

ARENA PHARMACEUTICALS INC

Form 10-K

March 01, 2013

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**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**FORM 10-K**

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

For the fiscal year ended December 31, 2012

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)

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**Delaware**  
(State or other jurisdiction of  
incorporation or organization)  
**6154 Nancy Ridge Drive, San Diego, CA**  
(Address of principal executive offices)

**23-2908305**  
(I.R.S. Employer  
Identification No.)  
**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 Select 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 whether the registrant has submitted electronically and posted on its corporate Web site, if any, every Interactive Data File required to be submitted and posted pursuant to Rule 405 of Regulation S-T (§232.405 of this chapter) during the preceding 12 months (or for such shorter period that the registrant was required to submit and post such files). Yes  No

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

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

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

The aggregate market value of the voting and non-voting common equity held by non-affiliates of the registrant was approximately \$2.0 billion as of June 30, 2012, based on the last sale price of the registrant's common stock as reported on the NASDAQ Global Select Market on such date. For purposes of this calculation, shares of the registrant's common stock held by directors and executive officers have been excluded. This

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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 20, 2013, there were 217,489,222 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 2013, 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, 2012.

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**INFORMATION RELATING TO FORWARD-LOOKING STATEMENTS**

This Annual Report on Form 10-K, or Annual Report, includes forward-looking statements, which involve a number of risks and uncertainties. These forward-looking statements can generally be identified as such because the context of the statement will include words such as may, will, intend, plan, believe, anticipate, expect, estimate, predict, potential, continue, likely, or opportunity, the negative of these words. Similarly, statements that describe our future plans, strategies, intentions, expectations, objectives, goals or prospects and other statements that are not historical facts are also forward-looking statements. Discussions containing these forward-looking statements may be found, among other places, in Business and Management's Discussion and Analysis of Financial Condition and Results of Operations in this Annual Report. For such statements, we claim the protection of the Private Securities Litigation Reform Act of 1995. Readers of this Annual Report are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the time this Annual Report was filed with the Securities and Exchange Commission, or SEC. These forward-looking statements are based largely on our expectations and projections about future events and future trends affecting our business, and are subject to risks and uncertainties that could cause actual results to differ materially from those anticipated in the forward-looking statements. These risks and uncertainties include, without limitation, those discussed in Risk Factors and in Management's Discussion and Analysis of Financial Condition and Results of Operations of this Annual Report. 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 update publicly or revise our forward-looking statements to reflect events or circumstances that arise after the filing of this Annual Report 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. BELVIQ® is a registered trademark of Arena Pharmaceuticals GmbH. Any other brand names or trademarks appearing in this Annual Report are the property of their respective holders.

BELVIQ is the trade name for lorcaserin hydrochloride in the United States. While BELVIQ (lorcaserin HCl) may in the future be marketed outside of the United States as BELVIQ or under a different trade name, we use BELVIQ in this Annual Report to refer to the finished drug product for lorcaserin hydrochloride or, depending on the context, lorcaserin hydrochloride or other solid state forms of lorcaserin.

In this Annual Report, Arena Pharmaceuticals, Arena, we, us and our refer to Arena Pharmaceuticals, Inc., and our wholly owned subsidiaries on a consolidated basis, unless the context otherwise provides. APD is an abbreviation for Arena Pharmaceuticals Development.

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**PART I**

**Item 1. Business.  
Overview**

We are a biopharmaceutical company focused on discovering, developing and commercializing novel drugs that target G protein-coupled receptors, or GPCRs, to address unmet medical needs. In June 2012, the US Food and Drug Administration, or FDA, approved our internally discovered drug, BELVIQ, for chronic weight management in adults who are overweight with a comorbidity or obese. We are focused on commercializing BELVIQ in the United States and ultimately in additional territories, selectively advancing our drug candidates and discovering additional drug candidates. BELVIQ and our earlier-stage drug candidates have resulted from our validated GPCR-focused drug discovery and development approach, specialized expertise and technologies.

Our wholly owned subsidiary, Arena Pharmaceuticals GmbH, or Arena GmbH, has provided Eisai Inc., or Eisai, exclusive rights to commercialize BELVIQ in the United States. Once the US Drug Enforcement Administration, or DEA, finalizes the scheduling designation, BELVIQ will be available to eligible patients by prescription in the United States. We will manufacture BELVIQ at our facility in Switzerland, and Eisai will purchase BELVIQ from us.

We have also granted exclusive marketing and distribution rights for BELVIQ to Eisai for most of the rest of North and South America and to Ildong Pharmaceutical Co., Ltd., or Ildong, for South Korea, subject to applicable regulatory approval in each of such territories. We expect that in 2013 Eisai will submit applications for the regulatory approval of BELVIQ in Mexico, Canada and Brazil, and Ildong will submit an application for the regulatory approval of BELVIQ in South Korea. In addition, we intend to enter into additional collaborations to support the commercialization of BELVIQ in other territories.

We are independently seeking regulatory approval of BELVIQ in territories that are not currently under collaboration. In 2012, we submitted applications for the regulatory approval of BELVIQ in the European Union and Switzerland.

We have composition of matter patents for BELVIQ issued in major jurisdictions globally that, in most cases, are capable of continuing into 2023. We have filed applications for patent extension in the United States, which, if granted, will extend the patent term for BELVIQ into 2026.

In addition to commercializing BELVIQ as a monotherapy for chronic weight management, we intend to explore BELVIQ's therapeutic potential in combination with other drugs and for other indications. We also intend to utilize our validated discovery and development approach to selectively advance other of our internally discovered, oral drug candidates, which include (i) APD811, an agonist of the prostacyclin receptor intended for the treatment of pulmonary arterial hypertension, which is currently in Phase 1; (ii) temanogrel, an inverse agonist of the serotonin 2A receptor intended for the treatment of thrombotic diseases, which has completed single- and multiple-ascending dose Phase 1 trials and is expected to complete an additional Phase 1 trial in healthy volunteers and potentially a Phase 2a proof-of-concept trial in patients under our Co-Development and License Agreement with Ildong; (iii) APD334, an agonist of the S1P<sub>1</sub> receptor intended for the treatment of autoimmune diseases, which we plan to advance into Phase 1 in the first half of 2013; and (iv) APD371, an agonist of the cannabinoid receptor 2 intended for the treatment of pain, which is in preclinical development. Our research and development pipeline also includes GPR119 agonists intended for the treatment of type 2 diabetes.

We have commercial rights for our programs and drug candidates, except for Eisai's rights with respect to BELVIQ and Ildong's rights with respect to BELVIQ and temanogrel. BELVIQ is our first drug to receive marketing approval, and we have not recognized revenues from selling any drugs, other than in connection with producing drugs for Siegfried AG (formerly Siegfried Ltd, and referred to collectively in this Annual Report as Siegfried) in our Swiss manufacturing facility.

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The headquarters of our operations outside of the United States is in Switzerland at Arena GmbH. Activities conducted at this location include manufacturing, quality control, quality assurance, development of manufacturing processes, qualifying suppliers and otherwise managing aspects of the global supply chain, regulatory compliance, distribution of finished products, and European strategic planning and development. Arena GmbH and its wholly owned subsidiary, API Development LTD, also hold certain intellectual property rights for BELVIQ. Arena Pharmaceuticals, Inc., incorporated in the state of Delaware in April 1997.

### **Our Strategy**

The key elements of our strategy are as follows:

**Focus on BELVIQ.** We intend to focus our efforts on the commercialization of BELVIQ in the United States and seeking approval for BELVIQ in additional territories with one or more collaborators or independently.

**Advance our drug candidates.** We intend to selectively advance our pipeline of drug candidates independently or through collaborations, licenses or other opportunities.

**Continue our research and development efforts.** Our technologies, our drug discovery infrastructure and the integrated approach to research used by our scientists have allowed us to identify and develop BELVIQ as well as a number of GPCR targets and novel compounds. We intend to continue our research and development efforts to selectively advance our programs and to discover additional drug candidates.

### **Our Research and Development Programs**

Our proprietary GPCR-based technologies and our validated drug discovery and development approach are at the core of our research programs, enabling us to internally discover and develop drug candidates. We periodically conduct a review of our programs to prioritize the use of our resources, and we are currently focusing our resources and activities on BELVIQ and the other programs in the below table. In addition to commercializing BELVIQ as a monotherapy for chronic weight management, we intend to explore BELVIQ's therapeutic potential in combination with other drugs and for other indications. Our research and development programs also include GPR119 and earlier-stage programs that span several therapeutic areas.

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### **Currently Active Programs**

#### ***BELVIQ® (lorcaserin HCl)***

According to the Centers for Disease Control and Prevention, more than one-third of US adults were obese in 2009-2010. Studies have shown that a weight loss of 5% to 10% of body weight from baseline can result in meaningful improvements in cardiovascular risk factors (e.g., lipids, blood pressure and blood glucose), quality of life and functional capacity, and a significant reduction in the incidence of type 2 diabetes.

In June 2012, the FDA approved our internally discovered drug, BELVIQ, for chronic weight management in adults who are overweight with a comorbidity or obese. The DEA has proposed that BELVIQ be classified as a Schedule IV drug under the Controlled Substances Act, or CSA. Once the DEA finalizes the scheduling designation, BELVIQ will be available to eligible patients by prescription in the United States.

We have granted exclusive marketing and distribution rights for BELVIQ to Eisai for most of North and South America and to Ildong for South Korea. We expect that in 2013 Eisai will submit applications for the regulatory approval of BELVIQ in Mexico, Canada and Brazil, and Ildong will submit an application for the regulatory approval of BELVIQ in South Korea. In addition, we intend to enter into additional collaborations to support the commercialization of BELVIQ in other territories. We have composition of matter patents for BELVIQ issued in most major jurisdictions globally that, in most cases, are capable of continuing into 2023. With respect to the United States, we have filed applications for patent extension, which, if granted, will extend the patent term for BELVIQ into 2026.

BELVIQ is believed to decrease food consumption and promote satiety by selectively activating serotonin 2C receptors in the brain. Activation of these receptors may help a person eat less and feel full after eating smaller amounts of food.

#### *FDA Approval of BELVIQ and Availability in the United States*

In the United States, BELVIQ is indicated as an adjunct to a reduced-calorie diet and increased physical activity for chronic weight management in adult patients with an initial body mass index (BMI) of:

30 kg/m<sup>2</sup> or greater (obese), or

27 kg/m<sup>2</sup> or greater (overweight) in the presence of at least one weight-related comorbid condition (e.g., hypertension, dyslipidemia, type 2 diabetes).

#### Limitations of Use:

The safety and efficacy of coadministration of BELVIQ with other products intended for weight loss, including prescription drugs (e.g., phentermine), over-the-counter drugs, and herbal preparations, have not been established.

The effect of BELVIQ on cardiovascular morbidity and mortality has not been established.

Following the final DEA scheduling, we expect that Eisai will launch BELVIQ in the United States with an initial sales force of approximately 200 representatives, 50 managed market specialists and three health economists. We also expect that Eisai will focus their initial targeting efforts on approximately 28,000 physicians who focus a significant portion of their practice on weight management, including certain endocrinologists, cardiologists, obesity specialists, internists and primary care physicians.

#### *US Post-Marketing Requirements*

As part of the US approval of BELVIQ, we and Eisai committed to evaluate the effect of long-term treatment with BELVIQ on the incidence of major adverse cardiovascular events in overweight and obese patients with cardiovascular disease or multiple cardiovascular risk factors, as well as to conduct post-marketing





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studies to assess the safety and efficacy of BELVIQ for weight management in obese pediatric patients. With respect to such studies, which we expect will take several years to complete, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for the cardiovascular outcomes trial, and we will share equally with Eisai the expenses of certain pediatric studies.

### *Additional Development of BELVIQ*

We plan to assess the safety and efficacy of BELVIQ in combination with one or more other drugs, such as phentermine, and for other indications, such as smoking cessation. In the event that we conduct any non-FDA required development work relating to BELVIQ, we would expect to incur additional expenses, which may be significant depending on whether, and to what extent, a collaborator shares the expenses. Eisai and we have agreed to not commercialize outside of our collaboration any product that competes with BELVIQ in any of the territories under our agreement.

### *BELVIQ Outside of the United States*

We are independently seeking regulatory approval of BELVIQ in the European Union and Switzerland, and, in 2012, we submitted applications for such regulatory approval. We also intend to seek regulatory approval of BELVIQ in additional territories that are not currently under collaboration.

Eisai is responsible for filing applications for regulatory approval of BELVIQ under our collaboration that includes most of North and South America, and Ildong is responsible for filing an application for regulatory approval of BELVIQ under our collaboration that is for South Korea. We expect that in 2013 Eisai will submit applications for the regulatory approval of BELVIQ in Mexico, Canada and Brazil, and Ildong will submit an application for the regulatory approval of BELVIQ in South Korea.

## **European Union**

In March 2012, we submitted a Marketing Authorization Application, or MAA, through the centralized procedure with the European Medicines Agency, or EMA, for the marketing approval of BELVIQ in the European Union. The proposed indication for BELVIQ in the European Union is for patients over 18 years old as an adjunct to diet and exercise for weight control in obese patients (BMI  $\geq$  30 kg/m<sup>2</sup>), or overweight patients (BMI > 27 kg/m<sup>2</sup>) with associated risk factor(s), such as hypertension, dyslipidemia, type 2 diabetes managed with oral hypoglycemic medicinal products, or sleep apnea. For our centralized submission, the United Kingdom has been assigned as rapporteur and Sweden as co-rapporteur.

The EMA's Committee for Medicinal Products for Human Use, or CHMP, provided feedback to our MAA in the form of a Day 120 List of Questions. We responded to the CHMP in October 2012, and, in January 2013, the CHMP provided further feedback in the form of a Day 180 List of Outstanding Issues.

The major objections in the Day 180 List of Outstanding Issues relate to non-clinical and clinical issues, including tumors in rats, valvulopathy and psychiatric events, and the CHMP requested that we further justify BELVIQ's overall benefit-risk balance taking these issues into consideration. The issues will need to be addressed before the CHMP can recommend BELVIQ for marketing approval in the European Union.

We have responded to the Day 180 List of Outstanding Issues in writing. As part of this process, the CHMP will consult with groups of independent experts who will provide recommendations on the outstanding issues. In addition, we have been invited by the CHMP to provide an oral explanation, and we expect to have other discussions with the CHMP and their experts. The CHMP is expected to reach its final opinion on the BELVIQ MAA by nominal Day 210, which, accounting for expected clock stoppages during the regulatory process, we expect to occur in the first half of 2013.

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**Switzerland**

In July 2012, we submitted a MAA with Swissmedic for the marketing approval of BELVIQ in Switzerland. The proposed indication for BELVIQ in Switzerland is as an adjunct to diet and exercise for weight control in obese patients (BMI  $\geq 30$  kg/m<sup>2</sup>), or overweight patients (BMI > 27 kg/m<sup>2</sup>) with associated risk factor(s), such as hypertension, dyslipidemia, cardiovascular disease, type 2 diabetes or sleep apnea.

In late February 2013, Swissmedic provided feedback to our MAA in the form of a list of questions with major objections, which include objections that are similar to those identified with respect to our MAA for the European Union. We are in the process of preparing our response.

*Eisai BELVIQ Collaboration: North and South America*

In July 2010, Arena GmbH entered into a Marketing and Supply Agreement with Eisai. Under this agreement, we granted Eisai exclusive rights to commercialize BELVIQ in the United States and its territories and possessions. This agreement was expanded in May 2012 to include most of North and South America, including Mexico, Canada and Brazil. As in the original agreement, we will manufacture BELVIQ at our facility in Switzerland, and Eisai will purchase BELVIQ from us. We will sell BELVIQ to Eisai for marketing and distribution in the United States and in the additional territories for a purchase price starting at 31.5% and 30.75%, respectively, of Eisai's aggregate annual net product sales in all of the territories on an aggregate basis. The purchase price will increase on a tiered basis in the United States and in the additional territories to as high as 36.5% and 35.75%, respectively, on the portion of Eisai's annual net product sales exceeding \$750.0 million, subject to reduction (for sales in a particular country), including in the event of generic competition in the applicable country. The amended agreement includes certain payments by Eisai if certain annual minimum sales requirements in the additional territories are not met during the first ten years after initial commercial sale in Mexico, Canada or Brazil.

We are eligible to receive up to an aggregate of \$1.19 billion in one-time purchase price adjustment payments and other payments based on Eisai's annual net sales of BELVIQ in the United States and the additional territories on an aggregate basis, with the first and last amounts payable, with annual net sales of \$250.0 million and \$2.5 billion, respectively. Of these payments, Eisai will pay us a total of \$330.0 million for annual net sales of up to \$1.0 billion. We are also eligible to receive up to an additional \$185.0 million in one-time purchase price adjustment payments based on Eisai's annual net sales of BELVIQ in the additional territories, with the first and last amounts payable upon first achievement of annual net sales of \$100.0 million and \$1.0 billion in the additional territories, respectively.

We have received from Eisai upfront payments totaling \$55.0 million, a \$20.0 million milestone payment and \$3.5 million in reimbursements of development and patent expenses. In addition, we will receive an additional \$65.0 million in milestone payments following the completion of DEA scheduling. We are also eligible to receive a total of \$54.5 million in additional regulatory and development milestone payments.

Eisai is responsible for regulatory activities related to the New Drug Application, or NDA, for BELVIQ as well as the regulatory activities for obtaining regulatory approval in any country in the additional territories under our collaboration.

With respect to any development work required by the FDA following approval of the BELVIQ NDA, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for such work, except that Eisai and we will share equally the expenses of certain pediatric or adolescent studies. With respect to the additional territories, Eisai is responsible for most of the expenses associated with seeking and obtaining regulatory approval in such territories. If the regulatory authority for a country in the additional territories requires development work before or following approval of BELVIQ in such country, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for such work, with the exception of the expenses for stability testing, which we will share equally with Eisai.

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Eisai and we have agreed to not commercialize outside of our collaboration any product that competes with BELVIQ in the United States or the additional territories. The agreement includes a stand-still provision limiting Eisai's ability to acquire our securities and assets.

Eisai will indemnify Arena GmbH for losses resulting from certain third-party claims, including for (a) Eisai's negligence, willful misconduct or violation of law, except for US product liability claims, (b) Eisai's breach of the marketing and supply agreement or related agreements, except for US product liability claims, (c) certain uses or misuses of BELVIQ, (d) certain governmental investigations of Eisai related to BELVIQ, and (e) infringement relating to Eisai's use of certain trademarks related to BELVIQ. Arena GmbH will indemnify Eisai for losses resulting from US product liability claims or from certain third-party claims, including for (i) Arena GmbH's negligence, willful misconduct, failure to comply with law, breach of any agreement with a third party with respect to product development prior to the effective date of the agreement with Eisai, (ii) Arena GmbH's negligence or willful misconduct with respect to certain uses or misuses of BELVIQ outside of the agreement, (iii) certain uses or misuses of BELVIQ after the term of the agreement or in any territory no longer under the agreement, (iv) Arena GmbH's negligence, willful misconduct or violation of law, (v) Arena GmbH's breach of the marketing and supply agreement or related agreements; (vi) certain infringement of intellectual rights of a third party; and (vii) infringement relating to Eisai's use of certain trademarks related to BELVIQ. In addition, each of Arena GmbH and Eisai will share equally in losses resulting from third-party product liability claims in the territories added with the amended agreement, except to the extent caused by one party's negligence, willful misconduct, violation of law or breach or default of the amended agreement or certain other agreements between the parties.

Eisai may terminate the amended agreement with respect to the United States or any country in the additional territories following the later of the expiration of all issued BELVIQ patents in such country and 12 years after the first commercial sale of BELVIQ in such country. Either party has the right to terminate the amended agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for commercialization concerns, and (c) for certain intellectual property infringement. Eisai also has the right to terminate the amended agreement early in its entirety or with respect to each country in certain circumstances, including (i) termination in a country if sales of generic equivalents of BELVIQ in such country exceed sales of BELVIQ in that country (based on volume), and (ii) if Eisai is acquired by a company that has a product that competes with BELVIQ. In addition, we can terminate the amended agreement early in its entirety or with respect to each country in the additional territories in certain circumstances, including termination in each country if Eisai does not satisfy certain regulatory filing and commercialization diligence requirements in such country.

*Ildong BELVIQ Collaboration: South Korea*

In November 2012, Arena GmbH entered into a Marketing and Supply Agreement with Ildong for BELVIQ. Under the agreement, we granted Ildong exclusive rights to commercialize BELVIQ in South Korea for weight loss or weight management in obese and overweight patients, subject to regulatory approval of BELVIQ by the Korea Food and Drug Administration, or KFDA.

Under the agreement, we received an upfront payment of \$5.0 million, and will receive an additional \$3.0 million upon the approval of BELVIQ by the KFDA. Ildong is responsible for the development, regulatory approval and, ultimately, commercialization of BELVIQ in South Korea for weight loss or weight management in obese and overweight patients, including related costs and expenses. We will manufacture BELVIQ at our facility in Switzerland, and sell BELVIQ to Ildong for a purchase price starting at 35% of Ildong's annual net sales. The purchase price will increase on a tiered basis up to 45% on the portion of annual net sales exceeding \$15.0 million. If certain annual net sales amounts are not met, we can convert Ildong's right to commercialize BELVIQ in South Korea to be non-exclusive.

Ildong has agreed not to conduct activities outside of our agreement related to the approval or commercialization of any other pharmaceutical product for weight loss, weight management or obesity in

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South Korea. We have agreed not to conduct activities outside of our agreement related to the commercialization in South Korea of any pharmaceutical product containing BELVIQ intended for end use in weight loss or weight management in obese and overweight patients.

Ildong will indemnify Arena GmbH for losses resulting from certain third-party claims, including for (a) Ildong's negligence, willful misconduct or violation of law, (b) Ildong's breach of the marketing and supply agreement or related agreements, (c) certain uses or misuses of BELVIQ (including any product liability claim and other claims relating to sales or development of BELVIQ in South Korea), (d) certain governmental investigations of Ildong related to BELVIQ, and (e) infringement relating to Ildong's use of trademarks related to BELVIQ. Arena GmbH will indemnify Ildong for losses resulting from certain third-party claims, including for (i) Arena GmbH's negligence, willful misconduct or violation of law, and (ii) Arena GmbH's breach of the marketing and supply agreement or related agreements.

Unless terminated earlier, the agreement with Ildong will continue in effect until the later of the expiration of all issued patents relating to BELVIQ in South Korea and 12 years after the first commercial sale of BELVIQ in South Korea. Either party has the right to terminate the agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for certain commercialization concerns, and (c) for certain intellectual property concerns. Ildong also has the right to terminate the agreement early in certain circumstances, including if we notify Ildong that Ildong's right to commercialize BELVIQ in South Korea will become non-exclusive.

*BELVIQ Phase 3 Clinical Development*

The three trials included in our BELVIQ Phase 3 development program are summarized in the following table:

	<b>BLOOM</b>	<b>BLOSSOM</b>	<b>BLOOM-DM</b>
<b>Number of patients</b>	3,182	4,008	604
<b>Treatment groups</b>	Placebo, BELVIQ 10 mg BID	Placebo, BELVIQ 10 mg once daily, or QD, BELVIQ 10 mg BID	Placebo, BELVIQ 10 mg QD, BELVIQ 10 mg BID
<b>Patient demographics</b>	BMI <sup>3</sup> 30, or <sup>3</sup> 27 with co-morbid condition(s); average BMI of 36.2 and baseline weight of 220 pounds	BMI <sup>3</sup> 30, or <sup>3</sup> 27 with co-morbid condition(s); average BMI of 35.9 and baseline weight of 220 pounds	BMI <sup>3</sup> 27; type 2 diabetes mellitus; average BMI of 36.0 and baseline weight of 228 pounds
	Average age 44	Average age 44	Average age 53
	84% women	80% women	54% women
	Caucasian (67%)	Caucasian (67%)	Caucasian (61%)
	African-American (19%) Hispanic (12%)	African-American (20%) Hispanic (11%)	African-American (21%) Hispanic (14%)
<b>Duration</b>	2 years	1 year	1 year
<b>Echocardiographic monitoring</b>	Screening, every 6 months, post-baseline	Baseline, every 6 months, post-baseline	Baseline, every 6 months, post-baseline
<b>First patient enrolled</b>	November 2006	January 2008	December 2007
<b>Last patient completed</b>	February 2009	July 2009	June 2010
<b>NDA submission</b>	Original NDA 2009	Original NDA 2009	NDA resubmission 2011
<b>Location</b>	USA	USA	USA

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The Phase 3 trials shared the same ordered primary efficacy endpoints: the proportion of patients achieving 5% or greater weight loss from baseline at Week 52; mean weight change from baseline at Week 52; and the proportion of patients achieving 10% or greater weight loss from baseline at Week 52. Secondary endpoints included changes in physical measures, serum lipids, blood pressure, HbA1c and other indicators of glycemic control, body compositions (in BLOSSOM and BLOOM-DM), high-sensitivity C-Reactive Protein, or hs-CRP, (in BLOOM and BLOOM-DM) and quality of life. A standardized program of diet and exercise advice was included in each of the trials.

In addition to routine safety monitoring, each study included echocardiographic monitoring for valvular regurgitation and pulmonary artery pressure. Valvular regurgitation, a measure of backflow or leakage of blood through heart valves due to imperfect valve closing, was scored on a five-point scale (absent, trace, mild, moderate or severe) for the mitral and aortic valves. For regulatory assessment of potential drug effects on heart valves, the FDA defined regurgitant valvulopathy as mild or greater aortic valve regurgitation and/or moderate or greater mitral valve regurgitation. Echocardiographic findings meeting this criterion are sometimes called FDA-defined valvulopathy.

Among the pooled population enrolled in BLOOM and BLOSSOM, 22% had hypertension, 30% had dyslipidemia, 25% had impaired fasting glucose and approximately 8% reported a history of depression. In BLOOM-DM, all patients on BELVIQ 10 mg BID had type 2 diabetes, 61% had hypertension and approximately 6% reported a history of depression.

### **Patient Disposition**

*BLOOM.* The Week 52 completion rate was higher for patients on BELVIQ (54.9%) compared to patients on placebo (45.1%). Discontinuation rates for adverse events were 7.1% vs. 6.7% in the BELVIQ and placebo groups, respectively, for Year 1 and approximately 3.0% for each group in Year 2.

*BLOSSOM.* The Week 52 completion rate was higher for patients on BELVIQ 10 mg BID (57.2%) and 10 mg QD (59.0%) compared to patients on placebo (52.0%). Discontinuation rates for adverse events were 7.2%, 6.2% and 4.6% in the BELVIQ 10 mg BID, BELVIQ 10 mg QD and placebo groups, respectively.

*BLOOM-DM.* The Week 52 completion rate was higher for patients on BELVIQ 10 mg BID (66.0%) compared to patients on placebo (62.1%). Discontinuation rates for adverse events were 8.6% and 4.3% in the BELVIQ 10 mg BID and placebo groups, respectively.

**Table of Contents***BELVIQ Phase 3 Results***Efficacy**

In each of the Phase 3 trials, BELVIQ 10 mg BID was superior to placebo for each of the ordered primary endpoints using a modified intent-to-treat population with last observation carried forward imputation for missing values, or ITT-LOCF, analysis, as summarized in the table below. Patients who completed one year of study participation experienced significantly greater efficacy according to each of the three co-primary endpoints.

	BLOOM		BLOSSOM		BLOOM-DM	
	Placebo	BELVIQ 10 BID	Placebo	BELVIQ 10 BID	Placebo	BELVIQ 10 BID
<b>ITT/LOCF</b>						
% Losing <sup>35</sup> % weight	20.3%	47.5%	25.0%	47.2%	16.1%	37.5%
Mean weight change (%)	2.2%	5.8%	2.8%	5.9%	1.5%	4.5%
% Losing <sup>310</sup> % weight	7.7%	22.6%	9.7%	22.6%	4.4%	16.3%
<b>Per Protocol/Completers*</b>						
% Losing <sup>35</sup> % weight	32.1%	66.4%	34.9%	63.2%	17.9%	44.6%
Mean weight change (%)	3.4%	8.2%	3.9%	7.9%	1.7%	5.5%
% Losing <sup>310</sup> % weight	13.6%	36.2%	16.1%	35.1%	5.8%	20.8%

\* These results are reported for the per protocol populations in BLOOM and BLOSSOM, and for the completers population in BLOOM-DM. The particular statistical analysis reported for each trial was pre-specified in the statistical analysis plan for that trial.

At the end of Year 2 of BLOOM, significantly more patients who took BELVIQ for two years maintained at least 5% weight loss achieved in Year 1 than did patients who took BELVIQ during Year 1 and were changed to placebo for Year 2.

BELVIQ demonstrated similar effects on secondary efficacy variables in BLOOM and BLOSSOM. A pooled analysis of changes from baseline to Week 52 showed significant improvements relative to placebo in waist circumference, BMI, total cholesterol, LDL cholesterol, HDL cholesterol, triglycerides, systolic blood pressure, diastolic blood pressure and heart rate. In BLOOM, significant improvements relative to placebo were also observed for hsCRP, fasting insulin and HOMA-IR (a measure of insulin resistance); these variables were not assessed in BLOSSOM. In BLOSSOM, BELVIQ significantly decreased body fat content relative to placebo; this variable was not assessed in BLOOM. In BLOOM-DM, which included only patients with type 2 diabetes, significant improvements with respect to patients on BELVIQ 10 mg BID relative to those on placebo occurred in HbA1c (-0.9% and -0.4%, respectively) and fasting glucose (-27.4 mg/dL and -11.9 mg/dL, respectively).

At baseline in BLOOM-DM, approximately 90% of patients were taking metformin and approximately 50% of patients were taking sulfonylureas with or without metformin. Weight loss and reductions in HbA1c and fasting plasma glucose were greater with BELVIQ treatment compared to placebo whether patients were treated with metformin or sulfonylureas. Fewer patients on BELVIQ 10 mg BID compared to placebo (13.3% vs. 21.8%, respectively) increased and more patients on BELVIQ 10 mg BID compared to placebo (16.8% vs. 11.5%, respectively) decreased use of anti-diabetic medication during the trial.

**Safety and Tolerability Profile***BLOOM and BLOSSOM Pooled Analysis*

Under the BLOOM and BLOSSOM pooled analysis, the most frequent adverse events reported in Year 1 and their incidences for BELVIQ 10 mg BID and placebo patients, respectively, were as follows: headache (16.8% vs. 10.1%), upper respiratory tract infection (13.7% vs. 12.3%), nasopharyngitis (13.0% vs. 12.0%), sinusitis (7.4% vs. 7.7%) and nausea (8.3% vs. 5.3%). Adverse events of depression, anxiety and suicidal ideation were infrequent and were reported by a similar proportion of each treatment group.

**Table of Contents****BLOOM-DM**

In BLOOM-DM, the most frequent adverse events reported and their incidences for BELVIQ 10 mg BID and placebo patients, respectively, were as follows: hypoglycemia (biochemical, symptomatic or asymptomatic) (29.3% vs. 21.0%), upper respiratory infection (13.7% vs. 14.7%), nasopharyngitis (11.3% vs. 9.9%), headache (14.5% vs. 7.1%), back pain (11.7% vs. 7.9%) and nausea (9.4% vs. 7.9%). Adverse events of depression, anxiety and suicidal ideation were infrequent and were reported by a similar proportion of each treatment group.

**Echocardiographic Analysis**

Echocardiograms were evaluated to assess whether there was an association between BELVIQ and valvular insufficiency. Incidences of new FDA-defined valvulopathy were as follows for BELVIQ 10 mg BID and placebo:

	Dose	Week 24	Week 52	Week 104
<b>BLOOM</b>	BELVIQ 10 mg BID	2.1%	2.7%	2.6%
	Placebo	1.9%	2.3%	2.7%
<b>BLOSSOM</b>	BELVIQ 10 mg BID	2.3%	2.0%	
	Placebo	1.8%	2.0%	
<b>BLOOM-DM</b>	BELVIQ 10 mg BID	2.5%	2.9%	
	Placebo	1.9%	0.5%	
<b>Pooled analysis</b>	BELVIQ 10 mg BID	2.20%	2.37%	
	Placebo	1.88%	2.04%	

***BELVIQ Prior Clinical Development.***

Prior to initiating our Phase 3 clinical trial program, we completed multiple Phase 1 and Phase 2 clinical trials of BELVIQ.

Our Phase 2a clinical trial included 352 obese patients dosed for 28 days, and our Phase 2b clinical trial included 469 obese patients dosed for 12 weeks. Significant weight loss was observed in both Phase 2 clinical trials. The most common adverse events occurring in the Phase 2a and Phase 2b clinical trials included headache, nausea and dizziness.

Our Phase 1 clinical trials included a three-part Phase 1a clinical trial of BELVIQ that established a maximum tolerated dose for the drug candidate and a multiple-dose Phase 1b clinical trial of BELVIQ in obese volunteers. The most common adverse events reported in the Phase 1 clinical trials were related to the central nervous system and the gastrointestinal system. Dose escalation was terminated at the 40 mg QD dose in the Phase 1a trial, a dose that resulted in euphoria and other central nervous system, or CNS, adverse effects. In each of the Phase 1a and 1b trials, serial echocardiograms supported further development of BELVIQ.

***BELVIQ Intellectual Property***

As of February 15, 2013, we owned issued patents that cover compositions of matter for the BELVIQ new chemical entity and related compounds and methods of treatment utilizing BELVIQ and related compounds in 69 jurisdictions, including the United States, Japan, Germany, France, China, Italy, Spain, Canada, the United Kingdom, Russia, Australia, India, and South Korea, and had applications pending in two other jurisdictions, of which the one with the largest pharmaceutical market was Brazil. Based on sales statistics provided by IMS Health, the jurisdictions where BELVIQ patents have been issued accounted for more than 93% of global pharmaceutical sales in 2011, while other jurisdictions where BELVIQ patents remain pending accounted for more than 2% of global pharmaceutical sales in that same year. The patents on BELVIQ issued by the US Patent and Trademark Office have serial numbers US 6,953,787; US 7,514,422; US 7,977,329; US 8,207,158; and US 8,273,734, while the corresponding patent granted by the European Patent Office has serial number EP 1 411 881 B9. Other of our BELVIQ issued patents and patent applications, including those directed to the HCl salt of



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BELVIQ (e.g., US 8,367,657), the hemihydrate of the HCl salt of BELVIQ as well as its crystalline forms (e.g., US 8,168,624 and EP 1 838 677 B1), synthetic routes and intermediates useful in the manufacturing of BELVIQ and pharmaceutical combinations of BELVIQ and phentermine (e.g., US 8,153,621 and EP 1 833 473 B1), are all present in a lesser number of commercially important jurisdictions. The earliest priority date for the patents on BELVIQ is 2002. The terms of these patents are capable of continuing into 2023 in most jurisdictions without taking into account any patent term adjustment or extension regimes of any country or any additional term of exclusivity we might obtain by virtue of the later filed patent applications. With respect to the United States, we have filed applications for patent extension, which, if granted, will extend the patent term for one of our BELVIQ composition of matter patents into 2026.

As of February 15, 2013, we owned registered trademarks on the use of the name BELVIQ in Class 5 for the sale and marketing of pharmaceutical preparations for weight management, weight loss, the treatment of obesity and the maintenance of weight loss in 61 jurisdictions, including the United States, Japan, Germany, France, China, Italy, Spain, the United Kingdom, Russia, Australia and South Korea, and had trademark applications pending in 80 other jurisdictions, of which the three with the largest pharmaceutical markets were Canada, Brazil and India. The trademark on the name BELVIQ registered by the US Patent and Trademark Office has serial number US 4,080,253, while the corresponding trademark registered by the European Union's Office for Harmonization in the Internal Market has serial number CTM 010224905. Other of our BELVIQ registered trademarks and trademark applications, including those in classes 16, 41 and 44 for publications, educational services and medical services, respectively, directed to weight management, weight loss and the maintenance of weight loss are all present in a lesser number of commercially important jurisdictions. As of February 15, 2013, we have also filed trademark applications in Class 5 on one or more transliterations of the name BELVIQ in the local character set or alphabet of seven jurisdictions, including Japan, China, Russia and South Korea.

### ***APD811 Program***

APD811, an orally available agonist of the prostacyclin, or IP, receptor, is an internally discovered investigational drug candidate intended for the treatment of pulmonary arterial hypertension, or PAH.

PAH is a progressive, life-threatening disorder characterized by increased pressure in the arteries that carry blood from the heart to the lungs. The increased pressure strains the heart, which can limit physical activity, result in heart failure and reduce life expectancy. Based on data from the Registry to Evaluate Early And Long-term PAH disease management (REVEAL) of patients in the United States, there is an estimated five-year survival rate of 57% from diagnosis.

Treatment with IP agonists, which can slow disease progression and improve exercise tolerance in PAH patients, is considered standard of care for advanced PAH. Currently available IP agonists belong to the prostanoid class of molecules, and these products need to be administered frequently or continuously through intravenous, subcutaneous or inhaled delivery methods. We believe that an orally available, non-prostanoid IP agonist that provides clinical benefits similar to currently available IP agonists has the potential to improve the standard of care for PAH.

There was a small safety margin from the no observed adverse effect level to significant adverse events in preclinical studies of APD811, and appropriate dosing in humans may require balancing the systemic hypotensive and other potential adverse effects with therapeutic benefits. Pharmacokinetics across species suggested the plasma half-life in humans may support once-daily dosing.

### ***APD811 Development***

In October 2012, we initiated a 28-day, multiple-dose, randomized, double-blind and placebo-controlled Phase 1 clinical trial in healthy volunteers to determine if dose escalation within patients could increase tolerability and to further investigate whether APD811 might adversely affect the QT interval. Thirty subjects (20 APD811, 10 placebo) were randomized to a dose of 0.05 mg once daily or placebo for five days, with

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subsequent dose escalations to 0.1, 0.2, 0.3 and 0.4 mg once daily every six days as tolerated; if a subject could not tolerate an increase in dose, the subject was decreased to the previous tolerated dose. Dose escalation did not appear to increase tolerability as only one subject was able to maintain a dose of 0.2 mg. The most common adverse events were consistent with the expected pharmacology of the drug candidate and the single-dose study described below, with nausea and vomiting as the dose-limiting events. Time matched ECGs and pharmacokinetic/pharmacodynamic analysis did not reveal evidence of a meaningful QT interval effect, consistent with nonclinical *in vitro* and *in vivo* testing. Although we believe these data are encouraging, a definitive answer regarding QT interval will require further assessment.

To optimize the dosing regimen for a potential Phase 2 clinical trial of APD811, we have decided to explore whether twice-daily dosing might substantially increase the tolerability threshold by reducing maximum plasma concentrations for a given daily exposure, and an additional cohort of 20-30 subjects will be initiated in the second quarter of 2013 using a twice-daily regimen and a similar dose escalation scheme. Depending upon the results from this additional cohort, we plan to initiate a Phase 2 clinical trial of APD811 with either once-daily or twice-daily dosing.

Prior to the multiple-dose clinical trial, in December 2010, we initiated a Phase 1 clinical trial to evaluate the safety, tolerability and pharmacokinetics of single-ascending doses of APD811. The randomized, double-blind and placebo-controlled trial evaluated the safety, tolerability and pharmacokinetics of 0.03 mg, 0.05 mg, 0.1 mg and 0.2 mg single doses of APD811. The trial evaluated 32 healthy volunteers in four cohorts of eight participants each, with six randomized to APD811 and two to placebo. APD811 was rapidly absorbed and demonstrated dose-proportional pharmacokinetic exposure over the tested dose range. The terminal half-life was approximately 20 hours. Consistent with the expected pharmacology of APD811, the most common adverse events were headache, vomiting, nausea, jaw pain and flushing; nausea and vomiting were dose limiting at the 0.2 mg dose. As compared to placebo, heart rate trended higher at the 0.05 mg, 0.1 mg and 0.2 mg doses and the corrected QT, or QTc, interval trended higher at the 0.1 mg and 0.2 mg doses.

