ARENA PHARMACEUTICALS INC
Form 424B5
August 06, 2010
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Filed pursuant to Rule 424(b)(5)
Registration No. 333-166481

PROSPECTUS SUPPLEMENT

To Prospectus dated May 10, 2010

8,955,224 Shares

Arena Pharmaceuticals, Inc.

Common Stock

Pursuant to this prospectus supplement and the accompanying prospectus, we are offering an aggregate of 8,955,224 shares of our common stock to certain institutional investors pursuant to a securities purchase agreement, dated August 5, 2010, at a price of $6.70 per share. The aggregate purchase price for the shares is approximately $60 million. We will receive net proceeds from the sale of these shares of approximately $59.9 million after deducting our estimated offering expenses.

Our common stock is quoted on The NASDAQ Global Market under the symbol ARNA . The last reported sale price of our common stock on The NASDAQ Global Market on August 5, 2010, was $7.05 per share.

Investing in our common stock involves a high degree of risk. Please read Risk Factors beginning on page S-4 of this prospectus supplement and in the documents incorporated by reference into this prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus supplement or the accompanying prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

We currently anticipate that the closing of the offering will take place on or before August 10, 2010. On the closing date, we will issue the shares of common stock to the investors and receive funds in the amount of the aggregate purchase price.

The date of this prospectus supplement is August 5, 2010.

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We provide information to you about this offering of shares of our common stock in two separate documents that are bound together: (1) this prospectus supplement, which describes the specific details regarding this offering; and (2) the accompanying prospectus, which provides general information, some of which may not apply to this offering. Generally, when we refer to this prospectus, we are referring to both documents combined. If information in this prospectus supplement is inconsistent with the accompanying prospectus, you should rely on this prospectus supplement.

You should rely only on information contained in or incorporated by reference into this prospectus supplement and the accompanying prospectus. We have not authorized anyone to provide you with information that is different. We are offering to sell and seeking offers to buy shares of our common stock only in jurisdictions where offers and sales are permitted. The information contained in this prospectus supplement, the accompanying prospectus and the documents incorporated by reference herein and therein are accurate only as of their respective dates, regardless of the time of delivery of this prospectus supplement or of any sale of our common stock.

Arena Pharmaceuticals®, Arena® and our corporate logo are registered service marks of Arena. CART and BRL Screening are unregistered service marks of Arena. APD is an abbreviation for Arena Pharmaceuticals Development. All other brand names or trademarks appearing in this prospectus supplement and the accompanying prospectus are the property of their respective holders. Unless otherwise specified or required by context, references in this prospectus supplement to we, us, our and Arena refer to Arena Pharmaceuticals, Inc., and its wholly owned subsidiaries on a consolidated basis.

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PROSPECTUS SUPPLEMENT SUMMARY

The items in the following summary are described in more detail later in this prospectus supplement and in the accompanying prospectus. This summary provides an overview of selected information and does not contain all the information you should consider before investing in our common stock. Therefore, you should read the more detailed information set out in this prospectus supplement, accompanying prospectus and the other information incorporated by reference herein and therein carefully.

Arena Pharmaceuticals, Inc.

We are a clinical-stage biopharmaceutical company focused on discovering, developing and commercializing oral drugs that target G protein-coupled receptors, an important class of validated drug targets, in four major therapeutic areas: cardiovascular, central nervous system, inflammatory and metabolic diseases. Our most advanced drug candidate is lorcaserin hydrochloride, or lorcaserin, for weight management, and it has completed a pivotal Phase 3 clinical trial program.

In December 2009, we submitted a New Drug Application, or NDA, for lorcaserin to the US Food and Drug Administration, or FDA, for regulatory approval. The FDA has assigned an October 22, 2010, Prescription Drug User Fee Act, or PDUFA, date for the review of our application, and has notified us of the tentative scheduling of an Endocrinologic and Metabolic Drugs Advisory Committee meeting on September 16, 2010, as part of such review. Arena Pharmaceuticals GmbH, or Arena GmbH, our wholly owned subsidiary, has granted Eisai Inc., or Eisai, exclusive rights to market and distribute lorcaserin in the United States and its territories and possessions following approval by the FDA of our lorcaserin NDA.

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

In addition to lorcaserin, our internal development programs include APD791, APD916 and APD811, all of which are oral drug candidates that we internally discovered. APD791 is a selective inverse agonist of the serotonin 2A receptor intended for the treatment of arterial thrombosis and other related conditions, and it has completed Phase 1a and Phase 1b clinical trials. APD916 is a histamine H3 inverse agonist intended for the treatment of narcolepsy and cataplexy, and we initiated a Phase 1 clinical trial of APD916 in March 2010. APD811 is a selective agonist of the prostacyclin receptor intended for the treatment of pulmonary arterial hypertension, and it is in preclinical development.

