ARENA PHARMACEUTICALS INC
Form 424B3
April 20, 2004

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Filed Pursuant to Rule 424(b)(3)
Registration Statement No. 333-112542

PROSPECTUS

UP TO 11,227,933 SHARES OF

ARENA PHARMACEUTICALS, INC.

COMMON STOCK

Our common stock is traded on the NASDAQ National Market under the symbol "ARNA". On April 19, 2004, the closing price of our common stock was $6.40.

This prospectus relates to the resale, from time to time, of up to 11,227,933 shares of our common stock by the selling stockholders named in this prospectus. The shares of our common stock which are being offered by this prospectus were issued and sold to the selling stockholders in a private placement transaction. See "Issuance of Common Stock to Selling Stockholders" on page 17. We will not receive any of the proceeds from the sale of these shares.

INVESTING IN OUR COMMON STOCK INVOLVES A HIGH DEGREE OF RISK. SEE "RISK FACTORS" BEGINNING ON PAGE 3 AND AS UPDATED IN ANY FUTURE FILINGS MADE WITH THE SECURITIES AND EXCHANGE COMMISSION THAT ARE INCORPORATED BY REFERENCE IN THIS PROSPECTUS.

Neither the Securities and Exchange Commission nor any state securities commission has approved or disapproved of these securities or passed upon the accuracy or adequacy of the prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus is April 20, 2004

No dealer, salesperson or other individual has been authorized to give any information or to make any representations other than contained or incorporated by reference in this prospectus, and if given or made, such information or representations must not be relied upon as having been authorized by Arena. This prospectus does not constitute an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstance, create any implication that there has not been any change in the affairs of Arena since the date hereof.

TABLE OF CONTENTS

	Page
ABOUT ARENA PHARMACEUTICALS, INC.	3
RISK FACTORS	3
FORWARD-LOOKING STATEMENTS	16
ISSUANCE OF COMMON STOCK TO THE SELLING STOCKHOLDERS	17
USE OF PROCEEDS	17
SELLING STOCKHOLDERS	17
PLAN OF DISTRIBUTION	19
VALIDITY OF COMMON STOCK	20
EXPERTS	20
WHERE YOU CAN FIND MORE INFORMATION	20
INCORPORATION OF INFORMATION BY REFERENCE	21

ABOUT ARENA PHARMACEUTICALS, INC.

We are a biopharmaceutical company that discovers and develops drugs that act on an important class of drug targets called G protein-coupled receptors, or GPCRs. We use our Constitutively Activated Receptor Technology, or CART , Melanophore technology and other proprietary technologies to identify small chemical molecules that may lead to new drugs in four major therapeutic areas: metabolic diseases, cardiovascular diseases, central nervous system disorders and inflammatory diseases. We have not received regulatory approval for, or generated commercial revenues from, marketing or selling drugs. We initiated our first human studies on APD356, one of our internally discovered compounds for metabolic disease and obesity, in February 2004.

In addition to our internal discovery and development efforts, we have research and development collaborations with several pharmaceutical and biotechnology companies, including Merck & Co., Fujisawa Pharmaceutical Co., Ltd., and Taisho Pharmaceutical Co., Ltd.

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

Arena Pharmaceuticals® and Arena® are registered service marks of the company. CART is an unregistered service mark of the company. 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 our website does not constitute part of this prospectus.

Unless otherwise specified or required by context, references in this prospectus to "we," "us," "our" and "Arena" refer to Arena Pharmaceuticals, Inc. and its subsidiaries on a consolidated basis.

RISK FACTORS

An investment in our stock involves a high degree of risk. Investors evaluating us should carefully consider the factors described below and all other information contained in this prospectus and in our other public filings before making investment decisions regarding our stock. Any of the following factors could materially harm our business, operating results and financial condition. Additional factors and uncertainties not currently known to us or that we currently consider immaterial could also harm our business, operating results and financial condition. Investors could lose all or part of their investment as a result of these factors.

If APD356 fails in clinical trials, we may significantly curtail some of our activities

We initiated our first clinical trial on an internally discovered compound, which we call APD356, in February 2004. This trial is being conducted at a contract Phase 1 unit in the United Kingdom. If APD356 is found to be unsafe in, or not tolerated by, the people we test in our Phase 1 clinical trial, we may not be able to raise new financing or generate significant revenue in the next year or two. Without such funding, we would need to re-evaluate our strategy of moving multiple drug development programs forward while at the same time maintaining our research and discovery capabilities. Based on such evaluation, we may need to significantly curtail some of our current and planned programs and expenditures. We do not know what programs, if any, we would need to curtail, but we believe narrowing the breadth of our pipeline would reduce our opportunity for success.

We have a history of losses and expect our losses to continue

We had losses of $47.1 million for the year ended December 31, 2003, and we had an accumulated deficit of $107.5 million from our inception in April 1997 through December 31, 2003. Our losses have resulted in large part from the significant research and development expenditures we have made in seeking to identify and validate new drug targets and compounds that could become marketed drugs.

We expect our operating expenses over the next several years will be significant and that we will continue to have significant operating losses in the near-term, even if we or our collaborators are successful in advancing compounds discovered using our technologies.

In addition, losses allocable to our common stockholders will be increased as a result of our recent Series B Convertible Preferred Stock financing. In accordance with EITF 00-27, "Application of Issue No. 98-5 to Certain Convertible Instruments," we allocated the total proceeds received in that financing among the Series B Convertible Preferred Stock, the warrants and the unit warrants. The amount we allocated to the warrants and unit warrants was $6.5 million. As a result of this allocation, we recorded on our financial statements a deemed dividend of $2.8 million. This deemed dividend is based on the value of the common stock underlying the Series B Convertible Preferred Stock. We will record amortization of the value of the warrants, unit warrants and deemed dividend over five years, which will increase the losses allocable to our common stockholders.

We will need additional funds in the future for our research and development, and we may not be able to obtain such funds

We cannot sustain our current operating plan for more than the next two or three years unless we obtain additional financing from collaborators or investors. In addition, it takes potentially hundreds of millions of dollars, which is substantially more cash than what we currently have, to successfully develop a compound into a marketed drug. Financing may not be available, or may not be available on terms that are favorable, to us.