### *APD811 Intellectual Property*

As of February 15, 2013, we owned pending patent applications and patents covering compositions of matter for APD811 and related compounds and methods of treatment utilizing APD811 and related compounds, synthetic routes and intermediates useful in the manufacturing of APD811, and various solid state forms of APD811 filed in 19 jurisdictions, including the United States, Europe, Japan, China, Canada, Brazil, Russia, Australia, India, and South Korea. Based on sales statistics provided by IMS Health, the jurisdictions where APD811 patents have been filed accounted for more than 95% of global pharmaceutical sales in 2011. The earliest priority date for the patents on APD811 is 2008. The terms of any patents that may issue from these patent applications should be capable of continuing into 2029 in most jurisdictions without taking into account any patent term adjustment or extension regimes of any country or any additional term of exclusivity we might obtain by virtue of later filed patent applications.

### *Temanogrel*

Temanogrel is an inverse agonist of the serotonin 2A receptor intended for the treatment of thrombotic diseases. We believe that this internally discovered drug candidate has the potential to inhibit serotonin-mediated platelet aggregation and vasoconstriction. Temanogrel's dual mechanism may be therapeutically useful for the treatment or prevention of thrombotic diseases.

Thrombosis is the formation of a clot, or thrombus, inside a blood vessel. Thrombus formation that occurs in the arteries leading to the heart or brain can lead to serious thrombotic diseases including myocardial infarction, acute coronary syndrome and stroke. One of the initial events in thrombus formation is the activation of platelets, which then aggregate and adhere to one another as they release certain factors, including high concentrations of serotonin. Serotonin promotes further platelet aggregation and also causes constriction, or narrowing, of the

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blood vessels. Elevated serotonin levels have been associated with increased cardiovascular risk. The prothrombotic effects of serotonin on platelets and blood vessels are mediated by the serotonin 2A receptor, and inverse agonists of the serotonin 2A receptor have the potential to inhibit this activity.

As described below, temanogrel has completed single- and multiple-ascending dose Phase 1 trials in healthy volunteers. Under our Co-Development and License Agreement, Ildong will be responsible for funding and conducting the next two planned clinical trials in this program: an additional Phase 1 trial in healthy volunteers and a Phase 2a proof-of-concept trial in patients.

### *Temanogrel Development*

In July 2007, we initiated a randomized, double-blind, placebo-controlled, single-ascending dose Phase 1a clinical trial evaluating temanogrel in 90 healthy male and female volunteers. Doses originally intended for study ranged from 1 mg to 160 mg, but due to favorable tolerability the maximum dose was increased to 320 mg. In this trial, a maximum tolerated dose could not be defined despite achieving high concentrations in blood. Temanogrel was rapidly absorbed, and exposures were generally related to dose. Terminal half-life ( $t_{1/2}$ ) of parent plus active metabolites was also related to dose, reaching approximately 11 hours at the higher doses. Dose-dependent inhibition of serotonin-mediated amplification of platelet aggregation was demonstrated, supporting the preclinical data generated around temanogrel and establishing initial clinical validation for temanogrel's novel mechanism of action.

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

### *Ildong Temanogrel Collaboration*

In November 2012, we entered into a Co-Development and License Agreement with Ildong for temanogrel. Under the agreement, we granted Ildong exclusive rights to commercialize temanogrel in South Korea for myocardial infarction, acute coronary syndrome, stroke, peripheral artery disease and other cardiovascular diseases, subject to further development and regulatory approval of temanogrel. Initially, Ildong will be responsible for funding and conducting, under the direction of a joint steering committee, the next two planned clinical trials in this program: an additional Phase 1 trial in healthy volunteers and a Phase 2a proof-of-concept trial in patients.

We will maintain ownership of temanogrel outside of South Korea, and have the rights to use data generated by Ildong for the development and potential commercialization of temanogrel outside of South Korea by us or other Arena licensees. In addition, Ildong has agreed to pay us a \$2.0 million development milestone if the planned additional Phase 1 and Phase 2a clinical trials conducted by Ildong support continued development and we or another Arena licensee initiates a Phase 2b clinical trial of temanogrel. We are also eligible to receive a royalty on net sales of temanogrel in South Korea, while Ildong is eligible to receive a share of future payments received by us related to licensing transactions and sales of temanogrel in other territories.

Ildong will indemnify us for losses resulting from certain third-party claims, including for (a) Ildong's negligence, willful misconduct or violation of law, (b) Ildong's breach of the agreement, (c) certain uses or misuses of temanogrel (including any product liability claim and other claims relating to sales or development of

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temanogrel in South Korea), and (d) certain governmental investigations of Ildong related to temanogrel. We will indemnify Ildong for losses resulting from certain third-party claims, including for (i) our negligence, willful misconduct or violation of law, and (ii) our breach of the agreement.

Unless terminated earlier or extended, the agreement will continue in effect until the later of the expiration of all issued patents relating to temanogrel in South Korea and 10 years after the first commercial sale of temanogrel in South Korea. Either party has the right to terminate the agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for certain commercialization concerns, and (c) for certain intellectual property concerns.

*Temnogrel Intellectual Property*

As of February 15, 2013, we owned issued patents that cover compositions of matter for temanogrel and related compounds and methods of treatment utilizing temanogrel and related compounds in 75 jurisdictions, including the United States, Japan, Germany, France, China, Italy, Spain, the United Kingdom, Russia, and Australia, and had applications pending in 24 other jurisdictions, of which the largest pharmaceutical markets were Canada, Brazil, India, and South Korea. Based on sales statistics provided by IMS Health, the jurisdictions where temanogrel patents have been issued accounted for more than 88% of global pharmaceutical sales in 2011, while other jurisdictions where temanogrel patents remain pending accounted for more than 11% of global pharmaceutical sales in that same year. The patent on temanogrel issued by the US Patent and Trademark Office has serial number US 7,884,101, while the corresponding patent granted by the European Patent Office has serial number EP 1 833 799 B1. Other of our temanogrel issued patents and patent applications, including those directed to the temanogrel HCl salt as well as its crystalline forms, synthetic routes and intermediates useful in the manufacturing of temanogrel, and the active metabolites of temanogrel have all been filed in a lesser number of commercially important jurisdictions. The earliest priority date for the patents on temanogrel is 2004. The terms of these patents are capable of continuing into 2025 in most jurisdictions without taking into account any patent term adjustment or extension regimes of any country or any additional term of exclusivity we might obtain by virtue of the later filed patent applications.

*APD334 Program*

We are researching and developing SIP<sub>1</sub> receptor agonists, including APD334, as potential oral treatments for a number of conditions related to autoimmune diseases, including multiple sclerosis, psoriasis and rheumatoid arthritis. SIP<sub>1</sub> receptors have been demonstrated to be involved in the modulation of several biological responses, including lymphocyte trafficking from lymph nodes to the peripheral blood. Five SIP receptors have been identified. A non-selective oral SIP agonist, fingolomod, has demonstrated lowering of lymphocyte counts in blood and been approved for the treatment of multiple sclerosis. We have optimized potent and selective small molecule SIP<sub>1</sub> receptor agonists that reduce the severity of disease in preclinical autoimmune disease models of multiple sclerosis, such as the experimental autoimmune encephalomyelitis, or EAE, model, and the collagen-induced arthritis, or CIA, animal disease model. We plan to initiate a Phase 1 clinical trial of APD334 in the first half of 2013.

*APD334 Intellectual Property*

As of February 15, 2013, we owned pending patent applications covering compositions of matter for APD334 and related compounds, methods of treatment utilizing APD334 and related compounds, and various salts of APD334 and crystalline forms thereof filed in 16 jurisdictions, including the United States, Europe, Japan, China, Canada, Brazil, Russia, Australia, India, and South Korea. Based on sales statistics provided by IMS Health, the jurisdictions where APD334 patents have been filed accounted for more than 94% of global pharmaceutical sales in 2011. Other of our APD334 pending patent applications, including those directed to synthetic routes and intermediates useful in the manufacturing of APD334 have all been filed in a lesser number of commercially important jurisdictions. The earliest priority date for the patents on APD334 is 2008. The terms

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of any patents that may issue from these patent applications should be capable of continuing into 2029 in most jurisdictions without taking into account any patent term adjustment or extension regimes of any country or any additional term of exclusivity we might obtain by virtue of the later filed patent applications.

### ***APD371 Program***

We are researching and developing APD371 for the potential treatment of pain. The analgesic effects of CB receptor agonists are well established in the scientific literature. However, they have been limited in utility by the psychotropic effects associated with activation of the CB1, but not CB2, receptor subtype. We have identified several novel, potent, CB2-selective, orally available lead compounds that are intended to retain the analgesic activity of CB receptor agonists while avoiding the limiting psychotropic side effects. Preclinical efficacy with these CB2 receptor agonists has been established in animal models of pain. Our current lead candidate, APD371, is in preclinical development.

### ***GPR119 Program***

We believe GPR119 represents a novel pharmaceutical target for discovering orally available small molecule agonists for the treatment of type 2 diabetes. GPR119 is expressed in beta cells, which are located in the pancreas and responsible for secreting insulin in response to increases in blood glucose. Stimulation of GPR119 has been shown to promote insulin release by beta cells in response to elevated blood glucose levels. In addition, GPR119 is expressed in cells other than pancreatic beta cells, such as endocrine cells in the gastrointestinal tract. In preclinical studies and clinical trials, GPR119 agonists have stimulated the release of GLP-1, GIP and PYY, incretins that play important roles in insulin regulation and other metabolic pathways.

We own a broad array of internally discovered, orally available GPR119 agonists, and a portfolio of patents and patent applications directed to a range of materials and methods that are related to the discovery and development of GPR119 agonists. The technologies covered by our patents and patent applications include materials and methods that may be used to identify and determine the activity of molecules that modulate GPR119, methods that measure the incretin response to GPR119 agonists and pharmaceutical compositions containing both GPR119 agonists and DPP-4 inhibitors.

Type 2 diabetes is characterized by dysregulation of insulin sensitivity, insulin secretion and hepatic glucose production. Therapies for type 2 diabetes act by improving insulin release, enhancing insulin sensitivity, increasing insulin levels, modifying glucose absorption from the gut, or modifying hepatic glucose production. Current oral medications for type 2 diabetes may have side effects that include hypoglycemia, weight gain, edema or possible increases in cardiovascular mortality, prompting continuing efforts to develop therapeutics to improve the treatment of diabetes.

### ***Development and Former Ortho-McNeil-Janssen Collaboration***

In December 2004, we entered into a collaboration and license agreement with Ortho-McNeil-Janssen Pharmaceuticals, Inc., or Ortho-McNeil-Janssen, to further develop GPR119 agonists for the potential treatment of type 2 diabetes and other disorders. Under the collaboration, Ortho-McNeil-Janssen advanced two Arena-discovered compounds into clinical trials, APD668 and APD597. Although we believe the data from these trials suggest GPR119 agonists have the potential to improve glucose control, in December 2010, Ortho-McNeil-Janssen terminated the collaboration. As a result of the termination, GPR119 compounds and related intellectual property and other information (including the investigational new drug, or IND, application relating to APD597) reverted to us.

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### **Other Earlier-Stage Development and Research Programs**

We are continuing our efforts to discover and develop additional novel drugs that target GPCRs to address unmet medical needs. The extent of our earlier-stage research and developments efforts will depend on our available resources and prioritization decisions.

### **Our GPCR Focus, Technologies and Programs**

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

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

We believe that our drug discovery approach, specialized expertise and technologies offer several advantages for drug discovery, including: (a) eliminating the need to identify the native ligand for an orphan receptor; (b) enhancing the detection of, and allowing us to simultaneously identify, both receptor inhibitor and receptor activator drug leads; (c) allowing for the identification of drug leads that inhibit both ligand-independent and ligand-dependent activity; and (d) providing the ability to discover novel and improved therapeutics directed at known receptors.

### **Intellectual Property**

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

As of February 15, 2013, we owned, in part or in whole, or had exclusively licensed the following patents: 70 in the United States, 19 in Japan, 17 in Germany, 17 in France, 15 in China, 14 in Italy, 14 in Spain, 7 in Canada, 17 in the United Kingdom, 8 in Russia, 18 in Australia, 5 in India, 12 in Korea, and approximately 440 in other jurisdictions. In addition, as of February 15, 2013, we had approximately 532 patent applications before the US Patent and Trademark Office, foreign patent offices and international patent authorities. These patents and patent applications are divided into 92 distinct families of related patents that are directed to chemical compositions of matter, methods of treatment using chemical compositions, research on GPCR genes, CART, and other novel screening methods or pharmaceutical manufacturing processes. 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 approximately 644 patents and 512 patent applications, were invented solely by our employees. The remaining four of our patent families, which include a total of approximately 28 patents and 20 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. As part of our efforts to

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conserve our financial resources, we are reviewing our patent portfolio to identify patents and patent applications that we deem to have relatively low value to our ongoing business operations. To the extent we identify such patents and patent applications and abandon them, the number of patents and patent applications reported above will be reduced in the future. There is also no assurance that we will correctly identify which of our patents and patent applications should be maintained and which should be abandoned. 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. Because the time from filing a patent application relating to our business to the issuance, if ever, of the patent is often more than three years and because any marketing and regulatory approval for a drug often occurs several years after the related patent application is filed, the resulting market exclusivity afforded by any patent on our drug candidates and technologies will likely be substantially less than 20 years.

In the United States, patent term extensions are available for certain delays in either patent office proceedings or marketing and regulatory approval processes. Under the Drug Price Competition and Patent Term Restoration Act of 1984, or the Hatch-Waxman Act, the term of a patent that covers an FDA-approved drug may also be eligible for patent term extension, or PTE. PTE permits patent term restoration of a US patent as compensation for the patent term lost during product development and the FDA regulatory review process. The Hatch-Waxman Act permits a PTE of up to five years beyond the expiration of the patent. This period is generally one-half the time between the effective date of an IND (falling after issuance of the patent) and the submission date of an NDA, plus the time between the submission date of an NDA and the approval of that application, provided the sponsor acted with diligence. A PTE cannot extend the remaining term of a patent beyond a total of 14 years from the date of product approval and only one patent applicable to an approved drug may be extended. The application for PTE is subject to approval by the US Patent and Trademark Office in conjunction with the FDA. We believe it currently takes about two years to obtain approval of the application for PTE.

Outside of the United States, similar provisions may be available in the European Union, Japan, South Korea and some other jurisdictions to extend the term of a patent that covers an approved drug. The length of any such extension would vary by country. Our European patents may be eligible for supplemental protection certificates of up to five years in one or more countries.

However, due to the specific requirements for obtaining these extensions, there is no assurance that our patents will be afforded extensions even if we encounter significant delays in patent office proceedings or marketing and regulatory approval.

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

## **Competition**

The biotechnology and pharmaceutical industries are highly competitive and are subject to rapid and significant change. We face significant competition from organizations with drugs or drug candidates that do

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may compete with BELVIQ or 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 and development 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 BELVIQ include Hoffmann-La Roche Inc., the US prescription drug unit of the Roche Group, which markets with Genentech USA, Inc., orlistat under the brand name Xenical, GlaxoSmithKline Consumer Healthcare which markets an over-the-counter low-dose version of orlistat in the United States under the brand name alli, and VIVUS Inc., which markets a combination of phentermine and topiramate under the brand name Qsymia. Another competitor is phentermine, which is a generic drug sold by a number of companies. Prescribers may also prescribe other drugs, including in combination or off label, that would compete with BELVIQ. We also face competition from other approaches for weight loss, including behavior modification (such as diet and exercise), surgical approaches (such as gastric bypass surgery and gastric banding), and herbal or other supplements.

There are also potentially competing drug candidates and other approaches for weight loss being developed by various pharmaceutical and medical device companies and other entities. Some programs in discovery, preclinical or other stages of development may include serotonin 2C programs. In January 2011, the FDA issued a complete response letter, or CRL, with respect to Orexigen Therapeutics, Inc.'s NDA for a drug candidate for the treatment of obesity that is a combination of bupropion and naltrexone. In January 2013, Orexigen publicly stated that it is conducting a cardiovascular outcomes trial, or CVOT, of the drug candidate evaluating the occurrence of major adverse cardiovascular events, or MACE, in patients participating in the study, and it expects to be in position to resubmit the NDA in the second half of 2013 with a potential approval in early 2014.

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 therapeutic products or drug discovery techniques, or to adapt more readily to technological advances than we can. Accordingly, our competitors may succeed in obtaining patent protection, receiving FDA approval or commercializing drugs before we do.

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

We may rely on collaborators for support of development programs and for the manufacturing and marketing of drug candidates. Such collaborators may be conducting multiple drug development efforts within the same disease areas that are the subject of their agreements with us, which may negatively impact the development of drugs that are subject to our agreements. In addition, we face and will continue to face intense competition from other companies for such collaborative arrangements, and technological and other developments by others may make it more difficult for us to establish such relationships.



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### **Government Regulation**

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

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

completion of extensive preclinical laboratory tests and preclinical animal studies, many of which are required to be performed in accordance with the FDA's Good Laboratory Practice, or GLP, regulations;

submission to the FDA of an IND, which must become effective before human clinical trials may begin and be updated annually;

performance of adequate and well-controlled human clinical trials to establish the safety and efficacy of the drug candidate for each proposed indication;

submission to the FDA of an NDA after completion of all pivotal clinical trials, accompanied by payment of a substantial user fee to the FDA;

a determination by the FDA within 60 days of its receipt of the NDA to file the NDA for review;

satisfactory completion of an FDA pre-approval inspection, or PAI, of the manufacturing facilities at which the active pharmaceutical ingredient, or API, and finished drug product, or FDP, are produced and tested to assess compliance with Current Good Manufacturing Practices, or CGMP, regulations; and

FDA review and approval of the NDA prior to any commercial marketing or sale of the drug in the United States. Prior to commercialization, centrally acting drugs are generally subject to review and potential scheduling by the Drug Enforcement Administration of the US Department of Justice, or DEA.

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

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

patients are being exposed to

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an unacceptable health risk. Clinical testing also must satisfy extensive Good Clinical Practice, or GCP, regulations and regulations for informed consent and privacy of individually identifiable information.

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

*Phase 1 Clinical Trials.* Studies are initially conducted in a limited population to test the drug candidate for safety, dose tolerance, absorption, metabolism, distribution and excretion, typically in healthy volunteers, but in some cases in patients.

*Phase 2 Clinical Trials.* Studies are generally conducted in a limited patient population to identify possible adverse effects and safety risks, explore the initial efficacy of the product for specific targeted indications and to determine dose range or pharmacodynamics. Multiple Phase 2 clinical trials may be conducted by the sponsor to obtain information prior to beginning larger and more expensive Phase 3 clinical trials.

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

*Phase 4 Clinical Trials.* The FDA may approve an NDA for a drug candidate, but require that the sponsor conduct additional clinical trials to further assess the drug after NDA approval under a post-approval commitment. In addition, a sponsor may decide to conduct additional clinical trials after the FDA has approved an NDA. Post-approval trials are typically referred to as Phase 4 clinical trials.

*New Drug Applications.* The results of drug development, preclinical studies and clinical trials are submitted to the FDA as part of an NDA. NDAs also must contain extensive manufacturing and control information. An NDA must be accompanied by a significant user fee. Once the submission has been accepted for filing, the FDA's goal is to review applications within 10 months from its acceptance of the filing or, if the application relates to an unmet medical need in a serious or life-threatening indication, 6 months from its acceptance of the filing. The review process is often significantly extended by FDA requests for additional information or clarification. The FDA may refer the application to an advisory committee for review, evaluation and recommendation as to whether the application should be approved. The FDA is not bound by the recommendation of an advisory committee. The FDA may deny approval of an NDA by issuing a CRL if the applicable regulatory criteria are not satisfied. A CRL may require additional clinical data and/or an additional pivotal Phase 3 clinical trial(s), and/or other significant, expensive and time-consuming requirements related to clinical trials, preclinical studies or manufacturing. Data are not always conclusive and the FDA may interpret data differently than we or our collaborators interpret data. Approval may occur with Risk Evaluation and Mitigation Strategies, or REMS, that may limit the labeling, distribution or promotion of a drug product. Once issued, the FDA may withdraw product approval if ongoing regulatory requirements are not met or if safety problems occur after the product reaches the market. In addition, the FDA may require testing, including Phase 4 clinical trials, and surveillance programs to monitor the safety effects of approved products which have been commercialized, and the FDA has the power to prevent or limit further marketing of a product based on the results of these post-marketing programs or other information.

*Other US Regulatory Requirements.* Products manufactured or distributed pursuant to FDA approvals are subject to continuing regulation by the FDA, including recordkeeping, annual product quality review and reporting requirements. Adverse event experience with the product must be reported to the FDA in a timely fashion and pharmacovigilance programs to proactively look for these adverse events are mandated by the FDA. Drug manufacturers and their subcontractors are required to register their establishments with the FDA and certain state agencies, and are subject to periodic unannounced inspections by the FDA and certain state agencies for compliance with ongoing regulatory requirements, including CGMPs, which impose certain procedural and documentation requirements upon us and our third-party manufacturers. Following such inspections, the FDA

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may issue notices on Form 483 and Warning Letters that could cause us to modify certain activities. A Form 483 notice, if issued at the conclusion of an FDA inspection, can list conditions the FDA investigators believe may have violated CGMP or other FDA regulations or guidelines. FDA guidelines specify that a Warning Letter be issued only for violations of regulatory significance, also known as Official Action Indicated, or OAI. Failure to adequately and promptly correct the observation(s) can result in regulatory action. In addition to Form 483 notices and Warning Letters, failure to comply with the statutory and regulatory requirements can subject a manufacturer to possible legal or regulatory action, such as suspension of manufacturing, seizure of product, injunctive action or possible civil penalties. We cannot be certain that we or our present or future third-party manufacturers or suppliers will be able to comply with the CGMP regulations and other ongoing FDA regulatory requirements. If we or our present or future third-party manufacturers or suppliers are not able to comply with these requirements, the FDA may halt our clinical trials, require us to recall a drug from distribution or withdraw approval of the NDA for that drug.

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

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

To distribute products commercially, we or our collaborators, as applicable, must comply with state laws that require the registration of manufacturers and wholesale distributors of pharmaceutical products in a state, including, in certain states, manufacturers and distributors who ship products into the state even if such manufacturers or distributors have no place of business within the state. Some states also impose requirements on manufacturers and distributors to establish the pedigree of product in the chain of distribution, including some states that require manufacturers and others to adopt new technology capable of tracking and tracing product as it moves through the distribution chain.

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

*Outside of the United States.* Outside of the United States, the ability to market a product is contingent upon obtaining marketing authorization from the appropriate regulatory authorities. The requirements governing marketing authorization, pricing and reimbursement vary widely from country to country.

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In the European Economic Area, or EEA (which is comprised of the 27 Member States of the European Union, plus Norway, Iceland and Liechtenstein), medicinal products can only be commercialized after obtaining a Marketing Authorization, or MA. There are two types of marketing authorizations:

The Community MA, which is issued by the European Commission through the centralized procedure, based on the opinion of the CHMP of the EMA, and which will be valid throughout the entire territory of the EEA. The centralized procedure is mandatory for certain types of products, such as biotechnology medicinal products, orphan medicinal products, and medicinal products containing a new active substance indicated for the treatment of AIDS, cancer, neurodegenerative disorders, diabetes, autoimmune and viral diseases. The centralized procedure is optional for products containing a new active substance not yet authorized in the EEA, or for products that constitute a significant therapeutic, scientific or technical innovation or which are in the interest of public health in the European Union.

National MAs, which are issued by the competent authorities of the Member States of the EEA and only cover their respective territory, are available for products not falling within the mandatory scope of the centralized procedure. Where a product has already been authorized for marketing in a Member State of the EEA, this National MA can be recognized in another Member State through the Mutual Recognition Procedure. If the product has not received a National MA in any Member State at the time of application, it can be approved simultaneously in various Member States through the Decentralized Procedure. Under the Decentralized Procedure, an identical dossier is submitted to the competent authorities of each of the Member States in which the MA is sought, one of which is selected by the applicant as the Reference Member State. The competent authority of the Reference Member State prepares a draft assessment report, a draft summary of the product characteristics, or SPC, and a draft of the labeling and package leaflet, which are sent to the other Member States (referred to as the Member States Concerned) for their approval. If the Member States Concerned raise no objections, based on a potential serious risk to public health, to the assessment, SPC, labeling, or packaging proposed by the Reference Member State, the product is subsequently granted a national MA in all the Member States (i.e., in the Reference Member State and the Member States Concerned).

Under the procedures described above, before granting the MA, the EMA or the competent authorities of the Member States of the EEA make an assessment of the risk-benefit balance of the product on the basis of scientific criteria concerning its quality, safety and efficacy.

The holder of a Community MA or National MA is subject to various obligations under applicable EEA regulations, such as pharmacovigilance obligations, requiring it to, among other things, report and maintain detailed records of adverse reactions, and to submit periodic safety update reports to the competent authorities. The holder must also ensure that the manufacturing and batch release of its product is in compliance with the applicable requirements. The MA holder is further obligated to ensure that the advertising and promotion of its products complies with applicable laws, which can differ from Member State to Member State of the EEA.

*Hatch-Waxman Exclusivity, Patent Term Extension and EU Data Protection.* Market exclusivity provisions of the Hatch-Waxman Act can delay the submission or approval of applications seeking to rely upon the FDA's findings of safety and effectiveness for a previously approved NDA. A new chemical entity subject to an NDA, such as BELVIQ, is entitled to a five-year period of non-patent marketing exclusivity in the United States. A drug is a new chemical entity if the FDA has not previously approved any other new drug containing the same active moiety, which is the molecule or ion responsible for the action of the drug substance. During the exclusivity period, the FDA may not accept for review an abbreviated new drug application, or ANDA, or a 505(b)(2) NDA submitted by another company for another version of such drug where the applicant does not own or have a legal right of reference to all the data required for approval. However, such an application may be submitted after four years if it contains a certification of patent invalidity or non-infringement of patents listed with the FDA by the NDA holder. The Hatch-Waxman Act also provides three years of marketing exclusivity for an NDA, or supplement to an existing NDA, if new clinical investigations, other than bioavailability studies, that

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were conducted or sponsored by the applicant are deemed by the FDA to be essential to the approval of the application. This three-year exclusivity covers only the conditions of use associated with the new clinical investigations and does not prohibit the FDA from approving ANDAs for drugs containing the original active ingredient. Five-year and three-year exclusivity will not delay the submission or approval of a full NDA. However, an applicant submitting a full NDA would be required to conduct or obtain a right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

Under Regulation (EC) No 726/2004/EC and Directive 2001/83/EC (each as amended), the European Union has adopted a harmonized approach to data protection (known as the 8 + 2 + 1 formula). The approach permits eight years of data protection and 10 years of marketing protection. An additional non-cumulative one-year period of marketing protection is possible if during the data protection period (the first eight years of the 10-year period), the MA holder obtains an authorization for one or more new therapeutic indications that are deemed to bring a significant clinical benefit compared to existing therapies.

The data protection period begins on the date of the product's first MA in the European Union and prevents generics from relying on the MA holder's pharmacological, toxicological and clinical data for a period of eight years. After eight years, a generic product application may be submitted and generic companies may rely on the MA holder's data. However, a generic cannot launch until two years later (or a total of 10 years after the first MA in the European Union of the innovator product), or three years later (or a total of 11 years after the first MA in the European Union of the innovator product) if the MA holder obtains marketing authorization for a new indication with significant clinical benefit within the eight-year data protection period.

The 8 + 2 + 1 protection scheme applies to products that have been authorized in the European Union by either the EMA through the centralized procedure or the competent authorities of the Member States of the EEA (under the Decentralized or Mutual Recognition procedures). As in the United States, the data and marketing protection will not delay the submission or approval of an MAA if the applicant conducted or obtained the right of reference to all of the preclinical studies and adequate and well-controlled clinical trials necessary to demonstrate safety and effectiveness.

*Drug Product Manufacturing.* In Zofingen, Switzerland, our Swiss subsidiary, Arena GmbH operates a drug product manufacturing facility. Swissmedic, a public service organization of the Swiss federal government, is the central Swiss agency for the authorization and supervision of therapeutic products. Our Swiss manufacturing facility has been inspected by the competent regional authorities (Regionales Heilmittelinспекtorat der Nordostschweiz, Basel, Switzerland), acting on behalf of Swissmedic, which issued GMP and production licenses to Arena GmbH for the production of drugs. The production license is valid until July 2017, and we expect that it will be renewed again in the future. The FDA conducted a PAI of this facility in July 2010, which resulted in No Actions Indicated, and classified this facility as acceptable. Consistent with FDA practice, we expect a routine FDA inspection in the 2013/2014 timeframe.

*Prescription Drug Reimbursement.* In the United States and markets in other countries, sales of prescription drug products depend in part on the availability of reimbursement from third-party payers. Third-party payers include government health administrative authorities, managed care providers, private health insurers and other organizations. The process for determining whether a payer will provide coverage for a drug product may be separate from the process for setting the price or reimbursement rate that the payer will pay for the drug product. Third-party payers may limit coverage to specific drug products on an approved list, or formulary, which might not include all of the FDA-approved drug products for a particular indication. Third-party payers are increasingly challenging the price and examining the medical necessity and cost-effectiveness of medical products and services, in addition to their safety and efficacy. We may need to conduct expensive pharmacoeconomic studies to demonstrate the cost-effectiveness of our products. A payer's decision to provide coverage for a drug product does not imply that an adequate reimbursement rate will be approved. Adequate third-party reimbursement may not be available to enable us to maintain price levels sufficient to realize an appropriate return on our investment in product development.

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Pricing and rebate programs must comply with the Medicaid rebate requirements of the Omnibus Budget Reconciliation Act of 1990 and the Veterans Health Care Act of 1992, or VHCA, each as amended. If products are made available to authorized users of the Federal Supply Schedule of the General Services Administration, additional laws and requirements apply. Under the VHCA, drug companies are required to offer certain drugs at a reduced price to a number of federal agencies including US Department of Veterans Affairs and US Department of Defense, the Public Health Service and certain private Public Health Service designated entities in order to participate in other federal funding programs including Medicare and Medicaid. Participation under the VHCA requires submission of pricing data and calculation of discounts and rebates pursuant to complex statutory formulas, as well as the entry into government procurement contracts governed by the Federal Acquisition Regulations.

The containment of healthcare costs has become a priority of federal, state and foreign governments, and the prices of drugs have been a focus in this effort. In addition, emphasis on managed care in the United States has increased and we expect will continue to increase the pressure on drug pricing. Coverage policies, third-party reimbursement rates and drug pricing regulation may change at any time. In particular, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act of 2010, or collectively PPACA, was enacted in the United States in March 2010 and contains provisions that may reduce the profitability of drug products, including, for example, increased rebates for drugs sold to Medicaid programs, extension of Medicaid rebates to Medicaid managed care plans, mandatory discounts for certain Medicare Part D beneficiaries and annual fees based on pharmaceutical companies' share of sales to federal health care programs. Even if favorable coverage and reimbursement status is attained for our products, less favorable coverage policies and reimbursement rates may be implemented in the future.

In markets outside the United States, including the countries in the European Union, pricing of pharmaceutical products may be subject to governmental control. Evaluation criteria used by many EU government agencies for the purposes of pricing and reimbursement typically focus on a product's degree of innovation and its ability to meet a clinical need unfulfilled by currently available therapies. Some jurisdictions operate positive and negative list systems under which products may only be marketed once a reimbursement price has been agreed. To obtain reimbursement or pricing approval, some of these countries may require the completion of clinical trials that compare the cost-effectiveness of a particular drug candidate to currently available therapies. Other member states allow companies to fix their own prices for medicines, but monitor and control company profits. In addition, in some countries, cross-border imports from low-priced markets exert a commercial pressure on pricing within a country. There can be no assurance that any country that has price controls or reimbursement limitations for drug products will allow favorable reimbursement and pricing arrangements for any of our products.

*Healthcare Fraud and Abuse.* Pharmaceutical companies are subject to various federal and state laws pertaining to healthcare fraud and abuse, including anti-kickback and false claims laws. We have a commercial compliance program and have adopted the voluntary Code on Interactions with Healthcare Professionals, or PhRMA Code, promulgated by the Pharmaceutical Research and Manufacturers of America, including its 2009 revisions. The PhRMA Code addresses interactions with respect to marketed products and related pre- and post-launch activities and reinforces the intention that interactions with healthcare professionals are professional exchanges designed to benefit patients and to enhance the practice of medicine.

The federal Anti-Kickback Statute makes it illegal for any person, including a prescription drug manufacturer, or a party acting on its behalf, to knowingly and willfully solicit, offer, receive or provide any remuneration, directly or indirectly, in exchange for, or to induce, the referral of business, including the purchase, order or prescription of a particular drug, for which payment may be made under federal healthcare programs such as Medicare and Medicaid. Some of the state prohibitions apply to referral of patients for healthcare services reimbursed by any source, not only the Medicare and Medicaid programs.

In the course of practicing medicine, physicians may legally prescribe FDA-approved drugs for an indication that has not been approved by the FDA and which, therefore, is not described in the product's

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approved labeling, so-called off-label use. The FDA does not ordinarily regulate the behavior of physicians in their choice of treatments. The FDA and other government agencies do, however, restrict communications on the subject of off-label use by a manufacturer or those acting on behalf of a manufacturer. Companies may not promote FDA-approved drugs for off-label uses. The FDA and other governmental agencies do permit a manufacturer (and those acting on its behalf) to engage in some limited, non-misleading, non-promotional exchanges of scientific information regarding unapproved indications. The US False Claims Act prohibits, among other things, anyone from knowingly and willfully presenting, or causing to be presented for payment to third-party payers (including Medicare and Medicaid) claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed or claims for medically unnecessary items or services. Violations of fraud and abuse laws may be punishable by criminal and/or civil sanctions, including imprisonment, fines and civil monetary penalties, as well as possible exclusion from federal health care programs (including Medicare and Medicaid). In addition, under this and other applicable laws, there is an ability for private individuals to bring similar actions. Further, there are an increasing number of state laws that require pharmaceutical companies to establish marketing compliance programs, file periodic reports with the state, make periodic public disclosures on sales, marketing, pricing, clinical trials and other activities, or register their sales representatives, as well as prohibiting pharmacies and other healthcare entities from providing certain physician prescribing data to pharmaceutical companies for use in sales and marketing, and prohibiting certain other sales and marketing practices. Beginning August 1, 2013, a similar federal requirement will require manufacturers to track and report to the federal government certain payments made to physicians and teaching hospitals. These laws may affect our or our collaborators' operational activities by imposing administrative and compliance burdens.

Our activities are also potentially subject to federal and state consumer protection and unfair competition laws. We are also subject to the US Foreign Corrupt Practices Act, or the FCPA, which prohibits companies and individuals from engaging in specified activities to obtain or retain business or to influence a person working in an official capacity. Under the FCPA, it is illegal to pay, offer to pay, or authorize the payment of anything of value to any foreign government official, governmental staff members, political party or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity.

*Healthcare Privacy and Security Laws.* Federal and state laws protect the confidentiality of certain health information, in particular, individually identifiable information, and restrict the use and disclosure of that information. At the federal level, the Department of Health and Human Services promulgated health information privacy and security rules under the Health Insurance Portability and Accountability Act of 1996, or HIPAA. In addition, many state laws apply to the use and disclosure of health information. We may be subject to, or our or our collaborators' marketing activities may be limited by, HIPAA, and its implementing regulations, which established uniform standards for certain covered entities (healthcare providers, health plans and healthcare clearinghouses) governing the conduct of certain electronic healthcare transactions and protecting the security and privacy of protected health information. The American Recovery and Reinvestment Act of 2009, commonly referred to as the economic stimulus package, included sweeping expansion of HIPAA's privacy and security standards called the Health Information Technology for Economic and Clinical Health Act, or HITECH, which became effective on February 17, 2010. Among other things, the new law makes HIPAA's privacy and security standards directly applicable to business associates, independent contractors or agents of covered entities that receive or obtain protected health information in connection with providing a service on behalf of a covered entity. HITECH also increased the civil and criminal penalties that may be imposed against covered entities, business associates and possibly other persons, and gave state attorneys general new authority to file civil actions for damages or injunctions in federal courts to enforce the federal HIPAA laws and seek attorney's fees and costs associated with pursuing federal civil actions.

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

In January 2008, we acquired from Siegfried certain drug product facility assets, including manufacturing facility production licenses, fixtures, equipment, other personal property and real estate assets in Zofingen,



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Switzerland. We are using this facility to manufacture and package BELVIQ as well as certain drug products for Siegfried. From time to time, we may also use this facility to manufacture and package tablets and capsules for other of our programs.

All of our manufacturing services revenues are attributable to Siegfried, which is our only customer for such services. Our revenues of \$27.6 million for the year ended December 31, 2012, included \$3.8 million, or 13.8%, of our total revenues, from Siegfried. Our revenues of \$12.7 million for the year ended December 31, 2011, included \$5.3 million, or 41.9%, of our total revenues, from Siegfried. Our revenues of \$16.6 million for the year ended December 31, 2010, included \$7.1 million, or 42.5% of our total revenues, from Siegfried.

We purchase raw materials, starting materials, intermediates, API, excipients and other materials from commercial sources. To decrease the risk of an interruption to our supply, when we believe it is reasonable for us to do so, we source these materials from multiple suppliers so that, in general, the loss of any one source of supply would not have a material adverse effect on commercial production, project timelines or inventory of supplies for our studies or clinical trials. However, currently we have only one or a limited number of suppliers for some of these materials for BELVIQ and for other of our programs. The loss of a primary source of supply would potentially delay our production of BELVIQ or our development projects and potentially those of current or future collaborators. We intend to maintain a safety stock of certain of these materials to help avoid delays in production, but we do not know whether such stock will be sufficient. Our facility in Zofingen is the only manufacturer of finished drug product for BELVIQ. We intend to have a second source of supply for finished drug product of BELVIQ, but we believe that it would take two years or longer to secure another source.

## **Compliance with Environmental Regulations**

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

With regard to Arena GmbH's drug product manufacturing facility, Arena GmbH has contracted with Siegfried to provide safety, health and environmental services and assess compliance, train personnel and oversee Arena GmbH's compliance with the applicable safety, health and environmental regulations. Arena GmbH is subject to regulation under the Environmental Protection Act (Umweltschutzgesetz, USG), the Chemicals Act (Chemikaliengesetz, ChemG), and the Federal Act on the Protection of Waters (Gewässerschutzgesetz, GSchG), which refer to several ordinances such as the Ordinance on Air Pollution Control (Luftreinhalteverordnung, LRV), the Ordinance on Incentive Taxes on Volatile Organic Compounds (Verordnung über die Lenkungsabgabe auf flüchtigen organischen Verbindungen, VOCV), the Water Protection Ordinance (Gewässerschutzverordnung, GSchV), the Ordinance of the Handling of Wastes (Verordnung über den Verkehr mit Abfällen, VeVA), the Chemicals Ordinance (Chemikalienverordnung, ChemV), the Ordinance on Chemical Risk Reduction (Chemikalien-Risikoreduktions-Verordnung, ChemRRV) and the Ordinance on Protection against Major Accidents (Störfallverordnung, StfV). The competent authorities in Switzerland for the implementation of environmental regulations are BAFU (Bundesamt für Umwelt / Federal Office for the Environment), which is the Swiss federal agency for the environment, and the respective authorities of the Canton of Aargau (Abteilung für Umwelt, AfU). Furthermore, the BAFU and the BAG (Bundesamt für Gesundheit / Federal Office of Public Health) share authorities with regard to the implementation and, together with the respective authority of the Canton of Aargau (Amt für Verbraucherschutz), the supervision of compliance with the laws and regulations related to chemicals. Occupational health and safety is regulated, in particular, by the EKAS (Eidgenössische Koordinationskommission für Arbeitssicherheit) guideline No. 6508 (ASA), governing the evaluation of worker safety and the reporting to the relevant authorities. The competent authority for the implementation of occupational health and safety regulations is the Canton of Aargau (Amt für Wirtschaft und Arbeit), whereby exposure limits are set by SUVA (Schweizerische Unfallversicherungsanstalt), which is the Swiss Accident Insurance Fund.