Along with our internal programs, we are collaborating with Ortho-McNeil-Janssen Pharmaceuticals, Inc., to develop compounds for the treatment of type 2 diabetes and other disorders by targeting the GPR119 receptor.

We intend to commercialize our drug candidates with pharmaceutical companies or independently. We have not received regulatory approval for marketing or selling any drugs. We have also not generated commercial revenues from selling any drugs, other than in connection with manufacturing drugs for Siegfried Ltd in our Swiss drug product manufacturing facility.

The headquarters of our operations outside of the United States is in Switzerland. Activities conducted at this location include manufacturing, quality control, development of manufacturing processes, qualifying suppliers and otherwise managing the global supply chain, regulatory strategy and compliance, distribution of finished products, and European strategic planning and development.

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The pharmaceutical marketplace in which we operate includes many large, well-established companies competing with us to develop or market treatments for the same diseases and disorders. See Risk Factors.

We incorporated in the state of Delaware in April 1997. Our corporate offices are located at 6166 Nancy Ridge Drive, San Diego, California 92121. Our telephone number is 858.453.7200. Our website address is www.arenapharm.com. Information contained in or accessible through our website does not constitute part of this prospectus.

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The Offering

Common Stock Offered By Us	8,955,224 shares
Common Stock To Be Outstanding Immediately After This Offering	121,301,688 shares
Use Of Proceeds	We estimate that our net proceeds from this offering, after deducting our estimated offering expenses, will be approximately $59.9 million. We will use $30 million of the proceeds of this offering to prepay the portion of the loan principal that otherwise would have been required to be repaid in July 2012 under the existing Facility Agreement, dated June 17, 2009, by and between us and entities affiliated with Deerfield Management. We anticipate that we will use the remainder of the net proceeds from this offering for payment of additional loan principal and debt under the Facility Agreement, for preclinical and clinical development of our drug candidates, for discovery research for new drug candidates and for general corporate purposes, including working capital. See Use of Proceeds on page S-9 of this prospectus supplement.
NASDAQ Global Market Listing	Our common stock is listed on The NASDAQ Global Market under the symbol ARNA .
Risk Factors	Investing in our common stock involves a high degree of risk. See Risk Factors on page S-4 of this prospectus supplement.

The number of shares of common stock to be outstanding after this offering as reflected above is based on the actual number of shares outstanding as of August 5, 2010, which was 112,346,464, and does not include, as of that date:

- 16,200,000 shares of common stock issuable upon the exercise of outstanding warrants at an exercise price of $3.45 per share;
- 11,800,000 shares of common stock issuable upon the exercise of outstanding warrants at an exercise price of $5.42 per share;
- 1,396,058 shares of common stock issuable upon the exercise of outstanding warrants at an exercise price of $6.11 per share (which as a result of this offering will become warrants to purchase 1,398,346 shares of common stock at an exercise price of $6.10 per share);
- 1,045,929 shares of common stock issuable upon the exercise of outstanding warrants at an exercise price of $12.29 per share (which as a result of this offering will become warrants to purchase 1,046,781 shares of common stock at an exercise price of $12.28 per share);
- 8,332,054 shares of common stock issuable upon the exercise of outstanding options at a weighted average exercise price of $7.84 per share;

1,700,450 performance-based restricted stock unit awards outstanding under our 2006 Long-Term Incentive Plan, as amended;

5,435,566 shares of common stock available for future issuance under our 2009 Long-Term Incentive Plan;

1,039,164 shares of common stock available for future issuance under our 2009 Employee Stock Purchase Plan; and

84,169 shares of common stock available for future issuance under our Deferred Compensation Plan.

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RISK FACTORS

Before you make a decision to invest in our common stock, you should consider carefully the risks described below, and in the section entitled Risk Factors contained in our quarterly report on Form 10-Q for the fiscal quarter ended March 31, 2010, as filed with the Securities and Exchange Commission, or the SEC, on May 7, 2010, together with other information in this prospectus supplement, the accompanying prospectus and the information incorporated by reference herein and therein. 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. These risks 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 operations. The following risks are either in addition to or update the risks described in our quarterly report on Form 10-Q for the fiscal quarter ended March 31, 2010.

We will have broad discretion as to the use of a portion of the proceeds from this offering, and we may not use the proceeds effectively.