We do not believe that we can currently license our programs or technologies on terms that would significantly reduce the need for us to obtain additional financing from investors. Our strategy is to continue developing these programs and move them towards or into clinical development so that we can achieve better financial terms with a collaborator and, therefore, be able to continue our drug discovery efforts at their current levels. If our research and development efforts are not successful in the next one or two years, and if we do not receive new financing from investors, we may need to license our programs on financial terms that are unfavorable to us.

Our stock has not performed as well as the stock of many of our peers for some time, and we presently are aware of only a small number of securities analysts covering our stock, which means limited third-party information is available to investors. We believe that institutional and other investors value third-party information in making investment decisions regarding our stock. These factors, and many others, may affect our ability to access capital markets.

If adequate funds are not available to us, we will be required to significantly curtail or eliminate one or more of our drug discovery or development programs, or to completely discontinue our operations.

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

A small number of our stockholders hold a significant amount of our outstanding stock. These stockholders' interests could differ from the interests of other stockholders, and they could be in a position to affect us in a way that is detrimental to the interests of other stockholders. Sales by these stockholders of our common stock could adversely affect the market price for our stock. In addition, their actions and votes would be important, and possibly determinative, in the event we consider a transaction that requires stockholder approval or in the event a third party makes a tender offer or a hostile take-over offer for outstanding shares.

On January 23, 2004, Biotechnology Value Fund, L.P., Biotechnology Value Fund II, L.P., BVF Investments, L.L.C., BVF Partners L.P., BVF Inc. (collectively, "BVF") and Investment 10, L.L.C.

(collectively with BVF, the "BVF Stockholders") reported that they own or control approximately 12.2% of our outstanding common stock. We entered into an agreement with the BVF Stockholders on January 17, 2003, when the BVF Stockholders held approximately 27% of our outstanding common stock, to allow us to pursue our strategic objectives, retain key management and scientific personnel, and protect the interests of stockholders in general. This agreement provides that the BVF Stockholders will not, on their own or as part of a larger group, (i) acquire any of our stock or assets, (ii) solicit proxies or submit stockholder proposals except as provided in such agreement, or (iii) engage in any of the actions set forth in paragraphs (a) through (j) of Item 4 of Schedule 13D, including actions that relate to or would result in any person acquiring or disposing of our securities, any change to our board of directors or management, or a material change to our business or corporate structure. This agreement also provides that the BVF Stockholders will vote for director nominees recommended by our board of directors and on certain other matters as recommended by our board of directors. Under the stockholders agreement, the BVF Stockholders received, among other things, (a) the right to have their designee appointed to our board of directors, and, thereafter, nominated for election at stockholders meetings, (b) the right to have another designee serve as an observer of meetings of our board of directors, and (c) the right to call a special meeting under certain circumstances. These provisions under the stockholders agreement terminate on December 31, 2004, or earlier if the BVF Stockholders and certain related parties beneficially own less than 1,914,603 shares of our common stock.

We believe that the BVF Stockholders favor a strategic direction for the company that is different than the one favored by management. The BVF Stockholders have recently sold a large number of our shares. Further sales by the BVF Stockholders may have an adverse effect on the near-term market price for our stock.

All of our programs are in the early stage of drug discovery and development, and if problems arise in the testing or approval process, our drug development efforts may be delayed or may not be successful

We are transitioning from primarily a research company to a research and development company. The research and development of new medicines is highly uncertain and subject to significant risks. Our most advanced program, APD356, is in the early stages of drug development. We do not expect any drugs resulting from our research to be commercially available for many years, if ever.

It typically takes many years to conduct preclinical and clinical trials and failure often occurs. Interim results of trials do not assure final results, and acceptable results in early trials may not be repeated in later trials.

In the course of our discovery, preclinical testing and clinical trials, we will rely on third parties, including laboratories, investigators and manufacturers, to perform critical services for us. For example, we are relying on a European-based third party to conduct our Phase 1 clinical trials for APD356. This organization is responsible for many aspects of these trials, including finding and enrolling volunteers for testing and administering the testing. Another example is that we are currently relying on a contract manufacturer to make certain compounds for us. These third parties may not be available when we need them or, if they are available, may not perform their services in a timely or acceptable manner. As a result of our dependence on third parties, we may face delays or failures outside of our direct control.

These risks also apply to the development activities of our collaborators, and we do not expect any drugs resulting from our collaborators' research and development efforts to be commercially available for many years, if ever.

If we are unable to obtain regulatory approval to develop and market products in the United States and foreign jurisdictions, we will not be able to commercialize products resulting from our research.

Governmental authorities in the U.S. heavily regulate the testing, development, manufacturing, approval and marketing of drugs. Any compound we are testing may not prove to be safe or effective or meet all of the applicable regulatory requirements. We may elect to, or a regulatory agency may require us to, discontinue development of a compound at any time for scientific, regulatory, commercial or other reasons. These regulations are complex and change from time to time.

Governments in other countries have similar requirements for the testing, development, manufacturing, approval and marketing of drugs, including in the United Kingdom (the "UK"), and, as in the U.S., the requirements are complex and change from time to time. We are currently conducting a clinical trial on APD356 in the UK. In the European Union (the "EU"), of which the UK is a member state, a new clinical trials directive (or "CTD") goes into effect on May 1, 2004. Under current UK regulations, a filing to the competent regulatory authority has not been required to conduct a Phase 1 clinical trial in "healthy subjects". However, under the new directive, Phase 1 clinical trials in healthy subjects, as well as later clinical trials, will require the filing of a clinical trials authorization (or "CTA") to the Medicines and Healthcare products Regulatory Agency (the "MHRA") (the equivalent of the FDA in the UK). This new directive also imposes new inspection requirements for clinical trials and for facilities manufacturing clinical trials materials.

Our current study on APD356 is not expected to be completed prior to the May 1, 2004, deadline. As any ongoing clinical trials that are active on May 1, 2004, will be subject to the terms of the new directive, we have filed a clinical trials exemption (or "CTX") with the MHRA to get approval for this trial. It is our understanding that after May 1, 2004, the MHRA intends to convert CTX's to CTA's under the new system. If we decide to conduct additional clinical trials in the EU, we will need to amend the CTA to include information on the new trial. If we decide instead to conduct our next clinical trial, if any, in the U.S., we will have to file an investigational new drug application (an "IND") with the FDA.