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

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

### **Research and Development Expenses**

Research and development activities are the primary source of our expenses. Our research and development expenses include personnel costs, research supplies, facility and equipment costs, clinical and preclinical study fees, and manufacturing costs for non-commercial products. Such expenses totaled \$54.1 million for the year ended December 31, 2012, \$58.7 million for the year ended December 31, 2011, and \$75.5 million for the year ended December 31, 2010. We include research and development sponsored by collaborators in our total research and development expenses. We estimate that such expenses totaled \$27,000 and \$3.3 million in 2012 and 2011, respectively. Our collaborators did not fund any of our research and development expenses in 2010.

### **Employees**

As of February 20, 2013, we had a total of 293 employees, including 242 in research, development and manufacturing and 51 in administration, which includes finance, legal, facilities, information technology and other general support areas.

### **Available Information**

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

### **Item 1A. Risk Factors.**

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

*In June 2012, the US Food and Drug Administration, or FDA, approved our internally discovered drug, BELVIQ® (lorcaserin HCl), for chronic weight management in adults who are obese or are overweight with at least one weight related comorbid condition. BELVIQ (pronounced BEL-VEEK ) is the trade name for*

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*lorcaserin hydrochloride in the United States. While BELVIQ may in the future be marketed outside of the United States as BELVIQ or under a different trade name, we use BELVIQ in this report to refer to the finished drug product for lorcaserin hydrochloride or, depending on the context, lorcaserin hydrochloride or other solid state forms of lorcaserin.*

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

**Our prospects are highly dependent on the success of BELVIQ, our first and only FDA-approved drug. To the extent BELVIQ is not commercially successful, our business, financial condition and results of operations may be materially adversely affected and the price of our common stock may decline.**

We are focusing a significant portion of our activities and resources on BELVIQ, and we believe our prospects are highly dependent on, and a significant portion of the value of our company relates to, the successful commercialization of BELVIQ in the United States and potentially in additional territories. The marketing approval and successful commercialization of BELVIQ is subject to many risks, including the risks discussed in other risk factors, and BELVIQ may not receive marketing approval from any other regulatory agency. If the results or timing of regulatory filings, the regulatory process, regulatory developments, commercialization, clinical trials or preclinical studies, or other activities, actions or decisions related to BELVIQ do not meet our, your, analysts' or others' expectations, the market price of our common stock could decline significantly.

The FDA approval of BELVIQ includes the following limitations of use: (i) the safety and efficacy of coadministration of BELVIQ with other products intended for weight loss including prescription drugs (e.g., phentermine), over-the-counter drugs, and herbal preparations have not been established, and (ii) the effect of BELVIQ on cardiovascular morbidity and mortality has not been established. In connection with approving BELVIQ, the FDA recommended to the US Drug Enforcement Administration, or DEA, that BELVIQ be classified as a Schedule IV drug under the Controlled Substances Act, or CSA. The DEA has proposed that BELVIQ be classified as a Schedule IV drug, and BELVIQ will not be commercially available in the United States until the DEA provides the final scheduling designation. BELVIQ will be marketed in the United States by Eisai Inc., or Eisai, under the Amended and Restated Marketing and Supply Agreement, or Eisai Agreement, between Eisai and our wholly owned subsidiary, Arena Pharmaceuticals GmbH, or Arena GmbH. Under such agreement, we also granted Eisai exclusive rights to market and distribute BELVIQ in most of the other territories in North and South America.

Arena GmbH has also entered into a Marketing and Supply Agreement, or Ildong Agreement, for BELVIQ with Ildong Pharmaceutical Co., Ltd., or Ildong. Under the Ildong Agreement, we granted Ildong exclusive rights to market and distribute BELVIQ in South Korea for weight loss or weight management in obese and overweight patients, subject to regulatory approval of BELVIQ by the Korea Food and Drug Administration.

We expect that revenues under the Eisai Agreement and, to a lesser extent, the Ildong Agreement will constitute the majority of our revenues over the next several years, and future payments to us under the agreements will substantially depend on the achievement of milestones and BELVIQ product sales. Each of these agreements may be terminated early in certain circumstances, in which case we may not receive additional milestone or other payments under the agreement. We cannot guarantee if or when any milestones or BELVIQ product sales under these agreements will be achieved or paid in the future.

We have not received regulatory approval for BELVIQ in any territories outside of the United States, nor do we have any marketing and supply agreements or similar arrangements in place other than the Eisai Agreement and the Ildong Agreement. We are independently seeking regulatory approval for BELVIQ in the European Union and Switzerland, and plan to seek, independently or under collaboration, regulatory approval for BELVIQ in other territories. There is no assurance that any pending or future regulatory applications will be approved. We also plan to enter into marketing and supply agreements or similar arrangements with one or more pharmaceutical companies to commercialize BELVIQ in additional territories, but there is no assurance that we will be able to do so at all or on terms that you or others view as favorable.

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In the United States, the degree of market acceptance and commercial success of BELVIQ, and our revenues, will depend on a number of factors, including the following, as well as risks identified in other risk factors:

the DEA's scheduling designation for BELVIQ, which designation may take longer and be more restrictive than we or others expect or change after finalization;

the successful launch of BELVIQ and growth of commercial sales;

the number of patients with the potential to use BELVIQ, the number of patients receiving BELVIQ treatment and the results achieved by such patients;

the pace of market acceptance, which may depend on the timing and impact of competition and BELVIQ's perceived advantages or disadvantages over alternative treatments (including relative convenience, ease of administration, and prevalence and severity of any adverse events, including any unexpected adverse events);

the actual and perceived safety and efficacy of BELVIQ on both a short- and long-term basis among actual or potential patients, healthcare providers and others in the medical community, regulatory agencies and insurers and other payers;

incidence and severity of any side effects, including as a result of off-label use or in combination with one or more drugs;

new data relating to BELVIQ, including as a result of additional studies, trials or analyses;

physicians may not prescribe, and patients may not take, BELVIQ until at least results from our required post-marketing studies are available or other long-term efficacy and safety data exists;

the claims, limitations, warnings and other information in BELVIQ's current or future labeling;

Eisai's maintenance of an effective sales force and medical affairs and related functions, and its sales, marketing and other representatives accurately describing BELVIQ consistent with its approved labeling;

BELVIQ's commercial price and perceived cost-effectiveness;

the ability of patients and physicians and other providers to obtain and maintain sufficient coverage or reimbursement, if any, by third-party payers, including government payers;

the ability of group purchasing organizations, or GPOs, including distributors and other network providers, to sell BELVIQ to their constituencies; and

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the establishment and maintenance of adequate commercial manufacturing capabilities ourselves or through third-party manufacturers, our ability to meet commercial demand for BELVIQ and supply chain issues.

If BELVIQ is approved in territories outside the United States, the degree of market acceptance and commercial success of BELVIQ in these territories, and our revenues, will depend on similar factors as in the United States, as well as territory-specific risks.

We cannot predict the extent to which BELVIQ will be utilized by patients in the United States or, subject to applicable regulatory approval, patients in other territories, or whether physicians, healthcare insurers or maintenance organizations, or the medical community in general, will accept or utilize BELVIQ. The potential population of patients eligible for treatment with BELVIQ may be reduced based on the limitations for use included in the approved label, which may be more restrictive in different territories. Our and others' efforts to educate the medical community and third-party payers regarding the benefits of BELVIQ will require significant resources and may not be successful in achieving the objectives. If BELVIQ does not achieve sufficient market acceptance in the United States, and ultimately in other territories, the revenues we generate from sales will be limited and our business may not be profitable.

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**Data generated or analyzed with respect to reported adverse safety events following marketing or with respect to post-marketing and other studies may result in decreased demand, lower sales, product recall or regulatory action.**

A New Drug Application, or NDA, holder is responsible for assessing and monitoring the safety of a drug that has been approved for marketing. With respect to BELVIQ, Eisai, we and others will assess and monitor the safety of BELVIQ in the marketplace, and we will receive reports of adverse safety events. In addition, as a condition to obtaining FDA approval of BELVIQ, we and Eisai committed to conduct post-marketing studies, including evaluation of the effect of long-term treatment with BELVIQ on the incidence of major adverse cardiovascular events in overweight and obese subjects with cardiovascular disease or multiple cardiovascular risk factors. The cardiovascular outcomes trial will include echocardiographic assessments. We or others may also decide or need to conduct additional studies, clinical trials or analyses of BELVIQ, including in connection with seeking regulatory approval of BELVIQ outside of the United States, in combination with other drugs or for other indications.

New data relating to BELVIQ, including from adverse event reports, post-marketing studies and trials in the United States, and registration and other studies and trials in territories outside the United States, may result in label changes and may adversely affect sales or result in withdrawal of BELVIQ from the market. Foreign regulatory agencies may also consider the new data in reviewing BELVIQ marketing applications in their territories or impose post-approval requirements that require significant additional expenditures. Furthermore, the discovery of significant problems with a product or class of products similar to BELVIQ could have an adverse effect on the BELVIQ program, including commercialization.

In addition, new data or other information, including information about product misuse, may lead government agencies, professional societies, practice management groups or organizations involved in various diseases to publish guidelines or recommendations related to the use of BELVIQ or place greater restrictions on sales. Such guidelines or recommendations may lead to lower sales of BELVIQ.

**Our forecasting of BELVIQ sales will be difficult due to uncertainty about the timing of launch, the rate of adoption and other aspects of commercialization. If our BELVIQ revenue projections are inaccurate, our business may be harmed and our stock price may be adversely affected.**

Our business planning requires us to forecast demand and revenues despite numerous uncertainties, which may be increased because we rely to at least some extent on our collaborators providing us accurate and timely information. Actual results may deviate materially from projected results for various reasons, including the following, as well as risks discussed in other risk factors:

uncertainty relating to the timing and results of the DEA scheduling process and potential for changes in the final scheduling designation;

uncertainty relating to the timing of launch and rate of adoption in the various territories;

uncertainty related to pricing, reimbursement, product returns or recalls, competition and others aspects of commercialization;

Eisai and Ildong control the commercialization of BELVIQ in most of North and South America and in South Korea, respectively, including related strategy and their allocation of resources, and we expect that any future collaborators for BELVIQ will similarly control the commercialization in the applicable territory;

lack of patient and physician familiarity with BELVIQ;

lack of patient use and physician prescribing history;

lack of commercialization experience for BELVIQ, in particular, and weight loss drugs, in general; and

actual sales to patients may significantly differ from expectations based on sales by Eisai to wholesalers.

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The extent to which any of these or other factors individually or in the aggregate may impact sales of BELVIQ is uncertain and difficult to predict. This may lead to lower than expected revenue, inefficiency in expenditures and increased difficulty in operational planning. Revenue shortfalls would have a negative impact on our cash flow and on our business in general. Our revenues from BELVIQ will be based in part on management's estimates, judgment and accounting policies, and incorrect estimates or the SEC's or others' disagreement regarding our estimates or accounting policies may result in changes to our guidance or previously reported results. For example, with respect to the commercialization of BELVIQ in the United States, we expect to recognize revenues upon Eisai's sales to wholesalers and prior to actual sales to patients. In addition, our expected and actual quarterly results may greatly fluctuate, including in the near-term, and such fluctuations can adversely affect the market price of our common stock, perceptions of our ability to forecast demand and revenues, and our ability to maintain and fund our operations.

**We will need to further collaborate or obtain additional funds to conduct our planned research, development and commercialization efforts; we may not be able to further collaborate or obtain adequate funds, your ownership may be substantially diluted if we do obtain additional funds, and you may not agree with the manner in which we allocate our available resources; and we may never become profitable.**

We have accumulated a large deficit since inception that has primarily resulted from the significant research and development expenditures we have made in seeking to identify and validate new drug targets and develop compounds that could become marketed drugs. We expect that our losses and operating expenses may continue to be substantial for at least the short term.

BELVIQ will not be commercially available in the United States until after the DEA provides the final scheduling designation, which designation may take significantly longer or be more restrictive than we or others expect. All of our other programs are in the research or early development stage, and we may not have adequate funds to develop our compounds into marketed drugs. We also intend to explore BELVIQ's therapeutic potential in combination with other drugs and for other indications. It takes many years and potentially hundreds of millions of dollars to successfully develop a preclinical compound or drug candidate into a marketed drug, and our efforts may not result in marketed drugs.

We cannot assure you that any additional payments we may receive under our marketing and supply agreement with Eisai or Ildong will be sufficient to fund our planned research and development and other activities or to result in profitability. We will need to enter into marketing and supply agreements or other arrangements with one or more pharmaceutical companies, or obtain additional funds, to commercialize BELVIQ in additional territories. We may not be able to enter into any such agreement or obtain additional funds, on terms that we or third parties, including investors or analysts, view as favorable, if at all.

Our ability to enter into new collaborations for BELVIQ or any of our drug candidates, and our ability to raise funds in the capital markets on terms that you or others view as favorable, may depend on the outcomes of regulatory applications for marketing approval or additional preclinical and clinical testing. We do not control these outcomes.

We may allocate our resources in ways that do not improve our results of operations or enhance the value of our assets. Our stockholders and others may also not agree with the manner in which we choose to allocate our resources. Any failure to apply our resources effectively could have a material adverse effect on our business or the development of our drug candidates and cause the market price of our common stock to decline.

In addition, if we experience a significant setback or delay, particularly with regard to BELVIQ, or adequate funding is not available, we may eliminate or postpone or scale back some or all of our research or development programs or delay the advancement of one or more of such programs, including in ways with which our stockholders or others may not agree. Any such reductions may adversely impact our development and commercialization timeline for BELVIQ or narrow or slow the development of our pipeline, which we believe would reduce our opportunities for success and result in a decline in the market price of our common stock.



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We have been opportunistic in our efforts to obtain cash, and we expect to continue to evaluate various funding alternatives from time to time. If we obtain additional funding, it may adversely affect the market price of our common stock.

**If we are unable to obtain marketing approvals for BELVIQ outside the United States, or if we are significantly delayed or limited in doing so, our results of operations and business may be materially adversely affected and our stock price may decline.**

In March 2012, we filed a Marketing Authorization Application, or MAA, for BELVIQ in the European Union, and the European Medicines Agency, or EMA, accepted the filing for review. In July 2012, we filed an MAA for BELVIQ with the Swiss health authority, Swissmedic, and Swissmedic has accepted the filing for review. We expect Eisai and Ildong to seek regulatory approval for the marketing of BELVIQ in territories under our agreements, and we plan to seek regulatory approval of BELVIQ in additional territories independently or with one or more pharmaceutical companies.

Despite the FDA's approval of BELVIQ, we cannot assure you or predict with any certainty that any other regulatory authority will grant marketing approval for BELVIQ, or the expected timeframe of any such approval. For example, VIVUS, Inc., announced in October 2012 that, despite the FDA's approval of its drug candidate for the treatment of obesity, the EMA's Committee for Medicinal Products for Human Use, or CHMP, recommended against approval of its MAA for such drug candidate. The review and potential approval of BELVIQ carries many risks and uncertainties, and our or others' BELVIQ regulatory submissions outside of the United States may not be satisfactory to the applicable regulatory authorities, including with regard to demonstrating adequate safety and efficacy for regulatory approval. We have made, and expect to make in the future, assumptions, estimations, calculations and decisions as part of our analyses of data and regulatory submissions, and the applicable regulatory authorities may not accept or agree with our assumptions, estimations, calculations, decisions or analyses or may interpret or weigh the importance of data differently.

Furthermore, as was the case with FDA approval, other regulatory approvals, even if obtained, may be limited to specific indications, limit the type of patients in which the drug may be used, or otherwise require specific warning or labeling language, any of which might reduce the commercial potential of BELVIQ. As with the FDA's approval of BELVIQ, regulatory authorities in other territories may condition BELVIQ marketing approval on the conduct of specific post-marketing studies to further evaluate safety and efficacy, in either particular or general patient populations or both. The results of these studies, discovery of previously unknown issues involving safety or efficacy or failure to comply with post-approval regulatory requirements, including requirements with respect to manufacturing practices, reporting of adverse effects, advertising, promotion and marketing, may result in restrictions on the marketing of BELVIQ or the withdrawal of BELVIQ from the market.

With respect to the European Union, the CHMP provided feedback to our MAA in the form of a Day 120 List of Questions, which identified three issues as major objections: the tumor findings in rats, the dropout rate in clinical trials and how this affects the analysis of efficacy, and the incidences of valvulopathy. In October 2012, we submitted our response to the Day 120 List of Questions.

In January 2013, the CHMP provided further feedback in the form of a Day 180 List of Outstanding Issues. The major objections in the Day 180 List of Outstanding Issues relate to non-clinical and clinical issues, including tumors in rats, valvulopathy and psychiatric events, and the CHMP requested that we further justify BELVIQ's overall benefit-risk balance taking these issues into consideration. The issues will need to be addressed before the CHMP can recommend BELVIQ for marketing approval in the European Union.

We have responded to the Day 180 List of Outstanding Issues in writing. As part of this process, the CHMP will consult with groups of independent experts who will provide recommendations on the outstanding issues. In addition, we have been invited by the CHMP to provide an oral explanation, and we expect to have other discussions with the CHMP and their experts.

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With respect to Switzerland, Swissmedic provided feedback to our MAA in the form of a list of questions with major objections, which include objections that are similar to those identified with respect to our MAA for the European Union. We are in the process of preparing our response.

We cannot assure you that our past or any further responses will be sufficient to the CHMP, the EMA, Swissmedic or others, that the CHMP, the EMA, Swissmedic or others will consider our BELVIQ program or data, including with regard to BELVIQ's efficacy or safety, as sufficient, that the CHMP will recommend to the EMA that BELVIQ be approved when we expect or at all, or that the EMA, Swissmedic or any other regulatory authority will ever approve BELVIQ.

### **Our development and commercialization of BELVIQ may be adversely impacted by cardiovascular side effects associated with drugs used for the treatment of obesity.**

We developed BELVIQ to more selectively stimulate the serotonin 2C receptor than did fenfluramine or dexfenfluramine because we believe this may avoid the cardiovascular side effects associated with fenfluramine and dexfenfluramine (often used in combination with phentermine, the combination of which was commonly referred to as fen-phen). These two drugs were serotonin-releasing agents and non-selective serotonin receptor agonists, and were withdrawn from the market in 1997 after reported incidences of heart valve disease and pulmonary hypertension associated with their usage. In *in vitro* studies examining affinity, activity and serotonin receptor subtype specificity, BELVIQ demonstrated affinity for, and activity at, serotonin 2A, 2B and 2C receptors, but demonstrated greater affinity, activity and selectivity for the serotonin 2C receptor than for the serotonin 2A and 2B receptors. Activation of the latter two receptors has been associated with undesirable effects. Activation of the 2A receptor has been associated with central nervous system, or CNS, effects, including altered perception, mood and abuse potential, and activation of the 2B receptor has been associated with cardiac valvulopathy.

We may not be correct in our belief that more selectively stimulating the serotonin 2C receptor will avoid these undesired side effects, or BELVIQ's selectivity profile may not be adequate to avoid these side effects. BELVIQ's selectivity profile and the potential relationship between the activity of BELVIQ and the activity of fenfluramine and dexfenfluramine may result in increased FDA, EMA or other regulatory scrutiny of the safety of BELVIQ, may raise potential adverse publicity and may affect enrollment of any future clinical trials or product sales. In addition, we cannot guarantee that any other regulatory authority will find our safety data to be sufficient to approve BELVIQ for marketing outside of the United States.

As a condition to obtaining FDA approval of BELVIQ, we and Eisai committed to conduct post-marketing studies to, among other things, evaluate the effect of long-term treatment with BELVIQ on the incidence of major adverse cardiovascular events in overweight and obese subjects with cardiovascular disease or multiple cardiovascular risk factors. The cardiovascular outcomes trial will include echocardiographic assessments, and the results of such trial and assessments may be unfavorable. Unfavorable results from these studies or other studies we or others conduct could negatively impact the commercialization of BELVIQ, limit the revenues we generate from sales, result in BELVIQ's withdrawal from the market, and preclude us from achieving or sustaining profitability.

### **We are dependent on marketing and supply agreements for BELVIQ and the failure to maintain such agreements, or poor performance under such agreements, could negatively impact our business.**

Eisai has primary responsibility for the marketing and distribution of BELVIQ in the United States, as well as other territories in North and South America, and Ildong has primary responsibility for the regulatory approval and, ultimately, marketing and distribution of BELVIQ in South Korea. We have limited control over the amount and timing of resources that Eisai and Ildong will dedicate to such activities. In addition, Eisai and Ildong are responsible for compliance with certain regulatory requirements.

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We are subject to a number of other risks associated with our dependence on the Eisai Agreement and the Ildong Agreement, including:

Eisai or Ildong may not comply with applicable regulatory guidelines with respect to BELVIQ, which could adversely impact the development or commercialization of BELVIQ;

there could be disagreements regarding the agreements or the study or development of BELVIQ that delay or terminate the research, study, development or commercialization of BELVIQ, delay or eliminate potential payments under the agreements or increase our costs under or outside of the agreements; or

Eisai or Ildong may not perform as expected, including with regard to making any required payments, and the agreements may not provide adequate protection or may not be effectively enforced.

We and Eisai or Ildong, as applicable, each have the right to terminate our agreement in certain circumstances. We and Eisai or Ildong, as applicable, could also agree to amend the terms of our agreement, and we or others, including investors and analysts, may not view any amendments as favorable. If either agreement is terminated early, we may not be able to find another company to further develop and commercialize BELVIQ in the covered territory on acceptable terms, if at all, and even if we elected to pursue further development or commercialization of BELVIQ on our own, we might not have the funds or otherwise be able to do so successfully.

We may enter into additional agreements for the commercialization of BELVIQ or one or more of our drug candidates, and may be similarly dependent on the performance of third parties with similar and potentially company-specific risks.

**We are responsible for supplying Eisai and Ildong with BELVIQ, including for commercial sale. We rely to an extent on other companies, including third-party manufacturers and sole-source suppliers, and we or such other companies may encounter failures or difficulties or not receive or provide adequate supply, which could adversely affect the commercial production of BELVIQ or the clinical development or regulatory approval of our drug candidates.**

Under the Eisai Agreement and the Ildong Agreement, we are the exclusive supplier of BELVIQ. We own and operate a manufacturing facility in Switzerland that will produce finished drug product of BELVIQ and potentially of one or more of our drug candidates. Such facility is currently our only source for finished drug product of BELVIQ. In addition, we do not own or operate manufacturing facilities that can produce active pharmaceutical ingredient, or API, intermediates and other material required to make BELVIQ and our drug candidates, or finished drug product for all of our drug candidates. Accordingly, we must either develop or acquire such facilities or rely on third-party manufacturers for such production, which, in either case, would likely require substantial time and funds. With respect to BELVIQ, we estimate that it would take two years or longer and a substantial amount of financial and other resources to secure another source for finished drug product.

We currently contract with other companies to supply API, intermediates and other materials. Certain of these materials are available from only one or a small number of suppliers, and using a new supplier, if available, for finished drug product, API and certain of the other materials could result in substantial delay and greater cost. We expect Siegfried AG (formerly Siegfried Ltd, and referred to collectively in this document as Siegfried) will be the only source of BELVIQ API for at least the short term. Our dependence on one source of finished drug product and API, as well as our dependence on other third parties in the supply chain, may adversely affect our ability to develop and deliver drug products on a timely and competitive basis, or at all.

Any performance failure on the part of us or a third-party manufacturer could delay or otherwise adversely affect the sales of BELVIQ or the clinical development or regulatory approval of BELVIQ or one or more of our drug candidates. We or third-party manufacturers may encounter difficulties involving production yields,

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regulatory compliance, lot release, quality control and quality assurance, as well as shortages of qualified personnel. Approval of BELVIQ, as well as one or more of our drug candidates, could be delayed, limited or denied if the applicable regulatory authority does not approve our processes or facilities or those of a third-party manufacturer. Moreover, the ability to adequately and timely manufacture and supply drug product is dependent on the uninterrupted and efficient operation of the manufacturing facilities, which is impacted by many manufacturing variables including:

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

capacity of our facilities or those of our contract manufacturers;

facility contamination by microorganisms or viruses or cross contamination;

compliance with regulatory requirements, including inspectional notices of violation and Warning Letters;

changes in actual or forecasted demand;

timing and number of production runs;

production success rates and bulk drug yields; and

timing and outcome of product quality testing.

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

We may not be able to enter into agreements for the manufacture of BELVIQ or one or more of our drug candidates with manufacturers whose facilities and procedures comply with applicable law. Manufacturers are subject to ongoing periodic unannounced inspection by the FDA, the DEA, corresponding state and foreign authorities and other regulatory authorities to ensure strict compliance with Current Good Manufacturing Practices, or CGMPs, regulations and other applicable government regulations and corresponding foreign standards. We do not have control over a third-party manufacturer's compliance with these regulations and standards. In addition, we have contracted with Siegfried to provide to us certain technical and business services, including safety, health and environmental services. We are, therefore, relying at least in part on Siegfried's judgment, experience and expertise. We intend to reduce or eliminate our dependence on Siegfried for such technical and business services, and any changes may result in increased cost, additional risk or otherwise negatively impact our operations. If we or one of our manufacturers fail to maintain compliance or otherwise experience setbacks, we or they could be subject to civil or criminal penalties, the production of BELVIQ or one or more 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.



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**Negative US and global economic conditions may pose challenges to our business strategy, which relies on funding from collaborators or the financial markets, and creates other financial risks for us.**

Negative conditions in the US or global economy, including financial markets, may adversely affect our business and the business of our current and prospective distributors, licensees and collaborators, which we sometimes refer to generally as our collaborators, and others with which we do or may conduct business. The duration and severity of these conditions is uncertain. If negative economic conditions persist or worsen, we may be unable to secure funding to sustain our operations or to find suitable collaborators to advance our internal programs, even if we achieve positive results from our research and development or business development efforts. Such negative conditions could also impact commercialization of BELVIQ or any other drugs we develop as well as our financial condition.

From time to time, we may maintain a portfolio of investments in marketable debt securities, which are recorded at fair value. Although we have established investment guidelines relative to diversification and maturity with the objectives of maintaining safety of principal and liquidity, we rely on credit rating agencies to help evaluate the riskiness of investments, and such agencies may not accurately predict such risk. In addition, such agencies may reduce the credit quality of our individual holdings, which could adversely affect their value. Lower credit quality and other market events, such as changes in interest rates and further deterioration in the credit markets, may have an adverse effect on the fair value of our investment holdings and cash position.

**We and certain of our current and former employees and directors have been named as defendants in litigation that could result in substantial costs and divert management's attention.**

Beginning in September 2010, a number of lawsuits were filed against us and certain of our employees and directors on behalf of certain purchasers of our common stock. The lawsuits in general include allegations that we and certain of our employees and directors violated laws by making materially false and misleading statements regarding our BELVIQ trials, thereby artificially inflating the price of our common stock. The plaintiffs are seeking unspecified monetary damages and other relief.

There is no guarantee that we will be successful in defending these lawsuits. Also, our insurance coverage may be insufficient, our assets may be insufficient to cover any amounts that exceed our insurance coverage, and we may have to pay damage awards or otherwise may enter into settlement arrangements in connection with such claims. A settlement of any of these lawsuits could involve the issuance of common stock or other equity, which may dilute your ownership interest. Any payments or settlement arrangements could have material adverse effects on our business, operating results, financial condition or your ownership interest. Even if the plaintiffs' claims are not successful, this litigation could result in substantial costs and significantly and adversely impact our reputation and divert management's attention and resources, which could have a material adverse effect on our business, operating results or financial condition. In addition, such lawsuits may make it more difficult to finance our operations, obtain certain types of insurance (including directors' and officers' liability insurance), and attract and retain qualified executive officers, other employees and directors.

**Our stock price could decline significantly based on the results and timing of clinical trials and preclinical studies of, and decisions affecting, BELVIQ or one or more of our drug candidates.**

The results and timing of clinical trials and preclinical studies can affect our stock price. Preclinical studies include experiments performed in test tubes, in animals, or in cells or tissues from humans or animals. These studies, which are sometimes referred to as nonclinical studies, include all drug studies except those conducted in human subjects, and may occur before or after initiation of clinical trials for a particular compound. Results of clinical trials and preclinical studies of BELVIQ or one or more of our drug candidates may not be viewed favorably by us or third parties, including investors, analysts, current or potential collaborators, the academic and medical communities, and regulators. The same may be true of how we design individual studies, trials and development programs of BELVIQ as well as for any of our drug candidates, and regulatory decisions (including

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by us or regulatory authorities) affecting those programs. Stock prices of companies in our industry have declined significantly when such results and decisions were unfavorable or perceived negatively or when a drug candidate did not otherwise meet expectations.

From time to time we have drug programs in clinical trials. In addition to successfully completing clinical trials, to conduct long-term clinical trials and gain regulatory approval to commercialize drug candidates, regulatory authorities require that all drug candidates complete short- and long-term preclinical toxicity and carcinogenicity studies. These preclinical, animal studies are required to help us and regulatory authorities assess the potential risk that drug candidates may be toxic or cause cancer in humans. The results of clinical trials and preclinical studies are uncertain and subject to different interpretations, and the design of these trials and studies (which may change significantly and be more expensive than anticipated depending on results and regulatory decisions) may also be viewed negatively by us, regulatory authorities or other third parties and adversely impact the development and opportunities for regulatory approval and commercialization of our drug candidates and those under collaborative agreements.

As a condition to obtaining FDA approval of BELVIQ, we and Eisai committed to conduct post-marketing studies to assess the safety and efficacy of BELVIQ for weight management in obese pediatric patients, as well as to evaluate the effect of long-term treatment with BELVIQ on the incidence of major adverse cardiovascular events in overweight and obese patients with cardiovascular disease or multiple cardiovascular risk factors. The cardiovascular outcomes trial will include echocardiographic assessments. In addition we may decide or need to conduct additional studies, clinical trials or analyses of BELVIQ, including in connection with seeking regulatory approval of BELVIQ outside of the United States. Unfavorable results from these studies, trials or analyses could negatively impact market acceptance of BELVIQ, limit the revenues we generate from sales, result in BELVIQ's withdrawal from the market, and preclude us from achieving or sustaining profitability.

We may not be successful in initiating or completing our studies or trials or advancing our programs on our projected timetable, if at all. Any failure to initiate or delays in our studies, trials or development programs, or unfavorable results or decisions or negative perceptions regarding any of our programs, could cause our stock price to decline significantly. This is particularly the case with respect to BELVIQ.

We may report top-line data from time to time, which is based on a preliminary analysis of then-available efficacy and safety data, and such findings and conclusions are subject to change following a more comprehensive review of the data related to the particular study or trial. In addition, we make assumptions, estimations and calculations as part of our analyses of data, and others, including regulatory agencies, may not accept or agree with our assumptions, estimations, calculations or analyses or may interpret or weigh the importance of data differently, which could impact the value of the particular program, the approvability or commercialization of the particular drug candidate or drug and our company in general.

**If we do not commercialize BELVIQ with one or more pharmaceutical companies outside of the territories under existing collaborations, our lack of corporate experience and resources may negatively impact our ability to commercialize BELVIQ in such territories.**

Subject to applicable regulatory approval, we expect to commercialize BELVIQ outside of the territories under existing collaborations with one or more collaborators or independently. We may not be able to enter into agreements to commercialize BELVIQ in such territories on acceptable terms, if at all. If we are unable to enter into such agreements, and we develop or acquire our own capabilities to commercialize BELVIQ in any territory independently, we may require additional capital to develop such capabilities and the marketing and sale of BELVIQ in such territory may be delayed or otherwise impeded by our lack of resources. We may not be successful in developing the requisite capabilities to commercialize BELVIQ without a collaborator. Even if we were able to do so, we have not previously commercialized a drug, and our limited experience may make us less effective at commercial planning, marketing and selling than a more experienced pharmaceutical company. Our lack of corporate experience and adequate resources may impede our efforts to successfully commercialize BELVIQ independently.

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We face competition in our search for pharmaceutical companies to commercialize BELVIQ in additional territories. In addition, if our competitors are able to establish commercialization arrangements with companies who have substantially greater resources than we have (or, with respect to commercializing BELVIQ in a territory under an existing marketing and supply agreement, than our collaborator has), our competitors may be more successful in marketing and selling their drugs, and our ability to successfully commercialize BELVIQ will be limited.

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

The preclinical and clinical development, manufacturing, labeling, packaging, storage, recordkeeping, advertising, promotion, export, marketing and distribution, and other possible activities relating to BELVIQ and our drug candidates are, and any other resulting drugs will be, subject to extensive regulation by the FDA and other regulatory agencies. We are subject to periodic unannounced inspections by the FDA, the DEA and other regulatory agencies, including inspections at Arena GmbH by the FDA, Swissmedic and other regulatory agencies. Failure to comply with applicable regulatory requirements may, either before or after product approval, subject us to administrative or judicially imposed sanctions that may negatively impact the commercialization of BELVIQ or approval of one or more of our drug candidates or otherwise negatively impact our business. Regulatory agencies have in the past inspected certain aspects of our business in the United States and Switzerland, and we were provided with observations of objectionable conditions or practices with respect to our business in the United States. We believe we satisfactorily addressed such observations, but there is no assurance that regulatory agencies will not provide us with observations in future inspections or that we satisfactorily addressed observations provided to us in past inspections.

Neither collaborators nor we are permitted to market a drug candidate in the United States until the particular drug candidate is approved for marketing by the FDA. Specific preclinical data, chemistry, manufacturing and controls data, a proposed clinical trial protocol and other information must be submitted to the FDA as part of an investigational new drug, or IND, application, and clinical trials may commence only after the IND application becomes effective. To market a new drug in the United States, we must submit to the FDA and obtain FDA approval of an NDA. An NDA must be supported by extensive clinical and preclinical data, as well as extensive information regarding chemistry, manufacturing and controls to demonstrate the safety and effectiveness of the drug candidate. Following its review of an NDA or a response to a Complete Response Letter, or CRL, the FDA may approve the NDA or issue a CRL.

Obtaining approval of an NDA can be a lengthy, expensive and uncertain process. As part of the Prescription Drug User Fee Act, or PDUFA, the FDA has a goal to review and act on a percentage of all submissions in a given time frame. The FDA's review goals are subject to change, and it is unknown whether any particular FDA review will be completed within the FDA's review goals or will be delayed. Moreover, the duration of the FDA's review may depend on the number and types of other submissions with the FDA around the same time period. As with BELVIQ, any drug that acts on the CNS has the potential to be scheduled as a controlled substance by the DEA. DEA scheduling is a separate process that can delay drug launch beyond an NDA approval date, and the timing and outcome of such DEA process is uncertain. For example, the FDA approved the NDA for BELVIQ in June 2012, but BELVIQ will not be marketed in the United States until the DEA makes its final scheduling designation, and the outcome may be different or take longer than what is expected. Consistent with the FDA's recommendation, the DEA has proposed that BELVIQ be scheduled as a Schedule IV drug. DEA scheduling ranges from I to V, with I being the most tightly controlled category. If BELVIQ were to be scheduled in a tightly controlled category, such scheduling could negatively impact the ability or willingness to prescribe or dispense BELVIQ, the likelihood that patients will use it and other aspects of our and Eisai's ability to commercialize it. The scheduling designation can also change after it has been finalized.

Regulatory approval of an NDA is not guaranteed. The number and types of preclinical studies and clinical trials that will be required for FDA approval varies depending on the drug candidate, the disease or condition that the drug candidate is designed to target and the regulations applicable to any particular drug candidate. Despite



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the time and expense exerted in preclinical and clinical studies, failure can occur at any stage, and we could encounter problems that cause us to abandon clinical trials or to repeat or perform additional preclinical studies and clinical trials. The FDA can delay, limit or deny approval of a drug candidate for many reasons, including:

a drug candidate may not be deemed adequately safe and effective;

FDA officials may not find the data from preclinical studies and clinical trials sufficient;

the FDA's interpretation and our interpretation of data from preclinical studies and clinical trials may differ significantly;

our or our contractors' or collaborators' failure to comply with applicable FDA and other regulatory requirements, including those identified in other risk factors;

the FDA may not approve the manufacturing processes or facilities;

the FDA may change its approval policies or adopt new regulations; or

the FDA may not accept an NDA or other submission due to, among other reasons, the content or formatting of the submission. Even if approved, drug candidates may not be approved for all indications requested and such approval may be subject to limitations on the indicated uses for which the drug may be marketed, restricted distribution methods or other limitations, such as those required by a Risk Evaluation and Mitigation Strategies, or REMS.

With the exception of our regulatory submissions for BELVIQ, we have not previously submitted an application for marketing approval in the United States or any other jurisdiction. This lack of corporate experience may impede our ability to obtain regulatory approval in a timely manner, if at all, for BELVIQ in territories in which regulatory approval is our responsibility or for any of our drug candidates. Our preclinical and clinical data, other information and procedures relating to a drug candidate may not be sufficient to support approval by the FDA or any other US or foreign regulatory authority, or regulatory interpretation of these data and procedures may be unfavorable. Our business and reputation may be harmed by any failure or significant delay in receiving regulatory approval for the sale of any drugs resulting from our drug candidates. As a result, we cannot predict when or whether regulatory approval will be obtained for any drug we or our collaborators develop.

To market any drugs outside of the United States, we and our current or future collaborators must comply with numerous and varying regulatory requirements of other countries. Approval procedures vary among countries and can involve additional product testing and additional administrative review periods. The time required to obtain approval in other countries might differ from that required to obtain FDA approval. The regulatory approval process in other countries may include all of the risks associated with FDA approval as well as additional risks, some of which may be unanticipated. With respect to our BELVIQ collaborations, our collaborators are responsible for regulatory filings, and we will depend on their capabilities, plans and diligence in obtaining regulatory approval.

In March 2012, we filed an MAA for EU approval of BELVIQ, and the EMA accepted the filing for review. The EU regulatory authorities could determine that our application and data from our BELVIQ studies and trials is not sufficient for EU approval. The approval requirements in the European Union are different than in the United States. For example, the EMA guidelines provide that clinical trials assessing drug candidates intended for weight control should subject patients to a weight reducing diet run-in period, and our Phase 3 clinical trials did not include a run-in period. Such EMA guidelines also provide primary and alternative primary efficacy criteria for weight loss drug candidates. We believe BELVIQ will satisfy the EMA's alternative primary efficacy criterion, which is the proportion of responders achieving more than 10% weight loss at the end of a 12-month period. However, we do not believe BELVIQ meets the more stringent EMA primary efficacy criterion, which requires demonstrating weight loss of at least 10% of baseline weight that is also at least 5% greater than that associated with placebo. The EMA has also raised questions regarding the dropout rate in our clinical trials and how this affects the analysis of efficacy in those trials.



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In October 2012, we submitted our response to the CHMP's Day 120 List of Questions regarding the BELVIQ MAA. The Day 120 List of Questions identified three issues as major objections: the tumor findings in rats, the dropout rate in clinical trials and how this affects the analysis of efficacy, and the incidences of valvulopathy.

In January 2013, the CHMP provided further feedback in the form of a Day 180 List of Outstanding Issues. The major objections relate to non-clinical and clinical issues, including tumors in rats, valvulopathy and psychiatric events, and the CHMP requested that we further justify BELVIQ's overall benefit-risk balance taking these issues into consideration. The issues will need to be addressed before the CHMP can recommend BELVIQ for marketing approval in the European Union.

We have responded to the Day 180 List of Outstanding Issues in writing. As part of this process, the CHMP will consult with groups of independent experts who will provide recommendations on the outstanding issues. In addition, we have been invited by the CHMP to provide an oral explanation, and we expect to have other discussions with the CHMP and their experts.

We have also submitted a MAA with Swissmedic for the marketing approval of BELVIQ in Switzerland. In February 2013, Swissmedic provided feedback to our MAA in the form of a list of questions with major objections, which include objections that are similar to those identified with respect to our MAA for the European Union. We are in the process of preparing our response.

We cannot assure you that our past or any further responses will be sufficient to the CHMP, the EMA, Swissmedic or others, that the CHMP, the EMA, Swissmedic or others will consider our BELVIQ program or data, including with regard to BELVIQ's efficacy or safety, as sufficient, that the CHMP will recommend to the EMA that BELVIQ be approved when we expect or at all, or that the EMA, Swissmedic or any other regulatory authority will ever approve BELVIQ.

