .....	\$10.00	\$ 6.61
Fourth Quarter .....	\$14.64	\$ 9.10
	<u>High</u>	<u>Low</u>
Year ended December 31, 2006		
First Quarter .....	\$20.68	\$14.21
Second Quarter .....	\$18.19	\$10.26
Third Quarter .....	\$12.97	\$ 9.18
Fourth Quarter .....	\$17.69	\$11.93

#### Holders

As of February 28, 2007, there were approximately 167 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 any cash dividends on our capital stock. We anticipate that we will retain earnings, if any, to support operations and finance the growth and development of our business and, therefore, do not expect to pay cash dividends in the foreseeable future. In addition, we are prohibited from paying cash dividends on any of our capital stock other than our Series B redeemable convertible preferred stock without the approval of the holders of our Series B redeemable convertible preferred stock.

#### Securities authorized for issuance under equity compensation plans

The following table summarizes our compensation plans under which our equity securities are authorized for issuance as of December 31, 2006:

<u>Plan category</u>	<u>Number of securities to be issued upon exercise of outstanding options, warrants and rights</u>	<u>Weighted-average exercise price of outstanding options, warrants and rights</u>	<u>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a))</u>
	(a)	(b)	(c)
Equity compensation plans approved by security holders .....	4,522,381	\$ 9.44	6,129,970*
Equity compensation plans not approved by security holders .....	—	—	—
Total .....	4,522,381	\$ 9.44	6,129,970*

\* Includes 685,320 shares of common stock available for future issuance under our 2001 Employee Stock Purchase Plan, as amended.

In 2003, we set up a deferred compensation plan for our executive officers, whereby executive officers may elect to defer their shares of restricted stock. At December 31, 2006, a total of 114,169 shares of restricted stock were in the plan. All of the shares contributed to this plan were previously granted to executive officers under an equity compensation plan approved by the stockholders.

On February 26, 2007, the Compensation Committee of the our board of directors granted 1,690,500 performance unit awards to a broad base of employees, including executive officers, under our 2006 Long-Term Incentive Plan. In addition, on the same date, 1,085,037 stock options were granted to employees, including executive officers, and directors.

The performance unit awards provide employees with five years to achieve four key drug development and strategic performance goals. A fixed number of awards will be earned for each milestone that is successfully achieved. Once earned, the awards will remain unvested until the five-year performance period is complete. After five years, the awards that have been earned will vest and be settled in shares of our common stock. Termination of employment prior to vesting will result in the forfeiture of any earned (as well as unearned) awards, except for limited circumstances such as termination due to death, disability or a change in control.

The stock options granted, which vest 25% per year over four years and are exercisable for up to 10 years from the date of grant, had an exercise price equal to the fair market value of our stock on the date of grant, which was \$13.50 per share.

The following table summarizes our compensation plans under which our equity securities are authorized for issuance as of February 28, 2007:

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)	Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders .....	5,619,958	\$ 10.24	3,336,995*
Equity compensation plans not approved by security holders .....	—	—	—
Total.....	5,619,958	\$ 10.24	3,336,995*

\* Includes 685,320 shares of common stock available for future issuance under our 2001 Employee Stock Purchase Plan, as amended.

## 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 elsewhere in this Annual Report on Form 10-K.

	Years ended December 31,				
	2006	2005	2004	2003	2002
	(In thousands, except share and per share data)				
<b>Revenues</b>					
Collaborative agreements .....	\$ 30,569	\$ 23,233	\$ 13,686	\$ 12,734	\$ 18,006
Collaborative agreements with affiliates .....	—	—	—	100	1,416
Total revenues.....	<u>30,569</u>	<u>23,233</u>	<u>13,686</u>	<u>12,834</u>	<u>19,422</u>
<b>Expenses</b>					
Research and development .....	103,388	79,710	58,579	52,867	45,976
General and administrative .....	18,466	13,122	11,066	9,808	8,187
Amortization of acquired technology .....	1,537	1,537	1,825	1,621	1,586
Total operating expenses .....	<u>123,391</u>	<u>94,369</u>	<u>71,470</u>	<u>64,296</u>	<u>55,749</u>
Interest and other income (expense), net .....	6,574	3,235	(208)	4,403	5,284
Investment writedown .....	—	—	—	—	(1,787)
Net loss .....	<u>(86,248)</u>	<u>(67,901)</u>	<u>(57,992)</u>	<u>(47,059)</u>	<u>(32,830)</u>
Dividends on redeemable convertible preferred stock.....	(2,031)	(1,813)	(1,437)	(27)	—
Accretion of discount on redeemable convertible preferred stock .....	—	(7,372)	(1,852)	(36)	—
Net loss allocable to common stockholders.....	<u>\$ (88,279)</u>	<u>\$ (77,086)</u>	<u>\$ (61,281)</u>	<u>\$ (47,122)</u>	<u>\$ (32,830)</u>
Net loss per share allocable to common stockholders, basic and diluted .....	<u>\$ (1.89)</u>	<u>\$ (2.24)</u>	<u>\$ (2.40)</u>	<u>\$ (1.74)</u>	<u>\$ (1.19)</u>
Shares used in calculating net loss per share allocable to common stockholders, basic and diluted .....	<u>46,750,596</u>	<u>34,377,693</u>	<u>25,527,617</u>	<u>27,159,234</u>	<u>27,487,537</u>

	As of December 31,				
	2006	2005	2004	2003	2002
	(In thousands)				
<b>Balance Sheet Data:</b>					
Cash and cash equivalents .....	\$373,044	\$ 73,781	\$ 58,686	\$ 60,472	\$ 61,871
Short-term investments .....	15,781	54,158	54,628	93,545	123,272
Accounts receivable.....	310	848	22,590	28	3,519
Total assets .....	468,465	198,129	206,365	229,898	254,890
Deferred revenues .....	13,054	24,144	30,070	3,973	6,593
Long-term obligations, net of current portion.....	13,678	13,485	13,259	13,000	46
Redeemable convertible preferred stock.....	51,808	49,777	29,092	25,776	—
Deferred compensation .....	—	(396)	(780)	(2,648)	(1,061)
Accumulated deficit.....	(334,171)	(245,892)	(168,806)	(107,525)	(60,403)
Total stockholders’ equity .....	<u>366,115</u>	<u>99,540</u>	<u>126,723</u>	<u>183,148</u>	<u>242,052</u>

## 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 on the date of this Annual Report and, except as required by law, we undertake no obligation to update publicly or revise any forward-looking statements.

## OVERVIEW

We have incurred net losses of approximately \$334.2 million from our inception in April 1997 through December 31, 2006, and expect to incur substantial and increasing net losses for the next several years or more as we continue our research and development activities, including our clinical program for our lead drug candidate, lorcaserin hydrochloride, or lorcaserin, for the treatment of obesity. We expect that the external expenses for our ongoing Phase 3 lorcaserin program, the majority of which we expect will be expensed through the first quarter of 2009, will be substantial. To date, we have generated cash and funded our operations primarily through the sale of common and preferred equity securities and from payments from collaborators. From our inception through December 31, 2006, we have generated approximately \$864.2 million in cash from these sources, of which approximately \$732.9 million was through sales of equity and approximately \$131.3 million was through payments from all of our collaborators.

Recent and 2006 highlights include:

- Initiated dosing in a Phase 2 clinical trial of APD125. The Phase 2 clinical trial of APD125 is a randomized, double-blinded, placebo-controlled study evaluating the safety and efficacy of nighttime dosing in patients with chronic insomnia that is expected to enroll a total of approximately 100 male and female patients in about 25 clinical sites in the United States.
- Completed the enrollment of 3,182 patients in the BLOOM (Behavioral modification and Lorcaserin for Overweight and Obesity Management) trial, the first of three planned Phase 3 pivotal trials evaluating the efficacy and safety of lorcaserin for the treatment of obesity. BLOOM is a double-blinded, randomized, and placebo-controlled trial that enrolled 3,182 obese patients in about 100 centers in the United States. Lorcaserin is orally administered and is a selective 5-HT<sub>2c</sub> serotonin receptor agonist that was internally discovered by Arena.
- Ortho-McNeil Pharmaceutical, Inc., a Johnson & Johnson company, exercised its option to extend the research term of its partnership with us for one additional year to develop compounds targeting the Glucose-Dependent Insulinotropic Receptor, or GDIR. The GDIR is a novel receptor discovered by Arena that has the potential to stimulate insulin production in response to increases in blood glucose. By extending the research term for an additional year, Ortho-McNeil committed to provide additional research funding to us in the amount of \$2.4 million.
- MK-0354, a drug candidate being evaluated under our partnership with Merck & Co., Inc. to develop niacin receptor agonists for the treatment of atherosclerosis and other disorders, completed a Phase 2 clinical trial. The start of the Phase 2 clinical trial triggered a \$4.0 million milestone payment to us. Merck subsequently discontinued development of MK-0354 for atherosclerosis, but preclinical studies are being conducted to explore continued development of MK-0354 for another indication. In addition, development of other niacin receptor agonists for the treatment of atherosclerosis and related disorders is continuing, including backup compounds to MK-0354.
- Initiated BLOOM, the first of three planned Phase 3 pivotal trials evaluating the efficacy and safety of lorcaserin for the treatment of obesity.
- Favorable results from Phase 1 clinical studies of APD125 were presented at the 20<sup>th</sup> Anniversary Meeting of the Associated Professional Sleep Societies in Salt Lake City, Utah. Phase 1 results demonstrated in normal healthy volunteers an excellent tolerability profile and significantly improved sleep parameters that are associated with better sleep maintenance, including number of awakenings and slow wave sleep, with no next-day impairment of psychomotor skills or memory.
- Positive Phase 2b clinical trial results of lorcaserin for the treatment of obesity were presented in an oral presentation at the 66<sup>th</sup> Annual Scientific Sessions of the American Diabetes Association in Washington, D.C. When compared to placebo, patients treated with lorcaserin experienced a highly statistically significant average weight loss and reductions in other physical measures, including body mass index and waist and hip circumference. Trends or improvements were seen in fasting glucose and most lipid measures despite normal mean baseline values and the relatively short study duration.

- The United States Adopted Names Council approved the nonproprietary name lorcaserin hydrochloride for our selective 5-HT<sub>2c</sub> serotonin receptor agonist under investigation for the treatment of obesity, formerly referred to by us as APD356.
- Reported from the chronic twelve and six-month preclinical toxicology studies of lorcaserin the absence of any apparent drug effect on heart valves or pulmonary vasculature. We also announced results from a Thorough Electrocardiogram Study of lorcaserin in 244 volunteers. This study was conducted to evaluate cardiovascular safety of orally administered lorcaserin at doses of 15 mg once daily and supra-therapeutic 40 mg once daily over seven consecutive days. Top-line results demonstrated that treatment with lorcaserin showed no signal of any echocardiogram effects at projected peak blood levels 2½ times higher than anticipated in the pivotal trials.
- Initiated a Phase 1 clinical trial of APD668, a novel, orally administered drug candidate discovered by us and being developed in collaboration with Ortho-McNeil, for the treatment of type 2 diabetes. The initiation of the Phase 1 trial triggered a \$5.0 million milestone payment to us under our collaboration with Ortho-McNeil to develop compounds targeting the GDIR.
- Promoted Robert E. Hoffman to Chief Financial Officer. Mr. Hoffman also serves as Arena’s Vice President, Finance, and has been an Arena employee since 1997.
- Financing highlights in 2006 included completing two follow-on stock offerings resulting in net proceeds to us of approximately \$334.1 million.

We will need to raise a substantial amount of cash to continue to develop our drug candidates and sustain our research efforts. At December 31, 2006, we had approximately \$388.8 million in cash, cash equivalents and short-term investments. The drug development process is long, uncertain and expensive and our ability to achieve our goals depends on numerous factors, many of which are out of our control. We will seek to balance the need to invest heavily in research to find new drugs and in clinical development 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. As a result, we expect to continue to incur significant and increasing losses over the next several years. We do not expect to generate positive operating cash flows for at least several years and, accordingly, we will need to raise additional funds through equity or debt financing, through partnering our more advanced programs which have entered into clinical development, or through the sale or financing of real estate that we currently own. Our cash flows from operations are expected to decline as the research funding we receive from our collaborations with Ortho-McNeil and Merck is scheduled to end in December 2007 and October 2007, respectively.

On January 1, 2006, we adopted Statement of Financial Accounting Standards, or SFAS, No. 123R, “Share-Based Payment,” related to the expensing of share-based compensation. We elected to use the modified-prospective transition method, under which prior period results are not restated. For the year ended December 31, 2006, we recorded non-cash share-based compensation expense totaling \$5.0 million, or \$0.11 per share, as a result of adopting SFAS No. 123R. At December 31, 2006, total unrecognized estimated compensation cost, excluding estimated forfeitures, related to unvested stock options was approximately \$10.3 million, which is expected to be recognized over a weighted-average remaining requisite service period of 2.31 years. At December 31, 2006, total unrecognized estimated compensation cost related to restricted stock was approximately \$1.0 million, which is expected to be recognized over a weighted-average remaining requisite service period of 2.04 years.

## SUMMARY OF REVENUES AND EXPENSES

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

### Revenues

<u>Collaborations</u>	<u>Years ended December 31,</u>		
	<u>2006</u>	<u>2005</u>	<u>2004</u>
Ortho-McNeil.....	\$ 18.5	\$ 13.4	\$ 0.3
Merck .....	12.1	9.8	13.0
Other .....	—	—	0.4
Total revenues.....	<u>\$ 30.6</u>	<u>\$ 23.2</u>	<u>\$ 13.7</u>

## Research and development expenses

Type of expense	Years ended December 31,		
	2006	2005	2004
External preclinical and clinical study fees and expenses .....	\$ 40.4	\$ 30.2	\$ 10.1
Personnel costs .....	34.0	25.4	24.7
Facility and equipment costs .....	13.3	11.8	11.7
Research supplies .....	12.2	10.5	10.4
Other .....	3.5	1.8	1.7
Total research and development expenses.....	<u>\$ 103.4</u>	<u>\$ 79.7</u>	<u>\$ 58.6</u>

## General and administrative expenses

Type of expense	Years ended December 31,		
	2006	2005	2004
Personnel costs.....	\$ 8.8	\$ 6.2	\$ 5.8
Legal, accounting and other professional fees .....	6.0	4.0	2.2
Facility and equipment costs.....	2.4	1.9	1.9
Other .....	1.3	1.0	1.2
Total general and administrative expenses.....	<u>\$ 18.5</u>	<u>\$ 13.1</u>	<u>\$ 11.1</u>

## YEAR ENDED DECEMBER 31, 2006 COMPARED TO YEAR ENDED DECEMBER 31, 2005

**Revenues.** We recorded revenues of \$30.6 million during the year ended December 31, 2006, compared to \$23.2 million during the year ended December 31, 2005. One hundred percent of our revenues during the year ended December 31, 2006 were from our collaborations with Ortho-McNeil and Merck, and included a \$5.0 million milestone earned under our Ortho-McNeil collaboration and a \$4.0 million milestone earned under our Merck collaboration, both of which we recognized immediately in accordance with our revenue recognition policy. Also included in our revenues during the year ended December 31, 2006 was \$9.6 million from amortization of milestones and technology access and development fees received in prior years, \$8.1 million in research funding, and \$3.9 million in additional sponsored research and patent activities. One hundred percent of our revenues during the year ended December 31, 2005 were also from our collaborations with Ortho-McNeil and Merck, and included \$2.0 million for a milestone achieved under our Merck collaboration, \$9.6 million from amortization of milestones and technology access and development fees, \$8.1 million in research funding, and \$3.5 million in additional sponsored research and patent activities.

In October 2004, we extended and expanded our collaboration with Merck, and Merck purchased \$7.5 million of our stock at a price of \$8.00 per share, approximately a 70% premium to the then current market price. We performed an evaluation on the initial Merck stock purchase and determined that \$3.9 million of the \$7.5 million purchase price was an upfront payment related to the collaboration extension and expansion. Accordingly, we are recognizing the \$3.9 million upfront payment, as well as the remaining portion of the unamortized upfront payment at October 2004 of \$1.3 million, over the extended collaboration term of three years. Additionally, in October 2004, we achieved a \$1.0 million milestone under our Merck collaboration which we are also recognizing over the extended collaboration term of three years because the milestone was reasonably assured to be achieved at the time we extended and expanded this collaboration. In December 2004, we entered into our collaboration and license agreement with Ortho-McNeil. This collaboration included a \$17.5 million upfront payment, as well as research funding of \$2.4 million per year, initially through December 20, 2006 and subsequently extended through December 20, 2007. We are amortizing this \$17.5 million upfront payment over three years. In December 2004, we achieved two milestones under our Ortho-McNeil collaboration of \$2.5 million each, which we are also recognizing as revenues over three years because these milestones were reasonably assured to be achieved at the time we entered into the collaboration. In February 2007, we amended our Merck collaboration to reduce the number of Arena research employees funded under the collaboration in exchange for Merck making a \$1.0 million equity investment in Arena equal to the reduction in their research funding obligation and at approximately a 70% premium to the then current market price. In addition, under our amended agreement, Merck is obligated to pay us \$3.6 million for collaboration research from January 1, 2007 to October 21, 2007.