Completion of clinical trials may take several years and failure may occur at any stage of testing. The length of time required varies substantially according to the type, complexity and intended use of the product candidate. Interim results of a preclinical study or clinical trial do not necessarily predict final results, and acceptable results in early trials may not be repeated in later trials. For example, a drug candidate that is successful at the preclinical level may cause harmful or dangerous side effects when tested at the clinical level. Our rate of commencement and completion of clinical trials may be delayed by many factors, including:

- our inability to manufacture sufficient quantities of materials for use in clinical trials;
- variability in the number and types of patients available for each study;
- difficulty in maintaining contact with patients after treatment, resulting in incomplete data;
- unforeseen safety issues or side effects;
- poor or unanticipated effectiveness of products during the clinical trials; or
- regulatory delays.

Data obtained from the clinical trials are susceptible to varying interpretation, which may delay, limit or prevent regulatory approval. A number of companies in the pharmaceutical industry, including biotechnology companies, have suffered significant setbacks in advanced clinical trials, even after achieving promising results in earlier trials. In addition, regulatory authorities may refuse or delay approval as a result of other factors, such as changes in regulatory policy during the period of product development and regulatory agency review.

Satisfaction of regulatory requirements for marketing approval typically takes many years. To obtain regulatory approval, we must first show that our drug products are safe and effective for target indications through preclinical studies (animal testing) and clinical trials (human testing). Preclinical testing and clinical development are long, expensive and uncertain processes, and we do not know whether the FDA or its foreign counterpart will allow us to undertake clinical trials of any potential drug products.

Because, in part, of the early stage of our drug candidate research and development process, we cannot predict whether or not regulatory approval will be obtained for any product we develop. At the present time, only one of our drug candidates, APD356, is undergoing clinical trials. Compounds developed by us, alone or with other parties, may not prove to be safe and effective in clinical trials and may not meet all of the applicable regulatory requirements needed to receive marketing approval. If regulatory approval of a product is granted, this approval will be limited to those disease states and conditions for which the product is demonstrated through clinical trials to be safe and effective. Failure to obtain regulatory approval would delay or prevent us from commercializing products.

These risks also apply to the development activities of our collaborators, and we do not expect any drugs resulting from our collaborators' research and development efforts to be commercially available for many years, if ever.

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

Our success depends on the continued contributions of our principal management, development and scientific personnel, and the ability to hire and retain key personnel, particularly in the clinical development area as we transition more of our programs from research into drug development. We face intense competition for such personnel. The loss of services of any principal member of our management or scientific staff, particularly Jack Lief, our president and chief executive officer, and Dominic P. Behan, Ph.D., our Vice President, Research, could adversely impact our operations and ability to raise additional capital. To our knowledge, neither Mr. Lief nor Dr. Behan is planning on leaving, retiring or otherwise disassociating with us in the near future.

Our revenues are contingent upon the actions of our existing and potential collaborators

Our revenues depend on our ability to enter into new collaborative and license agreements and the success of our existing collaborations. We will receive little revenue under our existing agreements if our own or our collaborators' research, development or, ultimately, marketing efforts are unsuccessful, or if our agreements are terminated early. Typically, our collaborators (and not us) control the development of compounds into drugs after we have met early preclinical scientific milestones, and we are not entitled to the more significant milestones payments under our agreements until our collaborators have advanced compounds into clinical testing, which may not occur for many years, if ever.

In 2002 and 2003, revenues recognized under our collaboration with Merck represented approximately 8% and 62% of our revenues, respectively. Absent any new collaborations, we expect substantially all of our revenues in 2004 will be derived from our collaboration with Merck. Our revenues will be materially impacted if:

Merck terminates its agreement with us;

Our collaborators do not devote their time and financial resources to develop compounds identified with our technologies;

Our collaborators dispute whether we have achieved a milestone, rights to a particular receptor or compound, or other terms of our agreements;

Collaborators and potential collaborators use alternative technologies to our technologies and compete with us in developing drugs; and

Our collaborators experience failures in the discovery or development of compounds identified with our technologies or in the clinic or marketplace with other drugs that cause them to discontinue or slow down progress under our collaboration.

The term of the collaborative research program with Merck is three years from October 21, 2002. Merck can terminate this program for any of the following reasons: (i) without cause, at any time on or after October 21, 2004, by giving notice at least 90 days prior to such termination date, if certain milestones have been achieved and paid; (ii) without cause, at any time after October 21, 2004, by giving 180 days prior notice; (iii) for certain technical grounds (including if the GPCRs are scientifically shown to be unsuitable targets for drug development or valid third-party patent rights block the achievement of significant program goals) by giving 30 days prior notice; and (iv) in the event of a change in control of Arena, by giving 30 days prior notice. Merck can also terminate the agreement without any reason at any time after October 21, 2005. Either party can terminate the agreement at any time for cause if the other party breaches its material obligations under the agreement by causes and reasons within its control, has not cured such breach and there is no dispute as to whether such breach has occurred. Additionally, in lieu of terminating the agreement, Merck can terminate certain aspects of the agreement by giving 90 days prior notice if we materially breach our obligations at any time during the period from October 21, 2002, to October 21, 2005 (or such earlier date of termination) and fail to cure such breach, if such default can be cured but not within a certain period, or if we do not commence and diligently continue good faith efforts to cure such default during such period. In the event of any such termination, our revenues would be materially adversely affected.

Consolidation in our industry and our or our collaborator's inability to obtain acceptable prices for drugs could make partnering more difficult and diminish our revenues

Consolidation in the pharmaceutical and biotechnology industry and setbacks caused by competition from generic drugs and litigation may have an adverse effect on us. In addition to the number of potential partners being reduced, pharmaceutical companies may be less willing to enter into a new collaboration with us during a time they are integrating a new operation as a result of a merger or acquisition, their therapeutic areas of focus may change following a merger, or they may have reduced research budgets as a result of some financial setback.

In addition, our and our collaborators' ability to commercialize future drugs will depend in part on government regulation and the reimbursement policies of government authorities, private health insurers and other third party payors. Government and third party payors are increasingly attempting to contain healthcare costs by limiting coverage and reimbursement levels for new drugs. These efforts may limit our commercial opportunity now by reducing the amount a potential collaborator is willing to pay to license our programs and in the future by reducing the revenues that we and our collaborators could generate from drug sales.