Apart from the use of $30 million of the proceeds from this offering to repay a portion of our outstanding indebtedness, our management will have broad discretion in the application of the net proceeds from this offering and could spend the proceeds in ways that do not improve our results of operations or enhance the value of our common stock. Our failure to apply these funds effectively could have a material adverse effect on our business or the development of our product candidates and cause the price of our common stock to decline.

You will experience immediate and substantial dilution in the net tangible book value per share of the common stock you purchase.

Since the price per share of our common stock being offered is substantially higher than the net tangible book value per share of our common stock, you will suffer substantial dilution in the net tangible book value of the common stock you purchase in this offering. Based on the public offering price of $6.70 per share, if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of $5.64 per share in the net tangible book value of the common stock. See the section entitled Dilution in this prospectus supplement for a more detailed discussion of the dilution you will incur if you purchase common stock in this offering.

You may experience future dilution as a result of future equity offerings or other equity issuances.

To raise additional capital, we may in the future offer additional shares of our common stock or other securities convertible into or exchangeable for our common stock. We cannot assure you that we will be able to sell shares or other securities in any other offering at a price per share that is equal to or greater than the price per share paid by investors in this offering, and investors purchasing shares or other securities in the future could have rights superior to existing stockholders. The price per share at which we sell additional shares of our common stock or other securities convertible into or exchangeable for our common stock in future transactions may be higher or lower than the price per share in this offering.

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

We have accumulated a large deficit since inception that has primarily resulted from the significant research and development expenditures we have made in seeking to identify and validate new drug targets and develop compounds that could become marketed drugs. We expect that our losses will continue to be substantial for at least the short term and that our operating expenses will also continue to be substantial, even if we are successful in advancing lorcaserin, including under our marketing and supply agreement with Eisai, or our other compounds and drug candidates, independently or with another company.

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

Our wholly owned subsidiary, Arena Pharmaceuticals GmbH, or Arena GmbH, has entered into a marketing and supply agreement with Eisai for the commercialization of our most advanced drug candidate, lorcaserin, in the United States and its territories and possessions following approval by the FDA of our lorcaserin NDA. We will need additional funds or a collaborative or other agreement with a pharmaceutical company or companies to commercialize lorcaserin outside of the United States, and we may not be able to secure adequate funding or find a pharmaceutical company to commercialize lorcaserin outside the United States at all or on terms you or we believe are favorable. Even if we receive approval of our lorcaserin NDA and commence commercialization of lorcaserin under our marketing and supply agreement with Eisai, we cannot assure you that payments, if any, we receive under such agreement will be sufficient to conduct our planned research and development and other activities or to result in profitability. We also believe that it may be difficult for us to obtain additional financing or enter into strategic relationships on terms that we or third parties, including investors, analysts, or potential collaborators, view as acceptable, if at all. We may need additional funding even if we enter into such a relationship. If adequate funding is not available, we may eliminate or further postpone or scale back some or all of our research or development programs or delay the advancement of one or more of such programs. Any such reductions may adversely impact our lorcaserin development and commercialization timeline or narrow or slow the development of our pipeline, which we believe would reduce our opportunities for success and result in a decline in the market price of our common stock.

We are focusing a significant portion of our activities and resources on lorcaserin and depend on its marketing approval and commercial success.

We are focusing a significant portion of our near-term activities and resources on lorcaserin, and we believe a significant portion of the value of our company relates to our ability to obtain marketing approval for and commercialize this drug candidate. The marketing approval and successful commercialization of lorcaserin is subject to many risks, including the risks discussed in other risk factors. If the results of clinical trials and preclinical studies of lorcaserin, the regulatory decisions affecting lorcaserin, the anticipated or actual timing and plan for commercializing lorcaserin, or, ultimately, the market acceptance of lorcaserin do not meet our, your, analysts or others expectations, the market price of our common stock could decline significantly. In 2010, for example, we may learn the results of the tentatively scheduled September 16, 2010, FDA advisory committee meeting for the review of the NDA for lorcaserin, whether the FDA will approve lorcaserin or issue a Complete Response Letter and, if approved, whether the Drug Enforcement Administration of the US Department of Justice, or DEA, will schedule lorcaserin as a controlled substance and, if so, the level of scheduling. Even if we receive approval of our lorcaserin NDA, we cannot assure you that our or our collaborators commercialization efforts with respect to lorcaserin will be successful.

We are dependent on the marketing and supply agreement with Eisai to commercialize lorcaserin in the United States and, if applicable, to further develop lorcaserin, and the failure to maintain such agreement, or poor performance under such agreement, could negatively impact our business.