Our collaborators often pay us before we recognize such payments as current revenues and, accordingly, these payments are recorded as deferred revenues until earned. As of December 31, 2006, we had deferred revenues of approximately \$13.1 million, all of which are expected to be recognized as revenues in 2007. Absent any new collaborations, our revenues for 2007 will be dependent on Ortho-McNeil and Merck. The research funding we receive from both of our collaborators is

scheduled to end in 2007. Future revenues for research or clinical milestones that have not yet been achieved are difficult to predict, and we expect our revenues to vary significantly from quarter to quarter and year to year. Our revenues over the next several years are dependent upon the clinical success of our partnered programs as well as whether we partner lorcaserin, APD125, APD791 or any of our other current or future drug candidates. Ultimately, we expect our future revenues to primarily depend upon the regulatory approval and commercialization of our partnered or internally developed drugs.

**Research and development expenses.** Research and development expenses, which account for the majority of our expenses, consisted 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 one or more contract research organizations, or CROs, preclinical study fees, personnel costs, research supplies, 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 partnered, clinical and preclinical programs, we generally do not track our early stage research expenses by project; rather, we track such expenses by the type of cost incurred.

Research and development expenses for the year ended December 31, 2006 increased \$23.7 million to \$103.4 million, from \$79.7 million for the year ended December 31, 2005. The difference was primarily due to (i) external preclinical and clinical study fees and expenses increasing by \$10.2 million as we initiated our larger and more costly Phase 3 clinical program for lorcaserin during the third quarter of 2006 and continued to advance APD791 closer to clinical development, and (ii) personnel costs increasing by a total of \$8.6 million as we increased the number of our research and development employees from 266 at the end of 2005 to 301 at the end of 2006 and recorded \$2.9 million in share-based compensation related to the expensing of share-based compensation under SFAS No. 123R. Included in the \$40.4 million in external preclinical and clinical study fees and expenses for the year ended December 31, 2006 was \$30.2 million related to our lorcaserin program, \$4.9 million related to our APD125 program and \$2.9 million related to our APD791 program. Included in the \$30.2 million in external preclinical and clinical study fees and expenses for the year ended December 31, 2005 was \$20.2 million related to our lorcaserin program and \$6.7 million related to our APD125 program. Nearly all of the increase in research and development personnel was needed to support the development of our internal programs, primarily lorcaserin, APD125 and APD791. We expect research and development expenses to be substantially greater in 2007 than in 2006 primarily due to ongoing and planned clinical trials and studies for our later-stage internal programs as well as due to planned increases in research and development employees. We expect that the number of our research and development employees will increase significantly in 2007, assuming positive results from our month-six Data Safety Monitoring Board, or DSMB, review and other clinical trial results for lorcaserin.

Cumulatively through December 31, 2006, we have recorded \$55.6 million, \$14.0 million and \$3.1 million in external preclinical and clinical study fees and other expenses related to lorcaserin, our lead drug candidate for the treatment of obesity, APD125, our lead drug candidate for the treatment of insomnia, and APD791, our drug candidate under investigation for the treatment and the prevention of arterial thromboembolic diseases such as acute coronary syndrome, respectively. While expenditures on current and future clinical development programs are expected to be substantial and to increase, they are subject to many uncertainties, including whether we develop our drug candidates with a partner or independently. As a result of such uncertainties, we cannot predict with any significant degree of certainty the duration and completion costs of our research and development projects or whether, when and to what extent we will generate revenues from the commercialization and sale of any of our product 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 number of patients who participate in the trials;
- the number of sites included in the trials;
- the rates of patient recruitment and enrollment;
- the duration of patient treatment and follow-up;
- the costs of manufacturing our drug candidates; and
- the costs, requirements, timing of, and the ability to secure regulatory approvals.

However, based upon our current plans, we expect to incur approximately \$99.0 million to \$103.0 million in external clinical study fees and other related expenses and preclinical studies in 2007, which includes approximately \$67.0 million, \$20.0 million and \$9.0 million for lorcaserin, APD125 and APD791, respectively. This assumes that we continue our first Phase 3 clinical trial of lorcaserin, initiate two additional pivotal Phase 3 clinical trials of lorcaserin later in 2007 and continue our Phase 2 clinical trial of APD125. Our estimates also assume that we will initiate a Phase 1 clinical trial of APD791 in 2007. We do not expect to receive regulatory approval for lorcaserin, or any of our other drug candidates, until 2010 at the earliest, if at all.

**General and administrative expenses.** General and administrative expenses for the year ended December 31, 2006 increased \$5.4 million to \$18.5 million, from \$13.1 million for the year ended December 31, 2005. This increase was primarily due to (i) personnel costs increasing by a total of \$2.6 million as we increased the number of general and administrative personnel from 48 at the end of 2005 to 54 at the end of 2006 and recorded \$2.1 million in non-cash share-based compensation under SFAS No. 123R, and (ii) patent costs related to our partnered programs and our internal programs and technologies increasing by \$1.6 million. To the extent our partners reimburse us for patent costs, the reimbursements are classified as revenues. Such reimbursements totaled \$2.1 million in 2006 and \$1.1 million in 2005. We expect to incur greater general and administrative expenses in 2007 than in 2006 due to increases in both the number of personnel and expenses for non-cash share-based compensation recorded in accordance with SFAS No. 123R, as well as the costs of maintaining our growing and maturing portfolio of patent applications and patents for our internal and partnered programs.

**Amortization of acquired technology.** We recorded \$1.5 million for amortization of acquired technology in both of the years ended December 31, 2006 and 2005 related to the patented Melanophore technology, our primary screening technology, which we acquired in 2001 for \$15.4 million. The Melanophore technology is being amortized over its estimated useful life of 10 years. We expect to recognize total charges from the amortization of acquired technology of approximately \$1.5 million in each of the next four years.

**Interest and other income, net.** Interest and other income, net, totaled \$6.6 million for the year ended December 31, 2006, compared to \$3.2 million for the year ended December 31, 2005. Interest and other income, net, for the year ended December 31, 2006 was primarily comprised of (i) \$12.7 million in interest income, (ii) a \$4.6 million non-cash charge related to a warrant issued as part of a settlement with one of our warrant holders, and (iii) interest expense and financing costs of \$1.8 million, which included lease payments accounted for in accordance with SFAS No. 66 "Accounting for Sales of Real Estate" on our 6138-6150 Nancy Ridge Drive facility that we sold in 2003 and are leasing back. Interest and other income, net, for the year ended December 31, 2005 was primarily comprised of (i) \$4.4 million in interest income, (ii) interest expense and financing costs of \$1.8 million, which included lease payments accounted for in accordance with SFAS No. 66, and (iii) a \$0.5 million payment received for the termination of our Fujisawa collaboration and classified as other income. The increase in interest income in the year ended December 31, 2006 was the result of both higher cash balances from the two public offerings we completed in 2006 and higher average interest rates in 2006 compared to 2005.

**Dividends on redeemable convertible preferred stock.** We recorded a dividend expense of \$2.0 million related to our redeemable convertible preferred stock for the year ended December 31, 2006, compared to \$1.8 million for the year ended December 31, 2005. In April 2005, we issued an additional \$11.5 million in redeemable convertible preferred stock as a result of the preferred stockholders' exercise of their unit warrants. The holders of series B redeemable convertible preferred stock, or Series B Preferred, are entitled to dividends that accrue at 4% annually. This dividend expense, payable in additional shares of redeemable convertible preferred stock or in common stock, increases the net loss allocable to common stockholders. Assuming that the redeemable convertible preferred stock is held until the mandatory redemption date, we expect to record dividends on redeemable convertible preferred stock of \$2.1 million, \$2.2 million, \$0.5 million and \$0.2 million for the years ending December 31, 2007, 2008, 2009 and 2010, respectively.

**Accretion of discount on redeemable convertible preferred stock.** We recorded as an expense accretion of discount and deemed dividend on our redeemable convertible preferred stock in the amount of \$7.4 million for the year ended December 31, 2005 in accordance with Emerging Issues Task Force, or EITF, Issue No. 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments." We allocated the total proceeds received in our preferred stock financing among the series B-1 redeemable convertible preferred stock, or Series B-1 Preferred, and the related warrants and unit warrants, estimating the value of the warrants and unit warrants at \$6.5 million using the Black-Scholes method. The fair value of the common stock into which the redeemable convertible preferred stock was convertible into on the date of issuance exceeded the proceeds allocated to the redeemable convertible preferred stock by \$2.8 million, resulting in a beneficial conversion feature that we recognized as an increase to paid-in capital and as a deemed dividend to the redeemable convertible preferred stock. As a result of the public offering we completed in February 2005, which resulted in the Series B-1 Preferred becoming



immediately redeemable at the option of the holders, we recorded a charge in the first quarter of 2005 of \$7.4 million to accrete the remaining unaccreted discount and deemed dividend on the redeemable convertible preferred stock. At December 31, 2006, the aggregate redemption price of the Series B-1 Preferred was approximately \$39.5 million.

#### **YEAR ENDED DECEMBER 31, 2005 COMPARED TO YEAR ENDED DECEMBER 31, 2004**

**Revenues.** We recorded revenues of \$23.2 million during the year ended December 31, 2005, compared to \$13.7 million during the year ended December 31, 2004. One hundred percent of our revenues during the year ended December 31, 2005 were from our collaborations with Ortho-McNeil and Merck, which included a \$2.0 million milestone received under our Merck collaboration and recognized immediately in accordance with our revenue recognition policy, \$9.6 million from amortization of milestones and technology access and development fees received in prior years, \$8.1 million in research funding, and \$3.5 million in additional sponsored research and patent activities. Ninety-five percent of our revenues during the year ended December 31, 2004 were from our collaboration with Merck, including \$7.0 million from milestones received and recognized immediately, \$4.5 million in research funding and \$1.5 million from amortization of milestones and technology access and development fees received in prior years.

**Research and development expenses.** Research and development expenses increased \$21.1 million to \$79.7 million for the year ended December 31, 2005, from \$58.6 million for the year ended December 31, 2004. The difference was due primarily to (i) external preclinical and clinical study fees and expenses increasing by \$20.1 million as we continued to develop lorcaserin and APD125, and (ii) personnel costs increasing by \$0.7 million as we increased the number of our research and development employees from 239 at the end of 2004 to 266 at the end of 2005. Included in the \$30.2 million in external preclinical and clinical study fees and expenses for the year ended December 31, 2005 was \$20.2 million related to our lorcaserin program and \$6.7 million related to our APD125 program. Included in the \$10.1 million in external preclinical and clinical study fees and expenses for the year ended December 31, 2004 was \$5.2 million related to our lorcaserin program and \$2.4 million related to our APD125 program.

**General and administrative expenses.** General and administrative expenses increased \$2.0 million to \$13.1 million for the year ended December 31, 2005, from \$11.1 million for the year ended December 31, 2004. This increase is due primarily to (i) patent costs related to our partnered programs and our internal programs and technologies increasing by \$1.7 million, and (ii) personnel costs increasing by \$0.9 million due to increases in salaries and related benefits. To the extent our partners reimburse us for patent costs, the reimbursements are classified as revenues. Such reimbursements totaled \$1.1 million and 0 in 2005 and 2004, respectively.

**Amortization of acquired technology.** We recorded \$1.5 million for amortization of acquired technology for the year ended December 31, 2005, compared to \$1.8 million for the year ended December 31, 2004 primarily related to our patented Melanophore technology.

**Interest and other income (expense), net.** Interest and other income, net, totaled \$3.2 million for the year ended December 31, 2005, compared to a net expense of \$0.2 million for the year ended December 31, 2004. Interest and other income, net, for the year ended December 31, 2005 was primarily comprised of (i) \$4.4 million in interest income, (ii) interest expense and financing costs of \$1.8 million, which included lease payments accounted for in accordance with SFAS No. 66 on our 6138-6150 Nancy Ridge Drive facility that we sold in 2003 and are leasing back, and (iii) a \$0.5 million payment received for the termination of our Fujisawa collaboration and classified as other income. Interest and other income (expense), net, for the year ended December 31, 2004 was primarily comprised of (i) \$2.4 million in interest income and \$0.1 million in gains on sales of investments and assets, (ii) interest expense and financing costs of \$1.9 million, which included lease payments accounted for in accordance with SFAS No. 66, and (iii) \$0.9 million in expense attributable to our share of the net loss of TaiGen Biotechnology Co., Ltd., which we previously accounted for using the equity method of accounting.

**Dividends on redeemable convertible preferred stock.** We recorded a dividend expense of \$1.8 million related to our redeemable convertible preferred stock for the year ended December 31, 2005, compared to \$1.4 million for the year ended December 31, 2004. This dividend expense, payable in additional shares of redeemable convertible preferred stock or in common stock, increases the net loss allocable to common stockholders.

**Accretion of discount on redeemable convertible preferred stock.** We recorded as an expense accretion of discount and deemed dividend on our redeemable convertible preferred stock in the amount of \$7.4 million for the year ended December 31, 2005, compared to \$1.9 million for the year ended December 31, 2004.

## LIQUIDITY AND CAPITAL RESOURCES

### *Short term*

We anticipate that our research and development expenditures will increase substantially as we continue our first Phase 3 trial of lorcaserin, initiate our other two planned pivotal Phase 3 lorcaserin trials in the second half of 2007, continue our Phase 2 clinical trial of APD125, and initiate a Phase 1 clinical trial of APD791. We expect that the external expenses for our Phase 3 lorcaserin program, the majority of which we expect will be expensed through the first quarter of 2009, will be substantial. In addition to costs related to these clinical trials, we expect to incur significant manufacturing and other pre-launch costs for lorcaserin. A majority of these expenses is expected to be paid through one or more CROs. Our contract with the primary CRO in the Phase 3 BLOOM trial can be terminated if we give five days prior written notice. Even if the results of our clinical trials are favorable, we estimate that our Phase 3 lorcaserin program will continue for several years and may take significantly longer than expected to complete for various reasons including those set forth in "Item 1A. Risk Factors" in this Annual Report. Research funding we receive from our collaborations with Ortho-McNeil and Merck is scheduled to end in 2007 and, absent any new collaborations, we expect that no revenues from research funding will be recognized starting in 2008.

We believe we have sufficient cash to meet our objectives over at least the next year, including continuing our Phase 3 program for lorcaserin and our Phase 2 clinical trial of APD125, initiating our planned clinical trial of APD791, continuing development of our other lead internal programs, discovering and developing additional drug candidates, continuing to build our development capabilities, and maintaining our research discovery capabilities. We will continue to monitor and evaluate the proper level of research and development expenditures, and may adjust such expenditures based upon a variety of factors such as our month-six DSMB and other clinical trial results for lorcaserin, as well as our ability to generate cash through collaborative and financing activities, including the sale of real estate that we own. We expect our 2007 capital expenditures will be higher than 2006 due to the purchase of equipment and ongoing leasehold and capital improvements to the facilities that we rent and own.

The holders of our Series B-1 Preferred can require us to redeem all or some of their outstanding shares of Series B-1 Preferred at any time. The aggregate redemption price of our Series B-1 Preferred at December 31, 2006 was approximately \$39.5 million. If required to redeem, we may be able to satisfy all or a portion of this amount with shares of our common stock. Our ability and decision whether to use cash or equity to satisfy any redemption will depend on, among other factors, the amount of cash we have, our stock price and the amount of common stock then held by our preferred stockholders.

To date, we have generated cash and funded our operations primarily through the sale of common and preferred equity securities and from payments from collaborators. From our inception through December 31, 2006, we have generated approximately \$864.2 million in cash from these sources, of which approximately \$732.9 million was through sales of equity and approximately \$131.3 million was through payments from all of our collaborators.

Our sources of liquidity include our cash balances and short-term investments. As of December 31, 2006, we had approximately \$388.8 million in cash and cash equivalents and short-term investments. In addition to our cash balances and short-term investments, other potential sources of near-term liquidity include (i) research funding from our collaborators through the fourth quarter of 2007, (ii) milestone payments from our collaborators, (iii) the out-licensing of our drug candidates, internal drug programs and technologies, (iv) the sale of any of the facilities that we own, none of which are subject to any outstanding loans, and (v) equity or debt financing. We will continue to be opportunistic in our efforts to generate cash, including the potential sale and leaseback of any or all of the facilities we own, as well as the assignment of our option to purchase one of the facilities we lease. As of December 31, 2006, the facilities we own had a carrying value on our balance sheet of approximately \$30.7 million, and we estimate the aggregate fair market value of these facilities to be in excess of their carrying value.

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

### *Long term*

We will need to raise or generate significant amounts of cash to achieve our objectives of internally developing drugs, which take many years and potentially hundreds of millions of dollars to develop, and continuing our research programs. If we decide to market lorcaserin or any other drug candidate independently or with a partner, we will need to invest heavily in

associated marketing costs. Such costs will be substantial and will need to be incurred prior to receiving marketing approval from the FDA. We do not currently have adequate internal liquidity to meet these objectives in the long term. In order to do so, we will need to continue our out-licensing activities and look to other external sources of liquidity, including the public and private financial markets and strategic partners.