A dispute regarding the infringement or misappropriation of our proprietary rights or the proprietary rights of others could be costly and result in delays in our research and development activities

Our success depends, in part, on our ability to operate 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 our drug discovery and development programs that could be determined to be similar, identical or superior to ours or our licensors or collaborators. Our activities, or those of our licensors or collaborators, could be determined to infringe these patents.

Although the government sponsored project to sequence the human genome has made genomics information freely available to the public, other organizations, companies and individuals are seeking

proprietary positions on genomics information that overlap with the government sponsored project. 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 be significant litigation and other administrative proceedings in our industry regarding patent and other intellectual property rights. Any legal action against us, or our collaborators, claiming damages or seeking to enjoin commercial activities relating to our drug discovery and development programs could:

- require us, or our collaborators, to obtain a license to continue to use, manufacture or market the affected products, 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.

Others contact us from time to time notifying us regarding their intellectual property rights, sometime asserting that we may need a license to use their technologies. No person is pursuing infringement proceedings against us that we believe will have a material adverse impact on our activities.

In addition, third parties 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 third parties.

Drug discovery and development is an intensely competitive business that could render our technologies obsolete or noncompetitive

The main focus of our efforts are G protein-coupled receptors, or GPCRs. Because GPCRs are an important target class for drug discovery efforts, we believe that most pharmaceutical companies, including GlaxoSmithKline PLC, which we view as our chief competitor in terms of GPCR knowledge and expertise, and many biotechnology companies and other organizations, have internal drug discovery programs focused on GPCRs. Another company, organization or individual could have, or could develop, a technology using GPCRs to discover and develop compounds into drugs more effectively or more efficiently than our screening and other technologies. Such a technology could render our technologies, in particular our constitutively activated receptor technology, or CART, and Melanophore technology, obsolete or noncompetitive.

Many of the drugs that we or our collaborators are attempting to discover and develop would compete with existing therapies. In addition, many companies are pursuing the development of drugs that target the same diseases and conditions that we are targeting such as metabolic diseases, cardiovascular diseases, central nervous system disorders and inflammatory diseases. Our competitors, or even our collaborators, may use discovery technologies and techniques to develop compounds into drugs more efficiently or successfully than we or our collaborators are able to do with our technologies. Many of our competitors, particularly large pharmaceutical companies, have substantially greater research and development capabilities and greater financial, scientific and human resources than we do. Companies that complete clinical trials, obtain required regulatory agency approvals and commence commercial sale of their drugs before we do for the same indication may achieve a significant competitive advantage, including certain patent and FDA marketing exclusivity rights. In addition, our

competitors may develop drugs with fewer side effects, more desirable characteristics (such as route of administration or frequency of dosing) or greater efficacy than our drugs, if any, for the same indication. Any results from our research and development efforts, or from our joint efforts with our existing or any future collaborators, may not compete successfully with existing products or therapies.

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

A patent gives the patent owner the exclusive right to exclude others from making, using, importing, selling and offering for sale the patented invention. Our success will depend on our own and on our collaborators' abilities to obtain, secure and defend patents. In particular, the patents directed to compounds discovered using our technologies are important to commercializing drugs. We have numerous United States and foreign patent applications pending for our technologies, including patent applications on drug lead discovery techniques using CART, genetically altered GPCRs, GPCRs that we have discovered, new uses for previously discovered GPCRs, compounds discovered using CART and Melanophore and other technologies. The procedures for obtaining a patent in the United States and in most foreign countries are complex. These procedures require an analysis of the scientific technology related to the invention and many legal issues. Consequently, we expect that the analysis of our patent applications will be complex and time consuming. Therefore, our patent position is very uncertain and we do not know when, or if, we will obtain additional patents for our technologies.

In March 2003, we became aware that the Japanese Patent Office had issued a Notification of Reasons for Revocation of our Japanese patent on our Melanophore technology based on the alleged obviousness and lack of enablement. In subsequent proceedings, the Japanese Patent Office has dropped its lack of enablement argument and has focused on obviousness. We are currently defending the non-obviousness of this patent. If we were to lose our opposition before the Japanese Patent Office, it might adversely affect our ability to enter into new drug discovery partnerships with Japanese companies that focus on the Melanophore technology

As of March 15, 2004, we own, in part or in whole, or have exclusively licensed the following patents: 12 in the United States, 12 in European countries, three in Australia, and two in New Zealand. In addition, as of March 15, 2004, we have approximately 191 patent applications before the United States Patent and Trademark Office, foreign patent offices and international patent authorities. These patents and patent applications are divided into 54 distinct families of related patents that are directed to CART, Melanophore technology, other novel screening methods, chemical compositions of matter, methods of treatment using chemical compositions, or GPCR genes. One of our patent families was exclusively in-licensed and contains a single issued patent. Five of our patent families containing a total of six patents and 14 patent applications were the subject of joint inventions by our employees and the employees of other entities. The remaining 48 patent families containing a total of 22 patents and 177 patent applications were invented solely by our employees. There is no assurance that any of these patent applications will issue, or that any of the patents will be enforceable or will cover a drug product or other commercially significant product or method. Our most advanced compounds, including APD356, are the subject of patent applications and not patents.

Except for the United States patents relating to our Melanophore technology, the term of all of our other current patents commenced, and our future patents, if any, will commence, on the date of issuance and terminate 20 years from the earliest effective filing date of the patent application. Since our United States Melanophore patents were issued under now superceded rules that provided a patent term of 17 years from the date of issuance, the term of these patents are scheduled to end in 2012, more than 21 years after their earliest filing date. Because the time from filing to issuance of biotechnology patent applications is often more than three years, the resulting term of our pending patent applications, if any, on our products and technologies may be substantially less than 20 years. In the United States, patent term extensions are available for certain delays in patent office proceedings and United States Food and Drug Administration ("FDA") approval. 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 FDA approval.

Our rights in our federally registered marks, including "Arena Pharmaceuticals," "Arena" and our corporate logo, can last indefinitely if we continue to use the mark on or in connection with the goods and/or services in the registration and file all necessary documentation in the United States Patent and Trademark Office at the appropriate times. Our rights in our other marks, such as "CART" and "BRL Screening", can last indefinitely under state law.