Pursuant to the terms of Arena GmbH s marketing and supply agreement with Eisai, Arena GmbH granted Eisai exclusive rights to commercialize lorcaserin in the United States and its territories and possessions following approval by the FDA of our lorcaserin NDA.

Our ability to generate payments from Eisai substantially depends on the regulatory approval and market acceptance of lorcaserin in the United States. Eisai has primary responsibility for the marketing and sale of lorcaserin in the United States and responsibility for compliance with certain US regulatory requirements, and we have limited control over the amount and timing of resources that Eisai will dedicate to the commercialization of lorcaserin in the United States.

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

- Eisai may not comply with applicable regulatory guidelines with respect to commercializing lorcaserin, which could adversely impact sales or any development of lorcaserin;
- there could be disagreements regarding the marketing and supply agreement that delay or terminate the commercialization or development of lorcaserin, delay or eliminate potential payments under the agreement or increase our costs under the agreement; or
- Eisai may not perform as expected, and the marketing and supply agreement may not provide adequate protection or may not be effectively enforced.

Either party has the right to terminate the agreement in certain circumstances. If the agreement is terminated early, we may not be able to find another company for the commercialization of lorcaserin in the United States and further development of lorcaserin on acceptable terms, if at all, and even if we elected to pursue continued commercialization or further development of lorcaserin 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 lorcaserin or other of our drug candidates, and may be similarly dependent on the performance of third parties with similar risk.

Our ability to generate significant revenues, for at least the short term, depends upon the regulatory approval of lorcaserin, the commercialization of lorcaserin and the actions of collaborators.

We expect that, for at least the short term, our ability to generate significant revenues will depend upon the regulatory approval of lorcaserin, the success of Eisai in commercializing lorcaserin, if approved, in the United States, the success of our existing collaboration with Ortho-McNeil-Janssen Pharmaceuticals, Inc., or Ortho-McNeil-Janssen, and our ability to enter into new collaborations. Future revenues under the marketing and supply agreement with Eisai will depend on the achievement of milestones under the agreement and Eisai s commercialization of lorcaserin, and we may receive no additional revenues from Eisai if lorcaserin is not approved by the FDA or further development of lorcaserin is unfavorable. Future revenues from our collaboration with Ortho-McNeil-Janssen will depend on patent reimbursements and milestone and royalty payments, if any, and we are not entitled to the more significant milestone payments under the collaboration until compounds are further advanced in clinical testing. In addition, we intend to commercialize lorcaserin outside of the United States with one or more pharmaceutical companies or independently, and we or our collaborators may not be successful in such efforts.

With the exception of the marketing and supply agreement with Eisai, collaborators (and not us) typically control the development of compounds subject to the collaboration after we have met early preclinical scientific milestones. In addition, we may not have complete access to information about the results and status of such collaborators clinical trials and regulatory programs and strategies.

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In addition to the specific risks identified above with respect to Eisai, our collaborators may not devote adequate resources to the research, development or commercialization of our compounds and may not develop or implement a successful clinical, regulatory or commercialization strategy. We cannot guarantee that any development, approval or sales milestones in our existing or future collaborations will be achieved in the future, or that we will receive any payments for the achievement of any milestones. In addition, our agreements with Eisai and Ortho-McNeil-Janssen may be terminated early in certain circumstances, in which case we may not receive future milestone or other payments under the applicable agreement.

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

If we do not commercialize lorcaserin outside of the United States with one or more pharmaceutical companies or raise additional funds, we may have to commercialize lorcaserin outside of the United States on our own and curtail certain of our activities.

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

We face competition in our search for pharmaceutical companies to commercialize lorcaserin outside of the United States. 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 lorcaserin in the United States, Eisai, has), our competitors may be more successful in marketing and selling their drugs, and our ability to successfully commercialize our drug candidates will be limited.

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SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement and the accompanying prospectus, including the documents that we incorporate by reference herein and therein, contain forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, or the Securities Act, and Section 21E of the Securities Exchange Act of 1934, as amended, or the Exchange Act. These forward-looking statements can generally be identified as such because the context of the statement will include words such as may, will, intends, plans, believes, anticipates, expect estimates, predicts, potential, continue, likely, unlikely or opportunity, the negative of these words or words of similar import. Similarl statements that describe our future plans, strategies, intentions, expectations, objectives, goals or prospects are also forward-looking statements. Discussions containing these forward-looking statements may be found, among other places, in the Business and Management s Discussion and Analysis of Financial Condition and Results of Operations sections incorporated by reference from our most recent Annual Report on Form 10-K, as well as any amendments thereto reflected in subsequent filings with the 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. The risks and uncertainties include, among others, those noted in Risk Factors above and those included in the documents that we incorporate by reference herein.