Regulatory approval in one territory does not ensure regulatory approval in another, but a failure or delay in obtaining regulatory approval in one territory may negatively impact the regulatory process in others. Failure to obtain regulatory approval in a territory, any delay or setback in obtaining such approval, or our regulatory strategy or decisions could adversely affect the regulatory approval or commercialization of our drug candidates in other territories, including that our drug candidates may not be approved for all indications requested, that such approval may be subject to limitations on the indicated uses for which the drug may be marketed, and with regard to the pricing or reimbursement of any approved drugs.

### **Our drugs will still be subject to extensive post-marketing regulation if approved.**

Following regulatory approval of any of our drug candidates, we and our collaborators will be subject to ongoing obligations and continued regulatory review from the FDA and other applicable regulatory agencies, such as continued adverse event reporting requirements. As with BELVIQ, there may also be additional post-marketing obligations imposed by the FDA or other regulatory agencies. These obligations may result in significant expense and limit the ability to commercialize such drugs.

The FDA or other regulatory agencies may also require that the sponsor of the NDA or foreign equivalent, as applicable, conduct additional clinical trials to further assess approved drugs after approval under a post-approval commitment. Such additional studies may be costly and may impact the commercialization of the drug. For example, as part of the approval of BELVIQ, we and Eisai committed to conduct post-marketing studies to assess the safety and efficacy of BELVIQ for weight management in obese pediatric patients, as well as to evaluate the effect of long-term treatment with BELVIQ on the incidence of major adverse cardiovascular events in overweight and obese subjects with cardiovascular disease or multiple cardiovascular risk factors. These trials are costly and time consuming, and unfavorable results could negatively impact market acceptance of BELVIQ.

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limit the revenues we generate from sales, result in BELVIQ's withdrawal from the market, negatively impact the potential approval of BELVIQ in other territories and preclude us from achieving or sustaining profitability.

The FDA or other regulatory agencies may also impose significant restrictions on the indicated uses for which a drug may be marketed. Additionally, the FDA may require a REMS, including in connection with a drug's approval, to help ensure that the benefits of the drug outweigh its risks. A REMS may be required to include various elements, such as a medication guide or patient package insert, a communication plan to educate healthcare providers of the drug's risks, limitations on who may prescribe or dispense the drug, requirements that patients enroll in a registry or undergo certain health evaluations or other measures that the FDA deems necessary to ensure the safe use of the drug.

With regard to BELVIQ and any of our drug candidates that receive regulatory approval, the labeling, packaging, adverse event reporting, storage, advertising and promotion for the drug will be subject to extensive regulatory requirements. We and the manufacturers of our products are also required to comply with CGMP regulations, which include requirements relating to quality control and quality assurance as well as the corresponding maintenance of records and documentation. Further, regulatory agencies must approve these manufacturing facilities before they can be used to manufacture our products, and these facilities are subject to ongoing regulatory inspections. In addition, regulatory agencies subject a drug, its manufacturer and the manufacturer's facilities to continual review and inspections. The subsequent discovery of previously unknown problems with a drug, including adverse events of unanticipated severity or frequency, or problems with the facility where the drug is manufactured, may result in restrictions on the marketing of that drug, up to and including withdrawal of the drug from the market. In the United States, the DEA and comparable state-level agencies also heavily regulate the manufacturing, holding, processing, security, recordkeeping and distribution of drugs that are considered controlled substances. If any of our drug candidates are scheduled by the DEA as controlled substances, we will also become subject to the DEA's regulations. Consistent with the FDA's recommendation, the DEA has proposed that BELVIQ be scheduled as a Schedule IV drug. If BELVIQ were to be scheduled in a tightly controlled category, such scheduling could negatively impact the ability or willingness to prescribe or dispense BELVIQ, the likelihood that patients will use it and other aspects of our and Eisai's ability to commercialize it. The scheduling designation can also change after it has been finalized. The DEA periodically inspects facilities for compliance with its rules and regulations. If our manufacturing facilities or those of our suppliers fail to comply with applicable regulatory requirements, such noncompliance could result in regulatory action and additional costs to us. Failure to comply with applicable FDA and other regulatory requirements may, either before or after product approval, if any, subject our company to administrative or judicially imposed sanctions, including:

issuance of inspectional notices of violation or Warning Letters by the FDA or other regulatory agencies;

imposition of fines and other civil penalties;

criminal prosecutions;

injunctions, suspensions or revocations of regulatory approvals;

suspension of any ongoing clinical trials;

total or partial suspension of manufacturing;

delays in commercialization;

refusal by the FDA to approve pending applications or supplements to approved applications filed by us or collaborators;

refusals to permit drugs to be imported into or exported from the United States;

restrictions on operations, including costly new manufacturing requirements; and

product recalls or seizures.

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

**Our ability to generate revenues from BELVIQ or any of our drug candidates that receive regulatory approval will be subject to a variety of risks, many of which are out of our control.**

BELVIQ or any of our drug candidates that may be approved for marketing may not gain market acceptance among patients, healthcare providers, healthcare payers or the medical community. We believe that the degree of market acceptance and our ability to generate revenues from such products will depend on a number of factors, including:

timing of market introduction of our drugs and competitive drugs and alternative treatments;

actual and perceived efficacy and safety of our drug candidates;

incidence and severity of any side effects;

potential or perceived advantages or disadvantages as compared to alternative treatments;

strength of sales, marketing and distribution support;

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

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

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

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

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

**Drug development programs are expensive, time consuming, uncertain and susceptible to change, interruption, delay or termination.**

Drug development programs are very expensive, time consuming and difficult to design and implement. Our drug candidates are in various stages of research and development and are prone to the risks of failure inherent in drug development. In addition, the FDA or other regulatory authority may require us to, or we or others may decide to, conduct additional research and development of any of our approved drugs. For example, the FDA is requiring us to conduct post-marketing studies of BELVIQ, and we or others may conduct additional studies or trials of BELVIQ alone or in combination with other drugs. Clinical trials and preclinical studies are needed to demonstrate that drug candidates are safe and effective to the satisfaction of the FDA and similar non-US regulatory authorities. These trials and studies are expensive and uncertain processes that may take years to complete. Failure can occur at any stage of the process, and successful early preclinical studies or clinical trials do not ensure that later studies or trials will be successful. In addition, the commencement or completion of our planned preclinical studies or clinical trials could be substantially delayed or prevented by several factors, including the following:

limited number of, and competition for, suitable patients required for enrollment in our clinical trials or animals to conduct our preclinical studies;

limited number of, and competition for, suitable sites to conduct our clinical trials or preclinical studies;

delay or failure to obtain FDA approval or agreement to commence a clinical trial or FDA approval of a study protocol;

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delay or failure to obtain sufficient supplies of drug candidates, drugs or other materials for the trial or study;

delay or failure to reach agreement on acceptable agreement terms or protocols; and

delay or failure to obtain institutional review board, or IRB, approval to conduct a clinical trial at a prospective site.

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

lack of effectiveness of any drug candidate during clinical trials;

side effects experienced by study participants or other safety issues;

slower than expected rates of patient recruitment and enrollment or lower than expected patient retention rates;

delays or inability to manufacture or obtain sufficient quantities of materials for use in clinical trials;

inadequacy of or changes in our manufacturing process or compound formulation;

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

changes in applicable regulatory policies and regulations;

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

uncertainty regarding proper dosing;

unfavorable results from ongoing clinical trials or preclinical studies;

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

scheduling conflicts with participating clinicians and clinical institutions;



failure to design appropriate clinical trial protocols;

insufficient data to support regulatory approval;

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

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

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

lack of sufficient funding to continue clinical trials or preclinical studies; or

changes in business priorities or perceptions of the value of the program.

There is typically a high rate of attrition from the failure of drug candidates proceeding through clinical trials, and many companies have experienced significant setbacks in advanced development programs even after promising results in earlier studies or trials. We have experienced setbacks in our internal and partnered development programs and expect to experience additional setbacks from time to time in the future. If we or our collaborators abandon or are delayed in our development efforts related to BELVIQ or any drug candidate, we may not be able to generate sufficient revenues to continue our operations at the current level or become

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profitable, our reputation in the industry and in the investment community would likely be significantly damaged, additional funding may not be available to us or may not be available on terms we or others believe are favorable, and our stock price may decrease significantly.

### **The results of preclinical studies and completed clinical trials are not necessarily predictive of future results, and our current drug candidates or any approved drugs 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. Favorable results in 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 or drugs in later-stage trials may fail to show desired safety and efficacy despite having progressed through earlier-stage trials. Unfavorable results from ongoing preclinical studies or clinical trials could result in delays, modifications or abandonment of ongoing or future clinical trials, or abandonment of a program. Preclinical and clinical results are frequently susceptible to varying interpretations that may delay, limit or prevent regulatory approvals or commercialization. Negative or inconclusive results or adverse medical events during a clinical trial could cause a clinical trial to be delayed, repeated or terminated; a program to be abandoned; or negatively impact a related marketed drug.

### **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 sufficient therapeutic potential, and any of our preclinical compounds may not result in the commencement of clinical trials. We cannot be certain that results sufficiently favorable to justify commencement of Phase 1 clinical trials will be obtained in these preclinical investigations. Even if such favorable preclinical results are obtained, our financial resources may not allow us to commence Phase 1 clinical trials. If we are unable to identify and develop new drug candidates, we may not be able to maintain a clinical development pipeline or generate revenues.

### **We may participate in new strategic transactions that could impact our liquidity, increase our expenses, present significant distractions to our management and be viewed as unfavorable.**

From time to time we consider strategic transactions, such as out-licensing or in-licensing of compounds or technologies, acquisitions of companies and asset purchases. Additional potential transactions we may consider include a variety of different business arrangements, such as strategic collaborations, joint ventures, spin-offs, restructurings, divestitures, business combinations and investments. In addition, another entity may pursue us as an acquisition target. Any such transaction may be viewed as unfavorable by our stockholders or others and may require us to incur non-recurring or other charges, may create potential liabilities, may increase our near- and long-term expenditures and may pose significant integration challenges, require additional expertise or disrupt our management or business, which could harm our operations and financial results.

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

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

Many of the drugs we or our collaborators are or may attempt to discover and develop may 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.

For example, with regard to BELVIQ, in July 2012, the FDA approved VIVUS's drug candidate for chronic weight management, and VIVUS announced the US market availability of its drug in September 2012. VIVUS is also seeking regulatory approval for its drug candidate outside of the United States. In addition, Orexigen Therapeutics, Inc. is seeking FDA approval for a drug candidate for a similar indication. With respect to future weight-loss treatments, we expect that companies and others may allocate resources to discover and develop additional drugs, additional drug candidates may be approved and competition may increase.

Our competitors, particularly large pharmaceutical companies, may have substantially greater research, development and marketing capabilities and greater financial, scientific and human resources than we do. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before we do for the same indication may achieve a significant competitive advantage, including certain patent and marketing exclusivity rights. In addition, our competitors' drugs may have fewer side effects, more desirable characteristics (such as efficacy, route of administration or frequency of dosing), or be viewed more favorably by patients, healthcare providers, healthcare payers, the medical community, the media or others than our drug candidates or drugs, if any, for the same indication. Our competitors may also market generic or other drugs that compete with our drugs at a lower price than our drugs, which may negatively impact our drug sales, if any. Any results from our research and development efforts, or from our joint efforts with our existing or any future collaborators, may not compete successfully with existing or newly discovered products or therapies.

**Collaborative relationships may lead to disputes and delays in drug development and commercialization, and we may not realize the full commercial potential of our drug candidates.**

We may have conflicts with our prospective, current or past collaborators, such as conflicts concerning rights and obligations under our agreements, the interpretation of preclinical or clinical data, the achievement of milestone or other payments, the ownership of intellectual property, or research and development, regulatory or commercialization strategy. Collaborators may stop supporting our drug candidates or drugs, including if they no longer view the program as in their best financial or other interests or they develop or obtain rights to competing drug candidates or drugs. In addition, collaborators may fail to effectively develop, obtain approval for or commercialize our drugs, which may result in us not realizing their full commercial potential. If any conflicts arise with any of our current, past or prospective collaborators, the other party may act in a manner that is adverse to our interests. Any such disagreement could result in one or more of the following, each of which could delay, or lead to termination of, development or commercialization of our drug candidates or drugs, and in turn prevent us from generating revenues:

unwillingness on the part of a collaborator to pay for studies or other research, milestone payments, royalties or other payments that we believe are due to us under a collaboration;

uncertainty regarding ownership of intellectual property rights arising from our collaborative activities, which could prevent us from entering into additional collaborations;

unwillingness on the part of a collaborator to keep us informed regarding the progress of its development and commercialization activities or to permit public disclosure of the results of those activities;

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slowing or cessation of a collaborator's research, development, regulatory or commercialization efforts with respect to our drug candidates or drugs; or

litigation or arbitration.

**Setbacks and consolidation in the pharmaceutical and biotechnology industries and inadequate third-party coverage and reimbursement could make entering into agreements with pharmaceutical companies to collaborate or commercialize our drugs more difficult and diminish our revenues.**

Setbacks in the pharmaceutical and biotechnology industries, such as those caused by safety concerns relating to drugs like Meridia, Avandia, Vioxx and Celebrex, or drug candidates, as well as competition from generic drugs, litigation, and industry consolidation, may have an adverse effect on us. For example, the FDA may be more cautious in approving our drug candidates based on safety concerns relating to these or other drugs or drug candidates, or pharmaceutical companies may be less willing to enter into new collaborations or continue existing collaborations if they are integrating a new operation as a result of a merger or acquisition or if their therapeutic areas of focus change following a merger.

Moreover, our and our collaborators' ability to commercialize any of our drugs that have been or may be approved will depend in part on government regulation and the availability of coverage and adequate reimbursement from third-party payers, including private health insurers and government payers, such as the Medicaid and Medicare programs, increases in government-run, single-payer health insurance plans and compulsory licenses of drugs. Government and third-party payers are increasingly attempting to contain healthcare costs by limiting coverage and reimbursement levels for new drugs. In addition, in March 2010, the Patient Protection and Affordable Care Act, as amended by the Health Care and Education Reconciliation Act, or collectively, PPACA, was passed, which has significantly affected the pharmaceutical industry. In addition to extending coverage to patients otherwise uninsured, PPACA includes, among several other provisions relating to pharmaceuticals, measures that impose a new nondeductible fee on certain branded drugs based on market share in government healthcare programs, increases in rebates for government programs such as Medicaid, and the creation of a new Patient-Centered Outcomes Research Institute to oversee, identify priorities in, and conduct comparative clinical effectiveness research, along with funding for such research.

Given the continuing discussion regarding the cost of healthcare, managed care, universal healthcare coverage and other healthcare issues, we also cannot predict with certainty what additional healthcare initiatives, if any, will be implemented or the effect any future legislation or regulation will have on our business. PPACA and any additional legislation or regulations may limit our commercial opportunities by reducing the amount a potential collaborator is willing to pay to license our programs or drug candidates in the future due to a reduction in the potential revenues from drug sales. Moreover, legislation and regulations affecting the pricing of pharmaceuticals may change before regulatory agencies approve our drug candidates for marketing. Adoption of such legislation and regulations could further limit pricing approvals for, and reimbursement of, drugs. A government or third-party payer decision not to approve pricing for, or provide adequate coverage and reimbursements of, our drugs, if any, could limit market acceptance of and demand for our drugs.

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

In the course of our discovery, preclinical testing and clinical trials, we rely on third parties, including laboratories, investigators, clinical research organizations and manufacturers, to perform critical services for us. For example, we rely on third parties to conduct our clinical trials and many of our preclinical studies. Clinical research organizations are responsible for many aspects of the trials, including finding and enrolling subjects for testing and administering the trials. Although we rely on these third parties to conduct our clinical trials, we are responsible for ensuring that each of our clinical trials is conducted in accordance with its investigational plan and protocol. Moreover, the FDA and foreign regulatory authorities require us to comply with regulations and

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standards, commonly referred to as good clinical practices, or GCPs, for conducting, monitoring, recording and reporting the results of clinical trials to ensure that the data and results are scientifically credible and accurate and that the trial subjects are adequately informed of the potential risks of participating in clinical trials. Our reliance on third parties does not relieve us of these responsibilities and requirements. These third parties may not be available when we need them or, if they are available, may not comply with all regulatory and contractual requirements or may not otherwise perform their services in a timely or acceptable manner, and we may need to enter into new arrangements with alternative third parties and our preclinical studies or clinical trials may be extended, delayed or terminated. These independent third parties may also have relationships with other commercial entities, some of which may compete with us. In addition, if such third parties fail to perform their obligations in compliance with regulatory requirements and our protocols, our preclinical studies or clinical trials may not meet regulatory requirements or may need to be repeated. As a result of our dependence on third parties, we may face delays or failures outside of our direct control. These risks also apply to the development activities of collaborators, and we do not control their research and development, clinical trial or regulatory activities.

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

Our success depends on the continued contributions of our principal management, development and scientific personnel, and the ability to hire and retain key and other personnel. We face competition for such personnel, and we believe that risks and uncertainties related to our business, including the timing and risk associated with research, development and commercialization, the regulatory process, our available and anticipated cash resources, pending and possible future litigation involving us, and the volatility of our stock price, may impact our ability to hire and retain key and other personnel. The loss of services of any principal member of our management or scientific staff or other personnel, particularly Jack Lief, our Chairman, President and Chief Executive Officer, and Dominic P. Behan, Ph.D., our Executive Vice President and Chief Scientific Officer, or a combination of different key employees, could adversely impact our operations and ability to generate or raise additional capital. To our knowledge, neither Mr. Lief nor Dr. Behan plans to leave, retire or otherwise disassociate with us in the near future.

### **We may incur substantial liabilities for any product liability claims or otherwise as a drug product manufacturer.**

We develop, test, manufacture and expect to commercialize drugs for use by humans. We face an inherent risk of product liability exposure related to the testing of our drug candidates in clinical trials, and will face an even greater risk with the commercialization of BELVIQ as well as with any other approved drugs. In addition, under the Eisai Agreement, Arena GmbH has agreed to indemnify Eisai for certain losses resulting from product liability claims, except to the extent caused by Eisai's negligence, willful misconduct, violation of law or breach of such agreement or related agreements.

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

An individual may bring a liability claim against us if one of our drugs or drug candidates causes, or merely appears to have caused, an injury. Regardless of merit or eventual outcome, liability claims may result in:

decreased demand for our drug;

injury to our reputation;

increased difficulty to attract, or withdrawal of, clinical trial subjects;

costs of related litigation;

substantial monetary awards to subjects or other claimants;



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loss of revenues; and

the inability to commercialize our drug candidates.

We will have limited product liability insurance that covers our clinical trials and products. We may not be able to maintain or obtain insurance coverage at a reasonable cost, and we may not have insurance coverage that will be adequate to satisfy any liability that may arise, which could have an adverse effect on our capital sources and financial condition.

Arena GmbH manufactures drug products for Siegfried and will manufacture BELVIQ for commercialization in the United States and, subject to applicable regulatory approval, in other territories. Arena GmbH is subject to liability for non-performance, product recalls and breaches of the agreements with Siegfried, Eisai and Ildong.

**We have significant contractual obligations, which may adversely affect our cash flow, cash position and stock price.**

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

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

increasing our vulnerability to general adverse economic conditions;

limiting our ability to obtain additional funds; and

placing us at a possible competitive disadvantage to less leveraged competitors and competitors that have better access to capital resources.

**We may be subject, directly or indirectly, to federal and state healthcare fraud and abuse and false claims laws and regulations. If we are unable to comply, or have not fully complied, with such laws, we could face substantial penalties and prosecution.**

In the United States, drug manufacturers and marketers are subject to various state and federal fraud and abuse laws, including, without limitation, the federal Anti-Kickback Statute and federal False Claims Act. There are similar laws in other countries. These laws may impact, among other things, the sales, marketing and education programs for our drugs.

The federal Anti-Kickback Statute prohibits persons from knowingly and willingly soliciting, offering, receiving or providing remuneration, directly or indirectly, in exchange for or to induce either the referral of an individual, or the furnishing or arranging for a good or service, for which payment may be made under a federal healthcare program such as the Medicare and Medicaid programs. Several courts have interpreted the statute's intent requirement to mean that if any one purpose of an arrangement involving remuneration is to induce referrals of federal healthcare covered business, the statute has been violated. The Anti-Kickback Statute is broad and, despite a series of narrow safe harbors, prohibits many arrangements and practices that are lawful in businesses outside of the healthcare industry. Moreover, the PPACA, among other things, amends the intent requirement of the federal Anti-Kickback Statute and criminal healthcare fraud statutes. A person or entity no

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longer needs to have actual knowledge of these statutes or specific intent to violate them. The PPACA also provides that the government may assert that a claim including items or services resulting from a violation of the federal Anti-Kickback Statute constitutes a false or fraudulent claim for purposes of the False Claims Act. Penalties for violations of the federal Anti-Kickback Statute include criminal penalties and civil sanctions such as fines, imprisonment and possible exclusion from Medicare, Medicaid and other federal healthcare programs. Many states have also adopted laws similar to the federal Anti-Kickback Statute, some of which apply to the referral of patients for healthcare items or services reimbursed by any source, not only the Medicare and Medicaid programs.

The federal False Claims Act prohibits persons from knowingly filing, or causing to be filed, a false claim to, or the knowing use of false statements to obtain payment from the federal government. Suits filed under the False Claims Act, known as qui tam actions, can be brought by any individual on behalf of the government and such individuals, commonly known as whistleblowers, may share in any amounts paid by the entity to the government in fines or settlement. The filing of qui tam actions has caused a number of pharmaceutical, medical device and other healthcare companies to have to defend a False Claims Act action. When an entity is determined to have violated the False Claims Act, it may be required to pay up to three times the actual damages sustained by the government, plus civil penalties for each separate false claim. Various states have also enacted laws modeled after the federal False Claims Act.

We are unable to predict whether we could be subject to actions under any of these or other fraud and abuse laws, or the impact of such actions. If we are found to be in violation of any of the laws described above and other applicable state and federal fraud and abuse laws, we may be subject to penalties, including civil and criminal penalties, damages, fines, exclusion from government healthcare reimbursement programs and the curtailment or restructuring of our operations, all of which could have a material adverse effect on our business and results of operations.

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

The headquarters of our operations outside of the United States is in Switzerland. Activities conducted at this location include manufacturing, quality control, quality assurance, development of manufacturing processes, qualifying suppliers and otherwise managing aspects of the global supply chain, regulatory compliance, distribution of finished products, and European strategic planning and development. There are significant risks associated with foreign operations, including, but not limited to, compliance with local laws and regulations, the protection of our intellectual property, the ability to integrate our corporate culture with local customs and cultures, the distraction to our management, foreign currency exchange rates and the impact of shifts in the United States and local economies on those rates, and integration of our policies and procedures, including disclosure controls and procedures and internal control over financial reporting, with our international operations.

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

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

interruption of our research and development or manufacturing efforts;

injury to our employees and others;

environmental damage resulting in costly clean up; and

liabilities under domestic or foreign federal, state and local laws and regulations governing the use, storage, handling and disposal of these materials and specified waste products.



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

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

Our US operations, including laboratories, offices and a chemical development facility, are located in the same business park in San Diego. We also have a drug product facility in Zofingen, Switzerland, and we expect that, at least for the foreseeable future, this facility will be the sole location for the manufacturing of BELVIQ finished drug product. We depend on our facilities and on collaborators, contractors and vendors for the continued operation of our business, some of whom are located in Europe and Asia. Natural disasters or other catastrophic events, including interruptions in the supply of natural resources, political and governmental changes, severe weather conditions, wildfires and other fires, explosions, actions of animal rights activists, terrorist attacks, earthquakes and wars could disrupt our operations or those of our collaborators, contractors and vendors. Even though we believe we carry commercially reasonable business interruption and liability insurance, and our contractors may carry liability insurance that protect us in certain events, we might suffer losses as a result of business interruptions that exceed the coverage available under our and our contractors' insurance policies or for which we or our contractors do not have coverage. For example, we are not insured against a terrorist attack. Any natural disaster or catastrophic event could have a significant negative impact on our operations and financial results. Moreover, any such event could delay our research and development programs and adversely affect, which may include stopping, our commercial production.

### **Our executive officers and directors may sell shares of their stock, and these sales could adversely affect our stock price.**

Sales of our stock by our executive officers and directors, or the perception that such sales may occur, could adversely affect the market price of our stock. Our executive officers and directors may sell stock in the future, either as part, or outside, of trading plans under SEC Rule 10b5-1.

### **Currency fluctuations may negatively affect our financial condition.**

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

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

Laws and regulations affecting public companies, including rules adopted by the SEC and by NASDAQ, as well as the laws and regulations of foreign governments, may result in increased costs to us, particularly as we continue to develop the required capabilities in the United States and abroad to commercialize our products. These laws, rules and regulations could make it more difficult or costly for us to obtain certain types of insurance, including directors' and officers' liability insurance, and we may be forced to accept reduced policy limits and coverage or incur substantially higher costs to obtain the same or similar coverage. The impact of these events could also make it more difficult for us to attract and retain qualified persons to serve on our board of directors, on our board committees or as executive officers. We cannot estimate accurately the amount or timing of additional costs we may incur to respond to these laws, rules and regulations.

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

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

Our success will depend on our own and on current or future collaborators' abilities to obtain, secure and defend patents. In particular, the patents directed to BELVIQ and our drug candidates are important to commercializing drugs. We have numerous US and foreign patent applications pending for our technologies. There is no assurance that any of our patent applications will issue, or that any of the patents will be enforceable or will cover a drug or other commercially significant technology or method, or that the patents will be held to be valid for their expected terms.

The procedures for obtaining a patent in the United States and in most foreign countries are complex. These procedures require an analysis of the scientific technology related to the invention and many sophisticated legal issues. Obtaining patent rights outside the United States often requires the translation of highly technical documents and an improper translation may lead to the loss of, or otherwise jeopardize, the patent protection of our inventions. Ensuring adequate quality of translators and foreign patent attorneys is often very challenging. Consequently, the process for having our pending patent applications issue as patents will be difficult, complex and time consuming. Our patent position is very uncertain and we do not know when, or if, we will obtain additional patents for our technologies, or if the scope of the patents obtained will be sufficient to protect our drugs, or be considered sufficient by parties reviewing our patent positions pursuant to a potential marketing, licensing or financing transaction.

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

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

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

We believe that the United States is by far the largest single market for pharmaceuticals in the world. Because of the critical nature of patent rights to our industry, changes in US patent laws could have a profound

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effect on our future profits, if any. It is unknown which, if any, patent laws will change, how changes to the patent laws will ultimately be enforced by the courts and the impact on our business. For example, in September 2011 the America Invents Act was signed into US law, which changes include, among others, the awarding of a patent to the first inventor to file a patent as opposed to the first inventor to make an invention and the creation of new administrative procedures for challenging US patents. It may be several years before the impact of the America Invents Act on patent law is understood, and we cannot predict with certainty whether or to what extent the changes may impair our business.

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

Our commercial success depends upon our ability to develop and manufacture our drugs and drug candidates, market and sell drugs, 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 drugs, drug candidates, technologies or activities infringe the intellectual property rights of others. Numerous US and foreign issued patents and pending patent applications owned by others exist in the area of G protein-coupled receptors, or GPCRs, including some which purport to allow the patent holder to control the use of all drugs that modulate a particular drug target or GPCR, regardless of whether the infringing drug bears any structural resemblance to a chemical compound known to the patent holder at the time of patent filing. Numerous US and foreign issued patents and pending patent applications owned by others also exist in the therapeutic areas in, and for the therapeutic targets for, which we are developing drugs. There are also numerous issued patents and patent applications to chemical compounds or synthetic processes that may be necessary or useful to use in our research, development, manufacturing or commercialization activities. These could materially affect our ability to develop our drug candidates or manufacture, import or sell drugs, and our activities, or those of our licensors or collaborators, could be determined to infringe these patents. Because patent applications can take many years to issue, there may be currently pending applications, unknown to us, which may later result in issued patents that our drugs, drug candidates or technologies may infringe. There also may be existing patents, of which we are not aware, that our drug candidates or technologies may infringe. Further, there may be issued patents or pending patent applications in fields relevant to our business, of which we are or may become aware, that we believe (i) are invalid or we do not infringe; (ii) relate to immaterial portions of our overall drug discovery, development, manufacturing and commercialization efforts; or (iii) in the case of pending patent applications, the resulting patent would not be granted or, if granted, would not likely be enforced in a manner that would materially impact such efforts. We cannot assure you that others holding any of these patents or patent applications will not assert infringement claims against us for damages or seek to enjoin our activities. We also cannot assure you that, in the event of litigation, we will be able to successfully assert any belief we may have as to non-infringement, invalidity or immateriality, or that any infringement claims will be resolved in our favor.

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

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

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damages or seeking to enjoin commercial activities relating to our drug discovery, development, manufacturing and commercialization activities could:

require us, or our collaborators, to obtain a license to continue to use, manufacture or market the affected drugs, methods or processes, which may not be available on commercially reasonable terms, if at all;

prevent us from importing, making, using, selling or offering to sell the subject matter claimed in patents held by others and subject us to potential liability for damages;

consume a substantial portion of our managerial, scientific and financial resources; or

be costly, regardless of the outcome.

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

We have been contacted from time to time by third parties regarding their intellectual property rights, sometimes asserting that we may need a license to use their technologies. For example, a third party has told us that it believes one of its issued US patents includes patent claims that cover BELVIQ or its use. We do not believe such patent claims are valid or, even if they are valid, that they cover BELVIQ or its use. If we fail to obtain any required licenses or make any necessary changes to our technologies, we may become involved in expensive and time-consuming litigation or we may be unable to develop or commercialize some or all of our drugs or drug candidates.

### **We cannot protect our intellectual property rights throughout the world.**

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

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### ***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, 2011, to February 20, 2013, the market price of our stock was as low as \$1.21 per share and as high as \$13.50 per share.

Very few drug candidates being tested will ultimately receive regulatory approval, and companies in our industry sometimes experience significant volatility in their stock price. Our stock price may fluctuate significantly depending on a variety of factors, including:

legislation or regulatory actions or decisions affecting BELVIQ, including the timing and outcome of the DEA's scheduling designation and the decisions of other regulatory authorities relating to BELVIQ, or other drugs or drug candidates, including those of our competitors;

the commercial launch and success or failure of BELVIQ or any of our drug candidates;

the entrance into, or failure to enter into, a new collaboration or the modification or termination of an existing collaboration or other material transaction;

the timing and receipt by us of milestone and other payments or failing to achieve and receive the same;

fluctuation in quarterly results (including with respect to revenue recognition) or inaccurate sales or cash forecasting;

accounting restatements and changes;

supply chain or manufacturing issues;

discussions or recommendations affecting our drugs or drug candidates by FDA advisory committees or other reviewers of preclinical or clinical data or other information related to BELVIQ, drug candidates or other drugs;

results or decisions affecting the development or commercialization of BELVIQ or any of our drug candidates, including the results of studies, trials and other analyses;

the development and implementation of our continuing development and research plans, including outcome studies and other research and development for BELVIQ;

the timing of the discovery of drug leads and the development of our drug candidates;

changes in our research and development budget or the research and development budgets of our existing or potential collaborators;

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

the success, failure or setbacks of our or a perceived competitor's drugs or drug candidates;

expenses related to, and the results of, litigation, other disputes and other proceedings;

financing strategy or decisions;

developments in intellectual property rights or related announcements; and

capital market conditions.

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

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

As of February 20, 2013, we had outstanding a seven-year warrant issued in June 2006 to purchase 1,467,405 shares of our common stock at an exercise price of \$8.76 per share and a seven-year warrant issued in August 2008 to purchase 1,965,418 shares of our common stock at an exercise price of \$4.34 per share. Such seven-year warrants were adjusted as a result of certain equity sales following their issuance to decrease the exercise price and increase the number of shares issuable upon exercise of the warrants. Certain future equity issuances below the pre-defined warrant adjustment price may result in additional adjustments to any such warrants then outstanding.

Along with our outstanding warrants, as of February 20, 2013, there were (i) options to purchase 13,890,247 shares of our common stock outstanding under our equity incentive plans at a weighted-average exercise price of \$4.47 per share, (ii) 14,542,800 additional shares of common stock remaining issuable under our 2012 Long-Term Incentive Plan, (iii) 1,235,019 shares of common stock remaining issuable under our 2009 Employee Stock Purchase Plan, as amended, and (iv) 79,169 shares of common stock remaining issuable under our Deferred Compensation Plan.

The shares described above, when issued, will be available for immediate resale in the public market. The market price of our common stock could decline as a result of such resales due to the increased number of shares available for sale in the market. As of February 20, 2013, there were 217,489,222 shares of our common stock outstanding.

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

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

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

A small number of stockholders may hold or acquire a significant amount of our outstanding stock. From time to time, there is a large short interest in our stock. These holders of such stock or positions may support competing transactions and have interests that are different from yours. In addition, sales of a large number of shares of our stock by these large stockholders or other stockholders within a short period of time could adversely affect our stock price.

We may also be involved with disagreements with the holders of our stock, warrants or other securities in the future. Such disagreements may lead to litigation, which may be expensive and consume management's time, or involve settlements, the terms of which may not be favorable to us.

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**Certain of our agreements, provisions in our charter documents, possible future agreements 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.**

There is a standstill provision in the Eisai Agreement, and we may enter into agreements with similar provisions. In addition, we may in the future adopt a stockholders' rights agreement, which would cause substantial dilution to any person who attempts to acquire us in a manner or on terms not approved by our board of directors. These provisions or agreements, 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, our charter 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 principal facilities that we occupy include approximately 308,000 square feet of research, development, warehouse and office space located at various addresses in the same business park in San Diego, California and approximately 85,000 square feet of laboratory, manufacturing, warehouse and office space located in the same business park in Zofingen, Switzerland.



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<b>Location</b>	<b>Own/ Lease</b>	<b>Description</b>
6114 Nancy Ridge Drive	Lease with option to purchase	This chemical development facility consists of approximately 40,000 square feet (which includes approximately 18,000 of internal square feet and approximately 22,000 square feet of integrated external space), of which approximately 5,000 square feet is office space. The remaining approximately 35,000 square feet of space is dedicated to process research and scale-up chemistry, the production of intermediates and other compounds for research and development purposes, and the production of active pharmaceutical ingredients to support our clinical trials. We commenced CGMP operations in this facility in 2004.
6118 Nancy Ridge Drive	Lease with option to purchase	This facility of approximately 30,000 square feet consists of approximately 50% laboratory space and 50% office space.
6122-6124-6126 Nancy Ridge Drive	Lease	We occupy approximately 40,000 square feet of this approximately 68,000 square foot facility, of which approximately 24,000 square feet is laboratory space and 16,000 square feet is office space. We sublease approximately 18,000 square feet of this facility.
6138-6150 Nancy Ridge Drive	Lease with option to purchase	This facility of approximately 55,000 square feet consists of approximately 33,000 square feet of laboratory space and 22,000 square feet of office space.
6154 Nancy Ridge Drive	Lease with option to purchase	This facility of approximately 143,000 square feet consists of approximately 131,000 square feet of office space and 12,000 square feet of warehouse space.
6162 Nancy Ridge Drive	Own	This facility includes approximately 20,000 square feet of warehouse and office space, all of which is presently unoccupied.
6166 Nancy Ridge Drive	Lease	The lease for this 37,000 square feet facility, all of which is presently unoccupied, expires in April 2013.
Zofingen, Switzerland	Own	The portion of this facility we own consists of approximately 67,000 square feet, including approximately 39,000 square feet of manufacturing space, 21,000 square feet of warehouse space and 7,000 square feet of office space.
Zofingen, Switzerland	Lease	We lease from Siegfried a total of approximately 18,000 square feet, consisting of approximately 7,000 square feet of warehouse space, 8,000 square feet of office space and 3,000 square feet of laboratory space, in various facilities.

We expect these facilities to be sufficient for our needs for at least the near term. We have significantly more space in San Diego than we expect to need for the foreseeable future, and are exploring subleasing some of our space and other options to reduce our expenses.

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**Item 3. Legal Proceedings.**

Beginning on September 20, 2010, a number of complaints were filed in the US District Court for the Southern District of California against us and certain of our current and former employees and directors on behalf of certain purchasers of our common stock. The complaints have been brought as purported stockholder class actions, and, in general, include allegations that we and certain of our current and former employees and directors violated federal securities laws by making materially false and misleading statements regarding our BELVIQ program, thereby artificially inflating the price of our common stock. The plaintiffs are seeking unspecified monetary damages and other relief. On November 19, 2010, eight prospective lead plaintiffs filed motions to consolidate, appoint a lead plaintiff, and appoint lead counsel. The Court took the motions to consolidate under submission on January 14, 2011. On August 8, 2011, the Court consolidated the actions and appointed a lead plaintiff and lead counsel. On November 1, 2011, the lead plaintiff filed a consolidated amended complaint. On December 30, 2011, we filed a motion to dismiss the consolidated amended complaint. The motion to dismiss has been fully briefed and the Court took the motion to dismiss under submission on April 13, 2012. In addition to the class actions, a complaint involving similar legal and factual issues has been brought by at least one individual stockholder and is pending in federal court. On December 30, 2011, we filed a motion to dismiss the stockholder's complaint. The motion to dismiss has been fully briefed and the Court took the motion to dismiss under submission on April 13, 2012. We intend to defend against the claims advanced and to seek dismissal of these complaints. Due to the early stage of these proceedings, we are not able to predict or reasonably estimate the ultimate outcome or possible losses relating to these claims.

**Item 4. Mine Safety Disclosures.**

Not applicable.

**Table of Contents****PART II****Item 5. Market for Registrant's Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities.**  
**Market information**

Our common stock is listed on the NASDAQ Global Select 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 Select Market.

	<b>High</b>	<b>Low</b>
Year ended December 31, 2011		
First Quarter	\$ 2.23	\$ 1.37
Second Quarter	\$ 1.68	\$ 1.21
Third Quarter	\$ 1.75	\$ 1.24
Fourth Quarter	\$ 2.62	\$ 1.23

	<b>High</b>	<b>Low</b>
Year ended December 31, 2012		
First Quarter	\$ 3.47	\$ 1.51
Second Quarter	\$ 13.50	\$ 2.00
Third Quarter	\$ 12.07	\$ 6.95
Fourth Quarter	\$ 10.05	\$ 7.09

 **Holders**

As of February 20, 2013, there were approximately 119 stockholders of record of our common stock, one of which is Cede & Co., a nominee for Depository Trust Company, or DTC. Shares of common stock that are held by financial institutions as nominees for beneficial owners are deposited into participant accounts at DTC, and are considered to be held of record by Cede & Co. as one stockholder.