In 2000, the United States Patent and Trademark Office began issuing broad patent claims that could allow patent holders to control the use of all drug products that modulate a particular drug target or GPCR, regardless of whether the infringing drug product bears any structural resemblance to a chemical compound known to the patent holder at the time of patent filing. The question of whether these new patent claims are valid and if so under what circumstances is highly controversial and the subject of intense litigation. Whether we or our competitors are able to obtain and enforce such patent claims particularly as they apply to the GPCRs that are the subject of our drug development activities may have a large impact on our profits from any drugs that we are able to develop. Moreover, the uncertainty surrounding the validity of these patent claims may make it significantly more difficult to predict future profits and to raise additional financing.

More consistent policies regarding the breadth of claims allowed in biotechnology patents have begun to emerge in the last few years. For example, on January 5, 2001, the United States Patent and Trademark Office issued finalized Utility Examination Guidelines to its patent examiners that focus on what can be patented under United States patent law. These guidelines are beginning to be implemented in a more consistent fashion and primarily impact the procedures that are used in determining the types of inventions that can be patented and the minimum threshold of information necessary to patent inventions in the fields of biotechnology and chemistry. We still do not completely know to what extent these guidelines will ultimately affect our patents or those of our competitors and collaborators.

We also rely on trade secrets to protect our technologies. However, trade secrets are difficult to protect. We require all of our employees to contractually agree not to improperly use our trade secrets or disclose them to others, but we may be unable to determine if our employees have conformed or will conform with their legal obligations under these agreements. We also require collaborators and consultants to enter into confidentiality agreements, 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.

Technology licensed to us by others, or in-licensed technology, is important to some aspects of our business. With a few exceptions, we generally do not control the patent prosecution, maintenance or enforcement of in-licensed technology. Accordingly, we are unable to exercise the same degree of control over in-licensed technology as we do over our internally developed technologies. Moreover, some of our academic institution licensors, research collaborators and scientific advisors have rights to publish data and information to which we have rights. If we cannot maintain the confidentiality of our technologies and other confidential information in connection with our collaborations, then our ability to receive patent protection or protect our proprietary information will be impaired.

We have entered into collaborations with several commercial and academic entities, and generally seek to prevent our partners from disclosing scientific discoveries before we have the opportunity to file patent applications on such discoveries. In some of our collaborations we do not have control over our partners' ability to disclose their own discoveries under the collaboration and in some of our academic collaborations we are limited to relatively short periods to review a proposed publication and file a

patent application. As a general matter, all of our consulting agreements require consultants to maintain the secrecy of our confidential information.

We cannot protect our intellectual property rights throughout the world

Filing patents on all of our drug discovery technologies throughout the world would be prohibitively expensive. Competitors may use our technologies in jurisdictions where we have not obtained patent protection to develop their own drug products. These products may compete with our products and may not be covered by any of our patent claims or other intellectual property rights.

Patent law outside the United States is also uncertain and in many countries is currently undergoing review and revision, particularly with respect to biotechnology-related and pharmaceutical inventions. The laws of some countries do not protect our intellectual property rights to the same extent as United States laws. It may be necessary or useful for us to participate in proceedings to determine the validity of our, or our competitors', foreign patents, which could result in substantial cost and divert our efforts and attention from other aspects of our business.

We may encounter significant delays or problems with our new chemical development facility

We have a chemical development facility that we are using for process research, the scale-up and production of intermediates and other compounds for research and development purposes, and the production of active pharmaceutical ingredients.

We are completing the activities needed to obtain the applicable manufacturing licenses to ship clinical materials in accordance with current good manufacturing practices, or cGMP. U.S., Europe and other regulatory authorities require that clinical and commercial products be manufactured according to cGMP regulations. In addition, drug-manufacturing facilities in the state of California must be inspected and licensed by the California Department of Health Services in compliance with state regulatory requirements. California law prohibits the shipment of product from a manufacturing facility for any clinical testing or commercial use prior to satisfaction of licensing requirements. There is no assurance that we will obtain a license, or obtain it in a timely manner.

We may encounter delays and problems in operating our chemical development facility due to:

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

Even if we are able to successfully commence full operation of our chemical development facility, we may not be able to do so in a cost-effective manner or in a time frame that is consistent with our expected future manufacturing needs. In addition, our future manufacturing needs may not be sufficient to allow the facility to be fully operational.

Our quarterly operating results may fluctuate and may cause our stock price to decline

Our revenues and results of operations may fluctuate significantly from quarter to quarter, depending on a variety of factors, including:

- our success or failure in clinical trials;

the timing of the discovery of drug leads and the development of drug candidates, if any;

entering into a new collaboration or modifying or terminating an existing collaboration;

the timing and receipt by us of milestone and royalty payments, if any;

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

others introducing new drug discovery techniques or new drugs that target the same diseases and conditions that we or our collaborators target;

regulatory actions;

changes in accounting principles generally accepted in the United States; and

expenses related to, and the results of, litigation and other proceedings relating to intellectual property rights or other matters.

We are not able to control all of these factors. Period-to-period comparisons of our financial results are not necessarily indicative of our future performance. If our revenues in a particular period do not meet stockholders' or analysts' expectations, our stock price may decline and such decline could be significant.

Our stock price has fluctuated historically. From January 1, 2002, through December 31, 2003, the market price of our stock was as low as $5.20 per share and as high as $12.79 per share. From January 1, 2004, to March 31, 2004, the market price of our stock was as low as $5.68 per share and as high as $7.10 per share.

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

There were 25,590,829 shares of our common stock outstanding as of March 31, 2004. The outstanding shares of our Series B-1 Convertible Preferred Stock are convertible into up to 4,717,570 shares of common stock at $7.50 per share of common stock. Holders of the Series B-1 Convertible Preferred Stock will receive a 4% annual dividend that is payable by issuing common stock or by increasing the amount of common stock that is issuable upon conversion of the Series B-1 Convertible Preferred Stock. In addition, our Series B-1 Convertible Preferred Stock owners hold warrants to acquire common stock and unit warrants to acquire Series B-2 Convertible Preferred Stock and additional warrants to acquire common stock, which, if exercised and converted, would obligate us to issue up to 3,579,057 additional shares of common stock at a weighted average exercise price of $8.62 per share. In addition, as of March 31, 2004, there were 2,862,320 common stock options issued and outstanding under our equity compensation plans at a weighted average exercise price of $9.23, 1,441,604 additional shares of common stock issuable under our equity compensation plans, 768,884 shares of common stock reserved for issuance under our 2001 Employee Stock Purchase Plan and 127,501 shares issuable under a deferred compensation plan. A substantial number of the shares described above, when issued upon exercise, will be available for immediate resale in the public market. The market price of our common stock could fall as a result of such resales due to the increased number of shares available for sale in the market.