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

### *Sources and Uses of Our Cash*

Net cash used in operating activities was approximately \$71.0 million during the year ended December 31, 2006, and was primarily used to fund our net losses in the period, adjusted for non-cash expenses. Non-cash expenses included a \$4.6 million charge related to a warrant settlement, \$7.4 million in depreciation and amortization expense, \$5.0 million in share-based compensation, \$1.5 million in amortization of acquired technology and other purchased intangibles, as well as changes in operating assets and liabilities. Net cash used in operating activities during the year ended December 31, 2005 was approximately \$42.9 million, and was primarily used to fund our net losses in the period, adjusted for non-cash expenses, including \$6.9 million in depreciation and amortization expense, \$1.5 million in amortization of acquired technology and other purchased intangibles, \$0.4 million in amortization of deferred compensation, as well as changes in operating assets and liabilities. Net cash used in operating activities during the year ended December 31, 2004 was approximately \$39.2 million, and was primarily used to fund our net loss in the period, adjusted for non-cash expenses, including \$7.1 million in depreciation and amortization expense, \$1.8 million in amortization of acquired technology and other purchased intangibles, \$1.5 million in amortization of deferred compensation, \$0.9 million for our minority interest in TaiGen's operations, as well as changes in operating assets and liabilities. We expect net cash used in operating activities to be substantially greater in 2007 than in 2006 as we continue our Phase 3 program for lorcaserin and our Phase 2 clinical trial of APD125, initiate our planned clinical trial of APD791, continue to increase the number of employees, and continue to experience increases in accounting and legal fees, including the costs of maintaining our growing and maturing portfolio of patent applications and patents.

Net cash of approximately \$25.1 million was provided by investing activities during the year ended December 31, 2006, and was primarily the result of net proceeds from short-term investments of approximately \$39.1 million, partially offset by approximately \$3.6 million used to purchase a building located at 6118 Nancy Ridge Drive and approximately \$10.6 million used for equipment and leasehold and capital improvements to our facilities. Net cash used in investing activities during the year ended December 31, 2005 was approximately \$2.9 million, and was primarily the result of approximately \$3.6 million used for the purchase of equipment and leasehold and capital improvements to our facilities, partially offset by net proceeds from the sale of short-term investments of approximately \$0.4 million. Net cash of approximately \$33.3 million was provided by investing activities during the year ended December 31, 2004, and was primarily the result of net proceeds from short-term investments of approximately \$37.0 million, partially offset by approximately \$4.4 million for the purchase of equipment and leasehold and capital improvements to our facilities. We expect our 2007 capital expenditures will be higher than 2006 due to the purchase of equipment and ongoing leasehold and capital improvements to the facilities that we lease and own.

Net cash of approximately \$345.2 million was provided by financing activities during the year ended December 31, 2006, primarily due to net proceeds of approximately \$165.1 million we received in December 2006 from the sale of 13,225,000 shares of our common stock at \$13.21 per share and net proceeds of approximately \$169.0 million we received in February 2006 from the sale of 10,637,524 shares of our common stock at \$16.90 per share, as well as approximately \$8.3 million of proceeds from the exercise of warrants to purchase 829,856 shares of our common stock at \$10.00 per share in March 2006. Net cash of approximately \$60.8 million was provided by financing activities during the year ended December 31, 2005, and was primarily attributable to the net proceeds of approximately \$48.2 million we received in

February 2005 from the sale of 8,625,000 shares of our common stock at \$6.00 per share as well as receiving \$11.5 million in April 2005 from our preferred stockholders' exercise of their unit warrants. Net cash of approximately \$4.0 million was provided by financing activities during the year ended December 31, 2004, primarily due to approximately \$3.6 million attributed to the equity component of the payment we received from Merck for the expansion and extension of our collaboration and proceeds of approximately \$0.5 million from the issuance of common stock upon exercise of options.

#### *Contractual Obligations Table*

The following table summarizes our contractual obligations as of December 31, 2006:

<b>Contractual Obligations</b>	<b>Total</b>	<b>Payment due by period (in thousands)</b>			
		<b>Less than 1 year</b>	<b>1-3 years</b>	<b>3-5 years</b>	<b>More than 5 Years</b>
Series B Preferred .....	\$ 51,808	\$ 39,501	\$ —	\$ 12,307	\$ —
Operating leases .....	7,144	1,143	2,369	2,486	1,146
Purchase obligations .....	164	164	—	—	—
Financing obligation .....	19,710	1,429	2,965	3,116	12,200
Total .....	<u>\$ 78,826</u>	<u>\$ 42,237</u>	<u>\$ 5,334</u>	<u>\$ 17,909</u>	<u>\$ 13,346</u>

The holders of our Series B-1 Preferred can require us to redeem all or some of their outstanding shares of Series B-1 Preferred at any time at such shares' stated value, which includes dividends that accrue at 4% annually. In addition, if not earlier redeemed, we are required to redeem our Series B-1 Preferred in December 2008. Although we may be able to satisfy all or a portion of this amount with shares of our common stock if certain criteria are met, the above table includes the full cash redemption price.

We have entered into agreements with CROs to conduct our clinical trials, and expect to continue to enter into such agreements. We will make payments to these sites and organizations primarily based upon the number of subjects enrolled and the length of their participation in the trials. In determining the amount of our purchase obligations for these and other 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, 2006) and did not include any amount which was previously paid, accrued, expensed or associated with a contingent event, such as a change in control or termination of a key employee.

On December 30, 2003, we completed the sale and leaseback of our facility at 6138-6150 Nancy Ridge Drive for \$13.0 million. We have accounted for this transaction in accordance with SFAS No. 98, "Accounting for Leases" and SFAS No. 66, "Accounting for Sales of Real Estate." Our ability to repurchase this facility at a future date is considered continuing involvement under SFAS 98 and, therefore, we must use the financing method specified under SFAS No. 66. Under the financing method, the book value of the facility and related accumulated depreciation remain on our balance sheet and no sale is recognized. Instead, the sales price of the facility is recorded as a financing obligation and lease payments are expensed to interest expense. At December 31, 2006, we expect interest expense over the term of this lease to total approximately \$19.7 million. We have included our lease obligations related to this facility in "financing obligation" in the above table. At December 31, 2006, in accordance with SFAS No. 66, we recorded a financing obligation of approximately \$13.0 million plus deferred interest of approximately \$0.7 million.

The following is a summary of our significant collaborations as of December 31, 2006:

#### **Ortho-McNeil Pharmaceutical, Inc.**

In December 2004, we entered into a collaboration and license agreement with Ortho-McNeil 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 for Ortho-McNeil moving two lead compounds into preclinical development. In February 2006, we received a \$5.0 million milestone payment related to Ortho-McNeil's initiation of a Phase 1 clinical trial of the lead drug candidate, APD668. In September 2006, Ortho-McNeil exercised its option to extend the research term of the agreement, committing to research funding of \$2.4 million through December 20, 2007, beyond which date we will no longer have significant involvement or perform services. We are eligible to receive a total of \$295.0 million in milestone payments for each compound, as well as royalty payments associated with Ortho-McNeil's commercialization of any products discovered under the agreement. 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, 2006, we received \$27.5 million from Ortho-McNeil in upfront and milestone payments and \$5.5 million in research funding. We are recognizing the upfront payment ratably over three years, along with the two milestones we received in January 2005 as their achievability was reasonably assured at the time we entered into the collaboration.

Our agreement with Ortho-McNeil will continue until the expiration of Ortho-McNeil's payment obligations for research funding, milestone payments and royalties, unless the agreement is terminated earlier by either party. We and Ortho-McNeil each have the right to terminate the agreement early if the other party commits an uncured material breach of its obligations. Further, Ortho-McNeil may terminate the agreement without cause during the term of the research program, provided that in such event it pays us the balance of its research funding obligation in a lump sum, unless the termination is due to our change of control (as defined in the agreement), in which case Ortho-McNeil may terminate either the agreement or the research program under the agreement without the payment of additional research funding to us. At any time after the end of the research program, Ortho-McNeil may terminate the agreement by providing us at least 60 days prior written notice. Upon termination of the agreement, all rights to the compounds developed under the collaboration will revert to us.

For the year ended December 31, 2006, we recognized revenues under the Ortho-McNeil agreement of approximately \$18.5 million, which included \$7.5 million from amortization of milestones and technology access and development fees received in prior years, \$5.0 million from a milestone earned, \$2.4 million in research funding, and approximately \$3.6 million in additional sponsored research and patent activities. For the year ended December 31, 2005, we recognized revenues under this agreement of approximately \$13.4 million, which included \$7.5 million from amortization of milestones and technology access and development fees, \$2.4 million in research funding, and approximately \$3.5 million in additional sponsored research and patent activities. For the year ended December 31, 2004, we recognized revenues under this agreement of approximately \$0.3 million, which included approximately \$0.2 million from amortization of milestones and technology access and development fees and approximately \$0.1 million in research funding. At December 31, 2006, approximately \$7.3 million remained in deferred revenues under our Ortho-McNeil agreement, all of which is expected to be recognized as revenues in 2007.

#### **Merck & Co., Inc.**

In October 2002, we entered into a research and licensing agreement with Merck to collaborate on three G protein-coupled receptors, or GPCRs, to develop therapeutics for atherosclerosis and related disorders. We believe one or more of these GPCRs plays a role in regulating plasma lipid profiles, including HDL cholesterol, the so-called "good cholesterol," and is responsible for the HDL-raising activity of niacin. In October 2004, we extended and expanded this collaboration, and Merck selected one of our compounds for preclinical development. In September 2006, we announced that Merck completed a Phase 2 clinical trial of MK-0354, a niacin receptor agonist discovered by us and intended for the treatment of atherosclerosis and related disorders. Based on the results of this trial, Merck discontinued development of MK-0354 for atherosclerosis, but is exploring continued development of the drug candidate under our partnership for an undisclosed indication. Merck also continues to evaluate other niacin receptor agonists under our partnership for atherosclerosis and related disorders. In February 2007, we amended our Merck collaboration to reduce the number of Arena research employees funded under the collaboration in exchange for Merck making a \$1.0 million equity investment in Arena equal to the reduction in their research funding obligation and at approximately a 70% premium to the then current market price. From the inception of this collaboration through December 31, 2006, we received \$18.0 million from Merck in upfront and milestone payments, and an equity investment of \$7.5 million. We may receive additional milestone payments of up to \$28.0 million for Merck's clinical and marketing achievements, as well as royalty payments associated with Merck's commercialization of any products discovered under the agreement. In addition, we received research funding from Merck through December 31, 2006 totaling \$25.3 million and, under our amended agreement, Merck is obligated to pay us a total of \$3.6 million for collaboration research from January 1, 2007 to October 21, 2007, beyond which date we will no longer have significant involvement or perform services. There is no guarantee we will receive any further milestone payments or any royalty payments under this agreement.

The term of our amended collaborative research program with Merck is three years from October 21, 2004. Merck can terminate this program: (i) for "Technical Grounds," by giving 30 days prior notice, if both Merck and we agree that Technical Grounds have occurred; or (ii) in the event of our change in control (as defined in the agreement), by giving 30 days prior notice. Technical Grounds include circumstances where: (1) our joint research committee (a committee of an equal number of Merck and Arena representatives) concludes that (a) a significant adverse event affecting all the targets, all program compounds and all active compounds under the program has arisen during the conduct of the program, or (b) continuation of the program is no longer scientifically promising because the role of all the targets proves incorrect, or

none of the targets are valid as a suitable target for development of a pharmaceutical product; or (2) Merck's patent department, upon consultation with our patent attorneys, makes a reasonable determination that valid third-party patent rights block the achievement of significant program goals. In addition, either party can terminate the agreement if the other party breaches its material obligations under the agreement by causes and reasons within its control, has not cured such breach within 90 days of receiving a letter requesting such cure, and there is no dispute as to whether such breach has occurred. In lieu of terminating the agreement, however, Merck can terminate the research program and certain other aspects of the agreement after giving 90 days prior notice if we materially breach our obligations during the course of the program and fail to cure such breach, if such default cannot be cured within such 90-day period, or if we do not commence and diligently continue good faith efforts to cure such default during such period.

As part of the extension and expansion of our collaboration with Merck in October 2004, Merck purchased \$7.5 million of our stock at approximately a 70% premium to the then current market price. We performed an evaluation on this Merck stock purchase and determined that \$3.9 million of this \$7.5 million purchase price was an upfront payment related to the collaboration extension and expansion. Accordingly, we are recognizing the \$3.9 million upfront payment, as well as the remaining portion of the unamortized upfront payment at October 2004 of \$1.3 million, over the extended collaboration term of three years. Additionally, in October 2004, we achieved a \$1.0 million milestone under the collaboration which we are also recognizing over the extended collaboration term of three years because the milestone was reasonably assured to be achieved at the time we extended and expanded this collaboration.

For the year ended December 31, 2006, we recognized revenues under the Merck agreement of approximately \$12.1 million, which included \$5.7 million in research funding, \$4.0 million from a milestone earned, approximately \$2.1 million from amortization of milestones and technology access and development fees received in prior years, and approximately \$0.3 million in additional sponsored research and patent activities. For the year ended December 31, 2005, we recognized revenues under this agreement of approximately \$9.8 million, which included \$5.7 million in research funding, approximately \$2.1 million from amortization of milestones and technology access and development fees received in prior years, and \$2.0 million from a milestone earned. For the year ended December 31, 2004, we recognized revenues under this agreement of approximately \$13.0 million, which included \$7.0 million from milestones received and recognized immediately, approximately \$4.5 million in research funding and approximately \$1.5 million from amortization of milestones and technology access and development fees received in prior years. At December 31, 2006, approximately \$1.7 million remained in deferred revenues under our Merck agreement, all of which is expected to be recognized as revenues in 2007.

### **Recently issued accounting standards**

In June 2006, the Financial Accounting Standards Board, or FASB, issued FASB Interpretation, or FIN, No. 48, "Accounting for Uncertainty in Income Taxes — an interpretation of SFAS No. 109," which clarifies the accounting and disclosure for uncertain income tax positions, as defined. FIN 48 seeks to reduce the diversity in practice associated with certain aspects of the recognition and measurement related to accounting for income taxes. FIN 48 is effective for fiscal years beginning after December 15, 2006. We are currently evaluating the effect, if any, the adoption of FIN 48 will have on our consolidated financial statements.

### **CRITICAL ACCOUNTING POLICIES AND MANAGEMENT ESTIMATES**

The SEC defines critical accounting policies as those that are, in management's view, important to the portrayal of our financial condition and results of operations and demanding of management's judgment. Our discussion and analysis of financial condition and results of operations are based on our consolidated financial statements, which have been prepared in accordance with U.S. generally accepted accounting principles, or 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. We base our estimates on 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 from those estimates.

Our critical accounting policies include:

**Revenue recognition.** Our revenue recognition policies are in accordance with SEC Staff Accounting Bulletin, or SAB, No. 104, "Revenue Recognition," and EITF Issue No. 00-21, "Revenue Arrangements with Multiple Deliverables," which provide guidance on revenue recognition in financial statements and are based on the interpretations and practices developed

by the SEC. Some of our agreements contain multiple elements, including technology access and development fees, research funding, milestones and royalty obligations.

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.

**Clinical trial expenses.** We accrue clinical trial expenses based on work performed. We rely on estimates of total costs incurred based on enrollment of subjects, completion of studies and other events. We follow this method because reasonably dependable estimates of the costs applicable to various stages of a clinical trial can be made. Accrued clinical costs are subject to revisions as clinical trials progress, and any revisions are recorded in the period in which the facts that give rise to the revisions become known. Historically, revisions have not resulted in material changes to amounts recorded; however, a modification to a clinical trial protocol or cancellation of a trial could result in material adjustments to our recorded expenses.

**Intangibles.** Purchase accounting requires estimates and judgments to allocate the purchase price to the fair market value of the assets received and liabilities assumed. In February 2001, we acquired Bunsen Rush Laboratories, Inc. for \$15.0 million in cash and assumed \$0.4 million in liabilities. We allocated \$15.4 million to the patented Melanophore technology acquired in such transaction. The Melanophore technology, our primary screening technology, is being amortized over its estimated useful life of 10 years, which was determined based on an analysis, as of the acquisition date, of the conditions in, and the economic outlook for, the pharmaceutical and biotechnology industries and the patent life of the technology. As with any intangible asset, we will continue to evaluate the useful life and the value of the Melanophore technology. If, in the future, we determine that the Melanophore technology has become impaired or we no longer use it internally as our primary screening technology, we will record a write-down of the carrying value or we will accelerate the amortization if we determine that its life has been shortened.

**Share-based compensation.** On January 1, 2006, we adopted SFAS No. 123R using the modified-prospective transition method. Under this method, prior period results are not restated. Compensation expense recognized subsequent to adoption includes: (i) compensation expense for all share-based awards granted prior to, but unvested as of, January 1, 2006, based on the grant-date fair value, estimated in accordance with the original provision of SFAS No. 123 using the Black-Scholes option pricing model, and (ii) compensation expense for all share-based awards granted subsequent to January 1, 2006, based on the grant-date fair value, estimated in accordance with the provisions of SFAS No. 123R using the Black-Scholes option pricing model to estimate the grant-date fair value of share-based awards.

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

SFAS No. 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. If actual forfeitures vary from our estimates, we will recognize the difference in compensation expense in the period the actual forfeitures occur or when options vest.

For the year ended December 31, 2006, we recorded non-cash share-based compensation expense totaling \$5.0 million.

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.