 **Dividends**

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

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**Performance Graph**

The graph below compares the cumulative five-year total return on our common stock from December 31, 2007, through December 31, 2012, to the cumulative total return over such period for (i) the NASDAQ Composite Index and (ii) the NASDAQ Biotechnology Index. The graph assumes the investment of \$100 on December 31, 2007, with 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 graph below, is not deemed to be soliciting material or to be filed with the Securities and Exchange Commission, or subject to the Securities and Exchange Commission's proxy rules, other than as provided in such rules, or to the liabilities of Section 18 of the Securities 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 Securities Exchange Act of 1934, except to the extent that we specifically incorporate it by reference into any such filing.*

**COMPARISON OF FIVE-YEAR CUMULATIVE TOTAL RETURN**

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

**Table of Contents****Item 6. Selected Financial Data.**

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

	Years ended December 31,				
	2012	2011	2010	2009	2008
	(In thousands, except share and per share data)				
<b>Revenues</b>					
Manufacturing services	\$ 3,817	\$ 5,338	\$ 7,057	\$ 6,579	\$ 7,434
Collaborative agreements	23,770	7,381	9,556	3,808	2,375
Total revenues	27,587	12,719	16,613	10,387	9,809
<b>Operating Expenses</b>					
Cost of manufacturing services	3,671	8,100	7,414	6,536	8,515
Research and development	54,112	58,706	75,459	110,159	204,374
General and administrative	26,226	24,248	27,936	25,247	30,535
Restructuring charges	0	3,467	0	3,324	0
Amortization of acquired technology and other intangibles	691	997	2,159	3,508	2,314
Total operating expenses	84,700	95,518	112,968	148,774	245,738
Interest and other expense, net	(28,364)	(26,425)	(28,179)	(14,817)	(1,644)
Net loss	(85,477)	(109,224)	(124,534)	(153,204)	(237,573)
Deemed dividends related to beneficial conversion feature of convertible preferred stock	(2,824)	(2,260)	0	0	0
Dividends on redeemable convertible preferred stock	0	0	0	0	(1,912)
Net loss allocable to common stockholders	\$ (88,301)	\$ (111,484)	\$ (124,534)	\$ (153,204)	\$ (239,485)
Net loss per share allocable to common stockholders, basic and diluted	\$ (0.45)	\$ (0.80)	\$ (1.14)	\$ (1.82)	\$ (3.24)
Shares used in calculating net loss per share allocable to common stockholders, basic and diluted	196,523,708	139,170,725	109,573,177	84,341,362	73,840,716

	As of December 31,				
	2012	2011	2010	2009	2008
	(In thousands)				
<b>Balance Sheet Data:</b>					
Cash and cash equivalents	\$ 156,091	\$ 57,632	\$ 150,669	\$ 94,733	\$ 73,329
Short-term investments, available-for-sale	0	0	0	20,716	36,800
Total assets	261,206	157,129	266,362	236,278	241,331
Total deferred revenues	62,735	44,682	48,077	4,086	4,049
Total lease financing obligations	74,458	75,771	76,769	77,486	63,067
Total derivative liabilities	15,042	1,617	2,271	6,642	0
Total notes payable	0	14,698	48,138	57,049	8,567
Accumulated deficit	(1,188,298)	(1,079,751)	(970,527)	(845,993)	(700,342)

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Total stockholders equity	98,639	10,562	80,015	74,567	117,632
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**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations.**

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

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

BELVIQ® is the trade name for lorcaserin hydrochloride in the United States. While BELVIQ (lorcaserin HCl) may in the future be marketed outside of the United States as BELVIQ or under a different trade name, we use BELVIQ in this Annual Report to refer to the finished drug product for lorcaserin hydrochloride or, depending on the context, lorcaserin hydrochloride or other solid state forms of lorcaserin.

**OVERVIEW AND RECENT DEVELOPMENTS**

We have incurred net losses of \$1.2 billion from our inception in April 1997 through December 31, 2012, and may incur substantial net losses in the future as we manufacture and commercialize our internally discovered drug, BELVIQ (pronounced BEL-VEEK), and continue our efforts to discover additional drug candidates and advance our research and development programs.

In June 2012, the US Food and Drug Administration, or FDA, approved BELVIQ for chronic weight management in adults who are overweight with a comorbidity or obese. The US Drug Enforcement Administration, or DEA, has proposed that BELVIQ be classified as a Schedule IV drug under the Controlled Substances Act, or CSA. BELVIQ will be marketed in the United States by Eisai Inc., or Eisai, under the Amended and Restated Marketing and Supply Agreement, or Eisai Agreement, between Eisai and our wholly owned subsidiary, Arena Pharmaceuticals GmbH, or Arena GmbH. Once the DEA finalizes the scheduling designation, Eisai will launch BELVIQ, which will be available to eligible patients by prescription, in the United States.

We provided Eisai with the marketing and distribution rights for BELVIQ in most of North and South America, including the United States, Mexico, Canada and Brazil. In addition, under the Marketing and Supply Agreement between Arena GmbH and Ildong Pharmaceutical Co., Ltd., or Ildong, herein referred to as the Ildong BELVIQ Agreement, we provided Ildong with the marketing and distribution rights for BELVIQ in South Korea for weight loss or weight management in obese and overweight patients, subject to regulatory approval of BELVIQ by the Korea Food and Drug Administration, or KFDA. We continue to own rights to market and distribute BELVIQ outside of these territories.

Outside of our collaborations, we have filed marketing authorization applications, or MAAs, for the regulatory approval of BELVIQ in the European Union and Switzerland. With respect to the European Union, in January 2013 we received the Day 180 List of Outstanding Issues from the European Medicines Agency, or EMA, Committee for Medicinal Products for Human Use, or CHMP. The major objections in the Day 180 List of Outstanding Issues relate to non-clinical and clinical issues, including tumors in rats, valvulopathy and psychiatric events, and the CHMP requested that we further justify BELVIQ's overall benefit-risk balance taking these issues into consideration. The issues will need to be addressed before the CHMP can recommend BELVIQ for marketing approval in the European Union. We responded to the Day 180 List of Outstanding Issues in writing. As part of this process, the CHMP will consult with groups of independent experts who will provide

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recommendations on the outstanding issues. In addition, we have been invited by the CHMP to provide an oral explanation, and we expect to have other discussions with the CHMP and their experts. The CHMP is expected to reach its final opinion on the BELVIQ MAA by nominal Day 210, which, accounting for expected clock stoppages during the regulatory process, we expect to occur in the first half of 2013.

In late February 2013, Swissmedic provided feedback to our MAA for Switzerland in the form of a list of questions with major objections, which include objections that are similar to those identified with respect to our MAA for the European Union. We are in the process of preparing our response.

We also intend to seek regulatory approval of BELVIQ in additional territories that are not currently under collaboration.

Eisai is responsible for filing applications for regulatory approval of BELVIQ under our collaboration that includes most of North and South America, and Ildong is responsible for filing an application for regulatory approval of BELVIQ under our collaboration for South Korea. We expect that in 2013 Eisai will submit applications for the regulatory approval of BELVIQ in Mexico, Canada and Brazil, and Ildong will submit an application for the regulatory approval of BELVIQ in South Korea.

In addition to commercializing BELVIQ as a monotherapy for chronic weight management, we intend to explore BELVIQ's therapeutic potential in combination with other drugs and for other indications. We also intend to utilize our GPCR-focused discovery and development approach to selectively advance other of our internally discovered, oral drug candidates, which include (i) APD811, an agonist of the prostacyclin receptor intended for the treatment of pulmonary arterial hypertension, which is currently in Phase 1; (ii) temanogrel, an inverse agonist of the serotonin 2A receptor intended for the treatment of thrombotic diseases, which has completed single- and multiple-ascending dose Phase 1 trials and is expected to complete an additional Phase 1 trial in healthy volunteers and potentially a Phase 2a proof-of-concept trial in patients under our Ildong BELVIQ Agreement; (iii) APD334, an agonist of the S1P1 receptor intended for the treatment of autoimmune diseases, which we plan to advance into Phase 1 in the first half of 2013; and (iv) APD371, an agonist of the cannabinoid receptor 2 intended for the treatment of pain, which is in preclinical development. Our research and development pipeline also includes GPR119 agonists intended for the treatment of type 2 diabetes.

In November 2012, we entered into a Co-Development and License Agreement with Ildong for temanogrel, or Ildong Temanogrel Agreement. Under the agreement, we granted Ildong exclusive rights to commercialize temanogrel in South Korea for myocardial infarction, acute coronary syndrome, stroke, peripheral artery disease and other cardiovascular diseases, subject to further development and regulatory approval of temanogrel. Initially, Ildong will be responsible for funding and conducting, under the direction of a joint steering committee, the next two planned clinical trials in this program: an additional Phase 1 trial in healthy volunteers and a Phase 2a proof-of-concept trial in patients.

In February 2013, we received preliminary results from a multiple-dose Phase 1 clinical trial of APD811. Evidence of intended pharmacology was achieved and the most common adverse events were consistent with the expected pharmacology of the drug candidate and the previously conducted single-dose trial. We plan to include an additional cohort in the Phase 1 program to optimize the dosing regimen prior to potentially initiating a Phase 2 clinical trial.

We have obtained cash and funded our operations to date primarily through the sale of common and preferred stock, the issuance of debt and related financial instruments, payments from collaborators and sale leaseback transactions. From our inception through December 31, 2012, we have generated \$1.7 billion in cash from these sources, of which \$1.2 billion was through sales of equity, \$272.1 million was through payments from collaborators, \$96.9 million was through the issuance of debt and related financial instruments to certain Deerfield entities and \$77.1 million was from sale and leaseback transactions. At December 31, 2012, we had \$156.1 million in cash and cash equivalents.



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We will receive milestone payments from Eisai totaling \$65.0 million in connection with the DEA's final scheduling designation for BELVIQ. We also expect to receive additional payments from Eisai in 2013 from sales of BELVIQ.

Developing marketed drugs is a long, uncertain and expensive process, and our ability to achieve our goals, including commercializing BELVIQ in the United States, obtaining regulatory approval of, and commercializing, BELVIQ in additional territories, conducting required and potentially other post-marketing studies of BELVIQ, and advancing our drug candidates, depends on numerous factors, many of which we do not control. We will continue to seek to balance the high costs of research, development and manufacturing against the need to sustain our operations long enough to commercialize the results of our efforts and attain profitability.

We will use substantial cash to achieve our goals. To date, we have not generated any revenues from the sale of BELVIQ or any of our drug candidates, and BELVIQ will not be commercially available until the DEA provides the final scheduling designation. We may continue to incur substantial losses, and do not expect to generate consistent positive operating cash flows for at least the short term. Accordingly, we will need to receive additional funds under our existing collaborative agreements, under future collaborative agreements for BELVIQ or one or more of our drug candidates or programs, or by raising additional funds through equity, debt or other financing transactions.

See the above Business section for a more complete discussion of certain of the recent developments described above.

**SUMMARY OF REVENUES AND EXPENSES**

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

**Revenues**

Source of revenue	Years ended December 31,			% change from 2011 to 2012	% change from 2010 to 2011
	2012	2011	2010		
Milestone payments from Eisai	\$ 20.0	\$ 0.0	\$ 0.0	100.0%	
Manufacturing services agreement	3.8	5.3	7.1	(28.5)%	(24.4)%
Amortization of upfront payments from Eisai	3.5	3.4	1.9	2.0%	78.6%
Reimbursements of development and patent expenses from Eisai	0.1	3.3	0.0	(96.6)%	100.0%
Other collaborative agreements	0.2	0.7	7.6	(74.9)%	(92.0)%
Total revenues	\$ 27.6	\$ 12.7	\$ 16.6	116.9%	(23.5)%

**Table of Contents****Research and development expenses**

Type of expense	Years ended December 31,			% change from 2011 to 2012	% change from 2010 to 2011
	2012	2011	2010		
Salary and other personnel costs (excluding non-cash share-based compensation)	\$ 23.7	\$ 24.9	\$ 33.5	(4.7)%	(25.7)%
Facility and equipment costs	11.0	12.0	14.2	(9.0)%	(15.4)%
External clinical and preclinical study fees and expenses, including external manufacturing costs	7.9	6.6	10.6	20.1%	(38.0)%
Internal research and development manufacturing costs for Swiss facility	4.2	7.2	5.4	(41.4)%	34.3%
Research supplies	3.3	3.5	3.9	(5.0)%	(11.7)%
Non-cash share-based compensation	1.8	1.9	3.4	(7.4)%	(42.5)%
Other	2.2	2.6	4.5	(13.6)%	(42.0)%
Total research and development expenses	\$ 54.1	\$ 58.7	\$ 75.5	(7.8)%	(22.2)%

**General and administrative expenses**

Type of expense	Years ended December 31,			% change from 2011 to 2012	% change from 2010 to 2011
	2012	2011	2010		
Salary and other personnel costs (excluding non-cash share-based compensation)	\$ 9.8	\$ 9.1	\$ 9.9	8.1%	(8.4)%
Legal, accounting and other professional fees	6.7	7.6	9.7	(12.3)%	(21.6)%
Facility and equipment costs	4.4	4.2	3.8	4.2%	12.1%
Non-cash share-based compensation	3.2	1.7	2.1	91.7%	(19.1)%
Other	2.1	1.6	2.4	27.2%	(33.5)%
Total general and administrative expenses	\$ 26.2	\$ 24.2	\$ 27.9	8.2%	(13.2)%

**YEAR ENDED DECEMBER 31, 2012, COMPARED TO YEAR ENDED DECEMBER 31, 2011**

**Revenues.** We recognized revenues of \$27.6 million for the year ended December 31, 2012, compared to \$12.7 million for the year ended December 31, 2011. This increase was primarily due to the \$20.0 million non-refundable milestone payment we earned in connection with the FDA approval of BELVIQ, which was partially offset by (i) a \$3.3 million decrease in reimbursements we received from Eisai related to additional BELVIQ development work and (ii) a \$1.5 million decrease in manufacturing services revenue under our manufacturing services agreement with Siegfried Ltd (now Siegfried AG, and referred to collectively in this Annual Report as Siegfried). The decrease in manufacturing services revenues is primarily the result of decreased volume and, to a lesser extent, decreases in certain sales prices under our manufacturing services agreement with Siegfried.

When collaborators pay us before revenues are earned, we record such payments as deferred revenues until earned. As of December 31, 2012, we had a total of \$62.7 million in deferred revenues. Of such amount, \$46.1 million is attributable to upfront payments we received under the Eisai Agreement, \$11.6 million is attributable to the BELVIQ product supply delivered to Eisai in October 2012 and \$4.9 million is attributable to the upfront payment under the Ildong BELVIQ Agreement.

Absent any new collaborations, we expect our 2013 revenues will primarily consist of (i) \$65.0 million of milestone payments from Eisai upon the DEA's final scheduling designation for BELVIQ, (ii) revenues from sales of BELVIQ and (iii) amortization of (a) the \$50.0 million non-refundable, upfront payment we received in July 2010 in connection with entering into the original marketing and supply agreement with Eisai, (b) the \$5.0



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million non-refundable, upfront payment we received in May 2012 in connection with entering into the amended and restated marketing and supply agreement with Eisai, and (c) the \$5.0 million non-refundable, upfront payment we received from Ildong in connection with entering into the Ildong BELVIQ Agreement in November 2012.

Revenues for milestones that may be achieved in the future are difficult to predict, and our revenues will likely vary significantly from quarter to quarter and year to year. We expect that this will be particularly the case in 2013 as we transition from a research and development company to a company with a marketed drug, and we do not know when Eisai will begin marketing BELVIQ in the United States or the rate at which it will be adopted by the marketplace. In addition to revenues from the commercialization of BELVIQ in the United States, we expect that any significant revenues in the short term will depend on whether and when we (i) receive regulatory approval of, and commercialize, BELVIQ outside of the United States, (ii) enter into any additional agreements to commercialize BELVIQ and (iii) enter into any agreements to collaborate on or license any of our drug candidates.

**Cost of manufacturing services.** Cost of manufacturing services is comprised of direct and indirect costs associated with manufacturing drug products for Siegfried under our amended manufacturing services agreement, including related salaries, other personnel costs and machinery depreciation costs. We recognized cost of manufacturing services of \$3.7 million and \$8.1 million for the years ended December 31, 2012, and 2011, respectively. This decrease was primarily related to our contract loss provision for these services, which is the result of providing the services at sales prices that are less than our costs, as well as the reduced volume of manufacturing services performed.

**Research and development expenses.** Research and development expenses, which account for the majority of our expenses, consist primarily of salaries and other personnel costs, clinical trial costs (including payments to contract research organizations, or CROs), preclinical study fees, manufacturing costs for non-commercial products, costs for the development of our earlier-stage programs and technologies, research supply costs and facility and equipment costs. We expense research and development costs as they are incurred when these expenditures have no alternative future uses. We generally do not track our earlier-stage, internal research and development expenses by project; rather, we track such expenses by the type of cost incurred.

Research and development expenses decreased by \$4.6 million to \$54.1 million for the year ended December 31, 2012, from \$58.7 million for the year ended December 31, 2011. This was primarily due to decreases of (i) \$3.0 million in internal research and development manufacturing costs related to our Swiss manufacturing facility, (ii) \$1.2 million in salary and personnel costs as a result of our 2011 workforce reduction and (iii) \$1.0 million in facility and equipment costs, primarily depreciation expense. These decreases were partially offset by a \$1.3 million increase in external clinical and preclinical study fees and expenses. We previously recorded BELVIQ manufacturing costs as research and development expenses. However, once the FDA approved BELVIQ, we began to capitalize our BELVIQ manufacturing costs, which we expect to be significant, as inventory, and will subsequently record such costs as cost of goods sold as the related inventory is sold. We expect to continue to incur substantial research and development expenses in 2013, which may include non-FDA required development work relating to BELVIQ that may be significant depending on whether, and to what extent, a collaborator shares the expenses. We expect our research and development expenses in 2013 may be substantially higher than in 2012.

Included in the \$7.9 million total external clinical and preclinical study fees and expenses noted in the table above for the year ended December 31, 2012, was \$4.4 million related to BELVIQ, \$2.2 million related to APD811 and \$1.0 million related to APD371. Included in the \$6.6 million total external clinical and preclinical study fees and expenses noted in the table above for the year ended December 31, 2011, was \$3.6 million related to BELVIQ, \$1.7 million related to APD811, \$0.7 million related to APD334, and \$0.2 million related to GPR119.

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Cumulatively through December 31, 2012, we have recognized external clinical and preclinical study fees and other related expenses of \$262.8 million for BELVIQ, \$43.7 million for nelotanserin (an inverse agonist of the serotonin 2A receptor, which we previously studied in Phase 2 for the treatment of insomnia), \$7.3 million for temanogrel, \$6.6 million for APD811, \$2.8 million for APD916 (which we formerly studied for the potential treatment of narcolepsy with cataplexy and have since abandoned), \$1.8 million for APD334 and \$1.1 million for APD371. With respect to temanogrel, in November 2012, we granted Ildong exclusive rights to commercialize temanogrel in South Korea for certain cardiovascular diseases, subject to further development and regulatory approval of temanogrel. Initially, Ildong will be responsible for funding and conducting the next two planned clinical trials in this program.

While expenditures on current and future clinical development programs are expected to be substantial, they are subject to many uncertainties, including whether we have adequate funds and develop our drug candidates with one or more collaborators 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 BELVIQ or any of our drug candidates. The duration and cost of clinical trials may vary significantly over the life of a project as a result of unanticipated events arising during clinical development and a variety of factors, including:

the nature and number of trials and studies in a clinical program;

the number of patients who participate in the trials;

the number and location 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 drug candidates; and

the costs, requirements, timing of, and the ability to secure regulatory approvals.

**General and administrative expenses.** General and administrative expenses increased by \$2.0 million to \$26.2 million for the year ended December 31, 2012, from \$24.2 million for the year ended December 31, 2011. This was primarily due to increases of (i) \$1.5 million in non-cash share-based compensation and (ii) \$0.7 million in salary and other personnel costs. These increases were partially offset by a \$1.1 million decrease in patent fees. We expect that our 2013 general and administrative expenses will be higher than in 2012.

**Amortization of acquired technology and other intangibles.** We recognized \$0.7 million for amortization of acquired technology and other intangibles for the year ended December 31, 2012, compared to \$1.0 million for the year ended December 31, 2011. This decrease was primarily due to reaching the end of the 10-year estimated useful life of our Melanophore screening technology in the first quarter of 2011. The remaining amortization expense relates to the manufacturing facility production licenses we acquired in connection with our Swiss manufacturing facility, which are being amortized over their estimated useful life of 20 years. Using the exchange rate in effect on December 31, 2012, we expect to record amortization expense of \$0.7 million per year through 2027 for the manufacturing facility production licenses.

**Interest and other expense, net.** Interest and other expense, net, increased by \$2.0 million to \$28.4 million for the year ended December 31, 2012, from \$26.4 million for the year ended December 31, 2011. This was primarily due to a \$13.4 million non-cash loss from revaluation of our derivative liabilities, primarily resulting from the increase in the price of our common stock in 2012, which is an input into our Black-Scholes option pricing model. This increased expense was partially offset by (i) a \$5.2 million decrease in interest expense primarily related to the May 2012 payoff of our former loan from certain Deerfield entities and (ii) a \$4.2 million decrease in the non-cash loss on extinguishment of debt. Although our total interest expense will decrease due to the payoff of the Deerfield loan, we expect that it will continue to be substantial due to

payments on our lease financing obligations.

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**Deemed dividend related to beneficial conversion feature of convertible preferred stock.** We recorded a deemed dividend of \$2.8 million in the year ended December 31, 2012, upon the issuance of our formerly outstanding Series D Convertible Preferred Stock and, in the year ended December 31, 2011, we recorded a deemed dividend of \$2.3 million upon the issuance of our formerly outstanding Series C Convertible Preferred Stock. The fair value of the common stock into which both series of preferred stock was convertible on the respective dates of issuance of the preferred stock exceeded the allocated proceeds on a relative fair value basis, resulting in the beneficial conversion feature.

**YEAR ENDED DECEMBER 31, 2011, COMPARED TO YEAR ENDED DECEMBER 31, 2010**

**Revenues.** We recognized revenues of \$12.7 million for the year ended December 31, 2011, compared to \$16.6 million for the year ended December 31, 2010. This was primarily due to decreases of (i) \$4.0 million from deferred non-cash revenues recognized in 2010 under our license agreement with TaiGen Biotechnology Co., Ltd., or TaiGen, (ii) \$3.2 million for patent activities reimbursed under our former collaboration with Ortho-McNeil-Janssen Pharmaceuticals, Inc., or Ortho-McNeil-Janssen, in 2010 and (iii) \$1.8 million under our manufacturing services agreement with Siegfried. These decreases were partially offset by (i) a \$3.3 million increase in reimbursements we received from Eisai related to additional BELVIQ development work and (ii) a \$1.5 million increase resulting from a full year's amortization of the \$50.0 million non-refundable, upfront payment we received in July 2010 in connection with entering into the original marketing and supply agreement with Eisai.

**Cost of manufacturing services.** We recognized cost of manufacturing services of \$8.1 million and \$7.4 million for the years ended December 31, 2011, and 2010, respectively. The amount recognized in 2011 included \$1.2 million representing the estimated contract loss provision for services expected to be rendered in 2012 under the amended manufacturing services agreement with Siegfried in place at that time.

**Research and development expenses.** Research and development expenses decreased by \$16.8 million to \$58.7 million for the year ended December 31, 2011, from \$75.5 million for the year ended December 31, 2010. This was primarily due to decreases of (i) \$8.6 million in salary and other personnel costs as a result of our 2011 workforce reduction, (ii) \$4.0 million in external clinical and preclinical study fees and expenses, including manufacturing costs, primarily due to completing our Phase 3 clinical trials for BELVIQ and (iii) \$2.2 million in facility and equipment costs, primarily depreciation expense. These decreases were partially offset by a \$1.8 million increase in internal research and development manufacturing costs at our Swiss manufacturing facility, due to decreased units of drug product manufactured under the amended agreements with Siegfried that resulted in an increase in the unused manufacturing capacity.

Included in the \$6.6 million total external clinical and preclinical study fees and expenses noted in the table above for the year ended December 31, 2011, was \$3.6 million related to BELVIQ, \$1.7 million related to APD811, \$0.7 million related to APD334, and \$0.2 million related to GPR119. Included in the \$10.6 million total external clinical and preclinical study fees and expenses noted in the table above for the year ended December 31, 2010, was \$7.5 million related to BELVIQ, \$1.4 million related to APD811, \$1.1 million related to APD334 and \$0.5 million related to APD916.

**General and administrative expenses.** General and administrative expenses decreased by \$3.7 million to \$24.2 million for the year ended December 31, 2011, from \$27.9 million for the year ended December 31, 2010. This was primarily due to decreases of (i) \$2.1 million in legal fees, including litigation and patent legal fees, (ii) \$0.8 million in salary and other personnel costs and (iii) \$0.7 million in marketing research expenses.

**Restructuring charges.** We recognized \$3.5 million of restructuring charges for the year ended December 31, 2011, in connection with one-time employee termination costs, including severance and other benefits related to our 2011 workforce reduction, and recognized no restructuring charges for the year ended December 31, 2010.

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**Amortization of acquired technology and other intangibles.** We recognized \$1.0 million for amortization of acquired technology and other intangibles for the year ended December 31, 2011, compared to \$2.2 million for the year ended December 31, 2010. This \$1.2 million decrease was primarily due to reaching the end of the 10-year estimated useful life of the Melanophore screening technology in the first quarter of 2011.

**Interest and other expense, net.** Interest and other expense, net, decreased by \$1.8 million to \$26.4 million for the year ended December 31, 2011, from \$28.2 million for the year ended December 31, 2010. This was primarily due to (i) a \$7.4 million decrease in interest expense primarily related to the Deerfield loan as a result of principal repayments totaling \$67.7 million that we made in 2010 and early 2011 and (ii) a \$1.8 million reduction in the non-cash loss on extinguishment of debt. These decreases were partially offset by a (i) \$4.3 million reduction in the non-cash gain from revaluation of our derivative liabilities and (ii) a \$2.0 million write-down of the balance of our investment in TaiGen. The interest expense recognized in 2010 included the non-cash correction of prior period errors which resulted in a \$3.0 million decrease to interest expense. We recognized interest expense of \$6.6 million and \$14.0 million related to the Deerfield loan for the years ended December 31, 2011, and 2010, respectively.

**Deemed dividend related to beneficial conversion feature of convertible preferred stock.** We recorded a deemed dividend of \$2.3 million for the year ended December 31, 2011, upon the issuance of our formerly outstanding Series C Convertible Preferred Stock related to its beneficial conversion feature. We did not record any such dividends for the year ended December 31, 2010.

## **LIQUIDITY AND CAPITAL RESOURCES**

We have accumulated a large deficit since inception that has primarily resulted from the significant research and development expenditures we have made in seeking to identify and validate new drug targets and develop compounds that could become marketed drugs. Notwithstanding the FDA approval of BELVIQ and related payments received and expected from our collaborators, we may incur substantial losses for at least the short term as a result of manufacturing and commercializing BELVIQ, conducting required and potentially other post-marketing studies of BELVIQ, seeking regulatory approval of BELVIQ outside of the United States and advancing other of our current and future compounds and drug candidates.

### *Short term*

As of December 31, 2012, we had \$156.1 million in cash and cash equivalents. In January 2013, we received the non-refundable, upfront payment of \$5.0 million, less withholding taxes, due in connection with entering into the Ildong BELVIQ Agreement. We believe our cash and cash equivalents will be sufficient to fund our operations for at least the next 12 months. We expect that our 2013 operating expenses will be substantial as we continue to fund BELVIQ-related activities, and, at the same time, selectively advance certain of our research and development programs.

In connection with the FDA approval of BELVIQ, we received a \$20.0 million non-refundable milestone payment from Eisai. In addition, we will receive milestone payments from Eisai totaling \$65.0 million in connection with the DEA's scheduling designation for BELVIQ. Following the DEA scheduling of BELVIQ, we expect Eisai to launch BELVIQ in the United States, and we will begin to receive payments based on Eisai's net sales of BELVIQ.

Other potential sources of liquidity in the short term include (i) payments from Eisai upon achievement of additional milestones, (ii) entering into new collaborative, licensing or commercial agreements for BELVIQ in additional territories or for one or more of our drug candidates or programs and (iii) the sale or lease of facilities or other assets we own.



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We will manufacture BELVIQ at our facility in Switzerland, and sell BELVIQ to Eisai for marketing and distribution in the United States and, subject to applicable regulatory approval, in the additional territories under the Eisai Agreement for a purchase price starting at 31.5% and 30.75%, respectively, of Eisai's aggregate annual net sales (which are the gross invoiced sales less certain deductions described in the Eisai Agreement, including for certain taxes, credits, allowances, discounts, rebates, chargebacks and other items) in all of such territories on an aggregate basis. The purchase price will increase on a tiered basis in the United States and in the additional territories to as high as 36.5% and 35.75%, respectively, on the portion of Eisai's annual net sales exceeding \$750.0 million, subject to reduction (for sales in a particular country), including in the event of generic competition in the applicable country.

As part of the FDA's approval of BELVIQ, we and Eisai committed to evaluate the effect of long-term treatment with BELVIQ on the incidence of major adverse cardiovascular events in overweight and obese patients with cardiovascular disease or multiple cardiovascular risk factors, as well as to conduct post-marketing studies to assess the safety and efficacy of BELVIQ for weight management in obese pediatric patients. With respect to such studies, which we expect will take several years to complete, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for the cardiovascular outcomes trial, and we will share equally with Eisai the costs of certain pediatric studies. In addition, in the event that we conduct any non-FDA required development work relating to BELVIQ, we would expect to incur additional expenses, which may be significant depending on whether, and to what extent, a collaborator shares the expenses.

Eisai is responsible for regulatory activities related to the BELVIQ New Drug Application, or NDA, and for the regulatory activities for obtaining marketing approval in any country in the additional territories under the Eisai Agreement. If the regulatory authority for a country in the additional territories requires development work before or following approval of BELVIQ in such country, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for such work, with the exception of the expenses for stability testing, which we will share equally with Eisai.

In connection with entering into the Ildong BELVIQ Agreement in November 2012, we received a non-refundable, upfront payment of \$5.0 million, less withholding taxes. Ildong is responsible for the regulatory approval and, ultimately, marketing and distribution of BELVIQ in South Korea, including related development and other costs and expenses.

To date, we have obtained cash and funded our operations primarily through equity financings, payments from collaborators, the issuance of debt and related financial instruments and sale leaseback transactions. Although we expect that payments related to the commercialization of BELVIQ may be substantial in the short term, we expect to continue to evaluate various funding alternatives on an ongoing basis. There is no guarantee that additional funding will be available or that, if available, such funding will be adequate or available on terms that we or our stockholders view as favorable.

### *Long term*

We will need substantial cash to achieve our objectives of discovering, developing and commercializing drugs, and this process typically takes many years and potentially several hundreds of millions of dollars for an individual drug. We may not have adequate available cash, or assets that could be readily turned into cash, to meet these objectives in the long term. We will need to obtain significant funds under our existing collaborations, under new collaborative, licensing or other commercial agreements for BELVIQ or one or more of our drug candidates and programs or patent portfolios, or from other potential sources of liquidity, which may include the public and private financial markets.

We expect to continue to incur substantial costs for BELVIQ, including costs related to manufacturing and required and potentially other post-marketing studies. As described above under short term, we will be responsible for a portion of the costs for BELVIQ development work required by regulatory agencies. In addition, in the event that we conduct any non-FDA required development work relating to BELVIQ, we would

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expect to incur additional expenses, which may be significant depending on whether, and to what extent, a collaborator shares the expenses. Subject to applicable regulatory approval, we expect Eisai to commercialize BELVIQ in additional territories in North and South America.

The Eisai Agreement includes payments by Eisai if annual minimum sales requirements in the additional territories are not met during the first ten years after initial commercial sale in Mexico, Canada or Brazil. In addition, we are eligible to receive up to an aggregate of \$1.19 billion in one-time purchase price adjustment payments and other payments based on Eisai's annual net sales of BELVIQ in all of the territories under our agreement on an aggregate basis, with the first and last amounts payable with annual net sales of \$250.0 million and \$2.5 billion, respectively. Of these payments, Eisai will pay us a total of \$330.0 million for annual net sales of up to \$1.0 billion. We are also eligible to receive up to an additional \$185.0 million in one-time purchase price adjustment payments based on Eisai's annual net sales of BELVIQ in the non-US territories under our agreement, with the first and last amounts payable upon first achievement of annual net sales of \$100.0 million and \$1.0 billion in such territories, respectively. We are also eligible to receive additional milestone payments totaling \$54.5 million based on achievement of regulatory filings and approvals.

We are also eligible to receive \$3.0 million upon the approval of BELVIQ by the KFDA under the Ildong BELVIQ Agreement. We will manufacture BELVIQ at our facility in Switzerland, and sell BELVIQ to Ildong for marketing and distribution in South Korea for a purchase price starting at 35% of Ildong's annual net sales. The purchase price will increase on a tiered basis up to 45% on the portion of annual net sales (which are the gross invoiced sales less certain deductions described in the Ildong BELVIQ Agreement, including for certain taxes and other items) exceeding \$15.0 million. If certain annual net sales amounts are not met, we can convert Ildong's right to commercialize BELVIQ in South Korea to be non-exclusive.

With respect to commercializing BELVIQ in other territories, we will need additional funds or a collaborative or other agreement with one or more pharmaceutical companies.

In addition to the potential payments from Eisai and Ildong described above, as well as the public and private financial markets, potential sources of liquidity in the long term include (i) milestone and royalty and other payments from any future collaborators or licensees and (ii) revenues from sales of any drugs we commercialize on our own. The length of time that our current cash and cash equivalents and any available borrowings will sustain our operations will be based on, among other things, the rate of adoption and commercial success of BELVIQ, regulatory decisions, our prioritization decisions regarding funding for our programs, progress in our clinical and earlier-stage programs, the time and costs related to current and future clinical trials and nonclinical studies, our research, development, manufacturing and commercialization costs (including personnel costs), our progress in any programs under collaborations, costs associated with intellectual property, our capital expenditures, and costs associated with securing any in-licensing opportunities. Any significant shortfall in funding may result in us reducing our development and/or research activities, which, in turn, would affect our development pipeline and ability to obtain cash in the future. If we determine it is advisable to raise additional funds, we do not know whether adequate funding will be available to us or, if available, that such funding will be available on acceptable terms.

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

### *Sources and Uses of Our Cash*

Net cash used in operating activities decreased by \$34.2 million to \$44.0 million in 2012. This was primarily due to a lower net loss in 2012, as well as changes in our operating assets and liabilities. Net cash used in operating activities increased by \$26.0 million to \$78.3 million in 2011. This was primarily due to changes in our operating assets and liabilities. Net cash used in operating activities decreased by \$103.6 million in 2010 to \$52.3 million. This decrease resulted from our lower net loss from 2009 to 2010, primarily due to completing our

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BLOOM (Behavioral modification and Lorcaserin for Overweight and Obesity Management) and BLOSSOM (Behavioral modification and Lorcaserin Second Study for Obesity Management) Phase 3 clinical trials for BELVIQ in 2009, as well as changes in our operating assets and liabilities, primarily receipt of the \$50.0 million payment from Eisai.

Net cash of \$2.2 million was used in investing activities in 2012, primarily for purchases of equipment and improvements to our facilities. Net cash of \$0.7 million was used in investing activities in 2011, primarily for purchases of equipment and improvements to our facilities. Net cash of \$16.3 million was provided by investing activities in 2010, and was primarily attributable to net proceeds of \$20.4 million from short-term investments, which were partially offset by \$4.2 million used for equipment and improvements to our facilities, primarily for our manufacturing facility in Switzerland. We expect that our 2013 capital expenditures will increase over the 2012 amount due to deferments of capital spending in previous years.

Net cash of \$144.1 million was provided by financing activities in 2012, primarily due to net proceeds of (i) \$65.7 million from a public offering of 12,650,000 shares of our common stock at \$5.50 per share, (ii) \$32.5 million from the portion of Deerfield's formerly outstanding warrants to purchase a total of 23,000,000 shares of our common stock that were cash exercised, (iii) \$27.9 million, after prepayment of \$5.0 million of loan principal, from the sale to Deerfield of 9,953,250 shares of our common stock and 9,953 shares of our preferred stock (subsequently converted in full into 9,953,250 shares of our common stock) and (iv) \$24.7 million from the sale of 14,414,370 shares of common stock under an equity line of credit agreement we had with Azimuth Opportunity, L.P. These proceeds were partially offset by principal repayments to Deerfield totaling \$22.3 million. Net cash of \$14.2 million was used in financing activities in 2011, primarily due to principal repayments to Deerfield totaling \$37.7 million and \$11.1 million paid to Siegfried in 2011. These repayments were partially offset by net proceeds of \$35.3 million from the sale of 12,150,000 shares of common stock and 12,150 shares of subsequently converted Series C Preferred to Deerfield in March 2011. Net cash of \$89.7 million was provided by financing activities in 2010, primarily due to net proceeds of \$35.5 million from the sale of 11.0 million shares of common stock and the exchange of warrants to Deerfield, net proceeds of \$30.0 million, after the \$30.0 million principal prepayment, from the sale of approximately 9.0 million shares of common stock to Deerfield, and net proceeds of \$24.2 million from the sale of approximately 8.3 million shares of common stock under an equity financing commitment we had with Azimuth Opportunity Ltd., or Azimuth Ltd.

**CONTRACTUAL OBLIGATIONS**

The following table summarizes our contractual obligations as of December 31, 2012, in thousands:

Contractual Obligations	Total	Payments due by period			
		Less than 1 year	1-3 years	3-5 years	More than 5 years
Financing obligations	\$ 128,612	\$ 7,892	\$ 17,852	\$ 18,756	\$ 84,112
Purchase obligations	2,489	2,489	0	0	0
Operating leases	13,945	1,050	1,662	1,747	9,486
Total	\$ 145,046	\$ 11,431	\$ 19,514	\$ 20,503	\$ 93,598

In December 2003, we completed the sale and leaseback of one of our properties for total consideration of \$13.0 million, and, in May 2007, we completed the sale and leaseback of three of our properties and assigned an option (subsequently exercised) to purchase a fourth property for total consideration of \$50.1 million. Our options to repurchase these properties in the future are considered continued involvement under the applicable accounting guidance and, therefore, we have applied the financing method which requires that the book value of the properties and related accumulated depreciation remain on our balance sheet with no sale recognized. Instead, the sales price of the properties is recorded as a financing obligation and a portion of each lease payment is recorded as interest expense. As of December 31, 2012, we expect interest expense over the term of these leases

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to total \$64.1 million. With the exception of the fourth property, which created an operating lease obligation and is included under operating leases above, we have included the lease obligations related to these properties in the above table as financing obligations.

*Off-Balance Sheet Arrangements*

Except for operating leases, we do not have, and did not have as of December 31, 2012, any off-balance sheet arrangements that have or are reasonably likely to have a current or future material effect on our financial condition, results of operations, liquidity, capital expenditures or capital resources.

**COLLABORATIONS****Eisai Inc.**

In May 2012, Arena GmbH and Eisai entered into the Amended and Restated Marketing and Supply Agreement for BELVIQ, which amended and restated the original marketing and supply agreement the parties entered into in July 2010. This amendment expanded Eisai's exclusive rights to commercialize BELVIQ to include, in addition to the United States and its territories and possessions, most of North and South America, including Mexico, Canada and Brazil, subject to applicable regulatory approval in the additional territories. In addition, we provide services related to development and regulatory activities, and we also manufacture and sell BELVIQ to Eisai. Under the Eisai Agreement, we are entitled to receive upfront payments, milestone payments based on the achievement of regulatory filings and approvals, one-time purchase price adjustment payments and other payments, and payments from sales of BELVIQ. The upfront payments we received of \$50.0 million when we entered into the original agreement and \$5.0 million when we entered into the amended agreement were deferred, as we determined that the exclusive rights did not have standalone value without our development and regulatory activities. These payments are being recognized ratably as revenue over the periods in which we expect the services to be rendered, which are approximately 16 years and 13 years, respectively.

In addition to the upfront payments, we received a \$20.0 million non-refundable milestone payment that we earned for the inclusion in the FDA-approved prescribing information of the efficacy and safety data from the Phase 3 BLOOM-DM (Behavioral modification and Lorcaserin for Overweight and Obesity Management in Diabetes Mellitus) clinical trial in patients with type 2 diabetes. We recognized this \$20.0 million milestone payment as revenue when the FDA approved BELVIQ on June 27, 2012. We are also entitled to receive from Eisai up to \$119.5 million of additional non-refundable milestone payments, consisting of \$65.0 million upon the DEA's final scheduling designation for BELVIQ and other milestone payments totaling \$54.5 million based on achievement of regulatory filings and approvals. Under the milestone method of revenue recognition, we will recognize revenue for the amount payable to us for achieving each substantive milestone payment, if any, in the period the milestone is achieved.

In November 2012, we received \$11.6 million for BELVIQ product supply delivered to Eisai pursuant to an initial order under the Eisai Agreement, which has been recorded as deferred revenues until earned. At December 31, 2012, our consolidated balance sheet included \$15.0 million and \$42.7 million for the current and non-current portion, respectively, of the total deferred revenues attributable to Eisai.