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

We have financed our operations, and we expect to continue to finance our operations, primarily by issuing and selling our common stock or securities convertible into or exercisable for shares of our common stock. In light of our need for additional financing, we may issue additional shares of common

stock or additional convertible securities that could dilute your ownership in our company and may include terms that give new investors rights that are superior to yours. Moreover, any issuances by us of equity securities may be at or below the prevailing market price of our common stock and in any event may have a dilutive impact on your ownership interest, which could result in the market price of our common stock declining.

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.

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

In December 2003, we completed the private placement to two institutional investors of (i) an aggregate of 3,500 shares of our Series B-1 Convertible Preferred Stock, (ii) seven-year warrants to purchase up to an aggregate of 1,486,200 shares of our common stock at an exercise price of $10.00 per share and (iii) unit warrants to purchase for a period of approximately 16 months up to $11,500,000 of our Series B-2 Convertible Preferred Stock and additional seven-year warrants to purchase up to 450,000 shares of our common stock at an exercise price of $10.00 per share. Provisions of the Series B Convertible Preferred Stock may require us to obtain approval of the preferred stockholders, or otherwise trigger rights of first refusal or payment provisions, to (i) offer or sell new securities, other than in underwritten offerings, licensing transactions and certain other exceptions, (ii) sell or issue common stock or securities issuable into common stock below certain prices, (iii) incur debt or allow liens on our property, other than certain permitted debt and liens, (iv) amend our certificate of incorporation so as to affect adversely any rights of the preferred stockholders, (v) authorize or create a new class of stock that will be senior or equal to the Series B Convertible Preferred Stock in terms of dividends, redemption or distribution of assets, (vi) use more than $25 million in cash for acquisitions or (vii) take certain other actions. These provisions may make it more difficult for us to take certain corporate actions and could delay, discourage or prevent future financings.

Holders of our Series B Convertible Preferred Stock may require us to redeem their Series B Convertible Preferred Stock, and we will be required to redeem any shares of Series B Convertible Preferred Stock that remain outstanding on the fifth anniversary of their issuance

If (i) following the 21st month anniversary of the original issue date of the applicable series of Series B Convertible Preferred Stock, our closing price of our common stock for any 30 days is below the applicable conversion price for the Series B Convertible Preferred Stock or (ii) we issue common stock or common stock equivalents (excluding, among other things, certain common stock and common stock equivalents issued or issuable (a) to our officers, directors, employees or consultants, (b) in connection with certain strategic partnerships or joint ventures, (c) pursuant to certain underwritten public offerings with gross proceeds of greater than $35.0 million, and (d) in connection with certain mergers and acquisitions) for less than $6.72, in the case of the Series B-1 Convertible Preferred Stock, or a price to be determined based on a formula, in the case of Series B-2 Convertible Preferred Stock, then in each case the holders of the Series B Convertible Preferred Stock may require us to redeem their shares of the applicable series of Series B Convertible Preferred Stock at a price equal to the amount of the original holder's original investment, plus all accrued but unpaid dividends thereon to the date of payment and any applicable penalties. In addition, we will be required to redeem any shares of the Series B Convertible Preferred Stock that remain outstanding on the fifth anniversary of their issuance at a price equal to the amount of the original holder's original investment, plus all accrued but unpaid dividends thereon to the date of such payment. We can elect to pay the redemption price in shares of our common stock if (u) we have sufficient number of shares of common stock available for issuance, (v) the shares of common stock to be issued are registered under an effective registration statement, (w) our common stock is listed on NASDAQ or other eligible market, (x) the

shares to be issued can be issued without violating the rules of NASDAQ or any applicable trading market or a provision of our agreement with the holders, (y) no bankruptcy event has occurred, and (z) certain other enumerated conditions.

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

We may engage in strategic transactions that could impact our liquidity

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

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

We have adopted certain anti-takeover provisions, including a stockholders' rights plan, dated as of October 30, 2002, between us and Computershare Trust Company, Inc., as Rights Agent, as amended on December 24, 2003 (the "Rights Agreement"). The Rights Agreement is not intended to prevent an acquisition of us at a full and fair price. Rather, it is intended to deter an attempt to acquire us in a manner or on terms not approved by our board of directors, and will cause substantial dilution to any person who attempts to acquire us in a manner or on terms not so approved.

The Certificate of Designations for the Series B Convertible Preferred Stock provides that the Series B Convertible Preferred Stock holders are entitled to receive a premium in the event of a change of control. The Series B Convertible Preferred Stock holders have also agreed to vote as recommended by our board of directors on all matters in which the common stockholders have the right to vote.

The Rights Agreement and Certificate of Designations for the Series B Convertible Preferred Stock, as well as other provisions in our certificate of incorporation and by-laws 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. For example, these provisions:

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

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

Our research and development activities involve the use of potentially harmful biological materials as well as hazardous materials, chemicals and various radioactive compounds that could be hazardous to human health, 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:

an interruption of our research and development efforts;

injury to our employees and others resulting in the payment of damages;

environmental damage resulting in costly clean up; or

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

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

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

We depend on our collaborators, contractors and venders and on our laboratories and other facilities for the continued operation of our business. Natural disasters or other catastrophic events, including terrorist attacks, power interruptions, wildfires and other fires, actions of animal rights activists, earthquakes and wars, could disrupt our operations or those of our collaborators, contractors and vendors. Even though we believe we carry reasonably adequate 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.

FORWARD-LOOKING STATEMENTS

This prospectus and the documents incorporated by reference into this prospectus contain forward-looking statements that are based on current expectations, estimates and projections about our industry, management's beliefs, and assumptions made by management. Words such as "will," "aim," "hope," "anticipate," "expect," "intend," "plan," "believe," "seek," "estimate," and variations of such words and similar expressions are intended to identify such forward-looking statements. These statements are not guarantees of future performance and are subject to certain risks, uncertainties and assumptions that are difficult to predict; therefore, actual results may differ materially from those expressed or forecasted in any forward-looking statements. The risks and uncertainties include those noted in "Risk Factors" above and in the documents incorporated by reference.