## **INCOME TAXES**

As of December 31, 2006, we had approximately \$259.2 million of federal net operating loss carryforwards and \$19.3 million of federal research and development tax credit carryforwards for income tax purposes which expire on various dates beginning in 2012. These amounts reflect different treatment of expenses for financial reporting and for tax purposes. U.S. tax law contains provisions that may limit our ability to use net operating loss and tax credit carryforwards in any year, including if there has been a significant ownership change.

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

Our management establishes and oversees the implementation of board-approved policies covering our investments. We manage our market risk in accordance with our investment guidelines, which: (i) emphasize preservation of principal over other portfolio considerations, (ii) require investments to be placed with high quality financial institutions, (iii) establish guidelines for the diversification of 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 four years with no one instrument having a duration exceeding five years and one month. We do not invest in derivative instruments, or any financial instruments for trading purposes. Our primary market risk exposure as it affects our cash equivalents, short-term investments, and securities available-for-sale is interest rate risk. We monitor our interest rate risk on a periodic basis and we ensure that our cash equivalents, short-term investments, and securities available-for-sale are invested in accordance with our investments guidelines. Managing credit ratings and the duration of our financial investments enhances the preservation of our capital.

We model interest rate exposure by a sensitivity analysis that assumes a hypothetical parallel shift downward in the U.S. 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, 2006, we would expect future interest income from our portfolio to decline by less than \$3.9 million over the next 12 months. As of December 31, 2005, our estimate of the effect of this same hypothetical reduction in interest rates was a decline in interest income of less than \$1.3 million. The difference in these two estimates is due to the difference in our cash and cash equivalents, short-term investments, and securities available-for-sale between the two periods.

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

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

#### **ARENA PHARMACEUTICALS, INC. INDEX TO FINANCIAL STATEMENTS**

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## 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, 2006 and 2005, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2006. 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, 2006 and 2005, and the consolidated results of its operations and its cash flows for each of the three years in the period ended December 31, 2006, in conformity with U.S. generally accepted accounting principles.

As discussed in Note 1 to the consolidated financial statements, Arena Pharmaceuticals, Inc. changed its method of accounting for share-based payments in accordance with Statement of Financial Accounting Standards No. 123 (revised 2004) on January 1, 2006.

We have also audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Arena Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2006, 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 February 28, 2007, expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Diego, California  
February 28, 2007

**ARENA PHARMACEUTICALS, INC.**  
**Consolidated Balance Sheets**  
(In thousands, except share and per share data)

	<u>December 31,</u> <u>2006</u>	<u>December 31,</u> <u>2005</u>
<b>Assets</b>		
Current assets:		
Cash and cash equivalents .....	\$ 373,044	\$ 73,781
Short-term investments, available-for-sale .....	15,781	54,158
Accounts receivable .....	310	848
Prepaid expenses and other current assets .....	10,551	5,721
Total current assets .....	<u>399,686</u>	<u>134,508</u>
Land, property and equipment, net .....	56,500	49,639
Acquired technology, net .....	6,412	7,949
Other non-current assets .....	5,867	6,033
Total assets .....	<u>\$ 468,465</u>	<u>\$ 198,129</u>
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable and accrued expenses .....	\$ 20,769	\$ 8,301
Accrued compensation .....	2,178	1,974
Current portion of deferred revenues .....	13,054	15,152
Total current liabilities .....	<u>36,001</u>	<u>25,427</u>
Deferred rent .....	863	908
Deferred revenues, less current portion .....	—	8,992
Financing obligation, including deferred interest .....	13,678	13,485
Commitments		
Series B redeemable convertible preferred stock, \$.0001 par value: 4,650 shares authorized, issued and outstanding at December 31, 2006 and 2005; liquidation preference \$46,500 at December 31, 2006 and 2005 .....	51,808	49,777
Stockholders' equity:		
Series A preferred stock, \$.0001 par value: 350,000 shares authorized at December 31, 2006 and 2005; no shares issued and outstanding at December 31, 2006 and 2005 .....	—	—
Common stock, \$.0001 par value: 142,500,000 and 67,500,000 shares authorized at December 31, 2006 and 2005, respectively; 60,771,401 and 35,490,571 shares issued and outstanding at December 31, 2006 and 2005, respectively .....	6	4
Additional paid-in capital .....	723,363	368,933
Treasury stock — 3,000,000 shares at December 31, 2006 and 2005 .....	(23,070)	(23,070)
Accumulated other comprehensive loss .....	(13)	(39)
Deferred compensation .....	—	(396)
Accumulated deficit .....	(334,171)	(245,892)
Total stockholders' equity .....	<u>366,115</u>	<u>99,540</u>
Total liabilities and stockholders' equity .....	<u>\$ 468,465</u>	<u>\$ 198,129</u>

See accompanying notes.

**ARENA PHARMACEUTICALS, INC.**  
**Consolidated Statements of Operations**  
(In thousands, except share and per share data)

	Years ended December 31,		
	2006	2005	2004
<b>Revenues:</b>			
Total revenues.....	\$ 30,569	\$ 23,233	\$ 13,686
<b>Operating expenses:</b>			
Research and development .....	103,388	79,710	58,579
General and administrative .....	18,466	13,122	11,066
Amortization of acquired technology .....	1,537	1,537	1,825
Total operating expenses .....	123,391	94,369	71,470
Loss from operations .....	(92,822)	(71,136)	(57,784)
<b>Interest and other income (expense):</b>			
Interest income.....	12,691	4,426	2,390
Interest expense .....	(1,838)	(1,838)	(1,854)
Non-cash warrant settlement .....	(4,554)	—	—
Gain (loss) on sale of investments .....	(8)	(28)	75
Other income, net.....	283	675	116
Equity in losses of TaiGen.....	—	—	(935)
Total interest and other income (expense), net .....	6,574	3,235	(208)
Net loss .....	(86,248)	(67,901)	(57,992)
Dividends on redeemable convertible preferred stock.....	(2,031)	(1,813)	(1,437)
Accretion of discount on redeemable convertible preferred stock.....	—	(7,372)	(1,852)
Net loss allocable to common stockholders.....	\$ (88,279)	\$ (77,086)	\$ (61,281)
Net loss per share allocable to common stockholders, basic and diluted.....	\$ (1.89)	\$ (2.24)	\$ (2.40)
Shares used in calculating net loss per share allocable to common stockholders, basic and diluted .....	46,750,596	34,377,693	25,527,617

See accompanying notes

**ARENA PHARMACEUTICALS, INC.**  
**Consolidated Statements of Stockholders' Equity**  
(In thousands, except share data)

	Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Deferred Compensation	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount						
<b>Balance at December 31, 2003</b>	<b>25,548,372</b>	<b>\$ 3</b>	<b>\$ 315,862</b>	<b>\$ (23,070)</b>	<b>\$ 526</b>	<b>\$ (2,648)</b>	<b>\$ (107,525)</b>	<b>\$ 183,148</b>
Issuance of common stock upon exercise of options, net of repurchases	63,700	—	38	—	—	—	—	38
Issuance of common stock under the employee stock purchase plan	105,098	—	451	—	—	—	—	451
Cancellations of restricted stock, net of issuances	(64,083)	—	(414)	—	—	414	—	—
Issuance of common stock to Merck	937,500	—	3,590	—	—	—	—	3,590
Deferred compensation related to stock options	—	—	13	—	—	—	—	—
Amortization of deferred compensation	—	—	—	—	—	1,467	—	1,467
Dividends on redeemable convertible preferred stock	—	—	—	—	—	—	(1,437)	(1,437)
Accretion of discount and deemed dividend on redeemable convertible preferred stock	—	—	—	—	—	—	(1,852)	(1,852)
Restricted shares deferred in deferred compensation plan, net of distributions and forfeitures	(24,168)	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	—	(57,992)	(57,992)
Net unrealized loss on available-for-sale securities and investments	—	—	—	—	(690)	—	—	(690)
Net comprehensive loss	—	—	—	—	—	—	—	(58,682)
<b>Balance at December 31, 2004</b>	<b>26,566,419</b>	<b>\$ 3</b>	<b>\$ 319,540</b>	<b>\$ (23,070)</b>	<b>\$ (164)</b>	<b>\$ (780)</b>	<b>\$ (168,806)</b>	<b>\$ 126,723</b>
Issuance of common stock upon exercise of options	75,790	—	405	—	—	—	—	405
Issuance of common stock under the employee stock purchase plan	197,862	—	784	—	—	—	—	784
Issuance of restricted stock	8,000	—	54	—	—	(54)	—	—
Issuance of common stock in public offering, net of offering costs of \$3,599	8,625,000	1	48,150	—	—	—	—	48,151
Amortization of deferred compensation	—	—	—	—	—	438	—	438
Dividends on redeemable convertible preferred stock	—	—	—	—	—	—	(1,813)	(1,813)
Accretion of discount and deemed dividend on redeemable convertible preferred stock	—	—	—	—	—	—	(7,372)	(7,372)
Restricted shares released from deferred compensation plan	17,500	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	—	(67,901)	(67,901)
Net unrealized gain on available-for-sale securities and investments	—	—	—	—	125	—	—	125
Net comprehensive loss	—	—	—	—	—	—	—	(67,776)
<b>Balance at December 31, 2005</b>	<b>35,490,571</b>	<b>\$ 4</b>	<b>\$ 368,933</b>	<b>\$ (23,070)</b>	<b>\$ (39)</b>	<b>\$ (396)</b>	<b>\$ (245,892)</b>	<b>\$ 99,540</b>
Issuance of common stock upon exercise of options	180,364	—	1,184	—	—	—	—	1,184
Issuance of common stock under the employee stock purchase plan	307,086	—	1,649	—	—	—	—	1,649
Issuance of restricted stock	81,000	—	—	—	—	—	—	—
Issuance of common stock upon exercise of warrants	829,856	—	8,298	—	—	—	—	8,298
Issuance of common stock in public offering, net of offering costs of \$10,809	10,637,524	1	168,964	—	—	—	—	168,965
Issuance of common stock in public offering, net of offering costs of \$9,574	13,225,000	1	165,127	—	—	—	—	165,128
Issuance of warrants in settlement	—	—	4,554	—	—	—	—	4,554
Share-based compensation expense, net of forfeitures	—	—	4,298	—	—	—	—	4,298
Reclassification of deferred compensation	—	—	(396)	—	—	396	—	—
Deferred compensation related to restricted stock	—	—	752	—	—	—	—	752
Dividends on redeemable convertible preferred stock	—	—	—	—	—	—	(2,031)	(2,031)
Restricted shares released from deferred compensation plan	20,000	—	—	—	—	—	—	—
Net loss	—	—	—	—	—	—	(86,248)	(86,248)
Net unrealized gain on available-for-sale securities and investments	—	—	—	—	26	—	—	26
Net comprehensive loss	—	—	—	—	—	—	—	(86,222)
<b>Balance at December 31, 2006</b>	<b>60,771,401</b>	<b>\$ 6</b>	<b>\$ 723,363</b>	<b>\$ (23,070)</b>	<b>\$ (13)</b>	<b>\$ —</b>	<b>\$ (334,171)</b>	<b>\$ 366,115</b>

See accompanying notes.

**ARENA PHARMACEUTICALS, INC.**  
**Consolidated Statements of Cash Flows**  
(In thousands)

	<u>Years ended December 31,</u>		
	<u>2006</u>	<u>2005</u>	<u>2004</u>
<b>OPERATING ACTIVITIES</b>			
Net loss .....	\$ (86,248)	\$ (67,901)	\$ (57,992)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization .....	7,361	6,850	7,134
Equity in losses of TaiGen .....	—	—	936
Amortization of acquired technology .....	1,537	1,537	1,825
Amortization of deferred compensation .....	—	438	1,466
Non-cash share-based compensation .....	5,050	—	—
Non-cash warrant settlement .....	4,554	—	—
Amortization/accretion of short-term investment premium/discount .....	(717)	154	1,267
Deferred rent .....	(45)	(24)	(2)
Deferred interest expense .....	193	226	259
Loss on disposal of equipment .....	8	19	8
Changes in operating assets and liabilities:			
Accounts receivable .....	538	21,742	(22,562)
Prepaid expenses and other current assets .....	(4,830)	(389)	(889)
Deferred revenues .....	(11,090)	(9,497)	26,097
Accounts payable, accrued expenses and accrued compensation .....	12,672	3,986	3,292
Net cash used in operating activities .....	<u>(71,017)</u>	<u>(42,859)</u>	<u>(39,161)</u>
<b>INVESTING ACTIVITIES</b>			
Purchases of short-term investments, available-for-sale .....	(17,976)	(152,639)	(95,314)
Proceeds from sales/maturities of short-term investments .....	57,096	153,079	132,275
Purchases of land, property and equipment .....	(14,231)	(3,581)	(4,415)
Proceeds from sale of equipment .....	1	69	8
Deposits, restricted cash and other assets .....	166	186	785
Net cash provided by (used in) investing activities .....	<u>25,056</u>	<u>(2,886)</u>	<u>33,339</u>
<b>FINANCING ACTIVITIES</b>			
Principal payments on capital leases .....	—	—	(44)
Proceeds from exercise of warrants .....	8,298	—	—
Proceeds from issuance of redeemable convertible preferred stock and warrants .....	—	11,500	—
Proceeds from issuance of common stock .....	336,926	49,340	4,080
Net cash provided by financing activities .....	<u>345,224</u>	<u>60,840</u>	<u>4,036</u>
Net increase (decrease) in cash and cash equivalents .....	299,263	15,095	(1,786)
Cash and cash equivalents at beginning of period .....	73,781	58,686	60,472
Cash and cash equivalents at end of period .....	<u>\$373,044</u>	<u>\$ 73,781</u>	<u>\$ 58,686</u>
<b>SUPPLEMENTAL DISCLOSURE OF CASH FLOW INFORMATION:</b>			
Interest paid .....	<u>\$ 1,499</u>	<u>\$ 1,460</u>	<u>\$ 1,419</u>
Equity investment in TaiGen .....	<u>\$ —</u>	<u>\$ 3,570</u>	<u>\$ —</u>
Unrealized gain (loss) on short-term investments, available-for-sale .....	<u>\$ 26</u>	<u>\$ 125</u>	<u>\$ (690)</u>

See accompanying notes.

**ARENA PHARMACEUTICALS, INC.**  
**Notes to Consolidated Financial Statements**

**(1) THE COMPANY AND SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES**

**The Company**

Arena Pharmaceuticals, Inc. (the “Company”) was incorporated on April 14, 1997, and commenced operations in July 1997. The Company operates in one business segment and is a clinical-stage biopharmaceutical company with a pipeline of internally discovered small molecule drug candidates that target G protein-coupled receptors (“GPCRs”).

**Principles of Consolidation**

The Company’s financial statements include the activity of its wholly owned subsidiary, BRL Screening, Inc. since the subsidiary’s formation in February 2001.

**Financial Statement Preparation**

The preparation of financial statements in conformity with U.S. generally accepted accounting principles 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.

**Cash and Cash Equivalents**

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

**Short-term Investments, Available-for-sale**

In accordance with Statement of Financial Accounting Standards (“SFAS”) No. 115, “Accounting for Certain Debt and Equity Securities,” short-term investments are classified as available-for-sale. The Company defines short-term investments as income-yielding securities that can be readily converted to cash. These securities are carried at fair value, with unrealized gains and losses reported as accumulated other comprehensive income. The cost of debt securities is adjusted for amortization of premiums and accretion of discounts to maturity. Such amortization and accretion is included in calculating 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. Investments held as of December 31, 2006 consist primarily of U.S. Federal agency notes and U.S. corporate debt securities.

**Fair Value of Financial Instruments**

Cash and cash equivalents, accounts receivable, accounts payable and accrued liabilities are carried at cost, which management believes approximates fair value due to the short-term maturity of these instruments. Short-term investments are carried at fair value.

**Concentration of Credit Risk and Major Customers**

Financial instruments, which potentially subject the Company to concentrations of credit risk, consist primarily of cash, cash equivalents and short-term investments. The Company limits its exposure to credit loss by placing its cash and investments with high quality financial institutions and, in accordance with the Company’s investment policy, debt that is rated investment grade.

Merck & Co., Inc. (“Merck”) and Ortho-McNeil, Inc., a Johnson & Johnson company (“Ortho-McNeil”) accounted for 100% of total revenues for the years ended December 31, 2006 and 2005, and Merck accounted for approximately 95% of total revenues for the year ended December 31, 2004. Ortho-McNeil accounted for 90%, 99% and 100% of accounts receivable as of December 31, 2006, 2005 and 2004, respectively.

## **Property and Equipment**

Property and equipment are stated at cost and depreciated over the estimated useful lives of the assets (generally three to seven years) using the straight-line method. Buildings and building improvements are stated at cost and depreciated over an estimated useful life of approximately 20 years using the straight-line method. Leasehold and capital improvements are stated at cost and amortized over the shorter of the estimated useful lives of the assets or the lease term.