The following table summarizes the revenues we have recognized under the Eisai Agreement for the periods presented, in thousands:

	December 31,			From Inception Through December 31, 2012
	2012	2011	2010	
Milestone payments	\$ 20,000	\$ 0	\$ 0	\$ 20,000
Amortization of the upfront payments	3,503	3,434	1,923	8,860
Reimbursement of development and patent expenses	114	3,336	0	3,450
Total	\$ 23,617	\$ 6,770	\$ 1,923	\$ 32,310

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We will sell BELVIQ to Eisai for marketing and distribution in the United States and, subject to applicable regulatory approval, in the additional territories for a purchase price starting at 31.5% and 30.75%, respectively, of Eisai's aggregate annual net sales (which are the gross invoiced sales less certain deductions described in the Eisai Agreement, including for certain taxes, credits, allowances, discounts, rebates, chargebacks and other items) in all of such territories on an aggregate basis. The purchase price will increase on a tiered basis in the United States and in the additional territories to as high as 36.5% and 35.75%, respectively, on the portion of Eisai's annual net sales exceeding \$750.0 million, subject to reduction (for sales in a particular country), including in the event of generic competition in the applicable country. The Eisai Agreement includes payments by Eisai if annual minimum sales requirements in the additional territories are not met during the first ten years after initial commercial sale in Mexico, Canada or Brazil. In addition, we are eligible to receive up to an aggregate of \$1.19 billion in one-time purchase price adjustment payments and other payments based on Eisai's annual net sales of BELVIQ in all of the territories under our agreement on an aggregate basis, with the first and last amounts payable with annual net sales of \$250.0 million and \$2.5 billion, respectively. Of these payments, Eisai will pay us a total of \$330.0 million for annual net sales of up to \$1.0 billion. We are also eligible to receive up to an additional \$185.0 million in one-time purchase price adjustment payments based on Eisai's annual net sales of BELVIQ in the non-US territories under our agreement, with the first and last amounts payable upon first achievement of annual net sales of \$100.0 million and \$1.0 billion, respectively, in such territories.

With respect to the post-marketing studies we and Eisai committed to conduct as part of the FDA approval of BELVIQ, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for the cardiovascular outcomes trial, and we will share equally with Eisai the costs of certain pediatric studies. Eisai is responsible for regulatory activities related to the BELVIQ NDA and for the regulatory activities for obtaining regulatory approval in any country in the additional territories. If the regulatory authority for a country in the additional territories requires development work before or following approval of BELVIQ in such country, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for such work, with the exception of the expenses for stability testing, which we will share equally with Eisai.

Eisai and we have agreed to not commercialize outside of the Eisai Agreement any product that competes with BELVIQ in the United States or the additional territories. Our Eisai Agreement includes a stand-still provision limiting Eisai's ability to acquire our securities and assets.

Eisai will indemnify Arena GmbH for losses resulting from certain third-party claims, including for (a) Eisai's negligence, willful misconduct or violation of law, except for US product liability claims, (b) Eisai's breach of the marketing and supply agreement or related agreements, except for US product liability claims, (c) certain uses or misuses of BELVIQ, (d) certain governmental investigations of Eisai related to BELVIQ, and (e) infringement relating to Eisai's use of certain trademarks related to BELVIQ. Arena GmbH will indemnify Eisai for losses resulting from US product liability claims or from certain third-party claims, including for (i) Arena GmbH's negligence, willful misconduct, failure to comply with law, breach of any agreement with a third party with respect to product development prior to the effective date of the agreement with Eisai, (ii) Arena GmbH's negligence or willful misconduct with respect to certain uses or misuses of BELVIQ outside of the agreement, (iii) certain uses or misuses of BELVIQ after the term of the agreement or in any territory no longer under the agreement, (iv) Arena GmbH's negligence, willful misconduct or violation of law, (v) Arena GmbH's breach of the marketing and supply agreement or related agreements; (vi) certain infringement of intellectual rights of a third party; and (vii) infringement relating to Eisai's use of certain trademarks related to BELVIQ. In addition, each of Arena GmbH and Eisai will share equally in losses resulting from third-party product liability claims in the territories added with the amended agreement, except to the extent caused by one party's negligence, willful misconduct, violation of law or breach or default of the amended agreement or certain other agreements between the parties. We are unable to predict the maximum potential amount of any future payment for such product liability indemnification provisions. As of December 31, 2012, we have not incurred any significant costs under these indemnification provisions.

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Eisai may terminate the amended agreement with respect to the United States or any country in the additional territories following the later of the expiration of all issued BELVIQ patents in such country and 12 years after the first commercial sale of BELVIQ in such country. Either party has the right to terminate the amended agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for commercialization concerns, and (c) for certain intellectual property infringement. Eisai also has the right to terminate the amended agreement early in its entirety or with respect to each country in certain circumstances, including (i) termination in a country if sales of generic equivalents of BELVIQ in such country exceed sales of BELVIQ in that country (based on volume), and (ii) if Eisai is acquired by a company that has a product that competes with BELVIQ. In addition, we can terminate the amended agreement early in its entirety or with respect to each country in the additional territories in certain circumstances, including termination in each country if Eisai does not satisfy certain regulatory filing and commercialization diligence requirements in such country.

**Ildong Pharmaceutical Co., Ltd.**

*BELVIQ*

In November 2012, Arena GmbH and Ildong entered into the Ildong BELVIQ Agreement. Under this agreement, we granted Ildong exclusive rights to commercialize BELVIQ in South Korea for weight loss or weight management in obese and overweight patients, subject to regulatory approval of BELVIQ by the KFDA. In addition, we also provide certain services and will manufacture and sell BELVIQ to Ildong. Under the Ildong BELVIQ Agreement, in addition to the upfront payment received, we are entitled to receive a milestone payment based on regulatory approval as well as payments from sales of BELVIQ.

Under the agreement, we received from Ildong an upfront payment of \$5.0 million, less withholding taxes, and will receive an additional \$3.0 million upon the approval of BELVIQ by the KFDA. We recorded this upfront payment as deferred revenue and are recognizing it as revenue ratably over approximately 14 years, which is the period in which we expect to have significant involvement. At December 31, 2012, our consolidated balance sheet included \$0.3 million and \$4.6 million for the current and non-current portion, respectively, of the deferred revenue attributable to such upfront payment. For the year ended December 31, 2012, we recognized revenues of \$0.1 million under this agreement.

Ildong is responsible for the regulatory approval and, ultimately, commercialization of BELVIQ in South Korea for weight loss or weight management in obese and overweight patients, including related development and other costs and expenses. We will manufacture BELVIQ at our facility in Switzerland, and sell BELVIQ to Ildong for a purchase price starting at 35% of Ildong's annual net sales (which are the gross invoiced sales less certain deductions described in the Ildong BELVIQ Agreement, including for certain taxes and other items). The purchase price will increase on a tiered basis up to 45% on the portion of annual net sales exceeding \$15.0 million. If certain annual net sales amounts are not met, we can convert Ildong's right to commercialize BELVIQ in South Korea to be non-exclusive.

Ildong has agreed not to conduct activities outside of our agreement related to the approval or commercialization of any other pharmaceutical product for weight loss, weight management or obesity in South Korea. We have agreed not to conduct activities outside of our agreement related to the commercialization in South Korea of any pharmaceutical product containing BELVIQ intended for end use in weight loss or weight management in obese and overweight patients.

Ildong will indemnify Arena GmbH for losses resulting from certain third-party claims, including for (a) Ildong's negligence, willful misconduct or violation of law, (b) Ildong's breach of the marketing and supply agreement or related agreements, (c) certain uses or misuses of BELVIQ (including any product liability claim and other claims relating to sales or development of BELVIQ in South Korea), (d) certain governmental investigations of Ildong related to BELVIQ, and (e) infringement relating to Ildong's use of trademarks related to

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BELVIQ. Arena GmbH will indemnify Ildong for losses resulting from certain third-party claims, including for (i) Arena GmbH's negligence, willful misconduct or violation of law, and (ii) Arena GmbH's breach of the marketing and supply agreement or related agreements.

Unless terminated earlier, the agreement with Ildong will continue in effect until the later of the expiration of all issued patents relating to BELVIQ in South Korea and 12 years after the first commercial sale of BELVIQ in South Korea. Either party has the right to terminate the agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for certain commercialization concerns, and (c) for certain intellectual property concerns. Ildong also has the right to terminate the agreement early in certain circumstances, including if we notify Ildong that Ildong's right to commercialize BELVIQ in South Korea will become non-exclusive.

*Temanogrel*

In November 2012, we entered into the Ildong Temanogrel Agreement for temanogrel, our internally discovered inverse agonist of the serotonin 2A receptor. Under such agreement, we granted Ildong exclusive rights to commercialize temanogrel in South Korea for myocardial infarction, acute coronary syndrome, stroke, peripheral artery disease, and other cardiovascular diseases, subject to further development and regulatory approval of temanogrel. Initially, Ildong will be responsible for funding and conducting, under the direction of a joint steering committee, the next two planned clinical trials in this program: an additional Phase 1 trial in healthy volunteers and a Phase 2a proof-of-concept trial in patients. To date, we have not recognized any revenue under this agreement.

We will maintain ownership of temanogrel outside of South Korea, and have the rights to use data generated by Ildong for the development and potential commercialization of temanogrel outside of South Korea by us or other Arena licensees. In addition, Ildong has agreed to pay us a \$2.0 million development milestone if the planned additional Phase 1 and Phase 2a clinical trials conducted by Ildong support continued development and we or another Arena licensee initiates a Phase 2b clinical trial of temanogrel. We are also eligible to receive a royalty on net sales of temanogrel in South Korea, while Ildong is eligible to receive a share of future payments received by us related to licensing transactions and sales of temanogrel in other territories.

Ildong will indemnify us for losses resulting from certain third-party claims, including for (a) Ildong's negligence, willful misconduct or violation of law, (b) Ildong's breach of the agreement, (c) certain uses or misuses of temanogrel (including any product liability claim and other claims relating to sales or development of temanogrel in South Korea), and (d) certain governmental investigations of Ildong related to temanogrel. We will indemnify Ildong for losses resulting from certain third-party claims, including for (i) our negligence, willful misconduct or violation of law, and (ii) our breach of the agreement.

Unless terminated earlier or extended, the agreement will continue in effect until the later of the expiration of all issued patents relating to temanogrel in South Korea and 10 years after the first commercial sale of temanogrel in South Korea. Either party has the right to terminate the agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for certain commercialization concerns, and (c) for certain intellectual property concerns.

**CRITICAL ACCOUNTING POLICIES AND MANAGEMENT ESTIMATES**

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

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historical experience and on various assumptions that we believe are reasonable under the circumstances, the results of which form the basis for making judgments about the carrying values of assets and liabilities that are not readily apparent from other sources. Actual results may differ significantly from those estimates.

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

**Revenue recognition.** Our revenues to date have been generated primarily through collaborative agreements and, to a lesser extent, a manufacturing services agreement. Our collaborative agreements may contain multiple elements including commercialization rights, research and development services and manufacturing. Consideration we receive under these arrangements may include upfront payments, research and development funding, cost reimbursements and milestone payments. We recognize revenue when there is persuasive evidence that an arrangement exists, title has passed, the price is fixed or determinable, and collectability is reasonably assured. Any advance payments we receive in excess of amounts earned are classified as deferred revenues on our consolidated balance sheets until earned.

We adopted revised guidance on accounting for revenue arrangements involving multiple elements on January 1, 2011, on a prospective basis, for agreements we entered into or materially modified after adoption. This updated guidance (i) relates to whether multiple deliverables exist, how the deliverables in a revenue arrangement should be separated and how the consideration should be allocated, (ii) requires companies to allocate revenues in an arrangement using estimated selling prices of deliverables if a vendor does not have vendor-specific objective evidence or third-party evidence of selling price and (iii) eliminates the use of the residual method and requires companies to allocate revenues using the relative selling price method.

Since adoption of this guidance, we evaluate deliverables in a multiple-element arrangement to determine whether each deliverable represents a separate unit of accounting. A deliverable constitutes a separate unit of accounting when it has standalone value to the customer. Items are considered to have standalone value if they could be sold separately by any vendor or if the customer could resell the item on a standalone basis. If these criteria are not met, we combine the deliverable with the applicable undelivered elements, allocate the consideration and recognize revenue for the combined unit as a single unit. We allocate the consideration to each unit of accounting at the inception of the arrangement based on the relative selling price.

For agreements that we entered into prior to adoption of the revised multiple-element guidance, if fair value exists for the undelivered and delivered elements whereby such elements have standalone value, we allocate the consideration to the elements based on their relative fair values. In cases where fair value exists for the undelivered elements but does not exist for the delivered elements, we use the residual method to allocate the arrangement consideration. In cases where fair value does not exist for the undelivered elements in an arrangement, we account for the transaction as a single unit of accounting.

We typically defer non-refundable upfront payments received under our collaborative agreements when associated with future performance, and recognize them on a straight-line basis over the period in which we expect to have significant involvement or perform services, based on various factors specific to each collaboration. Amounts we receive for research funding are recognized as revenue as the services are performed. For reimbursements of out-of-pocket expenses for research and development activities where we control the activities, have discretion to choose suppliers, bear credit risk and perform part of the services when required, we record revenue for the gross amount of the reimbursement. The costs associated with such reimbursements are reflected as a component of research and development expense in our consolidated statements of operations and comprehensive loss.

Under the milestone method, we recognize revenue that is contingent upon the achievement of a substantive milestone in its entirety in the period in which the milestone is achieved. A milestone is an event (i) that can be achieved in whole or in part on either our performance or on the occurrence of a specific outcome resulting from



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our performance, (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved and (iii) that would result in additional payments being due us. A milestone payment is considered substantive when the consideration payable to us for each milestone (a) is consistent with our performance necessary to achieve the milestone or the increase in value to the collaboration resulting from our performance, (b) relates solely to our past performance and (c) is reasonable relative to all of the other deliverables and payments within the arrangement. In making this assessment, we consider all facts and circumstances relevant to the arrangement, including factors such as the scientific, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required to achieve the respective milestone and whether any portion of the milestone consideration is related to future performance or deliverables. Other contingent event-based payments received for which payment is either contingent solely upon the passage of time or the result of our collaborator's performance are not considered milestones and are recognized when earned.

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

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

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

**Share-based compensation.** We recognize compensation expense for all of our share-based awards based on the grant-date fair value. We determine the grant-date fair value of share-based awards by using the Black-Scholes option pricing model, which is affected by our stock price on the date of grant, as well as assumptions regarding other subjective variables. These assumptions include, but are not limited to, our expected stock price volatility over the term of the awards, the risk-free interest rate and the expected term of awards. Changes in the assumptions used could have a material impact on the compensation expense we recognize.

Share-based compensation expense recognized is based on awards ultimately expected to vest, and, therefore, is reduced by expected forfeitures. We estimate forfeitures based upon historical forfeiture rates, and will adjust our estimate of forfeitures if actual forfeitures differ, or are expected to differ, from such estimates.

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Changes in estimated forfeitures will be recognized through a cumulative adjustment in the period of the change and will also impact the amount of share-based compensation expense in future periods.

*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.*

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

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

We model interest rate exposure by a sensitivity analysis that assumes a hypothetical parallel shift downward in the US Treasury yield curve of 100 basis points. Under these assumptions, if the yield curve were to shift lower by 100 basis points from the level existing at December 31, 2012, we would expect future interest income from our portfolio to decline by approximately \$1.6 million over the next 12 months. As of December 31, 2011, this same hypothetical reduction in interest rates would have resulted in a \$0.6 million decline in interest income over the following 12 months. The model we use is not intended to forecast actual losses in interest income, but is used as a risk estimation and investment management tool. These hypothetical changes and assumptions are likely to be different from what actually occurs in the future. Furthermore, such computations do not incorporate any actions our management may take if the hypothetical interest rate changes actually occur. As a result, the impact on actual earnings may differ from those quantified herein.

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

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

**ARENA PHARMACEUTICALS, INC.**

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**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders

Arena Pharmaceuticals, Inc.:

We have audited the accompanying consolidated balance sheets of Arena Pharmaceuticals, Inc. and subsidiaries (the Company) as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2012. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

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 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 consolidated financial statements referred to above present fairly, in all material respects, the financial position of Arena Pharmaceuticals, Inc. and subsidiaries as of December 31, 2012 and 2011, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2012, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), Arena Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 1, 2013, expressed an unqualified opinion on the effectiveness of the Company's internal control over financial reporting.

/s/ KPMG LLP

San Diego, California

March 1, 2013

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

	December 31,	
	2012	2011
<b>Assets</b>		
Current assets:		
Cash and cash equivalents	\$ 156,091	\$ 57,632
Accounts receivable	5,556	607
Inventory	6,058	0
Prepaid expenses and other current assets	3,454	2,021
<b>Total current assets</b>	<b>171,159</b>	<b>60,260</b>
Land, property and equipment, net	75,417	82,066
Acquired technology and other intangibles, net	10,611	11,032
Other non-current assets	4,019	3,771
<b>Total assets</b>	<b>\$ 261,206</b>	<b>\$ 157,129</b>
<b>Liabilities and Stockholders' Equity</b>		
Current liabilities:		
Accounts payable and other accrued liabilities	\$ 7,123	\$ 5,294
Accrued compensation	3,087	4,280
Current portion of deferred revenues	15,453	3,473
Current portion of derivative liabilities	2,587	0
Current portion of lease financing obligations	1,664	1,313
<b>Total current liabilities</b>	<b>29,914</b>	<b>14,360</b>
Deferred rent	122	225
Deferred revenues, less current portion	47,282	41,209
Derivative liabilities, less current portion	12,455	1,617
Note payable to Deerfield	0	14,698
Lease financing obligations, less current portion	72,794	74,458
Commitments and contingencies and subsequent events		
Stockholders' equity:		
Preferred stock, \$.0001 par value: 7,500,000 shares authorized and 0 shares issued and outstanding at December 31, 2012, and 2011	0	0
Common stock, \$.0001 par value: 367,500,000 and 242,500,000 shares authorized at December 31, 2012, and 2011, respectively; 217,476,458 shares issued and outstanding at December 31, 2012; 146,092,819 shares outstanding and 143,092,819 shares issued at December 31, 2011	22	15
Additional paid-in capital	1,281,426	1,108,625
Treasury stock, at cost: 0 and 3,000,000 shares at December 31, 2012, and 2011, respectively	0	(23,070)
Accumulated other comprehensive income	5,489	4,743
Accumulated deficit	(1,188,298)	(1,079,751)
<b>Total stockholders' equity</b>	<b>98,639</b>	<b>10,562</b>
<b>Total liabilities and stockholders' equity</b>	<b>\$ 261,206</b>	<b>\$ 157,129</b>

See accompanying notes to consolidated financial statements.

**Table of Contents****ARENA PHARMACEUTICALS, INC.****Consolidated Statements of Operations and Comprehensive Loss**

(In thousands, except share and per share data)

	Years ended December 31,		
	2012	2011	2010
<b>Revenues:</b>			
Manufacturing services	\$ 3,817	\$ 5,338	\$ 7,057
Collaborative agreements	23,770	7,381	9,556
Total revenues	27,587	12,719	16,613
<b>Operating Expenses:</b>			
Cost of manufacturing services	3,671	8,100	7,414
Research and development	54,112	58,706	75,459
General and administrative	26,226	24,248	27,936
Restructuring charges	0	3,467	0
Amortization of acquired technology and other intangibles	691	997	2,159
Total operating expenses	84,700	95,518	112,968
Loss from operations	(57,113)	(82,799)	(96,355)
<b>Interest and Other Income (Expense):</b>			
Interest income	119	117	469
Interest expense	(9,120)	(14,309)	(21,681)
Gain (Loss) from valuation of derivative liabilities	(13,425)	47	4,371
Loss on extinguishment of debt	(6,338)	(10,514)	(12,354)
Other	400	(1,766)	1,016
Total interest and other expense, net	(28,364)	(26,425)	(28,179)
Net loss	(85,477)	(109,224)	(124,534)
Deemed dividend related to beneficial conversion feature of convertible preferred stock	(2,824)	(2,260)	0
Net loss allocable to common stockholders	\$ (88,301)	\$ (111,484)	\$ (124,534)
Net loss per share allocable to common stockholders:			
Basic	\$ (0.45)	\$ (0.80)	\$ (1.14)
Diluted	\$ (0.45)	\$ (0.80)	\$ (1.14)
Shares used in calculating net loss per share allocable to common stockholders:			
Basic	196,523,708	139,170,725	109,573,177
Diluted	196,523,708	139,170,725	109,573,177
<b>Comprehensive Loss:</b>			
Net loss	\$ (85,477)	\$ (109,224)	\$ (124,534)
Net unrealized loss on available-for-sale investments	0	0	(283)
Foreign currency translation gain (loss)	746	(223)	4,304

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Comprehensive loss	\$ (84,731)	\$ (109,447)	\$ (120,513)
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See accompanying notes to consolidated financial statements.



**Table of Contents****ARENA PHARMACEUTICALS, INC.****Consolidated Statements of Stockholders Equity**

(In thousands, except share data)

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders Equity
	Shares	Amount	Shares	Amount					
<b>Balance at December 31, 2009</b>		<b>\$ 0</b>	<b>92,813,899</b>	<b>\$ 10</b>	<b>\$ 942,675</b>	<b>\$ (23,070)</b>	<b>\$ 945</b>	<b>\$ (845,993)</b>	<b>\$ 74,567</b>
Issuance of common stock upon exercise of options			51,655		55				55
Issuance of common stock under employee stock purchase plan			399,095		766				766
Issuance of common stock under equity line of credit			8,278,432		24,211				24,211
Issuance of common stock to Deerfield			19,955,224	2	95,432				95,434
Share-based compensation expense, net of forfeitures					5,495				5,495
Restricted shares released from deferred compensation plan			17,500						
Net unrealized loss on available-for-sale securities							(283)		(283)
Translation gain							4,304		4,304
Net loss								(124,534)	(124,534)
<b>Balance at December 31, 2010</b>		<b>0</b>	<b>121,515,805</b>	<b>12</b>	<b>1,068,634</b>	<b>(23,070)</b>	<b>4,966</b>	<b>(970,527)</b>	<b>80,015</b>
Issuance of common stock under employee stock purchase plan			272,014	1	314				315
Issuance of common stock to Deerfield			12,150,000	1	15,412				15,413
Issuance of Series C preferred stock to Deerfield	12,150	1			15,412				15,413
Issuance of common stock to Deerfield upon conversion of Series C preferred stock	(12,150)	(1)	12,150,000	1					
Beneficial conversion feature of Series C preferred stock					2,260				2,260
Deemed dividend related to beneficial conversion feature of Series C preferred stock					(2,260)				(2,260)
Exchange of Deerfield warrants					5,105				5,105
Share-based compensation expense, net of forfeitures					3,748				3,748
Restricted shares released from deferred compensation plan			5,000						
Translation loss							(223)		(223)
Net loss								(109,224)	(109,224)
<b>Balance at December 31, 2011</b>		<b>0</b>	<b>146,092,819</b>	<b>15</b>	<b>1,108,625</b>	<b>(23,070)</b>	<b>4,743</b>	<b>(1,079,751)</b>	<b>10,562</b>



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

	Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Treasury Stock	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total Stockholders' Equity
	Shares	Amount	Shares	Amount					
Issuance of common stock upon exercise of options			1,071,661		4,657				4,657
Issuance of common stock under employee stock purchase plan			341,108		470				470
Issuance of common stock under equity line of credit			14,414,370	1	24,726				24,727
Issuance of common stock in public offering, net of offering costs of \$3,875			12,650,000	1	65,699				65,700
Issuance of common stock to Deerfield			9,953,250	1	14,560				14,561
Issuance of Series D preferred stock to Deerfield	9,953				14,561				14,561
Issuance of common stock to Deerfield upon conversion of Series D preferred stock	(9,953)		9,953,250	1					1
Issuance of common stock upon exercise of Deerfield warrants			23,000,000	3	39,199				39,202
Exchange of Deerfield warrants					3,803				3,803
Beneficial conversion feature of Series D preferred stock					2,824				2,824
Deemed dividend related to beneficial conversion feature of Series D preferred stock					(2,824)				(2,824)
Share-based compensation expense, net of forfeitures					5,072				5,072
Share-based compensation expense capitalized					54				54
Retirement of treasury stock						23,070		(23,070)	
Translation gain							746		746
Net loss								(85,477)	(85,477)
<b>Balance at December 31, 2012</b>		<b>\$ 0</b>	<b>217,476,458</b>	<b>\$ 22</b>	<b>\$ 1,281,426</b>	<b>\$ 0</b>	<b>\$ 5,489</b>	<b>\$ (1,188,298)</b>	<b>\$ 98,639</b>

See accompanying notes to consolidated financial statements.

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

	Years ended December 31,		
	2012	2011	2010
<b>Operating Activities</b>			
Net loss	\$ (85,477)	\$ (109,224)	\$ (124,534)
Adjustments to reconcile net loss to net cash used in operating activities:			
Depreciation and amortization	9,055	10,127	10,393
Amortization of acquired technology and other intangibles	691	997	2,159
Share-based compensation	5,072	3,748	5,495
(Gain) Loss from valuation of derivative liabilities	13,425	(47)	(4,371)
Amortization of prepaid financing costs	292	438	545
Accretion of note payable to Deerfield	1,225	4,146	7,517
Accretion of note payable to Siegfried	0	345	269
Investment write-down	0	1,963	0
Loss on extinguishment of debt	6,338	10,514	12,354
(Gain) Loss on disposal or sale of equipment	(31)	18	(14)
Changes in assets and liabilities:			
Accounts receivable	(5,260)	2,878	(1,931)
Inventory	(5,875)	0	0
Prepaid expenses and other assets	(1,524)	539	1,608
Accounts payable and accrued liabilities	276	(1,117)	(5,644)
Deferred revenues	17,849	(3,395)	43,991
Deferred rent	(103)	(187)	(152)
Net cash used in operating activities	(44,047)	(78,257)	(52,315)
<b>Investing Activities</b>			
Purchases of short-term investments, available-for-sale	0	0	(1,231)
Proceeds from sales/maturities of short-term investments, available-for-sale	0	0	21,664
Purchases of land, property and equipment	(1,777)	(619)	(4,211)
Proceeds from sale of equipment	31	33	47
Other non-current assets	(425)	(86)	48
Net cash provided by (used in) investing activities	(2,171)	(672)	16,317
<b>Financing Activities</b>			
Principal payments on lease financing obligations	(1,313)	(998)	(717)
Principal payments on note payable to Deerfield	(22,261)	(37,739)	(30,000)
Payments on note payable to Siegfried	0	(11,060)	0
Proceeds from issuance of common stock	151,218	17,977	120,466
Proceeds from issuance of preferred stock	16,462	17,662	0
Net cash provided by (used in) financing activities	144,106	(14,158)	89,749
Effect of exchange rate changes on cash	571	50	2,185
Net increase (decrease) in cash and cash equivalents	98,459	(93,037)	55,936
Cash and cash equivalents at beginning of year	57,632	150,669	94,733
Cash and cash equivalents at end of year	\$ 156,091	\$ 57,632	\$ 150,669

**Supplemental Disclosure Of Cash Flow Information:**

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Interest paid	\$ 7,670	\$ 9,492	\$ 13,434
<b>Supplemental Disclosure Of Non-Cash Investing and Financing Information:</b>			
Conversion of preferred stock into common stock	\$ 14,561	\$ 15,413	\$ 0
Deemed dividend related to beneficial conversion feature of convertible preferred stock	\$ 2,824	\$ 2,260	\$ 0
Retirement of treasury stock	\$ 23,070	\$ 0	\$ 0
Purchases of land, property and equipment included in accounts payable and accrued liabilities	\$ 0	\$ 46	\$ 12

See accompanying notes to consolidated financial statements.

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**ARENA PHARMACEUTICALS, INC.**

**Notes to Consolidated Financial Statements**

**(1) The Company and Summary of Significant Accounting Policies**

*BELVIQ (pronounced BEL-VEEK ) is the trade name for lorcaserin hydrochloride in the United States. While BELVIQ may in the future be marketed outside of the United States as BELVIQ or under a different trade name, we use BELVIQ in this document to refer to the finished drug product for lorcaserin hydrochloride or, depending on the context, lorcaserin hydrochloride or other solid state forms of lorcaserin.*

**The Company**

Arena Pharmaceuticals, Inc., or Arena, was incorporated on April 14, 1997, and commenced operations in July 1997. We are a biopharmaceutical company focused on discovering, developing and commercializing novel drugs that target G protein-coupled receptors, or GPCRs, to address major therapeutic areas, including cardiovascular, central nervous system, inflammatory and metabolic diseases. We operate in one business segment.

In June 2012, the US Food and Drug Administration, or FDA, approved our internally discovered drug, BELVIQ® (lorcaserin HCl), for chronic weight management in adults who are overweight with a comorbidity or obese. We are focused on commercializing BELVIQ in the United States and ultimately in additional territories, selectively advancing our drug candidates and discovering additional drug candidates. BELVIQ and our earlier-stage drug candidates have resulted from our GPCR-focused drug discovery and development approach, specialized expertise and technologies.

The FDA has recommended that BELVIQ be classified as a scheduled drug by the US Drug Enforcement Administration, or DEA, and BELVIQ will not be commercially available in the United States until the DEA provides the final scheduling designation. BELVIQ will be marketed in the United States and, subject to applicable regulatory approval, in the additional territories by Eisai Inc., or Eisai, under the Amended and Restated Marketing and Supply Agreement, or Eisai Agreement, between Eisai and our wholly owned subsidiary, Arena Pharmaceuticals GmbH, or Arena GmbH. In addition, subject to applicable regulatory approval, BELVIQ will be marketed in South Korea by Ildong Pharmaceutical Co., Ltd., or Ildong, under the Marketing and Supply Agreement, or Ildong BELVIQ Agreement, between Ildong and Arena GmbH. We also intend to enter into additional collaborations to support the commercialization of BELVIQ in other territories.

**Basis of Presentation**

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

In June 2011, the Financial Accounting Standards Board, or FASB, issued Accounting Standards Update, or ASU, No. 2011-05, Presentation of Comprehensive Income, which amends the presentation requirements for comprehensive income. Under ASU No. 2011-05, we have the option to present the components of net income and comprehensive income as one single continuous statement or in two separate but consecutive statements. ASU No. 2011-05 eliminates the option to present other comprehensive income in the statement of stockholders' equity, but it does not change the items that must be reported in comprehensive income. We adopted ASU No. 2011-05 in 2012 by using a single-statement approach.

**Use of Estimates**

The preparation of financial statements in conformity with US generally accepted accounting principles, or GAAP, requires our 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

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reported amounts of revenues and expenses during the reporting period. The most significant areas involving estimates and assumptions include revenue recognition, share-based compensation, valuations of derivative liabilities, and certain accruals including, among others, clinical and preclinical study fees and expenses. Actual results could differ from those estimates.

**Reclassifications**

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

**Cash and Cash Equivalents**

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

**Inventory**

Inventory is stated at the lower of cost or market. We determine cost, which includes amounts related to materials, labor and overhead, using a first-in, first-out basis. We evaluate our inventory each period in order to identify potential obsolete, excess or otherwise non-saleable items. If non-saleable items are observed and there are no alternate uses for the inventory, we will record a write-down to net realizable value in the period that the decline in value is first recognized.

**Concentration of Credit Risk and Major Customers**

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

Our strategy is to enter into supply and distribution agreements that are exclusive for a given territory. With respect to BELVIQ, Eisai is the exclusive distributor and our only customer in most of North and South America, and Ildong is the exclusive distributor and our only customer in South Korea. The FDA is the only regulatory authority that has approved BELVIQ for marketing.

We also produce drug products for Siegfried AG (formerly Siegfried Ltd, and referred to collectively in these notes as Siegfried), under a manufacturing services agreement, and all of our manufacturing services revenues are attributable to Siegfried.

Percentages of our total revenues are as follows for the years presented:

	December 31,		
	2012	2011	2010
Eisai Agreement	85.6%	53.2%	11.6%
Manufacturing services agreement with Siegfried	13.8%	41.9%	42.5%
Former collaboration with Ortho-McNeil-Janssen Pharmaceuticals, Inc.	0.0%	4.3%	19.1%
Collaboration with TaiGen Biotechnology Co., Ltd.	0.0%	0.0%	24.4%
Other	0.6%	0.6%	2.4%
Total percentage of revenues	100.0%	100.0%	100.0%

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Percentages of our total accounts receivable are as follows for the years presented:

	2012	December 31, 2011	2010
Ildong BELVIQ Agreement	85.5%	0.0%	0.0%
Manufacturing services agreement with Siegfried	12.3%	8.0%	64.5%
Eisai Agreement	2.0%	91.3%	0.0%
Former collaboration with Ortho-McNeil-Janssen Pharmaceuticals, Inc.	0.0%	0.0%	35.4%
Other	0.2%	0.7%	0.1%
Total percentage of accounts receivable	100.0%	100.0%	100.0%

**Property and Equipment**

Property and equipment are stated at cost and depreciated over the estimated useful lives of the assets (generally 3 to 15 years) using the straight-line method. Buildings are stated at cost and depreciated over an estimated useful life of approximately 20 years using the straight-line method. Leasehold improvements are stated at cost and amortized over the shorter of the estimated useful lives of the assets or the lease term. Capital improvements are stated at cost and amortized over the estimated useful lives of the underlying assets.

**Acquired Technology and Other Intangibles**

We have intangible assets in connection with certain assets we acquired from Siegfried in January 2008, including manufacturing facility production licenses and an assembled workforce, as well as in connection with our February 2001 acquisition of Bunsen Rush Laboratories, Inc., or Bunsen Rush, and its Melanophore technology. These assets are measured based on their fair value at acquisition. The useful life of our intangible assets is determined based on the period over which the asset is expected to contribute directly or indirectly to our future cash flows. We amortize our intangible assets using the straight-line method over estimated useful lives ranging from 2 to 20 years.

**Long-lived Assets**

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

**Deferred Rent**

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

**Derivative Liabilities**

We account for our warrants and other derivative financial instruments as either equity or liabilities based upon the characteristics and provisions of each instrument. Warrants classified as equity are recorded as additional paid-in capital on our consolidated balance sheets and no further adjustments to their valuation are made. Warrants classified as derivative liabilities and other derivative financial instruments that require separate accounting as liabilities are recorded on our consolidated



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balance sheets at their fair value on the date of issuance and are revalued on each balance sheet date until such instruments are exercised or expire, with changes in the fair value between reporting periods recorded as other income or expense. We estimate the fair value of these liabilities using the Black-Scholes option pricing model.

### **Foreign Currency Translation**

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

### **Share-based Compensation**

Our share-based awards are measured at fair value and recognized over the requisite service period. The fair value of each stock option is estimated on the date of grant using the Black-Scholes option pricing model, based on the market price of the underlying common stock, expected life, expected stock price volatility and expected risk-free interest rate. Expected volatility is computed using a combination of historical volatility for a period equal to the expected term and implied volatilities from traded options to buy our common stock. The fair value of each unvested restricted stock unit award is estimated based on the market price of the underlying common stock on the date of the grant. We estimate forfeitures at the time of grant and revise our estimate in subsequent periods if actual forfeitures differ from those estimates. Share-based compensation expense is included in the applicable expense line item on our consolidated statements of operations and comprehensive loss.

### **Revenue Recognition**

Our revenues to date have been generated primarily through collaborative agreements and, to a lesser extent, a manufacturing services agreement. Our collaborative agreements may contain multiple elements including commercialization rights, research and development services and manufacturing. Consideration we receive under these arrangements may include upfront payments, research and development funding, cost reimbursements and milestone payments. We recognize revenue when there is persuasive evidence that an arrangement exists, title has passed, the price is fixed or determinable, and collectability is reasonably assured. Any advance payments we receive in excess of amounts earned are classified as deferred revenues on our consolidated balance sheets until earned.

We adopted revised guidance on accounting for revenue arrangements involving multiple elements on January 1, 2011, on a prospective basis, for agreements we entered into or materially modified after adoption. This updated guidance (i) relates to whether multiple deliverables exist, how the deliverables in a revenue arrangement should be separated and how the consideration should be allocated, (ii) requires companies to allocate revenues in an arrangement using estimated selling prices of deliverables if a vendor does not have vendor-specific objective evidence or third-party evidence of selling price and (iii) eliminates the use of the residual method and requires companies to allocate revenues using the relative selling price method.

Since adoption of this guidance, we evaluate deliverables in a multiple-element arrangement to determine whether each deliverable represents a separate unit of accounting. A deliverable constitutes a separate unit of accounting when it has standalone value to the customer. Items are considered to have standalone value if they could be sold separately by any vendor or if the customer could resell the item on a standalone basis. If these criteria are not met, we combine the deliverable with the applicable undelivered elements, allocate the consideration and recognize revenue for the combined unit as a single unit. We allocate the consideration to each unit of accounting at the inception of the arrangement based on the relative selling price.

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For agreements that we entered into prior to adoption of the revised multiple-element guidance, if fair value exists for the undelivered and delivered elements whereby such elements have standalone value, we allocate the consideration to the elements based on their relative fair values. In cases where fair value exists for the undelivered elements but does not exist for the delivered elements, we use the residual method to allocate the arrangement consideration. In cases where fair value does not exist for the undelivered elements in an arrangement, we account for the transaction as a single unit of accounting.

We typically defer non-refundable upfront payments received under our collaborative agreements when associated with future performance, and recognize them on a straight-line basis over the period in which we expect to have significant involvement or perform services, based on various factors specific to each collaboration. Amounts we receive for research funding are recognized as revenue as the services are performed. For reimbursements of out-of-pocket expenses for research and development activities where we control the activities, have discretion to choose suppliers, bear credit risk and perform part of the services when required, we record revenue for the gross amount of the reimbursement. The costs associated with such reimbursements are reflected as a component of research and development expense in our consolidated statements of operations and comprehensive loss.

Under the milestone method, we recognize revenue that is contingent upon the achievement of a substantive milestone in its entirety in the period in which the milestone is achieved. A milestone is an event (i) that can be achieved in whole or in part on either our performance or on the occurrence of a specific outcome resulting from our performance, (ii) for which there is substantive uncertainty at the date the arrangement is entered into that the event will be achieved and (iii) that would result in additional payments being due us. A milestone payment is considered substantive when the consideration payable to us for each milestone (a) is consistent with our performance necessary to achieve the milestone or the increase in value to the collaboration resulting from our performance, (b) relates solely to our past performance and (c) is reasonable relative to all of the other deliverables and payments within the arrangement. In making this assessment, we consider all facts and circumstances relevant to the arrangement, including factors such as the scientific, regulatory, commercial and other risks that must be overcome to achieve the respective milestone, the level of effort and investment required to achieve the respective milestone and whether any portion of the milestone consideration is related to future performance or deliverables. Other contingent event-based payments received for which payment is either contingent solely upon the passage of time or the result of our collaborator's performance are not considered milestones and are recognized when earned.

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

### **Research and Development Costs**

Research and development expenses, which consist primarily of salaries and other personnel costs, costs associated with external clinical and preclinical study fees, manufacturing costs for non-commercial products and other related expenses, and the development of earlier-stage programs and technologies, are expensed as incurred when these expenditures have no alternative future uses.

### **Clinical Trial Expenses**

We accrue clinical trial expenses based on work performed. In determining the amount to accrue, we rely on estimates of total costs incurred based on the enrollment of subjects, the completion of trials and other events. We follow this method because we believe reasonably dependable estimates of the costs applicable to various

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stages of a clinical trial can be made. However, the actual costs and timing of clinical trials are highly uncertain, subject to risks and may change depending on a number of factors. Differences between the actual clinical trial costs and the estimated clinical trial costs that we have accrued in any prior period are recognized in the subsequent period in which the actual costs become known. Historically, these differences have not been material; however, material differences could occur in the future.

**Patent Costs**

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

**Comprehensive Income (Loss)**

We report all components of comprehensive income (loss), including foreign currency translation gain and loss and unrealized gain and loss on investment securities, in the financial statements in the period in which they are recognized. Comprehensive income (loss) is defined as the change in equity during a period from transactions and other events and circumstances from non-owner sources.