Readers of this prospectus and the documents incorporated by reference into this prospectus are cautioned not to place undue reliance on these forward-looking statements, which speak only as of the date on which they are made. We undertake no obligation to update publicly any forward-looking statements, whether as a result of new information, future events or otherwise, except to the extent that we are required to do so by law. We also may make additional disclosures in our Annual Report on Form 10-K, Quarterly Reports on Form 10-Q and Current Reports on Form 8-K that we may file from

time to time with the Securities and Exchange Commission, or SEC. Please also note that we provide a cautionary discussion of risks and uncertainties under the section entitled "Risk Factors" in our Annual Report on Form 10-K and Quarterly Reports on Form 10-Q. These are factors that we think could cause our actual results to differ materially from expected results. Other factors besides those listed here could also adversely affect us. This discussion is provided as permitted by the Private Securities Litigation Reform Act of 1995.

ISSUANCE OF COMMON STOCK TO THE SELLING STOCKHOLDERS

On December 24, 2003, we completed a financing pursuant to which we issued to the selling stockholders (i) $35 million of Series B-1 Convertible Preferred Stock, which is convertible into Arena common stock at a fixed conversion price of $7.50 per share, (ii) seven-year warrants to purchase up to 1,486,200 shares of Arena common stock at an exercise price of $10.00 per share, and (iii) unit warrants giving such investors the right, and under certain conditions the obligation, for a period of approximately 16 months to purchase from us up to $11.5 million of Series B-2 Convertible Preferred Stock and additional seven-year warrants to purchase up to 450,000 shares of our common stock at an exercise price of $10.00 per share.

Pursuant to the registration rights agreement which we entered into in connection with the financing, we have filed a registration statement, of which this prospectus forms a part, in order to permit the selling stockholders to resell to the public the shares of common stock they have or may acquire pursuant the Series B Securities Purchase Agreement.

In addition, pursuant to our Non-Circumvention and Finder's Fee Agreement, dated as of December 10, 2003 (the "Finder's Agreement"), with Reedland Capital Partners, an Institutional Division of Financial West Group ("Reedland"), we agreed, among other things, to pay Reedland $600,000 in cash and 45,000 shares of our common stock as well as to register for resale such shares.

USE OF PROCEEDS

The proceeds from the sale of the common stock under this prospectus will belong to the selling stockholders. While we will not receive any proceeds from this offering, if the warrants to purchase 1,486,200 shares of common stock, the unit warrants to purchase $11,500,000 Series B-2 Convertible Preferred Stock and the related warrants to purchase 450,000 shares of common stock were all exercised, we will receive proceeds of $30,862,000. If we do receive any proceeds from the exercise of the warrants, we will likely use such proceeds for working capital and general corporate purposes.

SELLING STOCKHOLDERS

The selling stockholders may sell up to 11,227,933 shares of our common stock pursuant to this prospectus. The shares of our common stock offered by this prospectus were issued or may be issued to the selling stockholders in connection with the financing transaction described above under "Issuance of Common Stock to the Selling Stockholders." None of the selling stockholders has held any position or office, or has had any material relationship except as set forth in the financing transaction documents and Finder's Agreement, with us or our predecessors or affiliates within the past three years.

The following table sets forth information regarding beneficial ownership of our common stock by the selling stockholders as of March 31, 2004. There were 25,590,829 shares of our common stock outstanding as of March 31, 2004.

	Shares of Common Stock Beneficially Owned Before Offering			Shares of Common Stock Beneficially Owned Following the Offering(2)	
Name	**Number**	**% of Class(1)**	**Number of Shares of Common Stock Offered Hereby**	**Number**	**% of Class**
Mainfield Enterprises, Inc.(3)	2,695,754	9.5%(5)	6,389,988	0	
Smithfield Fiduciary LLC(4)	2,021,816	7.3%(5)	4,792,945	0	
Robert Schacter	24,000	*	24,000	0	
Thomas Griesel	6,300	*	6,300	0	
Financial West Group(6)	2,200	*	2,200	0	
Eric Sloane	12,500	*	12,500	0	

* Less than 1%.

(1) For the purposes of calculating the percent of class beneficially owned by a holder, shares of common stock which may be issued to that holder within 60 days of March 31, 2004, are deemed to be outstanding.

(2) We do not know when or in what amounts a selling stockholder may offer shares for sale. The selling stockholders may choose not to sell any of the shares offered by this prospectus. This table assumes the sale by the selling stockholders of all of the shares of common stock available for resale under this prospectus.

(3) Pursuant to an investment management agreement, Avi Vigder has voting discretion and investment control over the shares held by Mainfield Enterprises, Inc. Avi Vigder disclaims beneficial ownership of such shares.

(4) Highbridge Capital Management, LLC, is the trading manager of Smithfield Fiduciary LLC and consequently has voting control and investment discretion over securities held by Smithfield Fiduciary LLC. Glenn Dubin and Henry Swieca control Highbridge Capital Management, LLC. Each of Highbridge Capital Management LLC, Glenn Dubin and Henry Swieca disclaims beneficial ownership of the securities held by Smithfield Fiduciary LLC.

(5) The holder disclaims beneficial ownership of our common stock that exceeds 4.999% of our outstanding common stock. Under the terms of the Series B Convertible Preferred Stock, the number of shares of our common stock that may be acquired by the holder upon any conversion of the preferred stock is limited to the extent necessary to ensure that, following such conversion, the total number of shares of our common stock then beneficially owned by such holder and its affiliates and any other persons whose beneficial ownership of our common stock would be aggregated with the holders for purposes of Section 13(d) of the Securities Exchange of 1934 does not exceed 4.999% of our common stock (including shares of our common stock issuable upon such conversion). The holder can waive this provision or increase (but not to more than 9.999%) or decrease this percentage by giving us written notice, but (i) any such waiver or increase will not be effective until the 61st day after such notice is delivered to the us, and (ii) any such waiver or increase or decrease will apply only to such holder. The 4.999% limitation is disregarded for purposes of this table.