In addition, past financial and/or operating performance is not necessarily a reliable indicator of future performance and you should not use our historical performance to anticipate results or future period trends. We can give no assurances that any of the events anticipated by the forward-looking statements will occur or, if any of them do, what impact they will have on our results of operations and financial condition. Except as required by law, we undertake no obligation to publicly revise our forward-looking statements to reflect events or circumstances that arise after the filing of this prospectus supplement or the filing of the accompanying prospectus or documents incorporated by reference herein and therein that include forward-looking statements.

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USE OF PROCEEDS

We estimate the net proceeds from the sale of 8,955,224 shares of our common stock that we are offering will be approximately $59.9 million, based on the offering price of $6.70 per share and after deducting our estimated offering expenses.

We will use $30 million of the proceeds of this offering to prepay the portion of the loan principal that otherwise would have been required to be repaid in July 2012 under the existing Facility Agreement, dated June 17, 2009, by and between us and entities affiliated with Deerfield Management. We anticipate that we will use the remainder of the net proceeds from this offering for payment of additional loan principal and debt under the Facility Agreement, for preclinical and clinical development of our drug candidates, for discovery research for new drug candidates and for general corporate purposes, including working capital. In addition, we may use a portion of the proceeds to acquire drugs or drug candidates, technologies, businesses or other assets that complement our own, although we have no current plans, commitments or agreements to do so as of the date of this prospectus supplement. The timing and amount of our actual expenditures will be based on many factors, including the timing and success of our clinical trials, whether we partner any of our internal programs, and whether we choose to curtail some of our research activities. We will retain broad discretion in determining how we will allocate the net proceeds from this offering.

Until we use the net proceeds of this offering, we intend to invest the funds in short-term, investment grade, interest-bearing securities.

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DILUTION

Our unaudited net tangible book value on March 31, 2010 was approximately $56.5 million, or $0.56 per share of common stock. Net tangible book value is total assets minus the sum of liabilities and intangible assets. Net tangible book value per share is net tangible book value divided by the total number of common stock shares outstanding.

After giving effect to the sale of 8,955,224 shares of common stock offered by us in this offering, our as adjusted net tangible book value on March 31, 2010 would have been approximately $116.4 million, or $1.06 per share of common stock. The adjustments made to determine as adjusted net tangible book value per share are the following:

- an increase in total assets to reflect the net proceeds of the offering as described under Use of Proceeds ; and
- the addition of the number of shares offered by this prospectus supplement to the number of shares outstanding.

The following table illustrates the as adjusted increase in net tangible book value of $0.50 per share and the dilution (the difference between the offering price per share and net tangible book value per share) to new investors:

Public offering price per share	$ 6.70
Net tangible book value per share as of March 31, 2010	$ 0.56
Increase in net tangible book value per share attributable to offering	$ 0.50
As adjusted net tangible book value per share as of March 31, 2010, after giving effect to the offering	$ 1.06
Dilution per share to new investors in the offering	$ 5.64

The following table shows the difference between existing stockholders and new investors with respect to the number of shares purchased from us, the total consideration paid and the average price paid per share.

	Shares Purchased		Total Consideration		Average Price
	Number	Percent	Amount	Percent	Per Share
Existing stockholders	101,221,889	91.9%	$ 930,899,911	93.9%	$ 9.20
New investors	8,955,224	8.1%	$ 60,000,001	6.1%	$ 6.70
Total	110,177,113	100.0%	$ 990,899,912	100.0%	$ 8.99

The above discussion and tables are based on the actual number of shares outstanding as of March 31, 2010, which was 101,221,889, and does not include, as of that date:

- 28,000,000 shares of common stock issuable upon the exercise of outstanding warrants at an exercise price of $5.42 per share;
- 1,280,768 shares of common stock issuable upon the exercise of outstanding warrants at an exercise price of $6.66 per share;
- 960,723 shares of common stock issuable upon the exercise of outstanding warrants at an exercise price of $13.38 per share;

8,631,060 shares of common stock issuable upon the exercise of outstanding options at a weighted average exercise price of $7.99 per share;

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1,703,250 performance-based restricted stock unit awards outstanding under our 2006 Long-Term Incentive Plan, as amended;

5,148,525 shares of common stock available for future issuance under our 2009 Long-Term Incentive Plan;

1,134,434 shares of common stock available for future issuance under our 2009 Employee Stock Purchase Plan; and

96,669 shares of common stock available for future issuance under our Deferred Compensation Plan.