**Net Loss Per Share**

We calculate basic and diluted net loss per share allocable to common stockholders using the weighted-average number of shares of common stock outstanding during the period, less any shares subject to repurchase or forfeiture. There were no shares of our common stock outstanding subject to repurchase or forfeiture for the years ended December 31, 2012, 2011 or 2010.

Since we are in a net loss position, we have excluded outstanding stock options and restricted stock unit awards, both of which are subject to forfeiture, as well as warrants and unvested restricted stock in our deferred compensation plan, from our calculation of diluted net loss per share, and our diluted net loss per share is the same as our basic net loss per share. The table below presents the potentially dilutive securities that would have been included in our calculation of diluted net loss per share allocable to common stockholders if they were not antidilutive at December 31, 2012, 2011 and 2010.

	<b>December 31,</b>		
	<b>2012</b>	<b>2011</b>	<b>2010</b>
Stock options	4,260,754	0	8,630
Warrants	607,151	0	0
Time-based restricted stock unit awards	165,000	0	0
Performance-based restricted stock unit awards	0	1,171,250	1,666,650
Unvested restricted stock	79,169	79,169	84,169
Total	5,112,074	1,250,419	1,759,449

**(2) Fair Value Disclosures**

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

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

Level 1 Observable inputs such as unadjusted quoted prices in active markets for identical instruments.

Level 2 Quoted prices for similar instruments in active markets or inputs that are observable for the asset or liability, either directly or indirectly.

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Level 3 Significant unobservable inputs based on our assumptions.

The following tables present our valuation hierarchy for our financial assets and liabilities that are measured at fair value on a recurring basis as of December 31, 2012, and 2011, in thousands:

	Fair Value Measurements at December 31, 2012			
	Balance at December 31, 2012	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<i>Assets:</i>				
Money market funds and cash equivalents <sup>(1)</sup>	\$ 143,747	\$ 143,747	\$ 0	\$ 0
<i>Liabilities:</i>				
Warrants	\$ 15,042	\$ 0	\$ 0	\$ 15,042

<sup>(1)</sup> Included in cash and cash equivalents on our consolidated balance sheets.

	Fair Value Measurements at December 31, 2011			
	Balance at December 31, 2011	Quoted Prices in Active Markets (Level 1)	Significant Other Observable Inputs (Level 2)	Significant Unobservable Inputs (Level 3)
<i>Assets:</i>				
Money market funds and cash equivalents <sup>(1)</sup>	\$ 35,307	\$ 35,307	\$ 0	\$ 0
<i>Liabilities:</i>				
Warrants and other derivative instruments	\$ 1,617	\$ 0	\$ 0	\$ 1,617

<sup>(1)</sup> Included in cash and cash equivalents on our consolidated balance sheets.

The following table presents the activity for our derivative liabilities, which are classified as Level 3 in our valuation hierarchy, during the years ended December 31, 2012, 2011, and 2010, in thousands:

	December 31,		
	2012	2011	2010
Beginning balance	\$ 1,617	\$ 2,271	\$ 6,642
Termination of Deerfield Additional Loan Election (See Note 8)	0	(607)	0
(Gain) Loss from valuation of derivative liabilities	13,425	(47)	(4,371)
Ending balance	\$ 15,042	\$ 1,617	\$ 2,271

**(3) Inventory**

Upon receiving FDA approval in June 2012, we began to capitalize inventory costs for BELVIQ, which were recorded as research and development expenses prior to such approval. All of our inventory relates to BELVIQ, and no inventory was recorded on our consolidated balance sheet as of December 31, 2011. Our inventory consisted of the following as of December 31, 2012, in thousands:

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	<b>December 31, 2012</b>
Raw materials	\$ 423
Work in process	4,184
Finished goods	1,451
Total inventory	\$ 6,058

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All of our finished goods inventory is located at Eisai, for which revenue has been deferred.

**(4) Land, Property and Equipment**

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

	December 31,	
	2012	2011
Land	\$ 10,854	\$ 10,854
Building and capital improvements	67,404	67,081
Leasehold improvements	19,253	19,092
Machinery and equipment	50,064	48,906
Computers and software	9,719	9,276
Furniture and office equipment	2,038	2,121
	159,332	157,330
Less accumulated depreciation and amortization	(83,915)	(75,264)
Land, property and equipment, net	\$ 75,417	\$ 82,066

Depreciation and amortization expense for our land, property and equipment totaled \$9.1 million, \$10.1 million and \$10.4 million for the years ended December 31, 2012, 2011 and 2010, respectively.

**(5) Acquired Technology and Other Intangibles**

In February 2001, we acquired Bunsen Rush for \$15.0 million in cash and assumed \$0.4 million in liabilities. We allocated \$15.4 million to the Melanophore screening technology acquired in such transaction. We amortized this technology over its estimated useful life of 10 years.

In January 2008, we acquired from Siegfried certain drug product facility assets, including manufacturing facility production licenses and an assembled workforce originally valued at \$12.1 million and \$1.6 million, respectively. We amortized the acquired workforce over its estimated benefit of two years, and we are amortizing the manufacturing facility production licenses, which are necessary for us to manufacture and package tablets and other dosage forms in such facility, over their estimated useful life of 20 years.

Acquired technology and other intangibles, net, consisted of the following at December 31, 2012, and 2011, in thousands:

December 31, 2012	Gross	Accumulated Amortization	Net
Acquired Melanophore screening technology	\$ 15,378	\$ (15,378)	\$ 0
Acquired manufacturing facility production licenses	14,148	(3,537)	10,611
Acquired workforce	1,832	(1,832)	0
Total acquired technology and other intangibles, net	\$ 31,358	\$ (20,747)	\$ 10,611

  

December 31, 2011	Gross	Accumulated Amortization	Net
Acquired Melanophore screening technology	\$ 15,378	\$ (15,378)	\$ 0
Acquired manufacturing facility production licenses	13,789	(2,757)	11,032
Acquired workforce	1,786	(1,786)	0

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Total acquired technology and other intangibles, net	\$ 30,953	\$ (19,921)	\$ 11,032
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We recognized no amortization expense in the year ended December 31, 2012, and \$0.3 million and \$1.5 million in the years ended December 31, 2011, and 2010, respectively, for the acquired Melanophore technology, and \$0.7 million, \$0.7 million and \$0.6 million in the years ended December 31, 2012, 2011, and 2010, respectively, for the manufacturing facility production licenses. Using the exchange rate in effect on December 31, 2012, we expect to record amortization expense of \$0.7 million per year through 2027 for the manufacturing facility production licenses.

**(6) Accounts Payable and Other Accrued Liabilities**

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

	December 31,	
	2012	2011
Accounts payable	\$ 3,884	\$ 2,363
Accrued expenses	2,006	1,046
Accrued clinical and preclinical study fees	566	430
Loss provision (See Note 7)	482	1,203
Other accrued liabilities	185	252
Total accounts payable and other accrued liabilities	\$ 7,123	\$ 5,294

**(7) Agreements with Siegfried**

In January 2008, we acquired from Siegfried certain drug product facility assets, including manufacturing facility production licenses, fixtures, equipment, other personal property and real estate assets in Zofingen, Switzerland, under an asset purchase agreement. These assets are being used to manufacture BELVIQ as well as certain drug products for Siegfried. In connection with this transaction, the parties also entered into a long-term supply agreement for the active pharmaceutical ingredient of BELVIQ, a manufacturing services agreement and a technical services agreement. The purchase price under the asset purchase agreement was CHF 31.8 million in cash and 1,488,482 shares of our common stock valued at \$8.0 million, which we issued to Siegfried in January 2008. We paid CHF 21.8 million, or \$19.6 million, of the cash purchase price in January 2008 and paid the remaining CHF 10.0 million, or \$11.1 million, in three separate installments during 2011.

During the years ended December 31, 2012, 2011 and 2010, we recognized manufacturing services revenue of \$3.8 million, \$5.3 million and \$7.1 million, respectively, and costs of manufacturing services of \$3.7 million, \$8.1 million and \$7.4 million, respectively, under the manufacturing services agreement. The sales prices under the manufacturing services agreement, as amended in 2011 and 2012, are generally below our cost to provide such services. Accordingly, we record loss provisions, classified in costs of manufacturing services, reflecting our best estimate of the losses to be incurred during the remainder of the agreement. Losses are determined to be the amount by which the estimated direct and indirect costs of the services rendered exceed the estimated total manufacturing services revenues that will be generated under the manufacturing services agreement. The remaining loss provision of \$0.5 million as of December 31, 2012, is recorded in accounts payable and other accrued liabilities on our consolidated balance sheets. See Note 6.

During the years ended December 31, 2012, 2011 and 2010, we recognized expenses of \$2.6 million, \$3.0 million and \$2.5 million, respectively, for services incurred under the technical services agreement. The technical services agreement provides us with administrative and other services to operate the facility.

**(8) Transactions with Deerfield**

In July 2009, pursuant to a Facility Agreement we entered into in June 2009, or the Facility Agreement, with Deerfield Private Design Fund, L.P., Deerfield Private Design International, L.P., Deerfield Partners, L.P.,



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Deerfield International Limited, Deerfield Special Situations Fund, L.P., and Deerfield Special Situations Fund International Limited, or collectively Deerfield, Deerfield provided us with a \$100.0 million secured loan. We received net proceeds of \$95.6 million from this loan and had the right, at any time, to prepay any or all of the outstanding principal at par. In connection with the funding of this loan, we issued Deerfield warrants to purchase an aggregate of 28,000,000 shares of our common stock, which were exercisable until June 17, 2013, at an exercise price of \$5.42 per share. As described below, the Deerfield loan has been repaid in full and none of Deerfield's former warrants remain outstanding.

As of the July 2009 funding of the loan, we separately valued the following four components under the Facility Agreement: (i) the formerly outstanding \$100.0 million loan was valued at \$47.9 million on a relative fair value basis and recorded as a liability, (ii) the formerly outstanding warrants to purchase 28,000,000 shares of our common stock were valued at \$39.1 million on a relative fair value basis and recorded as additional paid-in capital, (iii) Deerfield's former right to loan us up to an additional \$20.0 million under the Facility Agreement, which we refer to as the Deerfield Additional Loan Election, was valued at \$9.5 million and classified as a liability and (iv) Deerfield's former ability to accelerate principal payments under the loan under certain circumstances was valued at \$0.5 million and classified as a liability.

As part of our various transactions with Deerfield subsequent to the funding of the loan, we amended the terms of the Facility Agreement, repaid portions of the loan and exchanged all of the original warrants for a lesser number of warrants at lower exercise prices. We exchanged certain of the warrants as part of equity financings with Deerfield in June 2010, March 2011 and January 2012. Other than the exercise period, the exercise price and certain provisions related to cashless exercise and early termination of the warrants, all of the warrants issued in exchange contained substantially the same terms as the original warrants. In May 2012, we repaid the remaining portion of our note payable to Deerfield.

In addition to various transactions with Deerfield that included warrant exchanges, the following Deerfield transactions occurred in the years ended December 31, 2012, 2011 and 2010 as follows:

In June 2010, Deerfield purchased 11,000,000 shares of our common stock at \$3.23 per share, resulting in net proceeds to us of \$35.5 million.

In August 2010, Deerfield purchased 8,955,224 shares of our common stock at \$6.70 per share in a registered direct public offering. As part of this transaction, we used \$30.0 million of the proceeds to prepay a portion of the then outstanding principal balance on the loan. Net proceeds to us from this transaction, after prepayment of the \$30.0 million, were approximately \$30.0 million. In connection with this \$30.0 million prepayment, we retired a proportional share of the debt discount and issuance costs directly related to the repaid debt and recognized a non-cash loss on extinguishment of debt of \$12.4 million in 2010.

In January 2011, we prepaid \$20.0 million of the then outstanding principal balance on the loan. In connection with this prepayment, we retired a proportional share of the debt discount and issuance costs directly related to the repaid debt and recognized a non-cash loss on extinguishment of debt of \$2.5 million in 2011.

In March 2011, Deerfield purchased 12,150,000 shares of our common stock at \$1.46 per share and 12,150 shares of our Series C Convertible Preferred Stock, or Series C Preferred, at \$1,460.00 per share. In April 2011, Deerfield converted all of the Series C Preferred into a total of 12,150,000 shares of common stock. The fair value of the common stock into which the Series C Preferred was convertible on the date of issuance exceeded the proceeds allocated to the Series C Preferred on a relative fair value basis by \$2.3 million, resulting in a beneficial conversion feature that we recognized as a decrease to additional paid-in capital and a deemed dividend to the Series C Preferred stockholders in 2011. Net proceeds to us from this transaction, after prepayment of \$17.7 million of the then outstanding principal balance on the loan, were \$17.6 million. In conjunction with this transaction, we

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agreed to exchange warrants to purchase 14,368,590 shares of our common stock at an exercise price of \$3.45 per share for new warrants to purchase a like number of shares of our common stock at an exercise price of \$1.68 per share. On a relative fair value basis, we determined that the incremental value of these new warrants was \$5.1 million, which was recorded as a component of the stock issuance and warrant exchange. With respect to the \$17.7 million prepayment, we retired a proportional share of the debt discount and issuance costs directly related to the repaid debt and recognized a non-cash loss on extinguishment of debt of \$8.0 million, which, along with the January 2011 amount above, totaled \$10.5 million in 2011.

In January 2012, Deerfield purchased 9,953,250 shares of our common stock at \$1.65775 per share and approximately 9,953 shares of our Series D Convertible Preferred Stock, or Series D Preferred, at \$1,657.75 per share. In February 2012, Deerfield converted all of the Series D Preferred into a total of 9,953,250 shares of common stock. The fair value of the common stock into which the Series D Preferred was convertible on the date of issuance of the Series D Preferred exceeded the proceeds allocated to the Series D Preferred on a relative fair value basis by \$2.8 million, resulting in a beneficial conversion feature that we recognized as a decrease to additional paid-in capital and a deemed dividend to the Series D Preferred stockholders in 2012. Net proceeds to us from this transaction, after prepayment of \$5.0 million of the then outstanding principal balance on the loan, were \$27.9 million. In conjunction with this transaction, we issued Deerfield warrants to purchase 8,631,410 shares of our common stock at an exercise price of \$1.745 per share in exchange for the cancellation of outstanding warrants to purchase 11,800,000 shares of our common stock at an exercise price of \$5.42 per share and outstanding warrants to purchase 1,831,410 shares of our common stock at an exercise price of \$3.45 per share. On a relative fair value basis, we determined that the incremental value of these new warrants was \$3.8 million, which was recorded as a component of the stock issuance and warrant exchange. With respect to the \$5.0 million prepayment, we retired a proportional share of the debt discount and issuance costs directly related to the repaid debt and recognized a non-cash loss on extinguishment of debt of \$1.7 million in 2012.

In April and May 2012, Deerfield exercised certain of its warrants to purchase a total of 4,000,000 shares of our common stock, and elected to pay the exercise price by canceling \$6.7 million of the then outstanding principal balance on its loan. In May 2012, we prepaid the remaining outstanding principal balance and unpaid interest on the Deerfield loan, and the Facility Agreement was terminated. In connection with these transactions, we retired the related debt discount and issuance costs and recognized a non-cash loss on extinguishment of debt of \$4.7 million, which, along with the January 2012 amount above, totaled \$6.4 million in 2012.

From June to August 2012, we received net proceeds totaling \$32.5 million from the cash exercise of Deerfield's remaining warrants to purchase a total of 19,000,000 shares of our common stock.

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The following table summarizes the principal repayments made on the Deerfield loan from its inception through the date it was repaid in full, in thousands:

	<b>Loan Principal</b>
Original loan principal	\$ 100,000
July 2009 repayment	(10,000)
August 2010 repayment	(30,000)
January 2011 repayment	(20,000)
March 2011 repayment	(17,739)
January 2012 repayment	(5,000)
April and May 2012 cancellations as part of warrant exercises	(6,720)
May 2012 repayment	(10,541)
<b>Outstanding principal balance at December 31, 2012</b>	<b>\$ 0</b>

Total interest expense of \$1.9 million, \$6.6 million and \$14.0 million, including accretion of the debt discount attributable to the warrants and the other derivative financial instruments and amortization of capitalized issuance costs, was recognized in connection with this loan in the years ended December 31, 2012, 2011 and 2010, respectively.

**(9) Derivative Liabilities**

In June 2006 and August 2008, we issued seven-year warrants, which we refer to as the Series B Warrants, to purchase 829,856 and 1,106,344 shares of our common stock, respectively, at an exercise price of \$15.49 and \$7.71 per share, respectively. The Series B Warrants are related to our Series B Convertible Preferred Stock, which we redeemed in 2008 and is no longer outstanding. The warrants contain an anti-dilution provision and, as a result of subsequent equity issuances at prices below the adjustment price of \$6.72 defined in the Series B Warrants, as of December 31, 2012, the number of shares issuable upon exercise of the outstanding June 2006 and August 2008 Series B Warrants was increased to 1,467,405 and 1,965,418, respectively, and the exercise price was reduced to \$8.76 and \$4.34 per share, respectively. The Series B Warrants are recorded as derivative liabilities on our consolidated balance sheets.

These outstanding warrants are revalued on each balance sheet date, with changes in the fair value between reporting periods recorded as other income or expense. The June 2006 and August 2008 Series B Warrants were valued at December 31, 2012, and 2011 using the Black-Scholes option pricing model and the following assumptions:

	December 31, 2012		December 31, 2011	
	June 2006 Series B Warrants	August 2008 Series B Warrants	June 2006 Series B Warrants	August 2008 Series B Warrants
Risk-free interest rate	0.1%	0.3%	0.2%	0.6%
Dividend yield	0%	0%	0%	0%
Expected volatility	66%	93%	90%	99%
Expected life (years)	0.50	2.62	1.50	3.62

We separately valued the Deerfield Additional Loan Election, including the 5,600,000 contingently issuable warrants to purchase up to 5,600,000 shares of our common stock, at \$9.5 million as of the July 2009 issuance date. See Note 8. Until the Deerfield Additional Loan Election was terminated in March 2011, it was recorded as a derivative liability and was revalued on each balance sheet date, with changes in the fair value between

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reporting periods recorded as other income or expense. Upon its termination in 2011, the then remaining balance for the Deerfield Additional Loan Election was recorded as a component of the stock issuance and warrant exchange.

We also separately valued Deerfield's right to require us to accelerate principal payments under the loan at \$0.5 million as of the July 2009 issuance date. See Note 8. Until this right was terminated in connection with the repayment of the Deerfield loan in May 2012 (see Note 8), the value of this right was recorded as a derivative liability and was revalued on each balance sheet date, with changes in the fair value between reporting periods recorded as other income or expense.

Our derivative liabilities consisted of the following, as of December 31, 2012, and 2011, in thousands:

	December 31	
	2012	2011
Series B Warrants - current portion	\$ 2,587	\$ 0
Total current derivative liabilities	2,587	0
Series B Warrants, less current portion	12,455	1,562
Deerfield acceleration right	0	55
Total long-term derivative liabilities	12,455	1,617
Total derivative liabilities	\$ 15,042	\$ 1,617

The change in the fair value of our derivative liabilities is recorded in the interest and other income (expense) section of our consolidated statements of operations and comprehensive loss. We recognized the following gain (loss) in the years ended December 31, 2012, 2011 and 2010, in thousands:

	December 31,		
	2012	2011	2010
Series B Warrants	\$ (13,480)	\$ (328)	\$ 1,152
Deerfield acceleration right	55	375	(5)
Deerfield Additional Loan Election	0	0	3,224
Total gain (loss) from valuation of derivative liabilities	\$ (13,425)	\$ 47	\$ 4,371

**(10) Commitments**

We occupy four US properties under sale and leaseback agreements that allow us the option to repurchase these properties at various dates between 2017 and 2027 and, in some cases, include renewal options. The terms of these leases stipulate annual increases in monthly rental payments of 2.0% to 2.5%. We accounted for our sale and leaseback transactions using the required financing method because our options to repurchase these properties in the future are considered continued involvement. Under the financing method, the book value of the properties and related accumulated depreciation remain on our balance sheet and no sale is recognized. Instead, the sales price of the properties is recorded as a financing obligation, and a portion of each lease payment is recorded as interest expense. We recorded interest expense of \$7.2 million, \$7.3 million and \$7.4 million in the years ended December 31, 2012, 2011 and 2010, respectively, related to these leases. We expect interest expense related to our facilities to total \$64.1 million from December 31, 2012, through the terms of the leases. As of December 31, 2012, the total financing obligation for these facilities was \$74.5 million. The aggregate residual value of the facilities at the end of the lease terms is \$10.0 million.

We also lease two additional US properties under operating leases. The lease on one of these properties, which is currently unoccupied, expires in April 2013. The lease on the second property, which expires in May 2027, stipulates annual increases in monthly rental payments of 2.5%. We also lease space in various facilities in



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Zofingen, Switzerland that can be terminated with 12 months written notice under an agreement that expires in 2032. The Swiss agreement stipulates that the annual rental payments are indexed to the Swiss Consumer Price Index.

In accordance with the lease terms for certain of our US properties, we are required to maintain deposits for the benefit of the landlord throughout the term of the leases. A total of \$1.5 million and \$1.4 million were recorded in other non-current assets on our consolidated balance sheets as of December 31, 2012, and 2011, respectively, related to such leases.

We recognize rent expense on a straight-line basis over the term of each lease. Rent expense of \$1.7 million was recognized in the year ended December 31, 2012, and \$1.2 million was recognized in each of the years ended December 31, 2011, and 2010.

Annual future obligations as of December 31, 2012, are as follows, in thousands:

Year ending December 31,	Financing Obligations	Operating Leases
2013	\$ 7,892	\$ 1,050
2014	8,816	821
2015	9,036	841
2016	9,262	863
2017	9,494	884
Thereafter	84,112	9,486
<b>Total minimum lease payments</b>	<b>128,612</b>	<b>\$ 13,945</b>
Less amounts representing interest	(64,144)	
Add amounts representing residual value	9,990	
Lease financing obligations	74,458	
Less current portion	(1,664)	
	<b>\$ 72,794</b>	

**(11) Stockholders Equity****Preferred Stock**

In October 2002, and in conjunction with a stockholders rights plan we entered into with Computershare Trust Company, Inc., our board of directors created a series of preferred stock, consisting of 350,000 shares with a par value of \$.0001 per share, designated as Series A Junior Participating Preferred Stock, or the Series A Preferred Stock. In October 2012, such agreement expired pursuant to its terms, and we filed a certificate of elimination with the Secretary of State of the State of Delaware with regard to the related Series A Preferred Stock. This certificate of elimination, which was effective upon filing, eliminated from our Fifth Amended and Restated Certificate of Incorporation, as amended, all matters set forth in the Certificate of Designations with respect to the Series A Preferred Stock. No shares of the Series A Preferred Stock were issued or outstanding as of December 31, 2012, or 2011.

In March 2011, as part of the equity financing described below, Deerfield purchased 12,150 shares of our Series C Preferred at \$1,460.00 per share, and, in April 2011, converted all of the Series C Preferred into a total of 12,150,000 shares of common stock. In January 2012, as part of the equity financing described below, Deerfield purchased approximately 9,953 shares of our Series D Preferred at \$1,657.75 per share, and, in February 2012, converted all of the Series D Preferred into a total of 9,953,250 shares of common stock. See Note 8. No shares of Series C Preferred or Series D Preferred were issued or outstanding as of December 31, 2012, or 2011.

**Table of Contents****Treasury Stock**

In October 2003, Biotechnology Value Fund, L.P., and certain of its affiliates accepted our offer of \$23.1 million to purchase from them 3,000,000 shares of our common stock at a cash price of \$7.69 per share, which we recorded on our consolidated balance sheets as treasury stock. In May 2012, we retired all of the treasury shares, and restored them to the status of authorized but unissued common stock. Such retirement resulted in a \$23.1 million increase to our accumulated deficit in 2012, and no treasury stock remains outstanding.

**Equity Financings**

In March 2011, Deerfield purchased 12,150,000 shares of our common stock at \$1.46 per share and 12,150 shares of our Series C Preferred (subsequently converted) at \$1,460.00 per share. Net proceeds to us from this transaction, after prepayment of \$17.7 million of the then outstanding principal balance on the Deerfield loan, were \$17.6 million. See Note 8.

In January 2012, Deerfield purchased 9,953,250 shares of our common stock at \$1.65775 per share and approximately 9,953 shares of our Series D Preferred (subsequently converted) at \$1,657.75 per share. Net proceeds to us from this transaction, after prepayment of \$5.0 million of the then outstanding principal balance on the Deerfield loan, were \$27.9 million. See Note 8.

In March 2012, we received net proceeds of \$24.7 million from the sale of 14,414,370 shares of our common stock under an equity line of credit agreement with Azimuth Opportunity, L.P.

In May 2012, we received net proceeds of \$65.7 million in a public offering of 12,650,000 shares of our common stock at \$5.50 per share, including 1,650,000 shares sold pursuant to the full exercise of an over-allotment option.

**Warrants**

During the year ended December 31, 2012, we issued a total of 23,000,000 shares of our common stock with respect to the exercise of all of Deerfield's formerly outstanding warrants, resulting in net proceeds to us of \$32.5 million. Such proceeds do not include \$6.7 million from the exercise of Deerfield's warrants that was used to cancel a portion of the then outstanding principal balance on the Deerfield loan. See Note 8. In June 2006 and August 2008, we issued Series B Warrants, which contain an anti-dilution provision. See Note 9.

The following table summarizes our outstanding warrants as of December 31, 2012:

	<b>Balance Sheet Classification</b>	<b>Number of Warrants</b>	<b>Exercise Price</b>	<b>Expiration Date</b>
August 2008 Series B Warrants	Liability	1,965,418	\$ 4.34	August 14, 2015
June 2006 Series B Warrants	Liability	1,467,405	\$ 8.76	June 30, 2013
<b>Total number of warrants outstanding</b>		<b>3,432,823</b>		

**Equity Compensation Plans**

In June 2012, our stockholders approved our 2012 Long-Term Incentive Plan, or 2012 LTIP. Upon such approval, our 2009 Long-Term Incentive Plan, or 2009 LTIP, was terminated. Our 2006 Long-Term Incentive Plan, as amended, Amended and Restated 1998 Equity Compensation Plan, Amended and Restated 2000 Equity Compensation Plan, and 2002 Equity Compensation Plan (or together with the 2009 LTIP, the "Prior Plans") were previously terminated. However, notwithstanding such termination of the Prior Plans, all outstanding

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awards under the Prior Plans will continue to be governed by the terms of the applicable Prior Plan in effect at the time of grant and the agreements evidencing those awards. The number of shares of common stock authorized for issuance under the 2012 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 would otherwise be returned to the share reserve under the Prior Plans but for their termination and as otherwise provided in the 2012 LTIP.

The 2012 LTIP provides for the grant of a total of 18,000,000 shares of our common stock, as (i) decreased for grants made under the Prior Plans between December 31, 2011, and the approval of the 2012 LTIP and (ii) increased by the number of shares subject to any stock awards under the Prior Plans that, between December 31, 2011, and the approval of the 2012 LTIP, are forfeited, expire or settled for cash and as otherwise provided in the 2012 LTIP.

There were 14,603,951 shares of common stock available for issuance under the 2012 LTIP at December 31, 2012. Shares may be granted under the 2012 LTIP as incentive stock options, nonstatutory stock options, stock appreciation rights, restricted stock awards, restricted stock unit awards and performance awards. Subject to certain limited exceptions, (i) stock options and stock appreciation rights granted under the 2012 LTIP reduce the available number of shares by one share for every share issued while awards other than stock options and stock appreciation rights granted under the 2012 LTIP reduce the available number of shares by 1.2 shares for every share issued. In addition, shares that are released from awards granted under the Prior Plans or the 2012 LTIP because the awards expire, are forfeited or are settled for cash will increase the number of shares available under the 2012 LTIP by one share for each share released from a stock option or stock appreciation right and by 1.2 shares for each share released from a restricted stock award or restricted stock unit award.

Stock options granted under the 2012 LTIP generally vest 25% per year over four years. Stock options granted prior to December 13, 2012, are exercisable for up to 10 years from the date of grant; stock options granted on or after December 13, 2012, are exercisable for up to 7 years from the date of grant. The recipient of a restricted stock award has all rights of a stockholder at the date of grant, subject to certain restrictions on transferability and a risk of forfeiture. The minimum performance period under a performance award is 12 months. Neither the exercise price of an option nor the grant price of a stock appreciation right may be less than 100% of the fair market value of the common stock on the date such option is granted, except in specified situations. The 2012 LTIP prohibits option and stock appreciation right repricings (other than to reflect stock splits, spin-offs or certain other corporate events) unless stockholder approval is obtained.

In 2003, we set up a deferred compensation plan for our executive officers, whereby executive officers elected to contribute their shares of restricted stock into the plan. There were 79,169 shares at both December 31, 2012, and 2011, and 84,169 shares at December 31, 2010, of restricted stock in the plan.

The following table summarizes our stock option activity under the Prior Plans and the 2012 LTIP, or collectively, our Equity Compensation Plans, for the year ended December 31, 2012:

	Options	Weighted-Average Exercise Price	Weighted-Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value (in thousands)
Outstanding at December 31, 2011	10,309,972	\$ 5.63		
Granted	5,813,400	3.14		
Exercised	(1,071,661)	4.35		
Forfeited/cancelled/expired	(1,209,851)	8.39		
Outstanding at December 31, 2012	13,841,860	\$ 4.44	7.11	\$ 69,951
Vested and expected to vest at December 31, 2012	13,202,473	\$ 4.51	7.03	\$ 66,108
Vested and exercisable at December 31, 2012	5,789,343	\$ 6.90	4.98	\$ 18,798





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The aggregate intrinsic value in the above table is calculated as the difference between the closing price of our common stock at December 31, 2012, of \$9.02 per share and the exercise price of stock options that had strike prices below the closing price. The intrinsic value of all stock options exercised during the years ended December 31, 2012, and 2010 was \$5.4 million and \$55,000, respectively, and there were no stock options exercised in 2011. During the year ended December 31, 2012, cash of \$4.7 million and \$0.5 million was received from stock option exercises and stock purchases under the employee stock purchase plans, respectively. There is no tax impact related to share-based compensation or stock option exercises because we are in a net operating loss position with a full valuation allowance.

We granted 1,690,500 and 371,800 performance-based restricted stock unit awards under the 2006 Long-Term Incentive Plan, as amended, in February 2007 and March 2008, respectively. The awards provided employees until February 26, 2012, to achieve four specific drug development and strategic performance goals. As none of these performance goals was achieved by February 26, 2012, all of the 1,171,250 then outstanding awards expired on such date without any vesting. No compensation expense was recognized related to these awards. In December 2012, we granted 165,000 restricted stock unit awards under the 2012 LTIP, which vest 25% per year over four years from the date of grant. The following table summarizes activity with respect to all restricted stock unit awards during the year ended December 31, 2012:

	Restricted Stock Unit Awards	Weighted-Average Grant-Date Fair Value
Outstanding at December 31, 2011	1,171,250	\$ 12.62
Granted	165,000	8.87
Vested	0	
Forfeited/cancelled	(1,171,250)	12.62
<b>Outstanding at December 31, 2012</b>	<b>165,000</b>	<b>\$ 8.87</b>
Vested at December 31, 2012	0	

**Employee Stock Purchase Plans**

In June 2012, our stockholders approved our 2009 Employee Stock Purchase Plan, as amended, or 2009 ESPP, which (i) increased the shares of our common stock authorized and available for future issuance under the plan to a total of 1,500,000 as of June 15, 2012, (ii) modified the plan's automatic transfer to a lower price offering period to be based on the enrollment date of a new offering period instead of the exercise date of the immediately preceding offering period, (iii) eliminated references to our former 2001 Employee Stock Purchase Plan, as amended, and (iv) changed the termination date of the plan to the date our Board of Directors determines to terminate the plan. Under applicable accounting guidance, the 2009 ESPP is considered a compensatory plan. As of December 31, 2012, a total of 1,235,019 shares of common stock were available for issuance under the 2009 ESPP.

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

During the years ended December 31, 2012, 2011 and 2010, 341,108, 272,014 and 399,095 shares, respectively, were purchased under our employee stock purchase plans.

**Table of Contents****Share-based Compensation**

We use the Black-Scholes option pricing model to estimate the grant-date fair value of share-based awards in determining our share-based compensation expense. The table below sets forth the weighted-average assumptions and estimated fair value of stock options we granted under our Equity Compensation Plans during the years ended December 31, 2012, 2011 and 2010:

	December 31,		
	2012	2011	2010
Risk-free interest rate	1.4%	2.2%	2.4%
Dividend yield	0%	0%	0%
Expected volatility	90%	86%	73%
Expected life (years)	6.05	5.86	5.76
Weighted-average estimated fair value per share of stock options granted	\$ 2.27	\$ 1.06	\$ 2.03

The table below sets forth the assumptions and estimated fair value of the options to purchase stock granted under our employee stock purchase plan for multiple offering periods during the years ended December 31, 2012, 2011 and 2010:

	December 31,		
	2012	2011	2010
Risk-free interest rate	0.0% - 0.7%	0.0% - 1.1%	0.1% - 1.6%
Dividend yield	0%	0%	0%
Expected volatility	85% - 106%	71% - 106%	71% - 85%
Expected life (years)	0.25 - 2.0	0.25 - 2.0	0.25 - 2.0
Range of fair value per share of options granted under employee stock purchase plan	\$0.56 to \$5.44	\$0.56 to \$3.28	\$0.74 to \$3.28

Expected volatility is based on a combination of 75% historical volatility of our common stock and 25% market-based implied volatilities from traded options on our common stock, with historical volatility being more heavily weighted due to the historically low volume of traded options on our common stock. The expected life of options is determined based on historical experience of similar awards, giving consideration to the contractual terms of the share-based awards, vesting schedules and post-vesting terminations. The risk-free interest rates are based on the US Treasury yield curve, with a remaining term approximately equal to the expected term used in the option pricing model.

Forfeitures are estimated at the time of grant and revised, if necessary, in subsequent periods if actual forfeitures differ from those estimates. Based on historical experience, forfeitures of unvested options were estimated to be 6.5%, 6.3% and 7.0% for the years ended December 31, 2012, 2011, and 2010, respectively. If actual forfeitures vary from estimates, we will recognize the difference in compensation expense in the period the actual forfeitures occur or when stock options vest.

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

	2012	December 31, 2011	2010
Research and development	\$ 1,822	\$ 1,958	\$ 3,404
General and administrative	3,250	1,696	2,091
Restructuring charges	0	94	0
Total share-based compensation expense and impact on net loss allocable to common stockholders	\$ 5,072	\$ 3,748	\$ 5,495
Impact on net loss per share allocable to common stockholders, basic and diluted	\$ 0.03	\$ 0.03	\$ 0.05

Upon receiving FDA approval for BELVIQ in June 2012, we began to capitalize related share-based compensation into inventory. Capitalized share-based compensation, which totaled \$54,000 for the year ended December 31, 2012, will be recognized as cost of sales as products are sold.

At December 31, 2012, total unrecognized estimated compensation cost, including estimated forfeitures, related to unvested stock options was \$11.4 million, which is expected to be recognized over a weighted-average remaining requisite service period of 2.73 years. At December 31, 2012, total unrecognized estimated compensation cost, including estimated forfeitures, related to unvested restricted stock unit awards was \$1.5 million, which is expected to be recognized over a weighted-average remaining requisite service period of 3.95 years.

**Common Shares Reserved for Future Issuance**

The following shares of our common stock are reserved for future issuance at December 31, 2012:

Outstanding warrants	3,432,823
Equity Compensation Plans	28,610,811
2009 ESPP	1,235,019
Deferred compensation plan	79,169
<b>Total</b>	<b>33,357,822</b>

**(12) Collaborations****Eisai Inc.**

In May 2012, Arena GmbH and Eisai entered into the Amended and Restated Marketing and Supply Agreement for BELVIQ, which amended and restated the original marketing and supply agreement the parties entered into in July 2010. This amendment expanded Eisai's exclusive rights to commercialize BELVIQ to include, in addition to the United States and its territories and possessions, most of North and South America, including Mexico, Canada and Brazil, subject to applicable regulatory approval in the additional territories. In addition, we provide services related to development and regulatory activities, and we also manufacture and sell BELVIQ to Eisai. Under the Eisai Agreement, we are entitled to receive upfront payments, milestone payments based on the achievement of regulatory filings and approvals, one-time purchase price adjustment payments and other payments, and payments from sales of BELVIQ. The upfront payments we received of \$50.0 million when we entered into the original agreement and \$5.0 million when we entered into the amended agreement were deferred, as we determined that the exclusive rights did not have standalone value without our development and regulatory activities. These payments are being recognized ratably as revenue over the periods in which we expect the services to be rendered, which are approximately 16 years and 13 years, respectively.

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In addition to the upfront payments, we received a \$20.0 million non-refundable milestone payment that we earned for the inclusion in the FDA-approved prescribing information of the efficacy and safety data from the Phase 3 BLOOM-DM (Behavioral modification and Lorcaserin for Overweight and Obesity Management in Diabetes Mellitus) clinical trial in patients with type 2 diabetes. We recognized this \$20.0 million milestone payment as revenue when the FDA approved BELVIQ on June 27, 2012. We are also entitled to receive from Eisai up to \$119.5 million of additional non-refundable milestone payments, consisting of \$65.0 million upon the DEA's final scheduling designation for BELVIQ and other milestone payments totaling \$54.5 million based on achievement of regulatory filings and approvals. Under the milestone method of revenue recognition, we will recognize revenue for the amount payable to us for achieving each substantive milestone payment, if any, in the period the milestone is achieved.

In November 2012, we received \$11.6 million for BELVIQ product supply delivered to Eisai pursuant to an initial order under the Eisai Agreement, which has been recorded as deferred revenues until earned. At December 31, 2012, our consolidated balance sheet included \$15.0 million and \$42.7 million for the current and non-current portion, respectively, of the total deferred revenues attributable to Eisai.

The following table summarizes the revenues we have recognized under the Eisai Agreement for the periods presented, in thousands:

	December 31,			From Inception Through December 31,
	2012	2011	2010	2012
Milestone payments	\$ 20,000	\$ 0	\$ 0	\$ 20,000
Amortization of the upfront payments	3,503	3,434	1,923	8,860
Reimbursement of development and patent expenses	114	3,336	0	3,450
<b>Total</b>	<b>\$ 23,617</b>	<b>\$ 6,770</b>	<b>\$ 1,923</b>	<b>\$ 32,310</b>

We will manufacture BELVIQ at our facility in Switzerland, and sell BELVIQ to Eisai for marketing and distribution in the United States and, subject to applicable regulatory approval, in the additional territories for a purchase price starting at 31.5% and 30.75%, respectively, of Eisai's aggregate annual net sales (which are the gross invoiced sales less certain deductions described in the Eisai Agreement, including for certain taxes, credits, allowances, discounts, rebates, chargebacks and other items) in all of such territories on an aggregate basis. The purchase price will increase on a tiered basis in the United States and in the additional territories to as high as 36.5% and 35.75%, respectively, on the portion of Eisai's annual net sales exceeding \$750.0 million, subject to reduction (for sales in a particular country), including in the event of generic competition in the applicable country. The Eisai Agreement includes payments by Eisai if annual minimum sales requirements in the additional territories are not met during the first ten years after initial commercial sale in Mexico, Canada or Brazil. In addition, we are eligible to receive up to an aggregate of \$1.19 billion in one-time purchase price adjustment payments and other payments based on Eisai's annual net sales of BELVIQ in all of the territories under our agreement on an aggregate basis, with the first and last amounts payable with annual net sales of \$250.0 million and \$2.5 billion, respectively. Of these payments, Eisai will pay us a total of \$330.0 million for annual net sales of up to \$1.0 billion. We are also eligible to receive up to an additional \$185.0 million in one-time purchase price adjustment payments based on Eisai's annual net sales of BELVIQ in the non-US territories under our agreement, with the first and last amounts payable upon first achievement of annual net sales of \$100.0 million and \$1.0 billion, respectively, in such territories.