## **Intangible Assets**

Purchase accounting requires estimates and judgments to allocate the purchase price to the fair market value of assets received and liabilities assumed. In February 2001, the Company acquired Bunsen Rush Laboratories, Inc. (“Bunsen Rush”) for \$15.0 million in cash and assumed \$0.4 million in liabilities. The Company allocated \$15.4 million to the patented Melanophore technology, its primary screening technology, acquired in such transaction. Acquired technology from the Company’s acquisition of Bunsen Rush is being amortized over its estimated useful life of 10 years, which was determined based on an analysis, as of the acquisition date, of the conditions in, and the economic outlook for, the pharmaceutical and biotechnology industries and the patent life of the technology. As with any intangible asset, the Company continues to evaluate the useful life and value of the Melanophore technology. If, in the future, the Company determines that the technology has become impaired or no longer uses this technology internally as a primary screening technology, the Company will record a write-down of the carrying value or will accelerate the amortization if it determines that the technology life has been shortened. Accumulated amortization from acquired technology totaled approximately \$9.0 million and \$7.4 million at December 31, 2006 and 2005, respectively. As of December 31, 2006, the Company anticipates that total charges of approximately \$1.5 million will be recognized from the amortization of acquired technology in each of the next four years.

## **Long-lived Assets**

In accordance with SFAS No. 144, “Accounting for the Impairment or Disposal of Long-Lived Assets,” the Company reviews the recoverability of long-lived and finite-lived intangible assets when circumstances indicate that the carrying amount of assets may not be recoverable. This evaluation is based on various analyses including undiscounted cash flow projections. In the event undiscounted cash flow projections indicate an impairment, the Company would record an impairment loss, if any, based on the fair value of the assets. The Company did not record any impairments or write-offs of long-lived assets in the years ended December 31, 2006 or 2005. A write-off of \$0.2 million was recorded in the year ended December 31, 2004 for the unamortized balance of acquired technology related to the Company’s agreement with the University of Glasgow.

## **Deferred Rent**

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

## **Share-based Compensation**

Prior to January 1, 2006, the Company accounted for share-based compensation in accordance with the provisions of Accounting Principles Board (“APB”) Opinion No. 25, “Accounting for Stock Issued to Employees” and its related Interpretations, which state that no compensation expense is recorded for stock options or other share-based awards to employees and directors that are granted with an exercise price equal to or above the fair value per share of the Company’s common stock on the grant date. In the event that stock options were granted with an exercise price below the fair value of the Company’s common stock on the grant date, the difference between the fair value of its common stock and the exercise price of the stock option was recorded as deferred compensation. For stock options granted to its employees and directors, the Company adopted the disclosure-only requirements of SFAS No. 123, “Accounting for Stock-Based Compensation,” which allowed compensation expense to be disclosed in the notes to the financial statements based on the fair value of the options granted at the date of the grant. Compensation expense for options granted to non-employees other than directors had been determined in accordance with SFAS No. 123 and Emerging Issues Task Force (“EITF”) Issue No. 96-18, “Accounting for Equity Instruments that are Issued to Other than Employees for Acquiring, or in Conjunction with Selling Goods or Services.” Such expense was based on the fair value of the options issued using the Black-Scholes option pricing model and was periodically remeasured as the underlying options vested in accordance with EITF Issue No. 96-18.

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

The Company measures the value of restricted stock awards based on the fair value of the stock on the grant date. The restrictions generally lapse in equal annual installments over a vesting period of two, three or four years. Prior to the adoption of SFAS No. 123R, deferred compensation for grants of restricted stock equivalent to the fair value of the shares at the date of grant was recorded as a separate component of stockholders' equity and subsequently amortized to compensation expense over the vesting period of each award. The remaining unamortized deferred compensation of approximately \$0.4 million at January 1, 2006 was reclassified to additional paid-in capital upon adoption of SFAS No. 123R. In accordance with SFAS No. 123R, stockholders' equity is now credited commensurate with the recognition of compensation expense over the applicable vesting period.

The Company recorded total share-based compensation expense for all share-based awards of approximately \$5.0 million during the year ended December 31, 2006 and recorded amortization of deferred compensation expense of approximately \$0.4 million and \$1.5 million during the years ended December 31, 2005 and 2004, respectively.

As a result of the adoption of SFAS No. 123R effective January 1, 2006, the Company's net loss allocable to common stockholders for the year ended December 31, 2006 was approximately \$5.0 million higher than if the Company had not adopted SFAS No. 123R. Basic and diluted net loss per share allocable to common stockholders for the year ended December 31, 2006 was \$0.11 higher than if the Company had not adopted SFAS No. 123R.

### **Revenue Recognition**

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

### **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 our earlier-stage programs and technologies, are expensed in the year incurred.

### **Clinical Trial Expenses**

The Company accrues clinical trial expenses based on work performed. The Company relies on estimates of total costs incurred based on enrollment of subjects, completion of studies and other events. The Company follows this method because reasonably dependable estimates of the costs applicable to various stages of a clinical trial can be made. Accrued clinical



costs are subject to revisions as clinical trials progress, and any revisions are recorded in the period in which the facts that give rise to the revisions become known.

### **Patent Costs**

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

### **Income Taxes**

In accordance with SFAS No. 109, "Accounting for Income Taxes," a deferred tax asset or liability is determined based on the difference between the financial statement and tax basis of assets and liabilities as measured by the enacted tax rates which will be in effect when these differences reverse. The Company provides a valuation allowance against net deferred tax assets unless, based upon the available evidence, it is more likely than not that the deferred tax assets will be realized.

### **Comprehensive Loss**

In accordance with SFAS No. 130, "Reporting Comprehensive Loss," all components of comprehensive loss, including net loss, are reported in the financial statements in the period in which they are recognized. Comprehensive loss is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources.

### **Net Loss Per Share**

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

The Company has excluded all outstanding stock options, unvested restricted stock subject to forfeiture, preferred stock, warrants and shares subject to repurchase from the calculation of basic and diluted net loss per share allocable to common stockholders because these securities are antidilutive for all years presented. The total number of shares subject to forfeiture or repurchase excluded from the calculation of basic and diluted net loss per share allocable to common stockholders was 71,420, 195,329 and 565,916 for the years ended December 31, 2006, 2005 and 2004, respectively. Such securities, had they been dilutive, would have been included in the computation of diluted net loss per share.

### **Pro Forma Information under SFAS No. 123 for Years Ended December 31, 2005 and 2004**

Prior to adopting the provisions of SFAS No. 123R, the Company provided pro forma disclosures of estimated share-based compensation expense as permitted under SFAS No. 123. The following pro forma information illustrates the effect on net loss allocable to common stockholders and net loss per share as if the Company had accounted for its employee and director stock options and stock issued under the employee stock purchase plan using the fair value method prescribed by SFAS 123. For pro forma purposes, the fair value of stock options was estimated at the date of grant using the Black-Scholes option pricing model and amortized to expense over the options' vesting periods using the assumptions stated below.

	<u>Years ended December 31,</u>	
	<u>2005</u>	<u>2004</u>
	<u>(in thousands, except per share data)</u>	
Net loss allocable to common stockholders, as reported .....	\$ (77,086)	\$ (61,281)
Add: Stock-based employee compensation expense included in net loss allocable to common stockholders, as reported, net of related tax effects .....	438	1,464
Fair value of stock-based employee compensation .....	<u>(4,347)</u>	<u>(6,009)</u>
Pro forma net loss .....	\$ (80,995)	\$ (65,826)
Net loss per share:		
Basic and diluted — as reported .....	\$ (2.24)	\$ (2.40)
Basic and diluted — pro forma .....	\$ (2.36)	\$ (2.58)

Assumptions used for employee stock options:

Risk-free interest rate .....	4.2%	3.0%
Dividend yield .....	0%	0%
Stock price volatility .....	44%	78%
Expected life (years) .....	4.99	5.00
Weighted-average estimated fair value per share .....	\$ 3.03	\$ 3.74

Assumptions used for Employee Stock Purchase Plan:

Risk-free interest rate .....	3.8%	2.1%
Dividend yield .....	0%	0%
Stock price volatility .....	48%	76%
Expected life (years) .....	0.25	0.25
Weighted-average estimated fair value per share .....	\$ 1.78	\$ 1.69

## Effect of New Accounting Standards

In June 2006, the Financial Accounting Standards Board (“FASB”) issued FASB Interpretation (“FIN”) No. 48, “Accounting for Uncertainty in Income Taxes — an interpretation of SFAS No. 109,” which clarifies the accounting and disclosure for uncertain income tax positions, as defined. FIN 48 seeks to reduce the diversity in practice associated with certain aspects of the recognition and measurement related to accounting for income taxes. FIN 48 is effective for fiscal years beginning after December 15, 2006. The Company is currently evaluating the effect, if any, the adoption of FIN 48 will have on its consolidated financial statements.

## (2) AVAILABLE-FOR-SALE SECURITIES

The following table summarizes the investment categories comprising available-for-sale securities at December 31, 2006 and 2005, in thousands:

<u>December 31, 2006</u>	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Estimated Fair Value</u>
Federal agency notes .....	\$ 11,905	\$ —	\$ (1)	\$ 11,904
Government-sponsored enterprises .....	—	—	—	—
Corporate debt securities .....	<u>3,877</u>	<u>—</u>	<u>—</u>	<u>3,877</u>
Total available-for-sale securities .....	<u>\$ 15,782</u>	<u>\$ —</u>	<u>\$ (1)</u>	<u>\$ 15,781</u>
<u>December 31, 2005</u>	<u>Amortized Cost</u>	<u>Gross Unrealized Gains</u>	<u>Gross Unrealized Losses</u>	<u>Estimated Fair Value</u>
Federal agency notes .....	\$ 20,917	\$ —	\$ (5)	\$ 20,912
Government-sponsored enterprises .....	10,394	—	(16)	10,378
Corporate debt securities .....	<u>22,885</u>	<u>2</u>	<u>(19)</u>	<u>22,868</u>
Total available-for-sale securities .....	<u>\$ 54,196</u>	<u>\$ 2</u>	<u>\$ (40)</u>	<u>\$ 54,158</u>

The amortized cost and estimated fair value of available-for-sale securities by contractual maturity at December 31, 2006 are shown below, in thousands:

	<u>Amortized Cost</u>	<u>Estimated Fair Value</u>
Due in one year or less.....	\$ 15,782	\$ 15,781
Due after one year through four years .....	—	—
Total.....	<u>\$ 15,782</u>	<u>\$ 15,781</u>

Proceeds from the sales of available-for-sale securities totaled \$57.1 million, \$153.1 million and \$132.3 million in 2006, 2005 and 2004, respectively.

### (3) PROPERTY AND EQUIPMENT

Property and equipment consisted of the following, in thousands:

	<u>December 31,</u>	
	<u>2006</u>	<u>2005</u>
Laboratory and computer equipment .....	\$30,373	\$25,721
Furniture, fixtures and office equipment.....	1,503	1,505
Land, building and capital improvements.....	47,311	42,359
Leasehold improvements .....	9,804	5,481
	<u>88,991</u>	<u>75,066</u>
Less accumulated depreciation and amortization.....	(32,491)	(25,427)
Net property and equipment.....	<u>\$56,500</u>	<u>\$49,639</u>

Depreciation expense was approximately \$7.4 million, \$6.9 million and \$7.1 million for the years ended December 31, 2006, 2005 and 2004, respectively.

### (4) ACCOUNTS PAYABLE AND ACCRUED EXPENSES

Accounts payable and accrued expenses consisted of the following, in thousands:

	<u>December 31,</u>	
	<u>2006</u>	<u>2005</u>
Accounts payable .....	\$ 3,165	\$ 1,357
Accrued contracts and study fees .....	14,328	4,223
Other accrued liabilities.....	3,276	2,721
Total .....	<u>\$20,769</u>	<u>\$ 8,301</u>

### (5) COMMITMENTS

#### Leases

In 1997, the Company leased its facility located at 6166 Nancy Ridge Drive in San Diego, California under an operating lease that had an original expiration date in 2004. The Company had an option to buy the facility during the first 12 months of the lease term for approximately \$2.1 million. In 1998, the Company assigned the option to a publicly traded Real Estate Investment Trust (“REIT”) in exchange for approximately \$0.7 million in cash. The \$0.7 million is being recognized on a straight-line basis as a reduction in the rent expense on the underlying lease. In addition, the Company signed a new lease with the REIT, which expires in 2013. The lease provides the Company with an option to extend the lease term via two five-year options. The new lease terms stipulate annual increases in monthly rental payments of 2.75% beginning in April 2000. The Company recognizes rent expense on a straight-line basis over the term of the lease. In accordance with the terms of the new lease, the Company is required to maintain restricted cash balances, which are included in other non-current assets on the accompanying consolidated balance sheets, on behalf of the landlord as rent deposits throughout the term of the lease.

In March 2002, the Company leased an additional facility located at 6124-6126 Nancy Ridge Drive in San Diego, California. Under the terms of this operating lease, effective April 2003, monthly rental payments increased by 2% and are subject to a 2% annual increase thereafter. In October 2005, the Company amended its 6124-6126 Nancy Ridge Drive lease to include

additional square footage of unimproved space at 6122 Nancy Ridge Drive, a building that is contiguous with the 6124-6126 Nancy Ridge Drive facility. The Company has the option to buy this entire building for \$7.9 million at the end of the lease in March 2012.

On December 30, 2003, the Company completed the sale and leaseback of its facility at 6138-6150 Nancy Ridge Drive. The sales price for this facility was \$13.0 million and net proceeds to the Company were approximately \$12.6 million. The Company has accounted for this transaction in accordance with SFAS No. 98 "Accounting for Leases" and SFAS No. 66 "Accounting for Sales of Real Estate." The Company's ability to repurchase this facility at a future date is considered continued involvement under SFAS No. 98 and therefore the Company has applied the financing method under SFAS No. 66. Under the financing method, the book value of the facility and related accumulated depreciation remain on the Company's balance sheet and no sale is recognized. Instead, the sales price of the facility is recorded as a financing obligation and all lease payments are recorded as interest expense. The term of the lease, which became effective in December 2003, is 15 years. Under the terms of the lease, the monthly rental payments increase by 2.5% annually, beginning in January 2005. The Company recorded interest expense of approximately \$1.6 million in each of the years ended December 31, 2006, 2005 and 2004 related to this lease. The Company has the right to repurchase this facility through year 14 of the lease. At December 31, 2006, in accordance with SFAS No. 66, the Company recorded a financing obligation of approximately \$13.0 million plus deferred interest of approximately \$0.7 million on the accompanying consolidated balance sheets.

In accordance with the terms of the leases, the Company is required to maintain restricted cash balances totaling approximately \$0.7 million, and included in other non-current assets on the accompanying consolidated balance sheets, on behalf of the landlord as rent deposits throughout the term of the lease.

The Company recognizes rent expense on a straight-line basis over the term of each lease. Rent expense was approximately \$1.1 million for the year ended December 31, 2006, and approximately \$1.0 million in each of the years ended December 31, 2005 and 2004.

Annual future obligations as of December 31, 2006 are as follows, in thousands:

<u>Year ending December 31,</u>	<u>Financing Obligation</u>	<u>Operating Leases</u>
2007 .....	\$ 1,429	\$ 1,143
2008 .....	1,464	1,170
2009 .....	1,501	1,199
2010 .....	1,539	1,228
2011 .....	1,577	1,258
Thereafter .....	12,200	1,146
Total minimum lease payments .....	<u>\$ 19,710</u>	<u>\$ 7,144</u>

## (6) COLLABORATIONS

### Ortho-McNeil Pharmaceutical, Inc.

In December 2004, the Company entered into a collaboration and license agreement with Ortho-McNeil to further develop compounds for the potential treatment of type 2 diabetes and other disorders. In January 2005, the Company received a non-refundable \$17.5 million upfront payment and two milestone payments of \$2.5 million each for Ortho-McNeil moving two lead compounds into preclinical development. In February 2006, the Company received a \$5.0 million milestone payment related to Ortho-McNeil's initiation of a Phase 1 clinical trial of the lead drug candidate, APD668. In September 2006, Ortho-McNeil exercised its option to extend the research term of the agreement, committing to research funding of \$2.4 million through December 20, 2007, beyond which date the Company will no longer have significant involvement or perform services. The Company is eligible to receive a total of \$295.0 million in milestone payments for each compound, as well as royalty payments associated with Ortho-McNeil's commercialization of any products discovered under the agreement. 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. In addition, the agreement requires Ortho-McNeil to pay the Company \$2.4 million a year for collaboration research. From the inception of this collaboration through December 31, 2006, the Company received \$27.5 million from Ortho-McNeil in upfront and milestone payments and \$5.5 million in research funding. The Company is

recognizing the upfront payment ratably over three years, along with the two milestones received in January of 2005 as their achievability was reasonably assured at the time the Company entered into the collaboration.

The agreement with Ortho-McNeil will continue until the expiration of Ortho-McNeil's payment obligations for research funding, milestone payments and royalties, unless the agreement is terminated earlier by either party. The Company and Ortho-McNeil each have the right to terminate the agreement early if the other party commits an uncured material breach of its obligations. Further, Ortho-McNeil may terminate the agreement without cause during the term of the research program, provided that in such event it pays the Company the balance of its research funding obligation in a lump sum, unless the termination is due to the Company's change of control (as defined in the agreement), in which case Ortho-McNeil may terminate either the agreement or the research program under the agreement without the payment of additional research funding to the Company. At any time after the end of the research program, Ortho-McNeil may terminate the agreement by providing at least 60 days prior written notice. Upon termination of the agreement, all rights to the compounds developed under the collaboration will revert to the Company.