To the extent that outstanding options or warrants are exercised, investors purchasing our common stock in this offering will experience further dilution. In addition, we may choose to raise additional capital due to market conditions or strategic considerations even if we believe we have sufficient funds for our current or future operating plans. To the extent that additional capital is raised through the sale of equity or convertible debt securities, the issuance of these securities could result in further dilution to our stockholders.

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PLAN OF DISTRIBUTION

We are selling 8,955,224 shares of our common stock under this prospectus supplement and the accompanying prospectus directly to certain institutional investors at a price of $6.70 per share pursuant to a securities purchase agreement. We currently anticipate that the closing of the sale of such shares under this agreement will take place on or before August 10, 2010. On the closing date, we will issue the shares of common stock to the investors and receive funds in the amount of the aggregate purchase price.

LEGAL MATTERS

Selected legal matters with respect to the validity of common stock offered by this prospectus supplement will be passed upon for us by Steven W. Spector, our Senior Vice President, General Counsel and Secretary.

EXPERTS

Ernst & Young LLP, independent registered public accounting firm, has audited our consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2009, and the effectiveness of our internal control over financial reporting as of December 31, 2009, as set forth in their reports, which are incorporated by reference in this prospectus and elsewhere in the registration statement. Our financial statements are incorporated by reference in reliance on Ernst & Young LLP s report, given on their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We have filed with the SEC a registration statement on Form S-3 under the Securities Act with respect to the shares of common stock we are offering under this prospectus supplement. This prospectus supplement and the accompanying prospectus do not contain all of the information set forth in the registration statement and the exhibits to the registration statement. For further information with respect to us and the securities we are offering under this prospectus supplement, we refer you to the registration statement and the exhibits and schedules filed as a part of the registration statement. We also file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy the registration statement, as well as any other material we file with the SEC, at the SEC s Public Reference Room at 100 F Street, NE, Washington, D.C. 20549. Please call the SEC at 1.800.SEC.0330 for more information on the Public Reference Room. The SEC maintains an Internet site that contains reports, proxy and information statements, and other information regarding issuers that file electronically with the SEC, including Arena. The SEC s Internet site can be found at http://www.sec.gov.

INCORPORATION OF CERTAIN INFORMATION BY REFERENCE

The SEC allows us to incorporate by reference into this prospectus supplement the information we file with it, which means that we can disclose important information to you by referring you to those documents. Information incorporated by reference is part of this prospectus supplement. Later information filed with the SEC will update and supersede this information. The SEC s Internet site can be found at http://www.sec.gov.

We incorporate by reference the documents listed below and any future filings made with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Exchange Act until this offering is completed:

our Annual Report on Form 10-K for the year ended December 31, 2009 filed with the SEC on March 16, 2010;

our Quarterly Report on Form 10-Q for the quarter ended March 31, 2010 filed with the SEC on May 7, 2010;

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our Definitive Proxy Statement on Schedule 14A (other than information furnished rather than filed) filed with the SEC on April 27, 2010;

our Current Reports on Form 8-K (other than information furnished rather than filed) filed with the SEC on January 27, 2010, February 24, 2010, February 26, 2010, March 8, 2010, March 24, 2010, June 2, 2010, June 8, 2010, June 14, 2010, June 28, 2010, July 1, 2010, July 14, 2010 and August 3, 2010;

the description of our Stockholders Rights Agreement contained in our registration statement on Form 8-A filed with the SEC on November 15, 2002, as amended on December 30, 2003 and November 16, 2006, including any amendments or reports filed for the purposes of updating this description; and

the description of our common stock contained in our registration statement on Form 8-A filed with the SEC on July 26, 2000, including any amendments or reports filed for the purposes of updating this description.

You may request a copy of these filings, at no cost, by contacting us at:

Arena Pharmaceuticals, Inc.

Attention: Investor Relations

6166 Nancy Ridge Drive

San Diego, CA 92121

Telephone number: 858.453.7200

In accordance with Section 412 of the Exchange Act, any statement contained in a document incorporated by reference herein shall be deemed modified or superseded to the extent that a statement contained herein or in any other subsequently filed document which also is or is deemed to be incorporated by reference herein modifies or supersedes such statement.

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PROSPECTUS

$150,000,000

Arena Pharmaceuticals, Inc.

Common Stock

Preferred Stock

Debt Securities

Warrants

Units

We may, from time to time, offer to sell up to $150,000,000 of any combination of the securities described in this prospectus, either individually or in units, at prices and on terms described in one or more supplements to this prospectus. We may also offer common stock or preferred stock upon conversion of debt securities, common stock upon conversion of preferred stock, or common stock, preferred stock or debt securities upon the exercise of warrants.