With respect to the post-marketing studies we and Eisai committed to conduct as part of the FDA approval of BELVIQ, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for the cardiovascular outcomes trial, and we will share equally with Eisai the costs of certain pediatric studies. Eisai is responsible for regulatory activities related to the BELVIQ New Drug Application, or NDA, and for the regulatory activities for obtaining regulatory approval in any country in the additional territories. If the regulatory

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authority for a country in the additional territories requires development work before or following approval of BELVIQ in such country, Eisai and we will be responsible for 90% and 10%, respectively, of the expenses for such work, with the exception of the expenses for stability testing, which we will share equally with Eisai.

Eisai and we have agreed to not commercialize outside of the Eisai Agreement any product that competes with BELVIQ in the United States or the additional territories. Our Eisai Agreement includes a stand-still provision limiting Eisai's ability to acquire our securities and assets.

Eisai will indemnify Arena GmbH for losses resulting from certain third-party claims, including for (a) Eisai's negligence, willful misconduct or violation of law, except for US product liability claims, (b) Eisai's breach of the marketing and supply agreement or related agreements, except for US product liability claims, (c) certain uses or misuses of BELVIQ, (d) certain governmental investigations of Eisai related to BELVIQ, and (e) infringement relating to Eisai's use of certain trademarks related to BELVIQ. Arena GmbH will indemnify Eisai for losses resulting from US product liability claims or from certain third-party claims, including for (i) Arena GmbH's negligence, willful misconduct, failure to comply with law, breach of any agreement with a third party with respect to product development prior to the effective date of the agreement with Eisai, (ii) Arena GmbH's negligence or willful misconduct with respect to certain uses or misuses of BELVIQ outside of the agreement, (iii) certain uses or misuses of BELVIQ after the term of the agreement or in any territory no longer under the agreement, (iv) Arena GmbH's negligence, willful misconduct or violation of law, (v) Arena GmbH's breach of the marketing and supply agreement or related agreements; (vi) certain infringement of intellectual rights of a third party; and (vii) infringement relating to Eisai's use of certain trademarks related to BELVIQ. In addition, each of Arena GmbH and Eisai will share equally in losses resulting from third-party product liability claims in the territories added with the amended agreement, except to the extent caused by one party's negligence, willful misconduct, violation of law or breach or default of the amended agreement or certain other agreements between the parties. We are unable to predict the maximum potential amount of any future payment for such product liability indemnification provisions. As of December 31, 2012, we have not incurred any significant costs under these indemnification provisions.

Eisai may terminate the amended agreement with respect to the United States or any country in the additional territories following the later of the expiration of all issued BELVIQ patents in such country and 12 years after the first commercial sale of BELVIQ in such country. Either party has the right to terminate the amended agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for commercialization concerns, and (c) for certain intellectual property infringement. Eisai also has the right to terminate the amended agreement early in its entirety or with respect to each country in certain circumstances, including (i) termination in a country if sales of generic equivalents of BELVIQ in such country exceed sales of BELVIQ in that country (based on volume), and (ii) if Eisai is acquired by a company that has a product that competes with BELVIQ. In addition, we can terminate the amended agreement early in its entirety or with respect to each country in the additional territories in certain circumstances, including termination in each country if Eisai does not satisfy certain regulatory filing and commercialization diligence requirements in such country.

**Ildong Pharmaceutical Co., Ltd.**

*BELVIQ*

In November 2012, Arena GmbH entered into a Marketing and Supply Agreement with Ildong Pharmaceutical Co., Ltd., or Ildong, which we refer to as the Ildong BELVIQ Agreement. Under this agreement, we granted Ildong exclusive rights to commercialize BELVIQ in South Korea for weight loss or weight management in obese and overweight patients, subject to regulatory approval of BELVIQ by the Korea Food and Drug Administration, or KFDA. In addition, we also provide certain services and will manufacture and sell BELVIQ to Ildong. Under the Ildong BELVIQ Agreement, in addition to the upfront payment received, we are entitled to receive a milestone payment based on regulatory approval as well as payments from sales of BELVIQ.

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Under the agreement, we received from Ildong an upfront payment of \$5.0 million, less withholding taxes, and will receive an additional \$3.0 million upon the approval of BELVIQ by the KFDA. We recorded this upfront payment as deferred revenue and are recognizing it as revenue ratably over approximately 14 years, which is the period in which we expect to have significant involvement. At December 31, 2012, our consolidated balance sheet included \$0.3 million and \$4.6 million for the current and non-current portion, respectively, of the deferred revenue attributable to such upfront payment. For the year ended December 31, 2012, we recognized revenues of \$0.1 million under this agreement.

Ildong is responsible for the regulatory approval and, ultimately, commercialization of BELVIQ in South Korea for weight loss or weight management in obese and overweight patients, including related development and other costs and expenses. We will manufacture BELVIQ at our facility in Switzerland, and sell BELVIQ to Ildong for a purchase price starting at 35% of Ildong's annual net sales (which are the gross invoiced sales less certain deductions described in the Ildong BELVIQ Agreement, including for certain taxes and other items). The purchase price will increase on a tiered basis up to 45% on the portion of annual net sales exceeding \$15.0 million. If certain annual net sales amounts are not met, we can convert Ildong's right to commercialize BELVIQ in South Korea to be non-exclusive.

Ildong has agreed not to conduct outside of our agreement activities related to the approval or commercialization of any other pharmaceutical product for weight loss, weight management or obesity in South Korea. We have agreed not to outside of our agreement commercialize in South Korea any pharmaceutical product containing BELVIQ intended for end use in weight loss or weight management in obese and overweight patients.

Ildong will indemnify Arena GmbH for losses resulting from certain third-party claims, including for (a) Ildong's negligence, willful misconduct or violation of law, (b) Ildong's breach of the marketing and supply agreement or related agreements, (c) certain uses or misuses of BELVIQ (including any product liability claim and other claims relating to sales or development of BELVIQ in South Korea), (d) certain governmental investigations of Ildong related to BELVIQ, and (e) infringement relating to Ildong's use of trademarks related to BELVIQ. Arena GmbH will indemnify Ildong for losses resulting from certain third-party claims, including for (i) Arena GmbH's negligence, willful misconduct or violation of law, and (ii) Arena GmbH's breach of the marketing and supply agreement or related agreements.

Unless terminated earlier, the agreement with Ildong will continue in effect until the later of the expiration of all issued patents relating to BELVIQ in South Korea and 12 years after the first commercial sale of BELVIQ in South Korea. Either party has the right to terminate the agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for certain commercialization concerns, and (c) for certain intellectual property concerns. Ildong also has the right to terminate the agreement early in certain circumstances, including if we notify Ildong that Ildong's right to commercialize BELVIQ in South Korea will become non-exclusive.

*Temanogrel*

In November 2012, we entered into the Co-Development and License Agreement with Ildong for temanogrel, our internally discovered inverse agonist of the serotonin 2A receptor. We refer to this agreement as the Ildong Temanogrel Agreement. Under such agreement, we granted Ildong exclusive rights to commercialize temanogrel in South Korea for myocardial infarction, acute coronary syndrome, stroke, peripheral artery disease, and other cardiovascular diseases, subject to further development and regulatory approval of temanogrel. Initially, Ildong will be responsible for funding and conducting, under the direction of a joint steering committee, the next two planned clinical trials in this program: an additional Phase 1 trial in healthy volunteers and a Phase 2a proof-of-concept trial in patients. To date, we have not recognized any revenue under this agreement.

We will maintain ownership of temanogrel outside of South Korea, and have the rights to use data generated by Ildong for the development and potential commercialization of temanogrel outside of South Korea by us or

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other Arena licensees. In addition, Ildong has agreed to pay us a \$2.0 million development milestone if the planned additional Phase 1 and Phase 2a clinical trials conducted by Ildong support continued development and we or another Arena licensee initiates a Phase 2b clinical trial of temanogrel. We are also eligible to receive a royalty on net sales of temanogrel in South Korea, while Ildong is eligible to receive a share of future payments received by us related to licensing transactions and sales of temanogrel in other territories.

Ildong will indemnify us for losses resulting from certain third-party claims, including for (a) Ildong's negligence, willful misconduct or violation of law, (b) Ildong's breach of the agreement, (c) certain uses or misuses of temanogrel (including any product liability claim and other claims relating to sales or development of temanogrel in South Korea), and (d) certain governmental investigations of Ildong related to temanogrel. We will indemnify Ildong for losses resulting from certain third-party claims, including for (i) our negligence, willful misconduct or violation of law, and (ii) our breach of the agreement.

Unless terminated earlier or extended, the agreement will continue in effect until the later of the expiration of all issued patents relating to temanogrel in South Korea and 10 years after the first commercial sale of temanogrel in South Korea. Either party has the right to terminate the agreement early in certain circumstances, including (a) if the other party is in material breach, (b) for certain commercialization concerns, and (c) for certain intellectual property concerns.

### **(13) Restructuring Charges**

In March 2011, we completed a reduction of our US workforce of 65 employees that was announced in January 2011. As a result of this restructuring, we recorded a charge of \$3.5 million in 2011, including non-cash, share-based compensation charges of \$0.1 million, which is reflected as a separate line item in the accompanying consolidated statements of operations.

### **(14) Employee Benefit Plans**

#### **401(k) Plan**

All of our US employees are eligible to participate in our defined contribution retirement plan that complies with Section 401(k) of the Internal Revenue Code. We match 100% of each participant's voluntary contributions, subject to a maximum of 6% of the participant's eligible compensation. Our matching portion, which totaled \$1.1 million, \$1.2 million and \$1.6 million in the years ended December 31, 2012, 2011 and 2010, respectively, vests over a five-year period from the date of hire.

#### **Pension Plan**

Our wholly owned subsidiary in Switzerland, Arena GmbH, contributes to a multiemployer defined benefit pension plan, established under an affiliated group of employers, for the purpose of providing mandatory occupational pension benefits for its employees. The risks of participating in a multiemployer plan are different from a single-employer plan in that (a) assets contributed to the multiemployer plan by one employer may be used to provide benefits to employees of other participating employers, (b) if a participating employer stops contributing to the plan, the unfunded obligations of the plan may be borne by the remaining participating employers, (c) if Arena GmbH elects to stop participating in the multiemployer plan, Arena GmbH may be required to pay the plan an amount based on the underfunded status of the plan, referred to as a withdrawal liability, and (d) Arena GmbH has no involvement in the management of the multiemployer plan's investments. We currently have no intention of withdrawing from the multiemployer plan.

Our contributions to the multiemployer plan were \$0.6 million in each of the years ended December 31, 2012, and 2011 and \$0.5 million in the year ended December 31, 2010.



**Table of Contents****(15) Income Taxes**

Our loss before benefit for income taxes is summarized by region as follows, in thousands:

	2012	December 31, 2011	2010
United States	\$ (62,674)	\$ (75,209)	\$ (85,471)
Foreign	(22,803)	(34,015)	(39,063)
<b>Total loss before income taxes</b>	<b>\$ (85,477)</b>	<b>\$ (109,224)</b>	<b>\$ (124,534)</b>

We have not recorded a benefit for income taxes for the years ended December 31, 2012, 2011, and 2010.

Our benefit for income taxes differs from the statutory Federal rate of 34% at December 31, 2012, 2011, and 2010, due to the following, in thousands:

	2012	December 31, 2011	2010
Benefit for income taxes at statutory Federal rate	\$ (29,062)	\$ (37,136)	\$ (42,342)
State income tax, net of Federal benefit	(4,390)	(3,857)	(3,954)
Permanent differences and other	(2,770)	(1,124)	1,246
Gain (Loss) from valuation of derivative liabilities	5,244	123	(428)
Foreign losses at lower effective rates	6,744	8,509	12,155
Research and development credit	(1,005)	(1,955)	(3,512)
Removal of California net operating losses, or NOLs, and research and development credits	4,831	7,086	14,947
Addition of Federal NOLs	0	0	(170,399)
Valuation allowance	20,408	28,354	192,287
<b>Benefit for income taxes</b>	<b>\$ 0</b>	<b>\$ 0</b>	<b>\$ 0</b>

The components of our deferred tax assets are as follows, in thousands:

	2012	December 31, 2011
Deferred tax assets:		
Foreign NOL carryforwards	\$ 8,264	\$ 6,835
Federal NOL carryforwards	210,005	191,826
Capitalized research and development (state)	0	169
Deferred revenues	23,346	20,421
Depreciation	8,055	6,640
Share-based compensation expense	5,698	4,967
Other, net	3,142	6,860
<b>Total deferred tax assets</b>	<b>258,510</b>	<b>237,718</b>
Deferred tax liabilities	(1,957)	(1,575)
<b>Net deferred tax assets</b>	<b>256,553</b>	<b>236,143</b>
Valuation allowance	(256,553)	(236,143)

Net deferred tax liabilities	\$	0	\$	0
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A valuation allowance has been established against all of our deferred tax assets, as realization of such assets is not more-likely-than-not. The valuation allowance increased by \$20.4 million in 2012 compared to 2011.

At December 31, 2012, we had Federal NOL carryforwards of \$623.5 million that will begin to expire in 2023 unless previously utilized. At the same date, we had California NOL carryforwards of \$742.8 million, which will begin to expire in 2014, and foreign NOL carryforwards of \$103.3 million, which will begin to expire in 2013. At December 31, 2012, approximately \$5.8 million of the Federal and California NOL 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. We also had Federal and California research and development tax credit carryforwards of \$28.7 million and \$27.7 million, respectively. The Federal research and development credit generated for the year ended December 31, 2012 of \$1.7 million is not included in the Federal research and development credit carryforward, as legislation was enacted in January 2013, which retroactively extended the research and development credit back to January 1, 2012. Therefore, the 2012 Federal research and development credit will be included in the Federal research and development credit carryforwards in 2013. Federal research and development credit carryforwards will begin to expire in 2025 unless previously utilized. The California research and development credit carryforwards carry forward indefinitely.

Sections 382 and 383 of the Internal Revenue Code limit the utilization of tax carryforwards that arise prior to certain cumulative changes in a corporation's ownership. The Section 382/383 analysis for Federal NOLs with respect to potential ownership changes was completed in 2010 and, accordingly, the Federal NOLs that are available to be utilized are included in our deferred tax asset schedule. We have reviewed our changes in ownership for Federal NOLs through December 31, 2012, and have not identified any additional changes. We have yet to complete a Section 382/383 analysis for our California NOL deferred tax assets and, accordingly, have excluded \$43.0 million from our deferred tax asset schedule. We have also excluded deferred tax assets of \$47.0 million for our Federal and California research and development credits from our deferred tax asset schedule as we have not completed our research and development credit analyses.

In accordance with authoritative guidance, the impact of an uncertain income tax position on the income tax return must be recognized at the largest amount that is more-likely-than-not to be sustained upon audit by the relevant taxing authority. An uncertain income tax position will not be recognized if it has less than a 50% likelihood of being sustained. We did not record provisions for an uncertain income tax position at December 31, 2012, 2011, or 2010.

Our practice is to recognize interest and/or penalties related to income tax matters in income tax expense. We did not have any uncertain income tax positions or accrued interest or penalties included in our consolidated balance sheets at December 31, 2012, or 2011, and did not recognize any interest and/or penalties in our consolidated statements of operations and comprehensive loss during the years ended December 31, 2012, 2011, or 2010.

We are subject to income taxation in the United States at the Federal and state levels. Our tax years for 1998 and later are subject to examination by US and California tax authorities due to the carryforward of unutilized NOLs and research and development credits. We are also subject to foreign income taxes in the countries in which we operate. To our knowledge, we are not currently under examination by any taxing authorities.

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

**Table of Contents****(16) Legal Proceedings**

Beginning on September 20, 2010, a number of complaints were filed in the US District Court for the Southern District of California against us and certain of our current and former employees and directors on behalf of certain purchasers of our common stock. The complaints have been brought as purported stockholder class actions, and, in general, include allegations that we and certain of our current and former employees and directors violated federal securities laws by making materially false and misleading statements regarding our BELVIQ program, thereby artificially inflating the price of our common stock. The plaintiffs are seeking unspecified monetary damages and other relief. On November 19, 2010, eight prospective lead plaintiffs filed motions to consolidate, appoint a lead plaintiff, and appoint lead counsel. The Court took the motions to consolidate under submission on January 14, 2011. On August 8, 2011, the Court consolidated the actions and appointed a lead plaintiff and lead counsel. On November 1, 2011, the lead plaintiff filed a consolidated amended complaint. On December 30, 2011, we filed a motion to dismiss the consolidated amended complaint. The motion to dismiss has been fully briefed and the Court took the motion to dismiss under submission on April 13, 2012. In addition to the class actions, a complaint involving similar legal and factual issues has been brought by at least one individual stockholder and is pending in federal court. On December 30, 2011, we filed a motion to dismiss the stockholder's complaint. The motion to dismiss has been fully briefed and the Court took the motion to dismiss under submission on April 13, 2012. We intend to defend against the claims advanced and to seek dismissal of these complaints. Due to the early stage of these proceedings, we are not able to predict or reasonably estimate the ultimate outcome or possible losses relating to these claims.

**(17) Quarterly Financial Data (Unaudited)**

The following tables present quarterly data for the years ended December 31, 2012, and 2011, in thousands, except per share data:

	Quarter ended December 31	Quarter ended September 30	Quarter ended June 30	Quarter ended March 31	Year ended December 31
<b>2012</b>					
Revenues	\$ 1,936	\$ 1,485	\$ 21,977	\$ 2,189	\$ 27,587
Net loss allocable to common stockholders	\$ (21,280)	\$ (15,521)	\$ (22,099)	\$ (29,401)	\$ (88,301)
Net loss per share allocable to common stockholders, basic and diluted	\$ (0.10)	\$ (0.07)	\$ (0.12)	\$ (0.18)	\$ (0.45)

	Quarter ended December 31	Quarter ended September 30	Quarter ended June 30	Quarter ended March 31	Year ended December 31
<b>2011</b>					
Revenues	\$ 2,076	\$ 3,459	\$ 3,259	\$ 3,925	\$ 12,719
Net loss allocable to common stockholders	\$ (23,682)	\$ (22,736)	\$ (22,908)	\$ (42,158)	\$ (111,484)
Net loss per share allocable to common stockholders, basic and diluted	\$ (0.16)	\$ (0.16)	\$ (0.16)	\$ (0.35)	\$ (0.80)

**(18) Subsequent Events**

We have evaluated subsequent events after the balance sheet date of December 31, 2012, through the date we filed this report.

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

None.

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

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

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended, or the Exchange Act. Based on this evaluation, our principal executive officer and our principal financial officer concluded that our disclosure controls and procedures were effective at the reasonable assurance level as of the end of the period covered by this Annual Report on Form 10-K.

Our management does not expect that our disclosure controls and procedures or our internal control over financial reporting will prevent all potential errors and fraud. A control system, no matter how well conceived and operated, can provide only reasonable, not absolute, assurance that the objectives of the control system are met. Because of the inherent limitations in all control systems, no system of controls can provide absolute assurance that all control issues and instances of fraud, if any, or misstatements due to error, if any, within the company have been detected. While we believe that our disclosure controls and procedures and internal control over financial reporting are and have been effective at the reasonable assurance level, we intend to continue to examine and refine our disclosure controls and procedures and internal control over financial reporting and to monitor ongoing developments in these areas.

#### **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 President and Chief Executive Officer and our Senior Vice President, 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, 2012.

The registered public accounting firm that audited our financial statements as of and for the year ended December 31, 2012, included in this Annual Report on Form 10-K has issued an attestation report on our internal control over financial reporting, and such report is included below.

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

There was no change in our internal control over financial reporting during the fourth quarter of the period covered by this Annual Report on Form 10-K that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

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**Report of Independent Registered Public Accounting Firm**

The Board of Directors and Stockholders

Arena Pharmaceuticals, Inc.:

We have audited Arena Pharmaceuticals, Inc.'s internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Arena Pharmaceuticals, Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting, included in the accompanying Management's Report on Internal Control Over Financial Reporting. Our responsibility is to express an opinion on Arena Pharmaceutical Inc.'s internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, assessing the risk that a material weakness exists, and testing and evaluating the design and operating effectiveness of internal control based on the assessed risk. Our audit also included 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 U.S. 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 U.S. generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

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

In our opinion, Arena Pharmaceuticals, Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2012, based on criteria established in *Internal Control - Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

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. and subsidiaries as of December 31, 2012 and 2011, and the related consolidated statements of operations and comprehensive loss, stockholders' equity, and cash flows for each of the years in the three-year period ended December 31, 2012, and our report dated March 1, 2013 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

San Diego, California

March 1, 2013

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**Item 9B. Other Information.**  
Not applicable.

**Table of Contents****PART III****Item 10. Directors, Executive Officers and Corporate Governance.**

We have adopted a Code of Business Conduct and Ethics that applies to our directors and employees (including our principal executive officer, principal financial officer, principal accounting officer and controller), and have posted the text of the policy on our website ([www.arenapharm.com](http://www.arenapharm.com)) in connection with Investor materials. In addition, we intend to promptly disclose on our website in the future (i) the date and nature of any amendment (other than technical, administrative or other non-substantive amendments) to the policy that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions and relates to any element of the code of ethics definition enumerated in Item 406(b) of Regulation S-K, 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 that relates to one or more of the elements of the code of ethics definition enumerated in Item 406(b) of Regulation S-K, the name of such person who is granted the waiver and the date of the waiver.

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 2013, or the Proxy Statement.

**Item 11. Executive Compensation.**

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

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

The following table summarizes our compensation plans under which our equity securities are authorized for issuance as of December 31, 2012:

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*	14,006,860	\$ 4.39	15,838,970**
Equity compensation plans not approved by security holders	0		0
<b>Total*</b>	<b>14,006,860</b>	<b>\$ 4.39</b>	<b>15,838,970**</b>

\* Includes 13,841,860 stock options with a per share weighted-average exercise price of \$4.44, and 165,000 restricted stock units with no exercise price.

\*\* Includes 1,235,019 shares of common stock available for future issuance under our 2009 Employee Stock Purchase Plan, as amended.





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In 2003, we set up a deferred compensation plan for our executive officers, whereby they may elect to defer their shares of restricted stock. At December 31, 2012, a total of 79,169 shares of restricted stock were in the plan. All of the shares contributed to this plan were previously granted to such officers under an equity compensation plan approved by our stockholders.

The other information required by this item is incorporated herein by reference from the information under the caption Security Ownership of Certain Beneficial Owners and Management contained in the Proxy Statement.

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

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

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

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

**Table of Contents****PART IV****Item 15. Exhibits, Financial Statement Schedules.****(a) 1. FINANCIAL STATEMENTS.**

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

**2. FINANCIAL STATEMENT SCHEDULES.**

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

**3. EXHIBITS****EXHIBIT  
NO.****DESCRIPTION**

2.1*	Agreement of Purchase and Sale, dated as of March 21, 2007, by and between Arena and BMR-6114-6154 Nancy Ridge Drive LLP (as assignee of BioMed Realty, L.P.) (incorporated by reference to Exhibit 2.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on May 8, 2007, Commission File No. 000-31161)
3.1	Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 3.1 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2002, filed with the Securities and Exchange Commission on August 14, 2002, Commission File No. 000-31161)
3.2	Certificate of Amendment of the Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 4.2 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 28, 2006, Commission File No. 333-135398)
3.3	Certificate of Amendment No. 2 of the Fifth Amended and Restated Certificate of Incorporation of Arena, as amended (incorporated by reference to Exhibit 4.3 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 30, 2009, Commission File No. 333-160329)
3.4	Certificate of Amendment No. 3 of the Fifth Amended and Restated Certificate of Incorporation of Arena, as amended (incorporated by reference to Exhibit 3.4 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 333-182238)
3.5	Amended and Restated Bylaws of Arena (incorporated by reference to Exhibit 3.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on October 4, 2007, Commission File No. 000-31161)
4.4	Form of common stock certificate (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. 333-35944)
10.1**	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)
10.2**	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)



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<b>NO.</b>	<b>DESCRIPTION</b>
10.3	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)
10.4	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 Commission on December 30, 2003, Commission File No. 000-31161)
10.5	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)
10.6	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)
10.7	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 Commission on January 6, 2004, Commission File No. 000-31161)
10.8	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)
10.9**	Arena's Deferred Compensation Plan, effective November 11, 2003, between Arena and participating executive officers (incorporated by reference to Exhibit 10.29 to Arena's annual report on Form 10-K for the year ended December 31, 2003, filed with the Securities and Exchange Commission on March 1, 2004, Commission File No. 000-31161)
10.10**	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)
10.11**	2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on April 13, 2007, Commission File No. 000-31161)
10.12**	Form of Stock Option Grant Agreement under the Arena 2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
10.13**	Form of Stock Option Grant Agreement Director under the Arena 2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.2 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
10.14**	Form of Incentive Stock Option Grant Agreement under the Arena 2006 Long-Term Incentive Plan, as amended (incorporated by reference to Exhibit 10.3 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on August 1, 2006, Commission File No. 000-31161)
10.15**	Form of Indemnification Agreement between Arena and its directors (incorporated by reference to Exhibit 10.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on June 18, 2007, Commission File No. 000-31161)

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<b>EXHIBIT NO.</b>	<b>DESCRIPTION</b>
10.16**	Form of Indemnification Agreement between Arena and its executive officers (incorporated by reference to Exhibit 10.2 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on June 18, 2007, Commission File No. 000-31161)
10.17**	Form of Indemnification Agreement between Arena and individuals serving as its directors and executive officers (incorporated by reference to Exhibit 10.3 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on June 18, 2007, Commission File No. 000-31161)
10.18	Lease agreement between BMR-6114-6154 Nancy Ridge Drive LLC and Arena for 6114 Nancy Ridge Drive, San Diego, California (incorporated by reference to Exhibit 10.5 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2007, filed with the Securities and Exchange Commission on August 9, 2007, Commission File No. 000-31161)
10.19	Lease agreement between BMR-6114-6154 Nancy Ridge Drive LLC and Arena for 6118 Nancy Ridge Drive, San Diego, California (incorporated by reference to Exhibit 10.6 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2007, filed with the Securities and Exchange Commission on August 9, 2007, Commission File No. 000-31161)
10.20	Lease agreement between BMR-6114-6154 Nancy Ridge Drive LLC and Arena for 6122, 6124 and 6126 Nancy Ridge Drive, San Diego, California (incorporated by reference to Exhibit 10.7 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2007, filed with the Securities and Exchange Commission on August 9, 2007, Commission File No. 000-31161)
10.21	Lease agreement between BMR-6114-6154 Nancy Ridge Drive LLC and Arena for 6154 Nancy Ridge Drive, San Diego, California (incorporated by reference to Exhibit 10.8 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2007, filed with the Securities and Exchange Commission on August 9, 2007, Commission File No. 000-31161)
10.22*	Asset Purchase Agreement, dated as of December 18, 2007, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.38 to Arena's annual report on Form 10-K for the year ended December 31, 2007, filed with the Securities and Exchange Commission on March 5, 2008, Commission File No. 000-31161)
10.23	Amendment No. 1 to the Asset Purchase Agreement, dated effective as of January 1, 2011, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.2 to Arena's quarterly report on Form 10-Q for the quarter ended March 31, 2011, filed with the Securities and Exchange Commission on May 10, 2011, Commission File No. 000-31161)
10.24*	Toll Manufacturing Agreement, dated as of January 7, 2008, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.39 to Arena's annual report on Form 10-K for the year ended December 31, 2007, filed with the Securities and Exchange Commission on March 5, 2008, Commission File No. 000-31161)
10.25	Amendment No. 1 to Toll Manufacturing Agreement, dated December 18, 2008, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.36 to Arena's annual report on Form 10-K for the year ended December 31, 2008, filed with the Securities and Exchange Commission on March 16, 2009, Commission File No. 000-31161)
10.26	Amendment No. 2 to Toll Manufacturing Agreement, dated September 17, 2009, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.36 to Arena's annual report on Form 10-K for the year ended December 31, 2009, filed with the Securities and Exchange Commission on March 16, 2010, Commission File No. 000-31161)

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**EXHIBIT**

<b>NO.</b>	<b>DESCRIPTION</b>
10.27	Amendment No. 3 to the Toll Manufacturing Agreement, dated effective as of January 1, 2011, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.3 to Arena's quarterly report on Form 10-Q for the quarter ended March 31, 2011, filed with the Securities and Exchange Commission on May 10, 2011, Commission File No. 000-31161)
10.28	Amendment No. 4 to the Toll Manufacturing Agreement, dated effective as of January 1, 2011, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.2 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2011, filed with the Securities and Exchange Commission on August 9, 2011, Commission File No. 000-31161)
10.29	Amendment No. 5 to the Toll Manufacturing Agreement, dated effective as of November 23, 2011, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd (incorporated by reference to Exhibit 10.36 to Arena's annual report on Form 10-K for the year ended December 31, 2012, filed with the Securities and Exchange Commission on March 15, 2012, Commission File No. 000-31161)
10.30	Amendment No. 6 to the Toll Manufacturing Agreement, dated effective as of August 20, 2012, by and between Arena Pharmaceuticals GmbH and Siegfried Ltd
10.31**	Amended and Restated Severance Benefit Plan, dated effective December 30, 2008, and providing benefits for Messrs. Lief, Hoffman and Spector and Drs. Behan and Shanahan (incorporated by reference to Exhibit 10.1 to Arena's Form 8-K filed with the Securities and Exchange Commission on December 31, 2008, Commission File No. 000-31161)
10.32**	Amendment No. 1 to Amended and Restated Severance Benefit Plan, dated as of February 10, 2012 (incorporated by reference to Exhibit 10.1 to Arena's Form 8-K filed with the Securities and Exchange Commission on February 14, 2012, Commission File No. 000-31161)
10.33**	Form of Amended and Restated Termination Protection Agreement, dated December 30, 2008, by and among Arena and Messrs. Lief and Spector and Dr. Behan (incorporated by reference to Exhibit 10.2 to Arena's Form 8-K filed with the Securities and Exchange Commission on December 31, 2008, Commission File No. 000-31161)
10.34**	Arena's 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.1 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 30, 2009, Commission File No. 333-160329)
10.35**	Form of Incentive Stock Option Grant Agreement for Employees under the Arena 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.7 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2009, filed with the Securities and Exchange Commission on August 7, 2009, Commission File No. 000-31161)
10.36**	Form of Stock Option Grant Agreement for Employees or Consultants under the Arena 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.8 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2009, filed with the Securities and Exchange Commission on August 7, 2009, Commission File No. 000-31161)
10.37**	Form of Stock Option Grant Agreement for Non-Employee Directors under the Arena 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.9 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2009, filed with the Securities and Exchange Commission on August 7, 2009, Commission File No. 000-31161)
10.38	Common Stock Purchase Agreement between the Company and Azimuth Opportunity, L.P., dated November 8, 2011 (incorporated by reference to Exhibit 10.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on November 8, 2011, Commission File No. 000-31161)

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<b>EXHIBIT NO.</b>	<b>DESCRIPTION</b>
10.39**	Arena's 2009 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 99.2 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 333-182238)
10.40**	Arena's 2012 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.1 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 333-182238)
10.41**	Form of Incentive Stock Option Grant Agreement for Employees for grants prior to December 13, 2012, under the Arena 2012 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 June 20, 2012, Commission File No. 000-31161)
10.42**	Form of Stock Option Grant Agreement for Employees or Consultants for grants prior to December 13, 2012, under the Arena 2012 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 June 20, 2012, Commission File No. 000-31161)
10.43**	Form of Stock Option Grant Agreement for Non-Employee Directors under the Arena 2012 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 June 20, 2012, Commission File No. 000-31161)
10.44**	Form of Restricted Stock Grant Agreement under the Arena 2012 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.6 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 000-31161)
10.45**	Form of Incentive Stock Option Grant Agreement for Employees for grants beginning on December 13, 2012, under the Arena 2012 Long-Term Incentive Plan
10.46**	Form of Stock Option Grant Agreement for Employees or Consultants for grants beginning on December 13, 2012, under the Arena 2012 Long-Term Incentive Plan
10.47**	Form of Restricted Stock Unit Grant Agreement under the Arena 2012 Long-Term Incentive Plan
10.48+	Amended and Restated Marketing and Supply Agreement, dated May 9, 2012, by and between Arena Pharmaceuticals GmbH and Eisai Inc. (incorporated by reference to Exhibit 10.1 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2012, filed with the Securities and Exchange Commission on August 9, 2012, Commission File No. 000-31161)
10.49**	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 December 19, 2012, Commission File No. 000-31161)
10.50**	Summary of compensation for non-employee directors
21.1	Subsidiaries of the registrant
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 and Rule 13a-14(B) promulgated under the Securities Exchange Act of 1934



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**EXHIBIT**

<b>NO.</b>	<b>DESCRIPTION</b>
101.INS***	XBRL Instance Document
101.SCH***	XBRL Taxonomy Extension Schema Document
101.CAL***	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF***	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB***	XBRL Taxonomy Extension Label Linkbase Document
101.PRE***	XBRL Taxonomy Extension Presentation Linkbase Document

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

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

\*\* Management contract or compensatory plan or arrangement.

\*\*\* Furnished herewith.

**(b) EXHIBITS**

See Item 15(a)(3) above.

**(c) FINANCIAL STATEMENT SCHEDULES**

See Item 15(a)(2) above.

**Table of Contents****SIGNATURES**

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

Arena Pharmaceuticals, Inc.,

a Delaware corporation

Date: March 1, 2013

By: */s/ JACK LIEF*  
**Jack Lief**

**President and Chief Executive Officer**

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

	<b>Signatures</b>	<b>Title</b>	<b>Date</b>
<b>By:</b>	<i>/s/ JACK LIEF</i> <b>Jack Lief</b>	Chairman, President and Chief Executive Officer	March 1, 2013
<b>By:</b>	<i>/s/ ROBERT E. HOFFMAN</i> <b>Robert E. Hoffman</b>	Senior Vice President, Finance and Chief Financial Officer (principal financial and accounting officer)	March 1, 2013
<b>By:</b>	<i>/s/ DOMINIC P. BEHAN</i> <b>Dominic P. Behan, Ph.D.</b>	Director	March 1, 2013
<b>By:</b>	<i>/s/ DONALD D. BELCHER</i> <b>Donald D. Belcher</b>	Director	March 1, 2013
<b>By:</b>	<i>/s/ SCOTT H. BICE</i> <b>Scott H. Bice</b>	Director	March 1, 2013
<b>By:</b>	<i>/s/ HARRY F. HIXSON, JR.</i> <b>Harry F. Hixson, Jr., Ph.D.</b>	Director	March 1, 2013
<b>By:</b>	<i>/s/ TINA S. NOVA</i> <b>Tina S. Nova, Ph.D.</b>	Director	March 1, 2013
<b>By:</b>	<i>/s/ PHILLIP M. SCHNEIDER</i> <b>Phillip M. Schneider</b>	Director	March 1, 2013

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<b>By:</b>	/s/ CHRISTINE A. WHITE	Director	March 1, 2013
	<b>Christine A. White, M.D.</b>		
<b>By:</b>	/s/ RANDALL E. WOODS	Director	March 1, 2013
	<b>Randall E. Woods</b>		

**Table of Contents****EXHIBIT INDEX**

<b>EXHIBIT NO.</b>	<b>DESCRIPTION</b>
2.1*	Agreement of Purchase and Sale, dated as of March 21, 2007, by and between Arena and BMR-6114-6154 Nancy Ridge Drive LLP (as assignee of BioMed Realty, L.P.) (incorporated by reference to Exhibit 2.1 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on May 8, 2007, Commission File No. 000-31161)
3.1	Fifth Amended and Restated Certificate of Incorporation of Arena (incorporated by reference to Exhibit 3.1 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2002, filed with the Securities and Exchange Commission on August 14, 2002, Commission File No. 000-31161)
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10.6	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)
10.7	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 Commission on January 6, 2004, Commission File No. 000-31161)
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10.10**	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)
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10.32**	Amendment No. 1 to Amended and Restated Severance Benefit Plan, dated as of February 10, 2012 (incorporated by reference to Exhibit 10.1 to Arena's Form 8-K filed with the Securities and Exchange Commission on February 14, 2012, Commission File No. 000-31161)
10.33**	Form of Amended and Restated Termination Protection Agreement, dated December 30, 2008, by and among Arena and Messrs. Lief and Spector and Dr. Behan (incorporated by reference to Exhibit 10.2 to Arena's Form 8-K filed with the Securities and Exchange Commission on December 31, 2008, Commission File No. 000-31161)
10.34**	Arena's 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.1 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 30, 2009, Commission File No. 333-160329)
10.35**	Form of Incentive Stock Option Grant Agreement for Employees under the Arena 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.7 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2009, filed with the Securities and Exchange Commission on August 7, 2009, Commission File No. 000-31161)
10.36**	Form of Stock Option Grant Agreement for Employees or Consultants under the Arena 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.8 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2009, filed with the Securities and Exchange Commission on August 7, 2009, Commission File No. 000-31161)
10.37**	Form of Stock Option Grant Agreement for Non-Employee Directors under the Arena 2009 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.9 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2009, filed with the Securities and Exchange Commission on August 7, 2009, Commission File No. 000-31161)
10.38	Common Stock Purchase Agreement between the Company and Azimuth Opportunity, L.P., dated November 8, 2011 (incorporated by reference to Exhibit 10.1 to Arena's current report on Form 8-K filed with the Securities and Exchange Commission on November 8, 2011, Commission File No. 000-31161)
10.39**	Arena's 2009 Employee Stock Purchase Plan, as amended (incorporated by reference to Exhibit 99.2 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 333-182238)
10.40**	Arena's 2012 Long-Term Incentive Plan (incorporated by reference to Exhibit 99.1 to Arena's registration statement on Form S-8 filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 333-182238)
10.41**	Form of Incentive Stock Option Grant Agreement for Employees for grants prior to December 13, 2012, under the Arena 2012 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 June 20, 2012, Commission File No. 000-31161)
10.42**	Form of Stock Option Grant Agreement for Employees or Consultants for grants prior to December 13, 2012, under the Arena 2012 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 June 20, 2012, Commission File No. 000-31161)

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<b>EXHIBIT NO.</b>	<b>DESCRIPTION</b>
10.43**	Form of Stock Option Grant Agreement for Non-Employee Directors under the Arena 2012 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 June 20, 2012, Commission File No. 000-31161)
10.44**	Form of Restricted Stock Grant Agreement under the Arena 2012 Long-Term Incentive Plan (incorporated by reference to Exhibit 10.6 to Arena's report on Form 8-K filed with the Securities and Exchange Commission on June 20, 2012, Commission File No. 000-31161)
10.45**	Form of Incentive Stock Option Grant Agreement for Employees for grants beginning on December 13, 2012, under the Arena 2012 Long-Term Incentive Plan
10.46**	Form of Stock Option Grant Agreement for Employees or Consultants for grants beginning on December 13, 2012, under the Arena 2012 Long-Term Incentive Plan
10.47**	Form of Restricted Stock Unit Grant Agreement under the Arena 2012 Long-Term Incentive Plan
10.48+	Amended and Restated Marketing and Supply Agreement, dated May 9, 2012, by and between Arena Pharmaceuticals GmbH and Eisai Inc. (incorporated by reference to Exhibit 10.1 to Arena's quarterly report on Form 10-Q for the quarter ended June 30, 2012, filed with the Securities and Exchange Commission on August 9, 2012, Commission File No. 000-31161)
10.49**	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 December 19, 2012, Commission File No. 000-31161)
10.50**	Summary of compensation for non-employee directors
21.1	Subsidiaries of the registrant
23.1	Consent of Independent Registered Public Accounting Firm
31.1	Certification of Chief Executive Officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
31.2	Certification of Chief Financial Officer pursuant to Rule 13a-14(A) promulgated under the Securities Exchange Act of 1934
32.1	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 and Rule 13a-14(B) promulgated under the Securities Exchange Act of 1934
101.INS***	XBRL Instance Document
101.SCH***	XBRL Taxonomy Extension Schema Document
101.CAL***	XBRL Taxonomy Extension Calculation Linkbase Document
101.DEF***	XBRL Taxonomy Extension Definition Linkbase Document
101.LAB***	XBRL Taxonomy Extension Label Linkbase Document
101.PRE***	XBRL Taxonomy Extension Presentation Linkbase Document

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

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

\*\* Management contract or compensatory plan or arrangement.

\*\*\* Furnished herewith.