For the year ended December 31, 2006, the Company recognized revenues under the Ortho-McNeil agreement of approximately \$18.5 million, which included \$7.5 million from amortization of milestones and technology access and development fees received in prior years, \$5.0 million from a milestone earned, \$2.4 million in research funding, and approximately \$3.6 million in additional sponsored research and patent activities. For the year ended December 31, 2005, the Company recognized revenues under this agreement of approximately \$13.4 million, which included \$7.5 million from amortization of milestones and technology access and development fees received in prior years, \$2.4 million in research funding, and approximately \$3.5 million in additional sponsored research and patent activities. For the year ended December 31, 2004, the Company recognized revenues under this agreement of approximately \$0.3 million, which included approximately \$0.2 million from amortization of milestones and technology access and development fees received in prior years, and approximately \$0.1 million in research funding. At December 31, 2006, approximately \$7.3 million remained in deferred revenues under this agreement, all of which is expected to be recognized as revenues in 2007.

#### **Merck & Co., Inc.**

In October 2002, the Company entered into a research and licensing agreement with Merck to collaborate on three G protein-coupled receptors, or GPCRs, to develop therapeutics for atherosclerosis and related disorders. The Company believes one or more of these GPCRs plays a role in regulating plasma lipid profiles, including HDL cholesterol, the so-called "good cholesterol," and is responsible for the HDL-raising activity of niacin. In October 2004, Merck extended and expanded the collaboration and selected one compound for preclinical development. In September 2006, the Company announced that Merck completed a Phase 2 clinical trial of MK-0354, a niacin receptor agonist discovered by the Company and intended for the treatment of atherosclerosis and related disorders. Based on the results of this trial, Merck discontinued development of MK-0354 for atherosclerosis, but is exploring continued development of the drug candidate under this partnership for an undisclosed indication. Merck also continues to evaluate other niacin receptor agonists under this partnership for atherosclerosis and related disorders. From the inception of this collaboration through December 31, 2006, the Company received \$18.0 million from Merck in upfront and milestone payments, and an equity investment of \$7.5 million. The Company may receive additional milestone payments of up to \$28.0 million for Merck's clinical and marketing achievements, as well as royalty payments associated with Merck's commercialization of any products discovered under the agreement. In addition, the Company received research funding from Merck through December 31, 2006 totaling \$25.3 million. In February 2007, this agreement was amended to reduce the number of Company research employees funded under the collaboration in exchange for Merck making a \$1.0 million equity investment in the Company equal to the reduction in their research funding obligation at approximately a 70% premium to the then current market price. Merck is obligated to pay the Company a total of \$3.6 million for collaboration research from January 1, 2007 to October 21, 2007, beyond which date we will no longer have significant involvement or perform services. There is no guarantee the Company will receive any further milestone payments or royalty payments under this agreement.

The term of the amended collaborative research program with Merck is three years from October 21, 2004. Merck can terminate this program: (i) for "Technical Grounds," by giving 30 days prior notice, if both Merck and the Company agree that Technical Grounds have occurred; or (ii) in the event of a change in control of the Company (as defined in the agreement), by giving 30 days prior notice. Technical Grounds include circumstances where: (1) the joint research committee (a committee of an equal number of Merck and Company representatives) concludes that (a) a significant adverse event affecting all the targets, all program compounds and all active compounds under the program has arisen during the conduct of the program, or (b) continuation of the program is no longer scientifically promising because the role of all the targets proves incorrect, or none of the targets are valid as a suitable target for development of a pharmaceutical product; or (2) Merck's

patent department, upon consultation with the Company's patent attorneys, makes a reasonable determination that valid third-party patent rights block the achievement of significant program goals. In addition, either party can terminate the agreement if the other party breaches its material obligations under the agreement by causes and reasons within its control, has not cured such breach within 90 days of receiving a letter requesting such cure, and there is no dispute as to whether such breach has occurred. In lieu of terminating the agreement, however, Merck can terminate the research program and certain other aspects of the agreement after giving 90 days prior notice if the Company materially breaches its obligations during the course of the program and fails to cure such breach, if such default cannot be cured within such 90-day period, or if the Company does not commence and diligently continue good faith efforts to cure such default during such period.

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

For the year ended December 31, 2006, the Company recognized revenues under the Merck agreement of approximately \$12.1 million, which included \$5.7 million in research funding, \$4.0 million from a milestone earned, approximately \$2.1 million from amortization of milestones and technology access and development fees received in prior years, and approximately \$0.3 million in additional sponsored research and patent activities. For the year ended December 31, 2005, the Company recognized revenues under this agreement of approximately \$9.8 million, which included \$5.7 million in research funding, approximately \$2.1 million from amortization of milestones and technology access and development fees received in prior years, and \$2.0 million from a milestone earned. For the year ended December 31, 2004, the Company recognized revenues under this agreement of approximately \$13.0 million, which included \$7.0 million from milestones received and recognized immediately, approximately \$4.5 million in research funding and approximately \$1.5 million from amortization of milestones and technology access and development fees received in prior years. At December 31, 2006, approximately \$1.7 million remained in deferred revenues under the Merck agreement, all of which is expected to be recognized as revenues in 2007.

## **(7) REDEEMABLE CONVERTIBLE PREFERRED STOCK AND WARRANTS**

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

In accordance with EITF Issue No. 00-27, "Application of Issue No. 98-5 for Certain Convertible Instruments," the Company allocated the components of the sale of the Series B-1 Preferred between the Series B-1 Preferred, the warrants and the unit warrants on the basis of the relative fair values at the date of issuance using the Black-Scholes model. The aggregate amount allocated to the warrants and unit warrants was \$6.5 million. The fair value of the common shares into which the Series B-1 Preferred was convertible on the date of issuance exceeded the proceeds allocated to the Series B-1 Preferred by \$2.8 million, resulting in a beneficial conversion feature that was recognized as an increase to paid-in capital and as a deemed dividend to the Series B-1 Preferred.

The Company valued the components of the Series B-1 Preferred as follows, in thousands:

Series B-1 Preferred .....	\$25,740
Warrants .....	4,535
Deemed dividend.....	2,800
Unit warrants .....	1,925
Total .....	<u>\$35,000</u>

The holders of the Company's Series B-1 Preferred can require the Company at any time to redeem all or some of their shares of Series B-1 Preferred at such shares' stated value, plus accrued but unpaid dividends thereon to the date of payment and any applicable penalties. The stated value is the original holder's investment plus any dividends settled by increasing the stated value at the time the dividend is payable. The Company may be able to satisfy a portion of any redemption with shares of its common stock. The Series B-1 Preferred is convertible into common stock at a fixed conversion price of \$7.50 per share. As a result of the public offering the Company completed in February 2005 which resulted in the Series B-1 Preferred becoming immediately redeemable at the option of the holders, the Company recorded a charge of \$7.4 million in 2005 to accrete the remaining unaccreted discount and deemed dividend on the redeemable convertible preferred stock. The Company will be required to redeem any shares of the Series B-1 Preferred that remain outstanding on the fifth anniversary of their issuance at a price equal to the amount of the original holder's original investment, plus all accrued but unpaid dividends thereon to the date of such payment. The aggregate redemption price of the Series B-1 Preferred at December 31, 2006 was approximately \$39.5 million, and accrues interest at 4% annually.

If not previously converted, the Company must redeem the Series B-2 Preferred in five years from April 22, 2005, or earlier under certain circumstances, at such shares' stated value, plus accrued but unpaid dividends thereon to the date of payment and any applicable penalties. The aggregate redemption price of the Series B-2 Preferred at December 31, 2006 was approximately \$12.3 million, and accrues interest at 4% annually. The Company may be able to satisfy a portion of any redemption with shares of its common stock. The Series B-2 Preferred is convertible into common stock at a fixed conversion price of \$7.00 per share. Otherwise, the Series B-2 Preferred has substantially identical terms as the Series B-1 Preferred. The holders of the Company's Series B-2 Preferred will be entitled to require the Company to redeem their shares of Series B-2 Preferred at such shares' stated value, plus accrued but unpaid dividends thereon to the date of payment and any applicable penalties if, in the future, the average of the closing price of the Company's common stock for any 30 consecutive trading days is below \$7.00 per share, which is the conversion price for the Series B-2 Preferred.

Assuming that the Series B-1 Preferred and the Series B-2 Preferred are held until the mandatory redemption date, the Company expects to record dividends on redeemable convertible preferred stock of \$2.1 million, \$2.2 million, \$0.5 million and \$0.2 million for the years ending December 31, 2007, 2008, 2009 and 2010, respectively.

At the option of any holder of Series B Preferred, any Series B Preferred held by such holder may be converted into common stock based on the applicable conversion price then in effect for such shares. If the Company is permitted to satisfy a portion of a redemption by using shares of its common stock, and if the Company elects to do so, the number of shares to be issued to holders of Series B Preferred will be determined by dividing such holder's cash redemption price by the lesser of the fixed conversion price or 95% of the arithmetic average of the volume weighted-average price of the Company's common stock for either 10 or 15 consecutive trading days prior to the delivery of the redemption notice.

If the Company is required to redeem all or some of the currently outstanding shares of its Series B Preferred, the Company may be able to pay a portion of the redemption price using shares of its common stock if certain enumerated conditions are satisfied, including: (i) the Company has sufficient number of shares of common stock available for issuance; (ii) the shares of common stock to be issued are registered under an effective registration statement or are otherwise available for sale under Rule 144(k) under the Securities Act; (iii) the Company's common stock is listed on the NASDAQ Global Market or other eligible market; (iv) the shares to be issued can be issued without violating the rules of the NASDAQ Global Market or any applicable trading market or a provision of our certificate of designations; and (v) no bankruptcy event has occurred.

Also, the holders of the Series B-2 Preferred may require the Company to redeem their shares if the Company issues common stock or common stock equivalents for an effective net price of less than \$5.33 per share (excluding, among other things, certain common stock and common stock equivalents issued or issuable (i) to the Company's officers, directors, employees or consultants, (ii) in connection with certain strategic partnerships or joint ventures, and (iii) in connection with certain mergers and acquisitions). "Effective net price" is not defined in the Certificate of Designations governing the Company's

Series B-2 Preferred. The holders of the Company's Series B-2 Preferred may assert that effective net price should be calculated as the amount the Company receives after paying any discounts and other expenses related to any such issuance.

In addition to the foregoing redemption rights, at any time following the occurrence of a "Triggering Event," a holder of the Series B Preferred may require the Company to repurchase all or any portion of the Series B Preferred then held by such holder at a price per share equal to the greater of 115% of the stated value or the market value (as calculated under both Certificates of Designations) of such shares plus all accrued but unpaid dividends thereon to the date of payment. "Triggering Event" is specifically defined in both Certificates of Designations, and includes any of the following events: (i) immediately prior to a bankruptcy event; (ii) the Company fails for any reason to timely deliver a certificate evidencing any securities to a purchaser or the exercise or conversion rights of the holders are otherwise suspended for other than a permissible reason; (iii) any of certain events of default (as set forth in the Registration Rights Agreement with the Series B Preferred holders) occur and remain uncured for 60 days; (iv) the Company fails to make any cash payment required under the Series B Preferred transaction documents and such failure is not timely cured; (v) the issuance of a going concern opinion by the Company's independent registered public accounting firm that is not timely cured; (vi) the Company breaches a section of the Series B Preferred purchase agreement relating to indebtedness and subordination; or (vii) the Company defaults in the timely performance of any other obligation under the Series B Preferred transaction documents and such default is not timely cured.

If the closing price of the Company's common stock is equal to or above \$14.00 per share for 30 consecutive trading days, upon 10 trading days' prior written notice, the Company has the right to, and the warrant holders will have the right to require the Company to, call and cancel any unexercised portion of the warrants. Upon exercise of a warrant following such call notice and prior to the warrant cancellation date, the Company will be obligated to issue to the warrant holder an exchange warrant entitling the holder to purchase shares of the Company's common stock equal to the amount of the holder's warrant that was called. This exchange warrant would contain the same terms and conditions as the original warrant, except that the maturity date would be seven years from the date of issuance of such exchange warrant and the exercise price would be equal to 130% of the average of the volume weighted-average price of the Company's common stock for the five trading days preceding the original warrant cancellation date.

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

Each investor agrees that for so long as it holds Series B-1 Preferred and Series B-2 Preferred, it shall vote its shares of Series B-1 Preferred, Series B-2 Preferred and common stock on all matters in which such investor is entitled to vote and on which holders of common stock have the right to vote, in the manner recommended by the Company's board of directors to all of its stockholders unless the Company's board of directors elects to permit the investors to vote such shares in their own discretion.

## **(8) STOCKHOLDERS' EQUITY**

### **Preferred Stock**

In October 2002, and in conjunction with the stockholders' rights plan (see "Stockholders' Rights Plan" below in this note), the Company's board of directors created a series of preferred stock, consisting of 350,000 shares with a par value of \$.0001



per share, designated as Series A Junior Participating Preferred Stock (the "Series A Preferred Stock"). Such number of shares may be increased or decreased by the board of directors, provided that no decrease shall reduce the number of shares of Series A Preferred Stock to a number less than the number of shares then outstanding, plus the number of shares reserved for issuance upon the exercise of outstanding options, rights or warrants or upon the conversion of any outstanding securities issued by the Company convertible into Series A Preferred Stock. As of December 31, 2006, 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 the Company's offer of \$23.1 million to purchase from them 3,000,000 shares of the Company's common stock at a cash price of \$7.69 per share.

### **Equity Compensation Plans**

On June 12, 2006, the Company's stockholders approved the Company's 2006 Long-Term Incentive Plan (the "2006 LTIP"), which provides for the grant of up to a total of 6,000,000 shares of common stock (subject to certain adjustments described in the 2006 LTIP) to designated employees, certain consultants and advisors who perform services for the Company, and non-employee members of the Company's board of directors as stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards and performance awards. Effective as of June 12, 2006, the Company's Amended and Restated 1998 Equity Compensation Plan, Amended and Restated 2000 Equity Compensation Plan and 2002 Equity Compensation Plan (the "Prior Plans") were terminated. However, notwithstanding such termination, all outstanding awards under the Prior Plans will continue to be governed under the terms of the Prior Plans. The 6,000,000 shares of common stock authorized for issuance under the 2006 LTIP may be increased by the number of shares subject to any stock awards under the Prior Plans that are forfeited, expire or otherwise terminate without the issuance of such shares and as otherwise provided in the 2006 LTIP. As of December 31, 2006, a total of 5,444,650 shares of common stock were available for future grant under the 2006 LTIP.

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

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

In 2003, the Company set up a deferred compensation plan for its executive officers, whereby executive officers may elect to defer their shares of restricted stock. At December 31, 2006, 2005 and 2004, a total of 114,169, 134,169 and 151,669 shares of restricted stock were contributed to the plan, respectively.

The following table summarizes the Company's stock option activities under the Prior Plans and the 2006 LTIP (collectively, the "Equity Compensation Plans") for the years ended December 31, 2006, 2005 and 2004:

	<u>Options</u>	<u>Weighted-Average Exercise Price</u>	<u>Weighted-Average Remaining Contractual Term (in years)</u>	<u>Aggregate Intrinsic Value (in thousands)</u>
Outstanding at December 31, 2003.....	1,945,468	\$ 11.20		
Granted .....	1,400,100	5.80		
Exercised .....	(63,700)	0.59		
Forfeited/cancelled/expired .....	(501,469)	11.52		
Outstanding at December 31, 2004.....	2,780,399	8.66		
Granted .....	1,201,635	6.73		
Exercised .....	(75,790)	5.34		
Forfeited/cancelled/expired .....	(253,413)	9.08		
Outstanding at December 31, 2005.....	3,652,831	8.07		
Granted .....	1,139,384	13.51		
Exercised .....	(180,364)	6.56		
Forfeited/cancelled/expired .....	(89,470)	10.81		
Outstanding at December 31, 2006.....	<u>4,522,381</u>	<u>\$ 9.44</u>	<u>7.20</u>	<u>\$ 19,321</u>
Vested and expected to vest at December 31, 2006...	<u>4,246,356</u>	<u>\$ 9.37</u>	<u>7.10</u>	<u>\$ 18,384</u>
Vested and exercisable at December 31, 2006 .....	<u>2,366,865</u>	<u>\$ 8.86</u>	<u>5.94</u>	<u>\$ 11,262</u>

The aggregate intrinsic value in the above table is calculated as the difference between the closing price of the Company's common stock at December 31, 2006 and the exercise price of the stock options that had strike prices below the closing price of \$12.91 per share. The total intrinsic value of stock options exercised during the years ended December 31, 2006, 2005 and 2004 was approximately \$1.7 million, \$0.4 million and \$0.3 million, respectively. Pursuant to the terms of the Prior Plans, all outstanding stock options were exercisable prior to vesting, such that stock options exercisable at December 31, 2005 and 2004 were equal to stock options outstanding.