This prospectus describes some of the general terms that may apply to an offering of our securities. The specific terms and any other information relating to a specific offering will be set forth in a post-effective amendment to the registration statement of which this prospectus is a part or in a supplement to this prospectus or may be set forth in one or more documents incorporated by reference in this prospectus. You should read this prospectus, the information incorporated by reference in this prospectus and any prospectus supplement carefully before you invest.

Securities may be sold by us to or through underwriters or dealers, directly to purchasers or through agents designated from time to time. For additional information on the methods of sale, you should refer to the section entitled Plan of Distribution in this prospectus. If any underwriters are involved in the sale of any securities with respect to which this prospectus is being delivered, the names of such underwriters and any applicable discounts or commissions and over-allotment options will be set forth in a prospectus supplement. The price to the public of such securities and the net proceeds we expect to receive from such sale will also be set forth in a prospectus supplement.

Our common stock is listed on the NASDAQ Global Market under the symbol ARNA. On May 7, 2010, the last reported sale price of our common stock on the NASDAQ Global Market was $2.92 per share.

Investing in our securities involves a high degree of risk. See Risk Factors on page 4 of this prospectus and as updated in our future filings made with the Securities and Exchange Commission that are incorporated by reference in this prospectus.

This prospectus may not be used to offer or sell any securities unless accompanied by a prospectus supplement.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or determined if this prospectus is truthful or complete. Any representation to the contrary is a criminal offense.

The date of this prospectus is May 10, 2010.

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You should rely only on the information contained in or incorporated by reference into this prospectus or any applicable prospectus supplement. We have not authorized anyone to provide you with different information. We are not making an offer to sell or seeking an offer to buy securities under this prospectus or any applicable prospectus supplement in any jurisdiction where the offer or sale is not permitted. The information contained in this prospectus, any applicable prospectus supplement and the documents incorporated by reference herein and therein are accurate only as of their respective dates, regardless of the time of delivery of this prospectus or any sale of a security.

About this Prospectus

This prospectus is part of a registration statement on Form S-3 that we filed with the Securities and Exchange Commission, or SEC, using a shelf registration process. Under this shelf registration statement, we may sell from time to time in one or more offerings up to a total dollar amount of $150,000,000 of common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units as described in this prospectus. Each time we sell any type or series of securities under this prospectus, we will provide a prospectus supplement that will contain more specific information about the terms of that offering. We may also add, update or change in a prospectus supplement any of the information contained in this prospectus or in documents we have incorporated by reference into this prospectus. This prospectus, together with any applicable prospectus supplement and the documents incorporated by reference into this prospectus, include all material information relating to this offering. You should carefully read both this prospectus and any applicable prospectus supplement together with the additional information described under Where You Can Find More Information before buying securities in this offering.

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Summary

The following summary highlights information contained elsewhere in this prospectus or incorporated by reference herein and does not contain all the information that may be important to purchasers of our securities. Prospective purchasers of our securities should review this entire prospectus carefully, including the risks of investing discussed under Risk Factors on page 4, the financial statements and related notes, and the information to which we refer you and the information incorporated into this prospectus by reference, for a complete understanding of our business and this offering. Unless otherwise specified or required by context, references in this prospectus to Arena Pharmaceuticals, Arena, we, us and our refer to Arena Pharmaceuticals, Inc.

Arena Pharmaceuticals

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

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

In addition to lorcaserin, our internal development programs include APD791, APD916 and APD811, all of which are oral drug candidates that we internally discovered. APD791 is a selective inverse agonist of the serotonin 2A receptor intended for the treatment of arterial thrombosis and other related conditions, and it has completed Phase 1a and Phase 1b clinical trials. APD916 is a histamine H3 inverse agonist intended for the treatment of narcolepsy and cataplexy, and we initiated a Phase 1 clinical trial of APD916 in March 2010. APD811 is a selective agonist of the prostacyclin receptor intended for the treatment of pulmonary arterial hypertension, and it is in preclinical development.

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

We intend to commercialize our drug candidates with pharmaceutical companies or independently. We have not received regulatory approval for marketing or selling any drugs. We have also not generated commercial revenues from selling any drugs, other than in connection with manufacturing drugs for Siegfried Ltd in our Swiss drug product manufacturing facility.

The headquarters of our operations outside of the United States is in Switzerland. Activities conducted at this location include manufacturing, quality control, development of manufacturing processes, qualifying suppliers and otherwise managing the global supply chain, regulatory strategy and compliance, distribution of finished products, and European strategic planning and development.

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The pharmaceutical marketplace in which we operate includes many large, well-established companies competing with us to develop or market treatments for the same diseases and disorders. See Risk Factors.

Arena Pharmaceuticals®, Arena® and our corporate logo are registered service marks of Arena.

We incorporated in the state of Delaware in April 1997. Our corporate offices are located at 6166 Nancy Ridge Drive, San Diego, California 92121. Our telephone number is 858.453.7200. Our website address is www.arenapharm.com. Information contained in or accessible through our website does not constitute part of this prospectus.

The Securities We May Offer

We may offer shares of our common stock and preferred stock, various series of debt securities and/or warrants to purchase any of such securities, either individually or in units, with a total value of up to $150,000,000 from time to time under this prospectus at prices and on terms to be determined at the time of any offering. This prospectus provides you with a general description of the securities we may offer. Each time we offer a type or series of securities under this prospectus, we will provide a prospectus supplement that will describe the specific amounts, prices and other important terms of the securities, including, to the extent applicable:

designation or classification;

aggregate principal amount or aggregate offering price;

maturity;

original issue discount;

rates and times of payment of interest or dividends;

redemption, conversion, exercise, exchange or sinking fund terms;

ranking;

restrictive covenants;

voting or other rights;

conversion or exchange prices or rates and, if applicable, any provisions for changes to or adjustments in the conversion or exchange prices or rates and in the securities or other property receivable upon conversion or exchange; and

a discussion of material United States federal income tax considerations.

The prospectus supplement and any related free writing prospectus that we may authorize to be provided to you may also add, update or change information contained in this prospectus or in documents we have incorporated by reference. However, no prospectus supplement or free writing prospectus will offer a security that is not registered and described in this prospectus at the time of the effectiveness of the registration statement of which this prospectus is a part.

This prospectus may not be used to offer or sell securities unless it is accompanied by a prospectus supplement.

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We may sell the securities directly to investors or to or through agents, underwriters or dealers. We, and our agents, underwriters or dealers reserve the right to accept or reject all or part of any proposed purchase of securities. If we do offer securities to or through agents, underwriters or dealers, we will include in the applicable prospectus supplement:

- the names of those agents, underwriters or dealers;
- applicable fees, discounts and commissions to be paid to them;
- details regarding over-allotment options, if any; and
- the net proceeds to us.

Common Stock. We may issue shares of our common stock from time to time. Common stockholders are entitled to one vote per share for the election of directors and on all other matters that require common stockholder approval. Holders of our common stock are entitled to share in an equal amount per share in any dividends declared by our board of directors on the common stock and paid out of legally available assets. Subject to any preferential rights of any outstanding preferred stock, in the event of our liquidation, dissolution or winding up, holders of our common stock are entitled to share ratably in the assets remaining after payment of liabilities and the liquidation preferences of any outstanding preferred stock. Our common stock does not carry any preemptive rights enabling a holder to subscribe for, or receive shares of, any class of our common stock or any other securities convertible into shares of any class of our common stock, or any redemption rights.

Preferred Stock. We may issue shares of our preferred stock from time to time, in one or more series. Our board of directors will determine the designations, voting powers, preferences and rights of the preferred stock, as well as the qualifications, limitations or restrictions thereof, including dividend rights, conversion rights, preemptive rights, terms of redemption or repurchase, liquidation preferences, sinking fund terms and the number of shares constituting any series or the designation of any series. Convertible preferred stock will be convertible into our common stock or exchangeable for other securities. Conversion may be mandatory or at your option and would be at prescribed conversion rates.

If we sell any series of preferred stock under this prospectus, we will fix the designations, voting powers, preferences and rights of such series of preferred stock, as well as the qualifications, limitations or restrictions thereof, in the certificate of designation relating to that series. We will file as an exhibit to the registration statement of which this prospectus is a part, or will incorporate by reference from reports that we file with the SEC, the form of any certificate of designation that describes the terms of the series of preferred stock that we are offering before the issuance of the related series of preferred stock. We urge you to read the applicable prospectus supplement (and any free writing prospectus that we may authorize to be provided to you) related to the series of preferred stock being offered, as well as the complete certificate of designation that contains the terms of the applicable series of preferred stock.

Debt Securities. We may issue debt securities from time to time, in one or more series, as either senior or subordinated debt or as senior or subordinated convertible debt. The senior debt securities will rank equally with any other unsecured and unsubordinated debt. The subordinated debt securities will be subordinate and junior in right of payment, to the extent and in the manner described in the instrument governing the debt, to all of our senior indebtedness. Convertible debt securities will be co