The following table summarizes information concerning outstanding and exercisable stock options as of December 31, 2006:

<u>Range of Exercise Price</u>	<u>Options Outstanding</u>			<u>Options Exercisable</u>	
	<u>Number Outstanding</u>	<u>Weighted-Average Remaining Contractual Life (in years)</u>	<u>Weighted-Average Exercise Price</u>	<u>Number Exercisable</u>	<u>Weighted-Average Exercise Price</u>
\$0.20 - \$5.99 .....	405,625	5.58	\$ 3.19	320,814	\$ 2.70
\$6.00 - \$6.00 .....	709,480	6.89	6.00	445,157	6.00
\$6.01 - \$6.16 .....	828,480	8.02	6.16	348,203	6.16
\$6.30 - \$10.11 .....	585,512	6.78	8.19	378,365	8.30
\$10.14 - \$10.52 .....	604,159	9.23	10.48	80,275	10.34
\$10.61 - \$15.40 .....	676,600	5.70	12.20	571,851	12.05
\$15.45 - \$31.34 .....	712,525	7.50	17.78	222,200	19.95
\$0.20 - \$31.34 .....	<u>4,522,381</u>	<u>7.20</u>	<u>\$ 9.44</u>	<u>2,366,865</u>	<u>\$ 8.86</u>

Stock options exercisable pursuant to the terms of the Prior Plans can be exercised at any time; however, unvested shares are subject to repurchase at the original purchase price if a grantee terminates employment prior to vesting. At December 31, 2006 and 2005, 924 and 1,537 shares of common stock issued upon the exercise of stock options were subject to repurchase at the original purchase price at a weighted-average price of \$6.11 and \$6.10 per share, respectively. No shares of common stock issued upon the exercise of stock options were subject to repurchase at December 31, 2004.

The following table summarizes the Company's unvested restricted stock activity, excluding shares contributed to the Company's deferred compensation plan, during the years ended December 31, 2006, 2005 and 2004:

<u>Unvested Restricted Stock</u>	<u>Shares</u>	<u>Weighted-Average Grant-Date Fair Value</u>
Unvested at December 31, 2003 .....	742,500	\$ 6.45
Granted .....	5,000	6.00
Vested .....	(428,920)	6.44
Forfeited .....	(69,083)	6.43
Unvested at December 31, 2004 .....	249,497	6.45
Granted .....	8,000	6.78
Vested .....	(187,001)	6.46
Forfeited .....	—	—
Unvested at December 31, 2005 .....	70,496	6.47
Granted .....	81,000	16.80
Vested .....	(51,997)	6.44
Forfeited .....	—	—
Unvested at December 31, 2006 .....	<u>99,499</u>	<u>\$ 14.89</u>

The total grant-date fair value of restricted stock vested during the years ended December 31, 2006, 2005 and 2004 was approximately \$0.3 million, \$1.2 million and \$2.8 million, respectively.

At December 31, 2006, total unrecognized estimated compensation cost, excluding estimated forfeitures, related to unvested stock options was approximately \$10.3 million, which is expected to be recognized over a weighted-average remaining requisite service period of 2.31 years. At December 31, 2006, total unrecognized estimated compensation cost related to restricted stock was approximately \$1.0 million, which is expected to be recognized over a weighted-average remaining requisite service period of 2.04 years. Cash of approximately \$1.2 million was received from the exercise of all share-based awards during the year ended December 31, 2006.

### Share-based Compensation

The Company uses the Black-Scholes option pricing model to estimate the grant-date fair value of share-based awards under SFAS No. 123R. The weighted-average estimated fair value of stock options granted under the Equity Compensation Plans during the year ended December 31, 2006 was \$8.35 per share using the following weighted-average assumptions:

Risk-free interest rate .....	4.6%
Dividend yield .....	0%
Expected volatility .....	70%
Expected life (years) .....	5.19

The weighted-average estimated fair values of the options to purchase stock under the Purchase Plan for multiple offering periods during the year ended December 31, 2006 ranged from \$1.99 to \$7.29 per share using the following assumptions:

Risk-free interest rate .....	1.7% - 5.3%
Dividend yield .....	0%
Expected volatility .....	65% - 75%
Expected life (years) .....	0.25 - 2.0

Expected volatility for awards granted after adoption of SFAS No. 123R is based on a combination of 75% historical volatility of the Company's common stock and 25% market-based implied volatilities from traded options on its common stock, with historical volatility being more heavily weighted due to low volume of traded options on its common stock. Prior to adoption of SFAS No. 123R, the Company's computation of expected volatility was based only on historical volatility of its common stock. The expected life of options granted under SFAS No. 123R is determined based on historical experience of similar awards, giving consideration to the contractual terms of the share-based awards, vesting schedules and post-vesting terminations. Prior to the adoption of SFAS No. 123R, an average expected life of five years was used in determining the fair value of option grants based on the vesting period of the options due to the short period of time the Company's stock had

been publicly traded. The risk-free interest rates are based on the U.S. Treasury yield curve, with a remaining term approximately equal to the expected term used in the option pricing model.

SFAS No. 123R requires forfeitures to be estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Forfeitures of unvested stock options were estimated to be approximately 6.7% for the year ended December 31, 2006 based on historical experience. As a result, the Company reduced its share-based compensation expense by \$0.4 million for the year ended December 31, 2006. If actual forfeitures vary from this estimate, the Company will recognize the difference in compensation cost in the period the actual forfeitures occur or when stock options vest. Prior to the adoption of SFAS No. 123R, the Company accounted for forfeitures as they occurred in the pro forma disclosure required under SFAS No. 123.

Tax benefits recognized related to share-based compensation and related cash flow impacts were not material during the year ended December 31, 2006 because the Company is in a net operating loss position.

### **Employee Stock Purchase Plan**

The Company's 2001 Arena Employee Stock Purchase Plan (the "Purchase Plan") qualifies under Section 423 of the Internal Revenue Service and permits substantially all employees to purchase shares of the Company's common stock at a discount to market. Under the Purchase Plan, employees can choose to have up to 15% of their annual compensation withheld to purchase shares of common stock, subject to certain limitations. The shares of common stock may be purchased over an offering period with a maximum duration of two years at 85% of the lower of the fair market value of the common stock on the first day of the applicable offering period or on the last day of the three-month purchase period. On June 12, 2006, the Company's stockholders approved an increase in the aggregate number of shares of common stock that may be issued pursuant to the Purchase Plan from 1,000,000 to 1,500,000. During the years ended December 31, 2006, 2005 and 2004, 307,086, 197,862 and 105,098 shares, respectively, were purchased under to the Purchase Plan. As of December 31, 2006, a total of 814,680 shares have been issued under to the Purchase Plan.

### **Common Shares Reserved for Future Issuance**

The following shares of common stock are reserved for future issuance at December 31, 2006:

Equity compensation plans .....	9,967,031
Deferred compensation plan .....	114,169
Warrants .....	1,936,200
Series B-1 Preferred .....	5,266,809
Series B-2 Preferred .....	1,758,161
Payment of dividends .....	2,221,763
Employee Purchase Plan .....	685,320
Total .....	<u>21,949,453</u>

### **Stockholders' Rights Plan**

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

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

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

## (9) EMPLOYEE BENEFIT PLAN

The Company has a defined contribution retirement plan that complies with Section 401(k) of the Internal Revenue Code. All employees of the Company are eligible to participate in the plan. The Company matches 100% of each participant's voluntary contributions, subject to a maximum Company contribution of 6% of the participant's compensation. The Company's matching portion, which totaled approximately \$1.4 million, \$1.1 million and \$0.9 million for the years ended December 31, 2006, 2005 and 2004, respectively, vests over a five-year period.

## (10) INCOME TAXES

Significant components of the Company's deferred tax assets at December 31, 2006 and 2005 are shown below, in thousands. A valuation allowance of approximately \$137.0 million and \$99.2 million has been recognized to offset the net deferred tax assets as of December 31, 2006 and 2005, respectively, as realization of such assets is uncertain. The valuation allowance increased by approximately \$37.8 million in 2006 compared to 2005, primarily due to an increase in the Company's net operating loss.

	<u>December 31,</u>	
	<u>2006</u>	<u>2005</u>
Deferred tax assets:		
Net operating loss carryforwards .....	\$ 99,913	\$ 64,470
Research and development credits .....	27,846	23,313
Capitalized R&D (state).....	2,330	2,740
Deferred revenues .....	5,200	9,617
Depreciation.....	1,518	477
SFAS No. 123R expense.....	830	—
Other, net.....	<u>1,900</u>	<u>1,775</u>
Total deferred tax assets.....	139,537	102,392
Deferred tax liabilities:		
Acquired intangible amortization.....	<u>(2,554)</u>	<u>(3,166)</u>
Total deferred tax liabilities .....	<u>(2,554)</u>	<u>(3,166)</u>
Net deferred tax assets .....	136,983	99,226
Valuation allowance.....	<u>(136,983)</u>	<u>(99,226)</u>
Net deferred tax assets .....	<u>\$ —</u>	<u>\$ —</u>

At December 31, 2006, the Company had Federal tax net operating loss carryforwards of approximately \$259.2 million that will begin to expire in 2017 unless previously utilized. At the same date, the Company had state tax net operating loss carryforwards of approximately \$223.4 million, of which approximately \$12.8 million are scheduled to expire in 2007. The balance of the California net operating loss carryforwards will begin to expire in 2012. The Company also had Federal and California research tax credit carryforwards of approximately \$19.3 million and \$12.9 million, respectively. The Federal research and development credit carryforwards will begin to expire in 2012 unless previously utilized. The California research and development credit carryforwards carry forward indefinitely. At December 31, 2006, approximately \$7.7 million of net operating loss carryforwards related to stock option exercises, which will result in an increase to additional paid-in capital and a decrease in income taxes payable at the time when the tax loss carryforwards are utilized.

Pursuant to Sections 382 and 383 of the Internal Revenue Code, annual use of the Company's net operating loss and credit carryforwards could be limited in the event of cumulative changes in ownership of more than 50%. Such a change occurred in prior years.

The provision for income taxes on earnings subject to income taxes differs from the statutory Federal rate at December 31, 2006, 2005 and 2004, due to the following, in thousands:

	December 31,		
	2006	2005	2004
Statutory Federal rate.....	\$(30,014)	\$(26,209)	\$(20,836)
State income tax, net of Federal benefit.....	(5,146)	(4,494)	(3,573)
Permanent items and other.....	739	(183)	(758)
SFAS No. 123R expense .....	1,208	—	—
Deferred compensation.....	—	175	584
Research and development credit .....	(5,353)	(5,074)	(3,668)
Dividends and accretion on preferred stock.....	809	3,658	1,310
Valuation allowance and other .....	37,757	32,127	26,941
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

As a result of the adoption of SFAS No. 123R, the Company recognizes windfall tax benefits associated with the exercise of stock options directly to stockholders' equity only when realized. Accordingly, deferred tax assets are not recognized for net operating loss carryforwards resulting from windfall tax benefits occurring from January 1, 2006 onward. At December 31, 2006, deferred tax assets do not include approximately \$1.2 million of excess tax benefits from share-based compensation.

#### (11) SUBSEQUENT EVENT (UNAUDITED)

On February 26, 2007, the Compensation Committee of the Company's board of directors granted 1,690,500 performance unit awards to a broad base of employees, including executive officers, under the 2006 LTIP. In addition, on the same date, 1,085,037 stock options were granted to employees, including executive officers, and directors.

The performance unit awards provide employees with five years to achieve four key drug development and strategic performance goals. A fixed number of awards will be earned for each milestone that is successfully achieved. Once earned, the awards will remain unvested until the five-year performance period is complete. After five years, the awards that have been earned will vest and be settled in shares of the Company's common stock. Termination of employment prior to vesting will result in the forfeiture of any earned (as well as unearned) awards, except for limited circumstances such as termination due to death, disability or a change in control.

The stock options granted, which vest 25% per year over four years and are exercisable for up to 10 years from the date of grant, had an exercise price equal to the fair market value of the Company's stock on the date of grant, which was \$13.50 per share.

#### (12) QUARTERLY FINANCIAL DATA (UNAUDITED)

The following table presents quarterly data for the years ended December 31, 2006 and 2005, in thousands, except per share data:

<u>2006</u>	<u>Quarter ended December 31</u>	<u>Quarter ended September 30</u>	<u>Quarter ended June 30</u>	<u>Quarter ended March 31</u>	<u>Year</u>
Revenues.....	\$ 4,699	\$ 4,416	\$ 9,328	\$ 12,126	\$ 30,569
Net loss .....	(35,889)	(19,624)	(18,509)	(12,226)	(86,248)
Net loss allocable to common stockholders....	(36,409)	(20,138)	(19,013)	(12,719)	(88,279)
Net loss per share allocable to common stockholders, basic and diluted .....	\$ (0.73)	\$ (0.43)	\$ (0.40)	\$ (0.30)	\$ (1.89)
<u>2005</u>	<u>Quarter ended December 31</u>	<u>Quarter ended September 30</u>	<u>Quarter ended June 30</u>	<u>Quarter ended March 31</u>	<u>Year</u>
Revenues.....	\$ 5,876	\$ 7,432	\$ 5,505	\$ 4,420	\$ 23,233
Net loss .....	(19,070)	(15,638)	(15,891)	(17,302)	(67,901)
Net loss allocable to common stockholders....	(19,570)	(16,132)	(16,349)	(25,035)	(77,086)
Net loss per share allocable to common stockholders, basic and diluted .....	\$ (0.55)	\$ (0.46)	\$ (0.46)	\$ (0.79)	\$ (2.24)

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

None.

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

#### **Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

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

#### **Management’s Report on Internal Control Over Financial Reporting**

Our management is responsible for establishing and maintaining for us adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our CEO and VP, Finance and Chief Financial Officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control — Integrated Framework*, our management concluded that our internal control over financial reporting was effective as of December 31, 2006.

Our management’s assessment of the effectiveness of our internal control over financial reporting as of December 31, 2006 has been audited by Ernst & Young LLP, an independent registered public accounting firm, as stated in their report which is included herein.

#### **Changes in Internal Control Over Financial Reporting**

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

## **Report of Independent Registered Public Accounting Firm**

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

We have audited management's assessment included in the accompanying Management's Report of Internal Control Over Financial Reporting, that Arena Pharmaceuticals, Inc. maintained effective internal control over financial reporting as of December 31, 2006, based on criteria established in Internal Control—Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (the COSO criteria). Arena Pharmaceuticals, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the company's internal control over financial reporting based on our audit.

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

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

In our opinion, management's assessment that Arena Pharmaceuticals, Inc. maintained effective internal control over financial reporting as of December 31, 2006, is fairly stated, in all material respects, based on the COSO criteria. Also, in our opinion, Arena Pharmaceuticals, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2006, based on the COSO criteria.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Arena Pharmaceuticals, Inc. as of December 31, 2006 and 2005, and the related consolidated statements of operations, stockholders' equity, and cash flows for each of the three years in the period ended December 31, 2006 of Arena Pharmaceuticals, Inc. and our report dated February 28, 2007 expressed an unqualified opinion thereon.

/s/ ERNST & YOUNG LLP

San Diego, California  
February 28, 2007



## PART III

### **Item 10. Directors, Executive Officers and Corporate Governance.**

We have adopted a Code of Business Conduct and Ethics that applies to our directors and employees (including our principal executive officer, principal financial officer, principal accounting officer and controller), and have posted the text of the policy on our website (www.arenapharm.com) in connection with “Investor” materials. In addition, we intend to promptly disclose (i) the nature of any amendment to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and (ii) the nature of any waiver, including an implicit waiver, from a provision of the policy that is granted to one of these specified individuals, the name of such person who is granted the waiver and the date of the waiver on our website in the future.

The other information required by this item is incorporated herein by reference from the information under the captions “Election of Directors,” “Compensation and Other Information Concerning Executive Officers, Directors and Certain Stockholders” and “Section 16(a) Beneficial Ownership Reporting Compliance” contained in our proxy statement for the annual meeting of stockholders to be held in June 2007 (the “Proxy Statement”).

### **Item 11. Executive Compensation.**

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

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

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

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

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

### **Item 14. Principal Accountant Fees and Services.**

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

## PART IV

### **Item 15. Exhibits, Financial Statement Schedules.**

#### **(a) 1. FINANCIAL STATEMENTS.**

Reference is made to the Index to Financial Statements under Item 8, Part II hereof.

#### **2. FINANCIAL STATEMENT SCHEDULES.**

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

### 3. EXHIBITS

<b>EXHIBIT NO.</b>	<b>DESCRIPTION</b>
3.1	Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 3.1 to Arena's quarterly report on Form 10-Q for the period ended June 30, 2002, filed with the Securities and Exchange Commission on August 14, 2002, Commission File No. 000-31161)
3.2	Certificate of Amendment of the Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 4.2 to Arena's registration statement on Form S-8, filed with the Securities and Exchange Commission on June 28, 2006, Commission File No. 333-135398)
3.3	Amended and Restated Bylaws of Arena (incorporated by reference to Exhibit 3.2 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on December 21, 2005, Commission File No. 000-31161)
3.4	Certificate of Designations of Series A Junior Participating Preferred Stock of Arena, dated November 4, 2002 (incorporated by reference to Exhibit 3.3 to Arena's quarterly report on Form 10-Q for the period ended September 30, 2002, filed with the Securities and Exchange Commission on November 14, 2002, Commission File No. 000-31161)
3.5	Certificate of Designations of Series B-1 Convertible Preferred Stock and Series B-2 Convertible Preferred Stock of Arena, dated December 24, 2003 (incorporated by reference to Exhibit 3.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
4.1	Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on November 1, 2002, Commission File No. 000-31161)
4.2	Amendment No. 1, dated December 24, 2003, to Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
4.3	Amendment No. 2, dated November 16, 2006, to Rights Agreement, dated October 30, 2002, between Arena and Computershare Trust Company, Inc. (incorporated by reference to Exhibit 4.3 to Amendment No. 2 to Arena's Registration Statement on Form 8-A filed with the Securities and Exchange Commission on November 16, 2006, Commission File No. 000-31161)
4.4	Form of common stock certificates (incorporated by reference to Exhibit 4.2 to Arena's registration statement on Form S-1, as amended, filed with the Securities and Exchange Commission on July 19, 2000, Commission File No. 333-3594)
10.1*	1998 Equity Compensation Plan (incorporated by reference to Exhibit 10.1 to Arena's registration statement on Form S-1, as amended, filed with the Securities and Exchange Commission on June 22, 2000, Commission File No. 333-3594)
10.2	Amended and Restated 2000 Equity Compensation Plan (incorporated by reference to Exhibit 10.2 to Arena's annual report on Form 10-K for the year ended December 31, 2001, filed with the Securities and Exchange Commission on March 15, 2002, Commission File No. 000-31161)
10.3	Lease, dated March 1998, by and between ARE 6166 Nancy Ridge, LLC and Arena, as amended by First Amendment to Lease dated as of June 30, 1998 (incorporated by reference to Exhibit 10.6 to Arena's registration statement on Form S-1, as amended, filed with the Securities and Exchange Commission on June 22, 2000, Commission File No. 333-3594)
10.4+	Research Collaboration and License Agreement, effective as of April 14, 2000, by and between Arena and Eli Lilly and Company (incorporated by reference to Exhibit 10.9 to Arena's registration statement on Form S-1, as amended, filed with the Securities and Exchange Commission on July 19, 2000, Commission File No. 333-3594)
10.5*	2001 Arena Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 10.5 to Arena's quarterly report on Form 10-Q, filed with the Securities and Exchange Commission on August 4, 2006, Commission File No. 000-31161)
10.6*	2002 Equity Compensation Plan (incorporated by reference to Exhibit A to Arena's Proxy Statement regarding Arena's June 11, 2002, Annual Stockholders Meeting, filed with the Securities and Exchange Commission on April 23, 2002, Commission File No. 000-31161)
10.7	Stockholders Agreement dated as of January 17, 2003, by and among Arena, Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., BVF Investments, L.L.C., BVF Partners L.P., BVF Inc. and Investment 10, L.L.C. (incorporated by reference to Exhibit 10 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on January 21, 2003, Commission File No. 000-31161)
10.8+	Research Collaboration and License Agreement, dated effective as of October 21, 2002, by and between Arena and Merck & Co., Inc., a New Jersey corporation (incorporated by reference to Exhibit 10.20 to Arena's annual report on Form 10-K for the period ended December 30, 2003, filed with the Securities and Exchange Commission on March 28, 2003, Commission File No. 000-31161)

- 10.9\* Form of Termination Protection Agreement, dated December 20, 2002, by and among Arena and the employees listed on Schedule 1 thereto (incorporated by reference to Exhibit 10.1 to Arena's quarterly report on Form 10-Q for period ended June 30, 2003, filed with the Securities and Exchange Commission on August 13, 2003, Commission File No. 000-31161)
- 10.10\* Form of Termination Protection Agreement, dated December 20, 2002, by and among Arena and the employees listed on Schedule 1 thereto (incorporated by reference to Exhibit 10.2 to Arena's quarterly report on Form 10-Q for the June 30, 2003, filed with the Securities and Exchange Commission on August 13, 2003, Commission File No. 000-31161)
- 10.11 Securities Purchase Agreement for Arena's Series B Convertible Preferred Stock and warrants dated December 24, 2003, among Arena and the investor signatories thereto (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
- 10.12 Registration Rights Agreement dated December 24, 2003, among Arena and the investor signatories thereto (incorporated by reference to Exhibit 10.2 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
- 10.13 Form of Warrant dated December 24, 2003 (incorporated by reference to Exhibit 10.3 to Arena's report on Form 8-K filed with the Securities and Exchange Securities and Exchange Commission on December 30, 2003, Commission File No. 000-31161)
- 10.14 Settlement Agreement and Release, dated as of June 30, 2006, between Arena and Smithfield Fiduciary LLC. (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)
- 10.15 Amendment to Registration Rights Agreement, dated as of June 30, 2006, between Arena and Smithfield Fiduciary LLC. (incorporated by reference to Exhibit 10.2 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)
- 10.16 Amendment to Registration Rights Agreement, dated as of June 30, 2006, between Arena and Mainfield Enterprises, Inc. (incorporated by reference to Exhibit 10.3 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on July 6, 2006, Commission File No. 000-31161)
- 10.17 Purchase and Sale Agreement and Joint Escrow Instructions, dated December 22, 2003, between Arena and ARE — Nancy Ridge No. 3, LLC (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Securities and Exchange Commission on January 6, 2004, Commission File No. 000-31161)
- 10.18 Lease Agreement, dated December 30, 2003, between Arena and ARE — Nancy Ridge No. 3, LLC (incorporated by reference to Exhibit 10.2 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on January 6, 2004, Commission File No. 000-31161)
- 10.19\* Arena's Deferred Compensation Plan, effective November 11, 2003, between Arena and participating executive officers (incorporated by reference to Exhibit 10.29 to Arena's annual report on Form 10-K filed with the Securities and Exchange Commission on March 1, 2004, Commission File No. 000-31161)
- 10.20+ First Amendment to Research Collaboration and License Agreement, dated as of October 20, 2004, by and between Arena and Merck (incorporated by reference to Exhibit 10.19 to Arena's annual report on Form 10-K filed with the Securities and Exchange Commission on March 2, 2005, Commission File No. 000-31161)
- 10.21+ Collaboration and License Agreement, dated as of December 20, 2004, by and between Arena and Ortho-McNeil Pharmaceutical, Inc., a New Jersey corporation (incorporated by reference to Exhibit 10.20 to Arena's annual report on Form 10-K filed with the Securities and Exchange Commission on March 2, 2005, Commission File No. 000-31161)
- 10.22\* Form of stock option grant for non-employee directors under Arena's 2002 Equity Incentive Plan (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on January 21, 2005, Commission File No. 000-31161)
- 10.23\* Severance Benefit Plan, providing benefits for specified executive officers, dated effective January 20, 2006 (incorporated by reference to Exhibit 10.2 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on January 24, 2006, Commission File No. 000-31161)
- 10.24\* 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on June 16, 2006, Commission File No. 000-31161)
- 10.25\* Form of Stock Option Grant Agreement under the Arena 2006 Long-Term Incentive Plan. (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
- 10.26\* Form of Stock Option Grant Agreement — Director under the Arena 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.2 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)

- 10.27\* Form of Incentive Stock Option Grant Agreement under the Arena 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.3 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
- 10.28\* Form of Restricted Stock Grant Agreement under the Arena 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.4 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
- 10.29\* Form of Restricted Stock Unit Grant Agreement under the Arena 2006 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.5 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
- 10.30\* Summary of compensation for non-employee directors, effective January 1, 2007 (incorporated by reference to the description of such compensation in Arena's report on Form 8-K filed with the Securities and Exchange Commission on December 19, 2006, Commission File No. 000-31161)
- 10.31\* Summary of the 2007 Annual Incentive Plan for Arena's executive officers (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on January 26, 2007, Commission File No. 000-31161)
- 21.1 Subsidiaries of the registrant-None
- 23.1 Consent of Independent Registered Public Accounting Firm
- 31.1 Certification of Chief Executive Officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
- 31.2 Certification of Chief Financial Officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
- 32.1 Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 and Rule 13a-14(B) promulgated under the Securities Exchange Act of 1934

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

\* Management contract or compensatory plan or arrangement.

(b) **EXHIBITS**

See Item 15(a)(3) above.

(c) **FINANCIAL STATEMENT SCHEDULES**

See Item 15(a)(2) above.

## SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized, on March 6, 2007.

Arena Pharmaceuticals, Inc.,  
a Delaware corporation

By: /s/ Jack Lief  
Jack Lief  
President and Chief Executive Officer

Pursuant to the requirements of the Securities Exchange Act of 1934, this report has been signed below by the following persons on behalf of the registrant and in the capacities indicated on March 6, 2007.

<u>Signatures</u>	<u>Title</u>
By: <u>/s/ Jack Lief</u> Jack Lief	President, Chief Executive Officer and Director
By: <u>/s/ Robert E. Hoffman</u> Robert E. Hoffman, CPA	Vice President, Finance, Chief Financial Officer and Chief Accounting Officer
By: <u>/s/ Dominic P. Behan</u> Dominic P. Behan, Ph.D.	Director
By: <u>/s/ Donald D. Belcher</u> Donald D. Belcher	Director
By: <u>/s/ Scott H. Bice</u> Scott H. Bice	Director
By: <u>/s/ Harry F. Hixson</u> Harry F. Hixson, Ph.D.	Director
By: <u>/s/ J. Clayburn La Force, Jr.</u> J. Clayburn La Force, Jr., Ph.D.	Director
By: <u>/s/ Tina S. Nova</u> Tina S. Nova, Ph.D.	Director
By: <u>/s/ Christine A. White, M.D.</u> Christine A. White, M.D.	Director

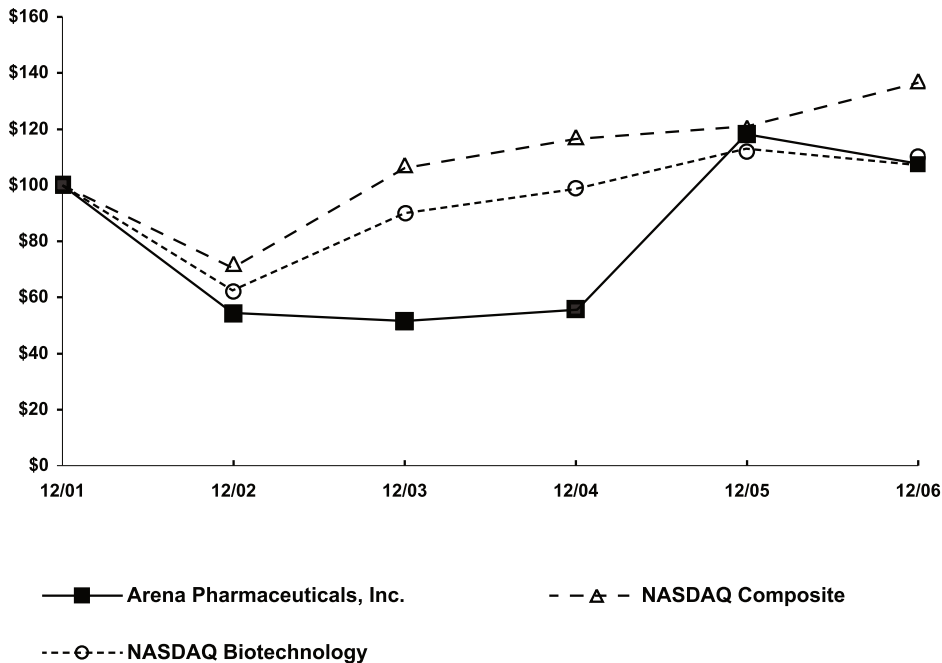
## Performance Graph

The following is a line graph comparing the yearly percentage change in the cumulative total return to stockholders on our common stock from December 31, 2001 through December 31, 2006 to (i) the cumulative total return over such period for the NASDAQ Composite and (ii) the cumulative total return over such period for the NASDAQ Biotechnology Index. The graph assumes the investment of \$100 on December 31, 2001, and the reinvestment of dividends, although dividends have not been declared on our common stock, and is calculated according to the Securities and Exchange Commission's methodology. We caution that the stock price performance shown in the graph may not be indicative of future stock price performance. The graph, including each of the graph lines, was provided by Research Data Group, Inc.

This information, including the below graph, is not deemed to be "soliciting material" or to be "filed" with the Securities and Exchange Commission, or subject to the Security and Exchange Commission's proxy rules, other than as provided in such rules, or to the liabilities of Section 18 of the Exchange Act of 1934, and shall not be deemed incorporated by reference into any prior or subsequent filing by us under the Securities Act of 1933 or the Exchange Act of 1934, except to the extent that we specifically incorporate it by reference into any such filing.

### COMPARISON OF 5 YEAR CUMULATIVE TOTAL RETURN

Among Arena Pharmaceuticals, Inc.,  
The NASDAQ Composite Index, and  
The NASDAQ Biotechnology Index



**BOARD OF DIRECTORS**

Jack Lief  
President and Chief Executive Officer  
Arena Pharmaceuticals, Inc.

Dominic P. Behan, Ph.D.  
Senior Vice President and  
Chief Scientific Officer  
Arena Pharmaceuticals, Inc.

Donald D. Belcher  
Former Chairman and  
Chief Executive Officer  
Banta Corporation

Scott H. Bice  
Robert C. Packard Professor  
University of Southern California  
Law School

Harry F. Hixson, Jr., Ph.D.  
Chairman and Former  
Chief Executive Officer  
BrainCells, Inc.

J. Clayburn La Force, Jr., Ph.D.  
Dean Emeritus  
Anderson Graduate School of  
Management at UCLA

Tina S. Nova, Ph.D.  
President and Chief Executive Officer  
Genoptix, Inc.

Christine A. White, M.D.  
Former Senior Vice President,  
Global Medical Affairs  
Biogen Idec Inc.

**EXECUTIVE OFFICERS**

Jack Lief  
President and Chief Executive Officer

K.A. Ajit-Simh  
Vice President, Quality Systems

Dominic P. Behan, Ph.D.  
Senior Vice President and  
Chief Scientific Officer

Robert E. Hoffman, C.P.A.  
Vice President, Finance  
and Chief Financial Officer

Louis J. Scotti  
Vice President, Marketing  
and Business Development

William R. Shanahan, Jr., M.D., J.D.  
Vice President and Chief Medical Officer

Steven W. Spector, J. D.  
Senior Vice President,  
General Counsel and Secretary

**CORPORATE HEADQUARTERS**

Arena Pharmaceuticals, Inc.  
6166 Nancy Ridge Drive  
San Diego, California 92121  
Telephone: 858.453.7200  
Facsimile: 858.677.0065

**ANNUAL MEETING**

The Annual Meeting of Stockholders will be held on Monday, June 11, 2007, at 9:00 a.m. local time, at 6150 Nancy Ridge Drive, San Diego, California 92121. For further information, call 858.453.7200, ext. 1682.

**INVESTOR RELATIONS**

Stockholder inquiries should be directed to:  
Investor Relations  
Arena Pharmaceuticals, Inc.  
6166 Nancy Ridge Drive  
San Diego, California 92121  
Telephone: 858.453.7200, ext. 1682  
Facsimile: 858.677.0065

**INFORMATION AVAILABLE**

**A copy of Arena's annual report to the Securities and Exchange Commission on Form 10-K is available without charge by writing Investor Relations at Arena's corporate headquarters or calling 858.453.7200, ext. 1682.**

**In addition, Arena's annual report on Form 10-K, other filings with the Securities and Exchange Commission, and press releases, along with general information on Arena's business and technology, are available through Arena's home page on the Internet at the following address:  
[www.arenapharm.com](http://www.arenapharm.com)**

**TRANSFER AGENT AND REGISTRAR**

Computershare Investor Services  
350 Indiana Street, Suite 800  
Golden, Colorado 80401  
Telephone: 800.962.4284  
Facsimile: 303.262.0633

**STOCK LISTING**

Arena's common stock trades on The NASDAQ Global Market® under the symbol ARNA.

**INDEPENDENT AUDITORS**

Ernst & Young LLP  
4370 La Jolla Village Drive, Suite 500  
San Diego, California 92122  
Telephone: 858.535.7200  
Facsimile: 858.535.7777

**TRADEMARKS AND SERVICE MARKS**

The following trademarks and service marks in this report are the property of Arena or its subsidiary: Arena Pharmaceuticals®, CART™ and BRL Screening™. The corporate logo is a registered trademark.

**WHOLLY OWNED SUBSIDIARY**

BRL Screening, Inc.

**INFORMATION RELATING TO FORWARD-LOOKING STATEMENTS** Certain statements in this Annual Report are forward-looking statements that involve a number of risks and uncertainties. Such forward-looking statements include statements about our strategies, technologies, internal and partnered programs, ability to develop compounds and commercialize drugs and our future achievements. These forward-looking statements also involve other statements that are not historical facts, including statements which are preceded by the words "intend," "will," "plan," "expect," "estimate," "believe," "hope" or similar words. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. Factors that could cause actual results to differ materially from the forward-looking statements include, but are not limited to, the FDA may not allow our planned clinical trials to proceed at the time we expect or at all, the results of preclinical studies or clinical trials may not be predictive of future results, our ability to partner compounds or programs, the timing, success and cost of our research, out-licensing endeavors and clinical trials, our ability to obtain additional financing, our ability to obtain and defend our patents, and the timing and receipt of payments and fees, if any, from our collaborators. Additional factors that could cause actual results to differ materially from those stated or implied by our forward-looking statements are disclosed in our filings with the Securities and Exchange Commission. These forward-looking statements represent our judgment as of the time of release. We disclaim any intent or obligation to update these forward-looking statements, other than as may be required under applicable law.

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San Diego, CA 92121