This table excludes the shares of our common stock that the holder may acquire by exercising warrants and unit warrants that were issued in the Series B Convertible Preferred Stock financing transaction. The warrants provide that the number of shares of our

common stock that may be acquired by the holder upon any exercise of the warrant is limited to the extent necessary to ensure that, following such exercise, the total number of shares of our common stock then beneficially owned by such holder and its affiliates and any other persons whose beneficial

ownership of our common stock would be aggregated with the holders for purposes of Section 13(d) of the Securities Exchange of 1934 does not exceed 4.999% of our common stock (including shares of our common stock issuable upon such exercise). The holder can waive this limitation on exercise or increase or decrease the 4.999% by giving us written notice, but (i) any such waiver or increase will not be effective until the 61st day after such notice is delivered to us and (ii) any such waiver or increase or decrease will apply only to such holder and not to any other holder of warrants.

(6) This selling stockholder is a registered broker-dealer and, as a result, is an underwriter.

PLAN OF DISTRIBUTION

The selling stockholders may, from time to time, sell any or all of their shares of common stock on any stock exchange, market or trading facility on which the shares are traded or in private transactions. These sales may be at fixed or negotiated prices. The selling stockholders may use any one or more of the following methods when selling shares:

- ordinary brokerage transactions and transactions in which the broker-dealer solicits purchasers;
- block trades in which the broker-dealer will attempt to sell the shares as agent but may position and resell a portion of the block as principal to facilitate the transaction;
- purchases by a broker-dealer as principal and resale by the broker-dealer for its account;
- an exchange distribution in accordance with the rules of the applicable exchange;
- privately negotiated transactions;
- short sales;
- broker-dealers may agree with the selling stockholders to sell a specified number of such shares at a stipulated price per share;
- a combination of any such methods of sale; and
- any other method permitted pursuant to applicable law.

The selling stockholders may also sell shares under Rule 144 under the Securities Act, if available, rather than under this prospectus.

The selling stockholders may also engage in short sales against the box, puts and calls and other transactions in our securities or derivatives of our securities and may sell or deliver shares in connection with these trades.

Broker-dealers engaged by the selling stockholders may arrange for other brokers-dealers to participate in sales. Broker-dealers may receive commissions or discounts from the selling stockholders (or, if any broker-dealer acts as agent for the purchaser of shares, from the purchaser) in amounts to be negotiated. The selling stockholders do not expect these commissions and discounts to exceed what is customary in the types of transactions involved. Any profits on the resale of shares of common stock by a broker-dealer acting as principal might be deemed to be underwriting discounts or commissions under the Securities Act. Discounts, concessions, commissions and similar selling expenses, if any, attributable to the sale of shares will be borne by a selling stockholder. The selling stockholders may agree to indemnify any agent, dealer or broker-dealer that participates in transactions involving sales of the shares if liabilities are imposed on that person under the Securities Act.

The selling stockholders may from time to time pledge or grant a security interest in some or all of the shares of common stock owned by them and, if they default in the performance of their secured obligations, the pledgees or secured parties may offer and sell the shares of common

stock from time

to time under this prospectus after we have filed an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933 amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

The selling stockholders also may transfer the shares of common stock in other circumstances, in which case the transferees, pledgees or other successors in interest will be the selling beneficial owners for purposes of this prospectus and may sell the shares of common stock from time to time under this prospectus after we have filed an amendment to this prospectus under Rule 424(b)(3) or other applicable provision of the Securities Act of 1933 amending the list of selling stockholders to include the pledgee, transferee or other successors in interest as selling stockholders under this prospectus.

The selling stockholders that are involved in selling the shares of common stock may be deemed to be "underwriters" within the meaning of the Securities Act in connection with such sales. Financial West Group, one of the selling stockholders, is a registered broker-dealer and, as a result, is an underwriter. The securities registered to this stockholder consist of shares of common stock issued to this stockholder pursuant to a written agreement as consideration for services rendered. Any commissions received by broker-dealers or agents and any profit on the resale of the shares of common stock purchased by them may be deemed to be underwriting commissions or discounts under the Securities Act.

We are required to pay all fees and expenses incident to the registration of the shares of common stock to the selling stockholders, other than the fees and disbursements of counsel, brokerage fees or underwriting fees. We have agreed to indemnify the selling stockholders against certain losses, claims, damages and liabilities, including liabilities under the Securities Act.

The selling stockholders have advised us that they have not entered into any agreements, understandings or arrangements with any underwriters or broker-dealers regarding the sale of their shares of common stock, nor is there an underwriter or coordinating broker acting in connection with a proposed sale of shares of common stock by any selling stockholder. If we are notified by any selling stockholder that any material arrangement has been entered into with a broker-dealer for the sale of shares of common stock, if required, we will file a supplement to this prospectus. If the selling stockholders use this prospectus for any sale of the shares of common stock, they will be subject to the prospectus delivery requirements of the Securities Act.

The anti-manipulation rules of Regulation M under the Securities Exchange Act of 1934 may apply to sales of our common stock and activities of the selling stockholders.

VALIDITY OF COMMON STOCK

Milbank, Tweed, Hadley & McCloy LLP, New York, New York, will pass on the validity of the authorization and issuance of the shares of common stock offered by this prospectus.

EXPERTS

Ernst & Young LLP, independent auditors, have audited our consolidated financial statements included in our Annual report on Form 10-K for the year ended December 31, 2003, as set forth in their report, which is 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 file annual, quarterly and special reports, proxy statements and other information with the SEC. You may read and copy any document we file at the SEC's public reference room at 450 Fifth

Street, N.W., Washington, D.C., 20549. Please call the SEC at 1-800-SEC-0330 for further information on the operation of the public reference room. Our SEC filings are also available to the public at the SEC's website at *http://www.sec.gov*.

INCORPORATION OF INFORMATION BY REFERENCE

The SEC allows us to "incorporate by reference" the information we file with them, which means that we can disclose important information to you by referring you to those documents instead of having to repeat the information in this prospectus. The information incorporated by reference is considered to be part of this prospectus, and later information that we file with the SEC will automatically update and supersede this information. 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 Securities Exchange Act of 1934 until the selling stockholders sell all the shares:

Our annual report on Form 10-K for the fiscal year ended December 31, 2003 (filed on March 1, 2004);

Our current reports on Form 8-K filed on January 6, 2004 and March 17, 2004;

The description of our Series A Preferred Stock contained in our registration statement on Form 8-A, filed on November 5, 2002, including any amendment or reports filed for the purpose of updating such description; and

The description of our common stock contained in our registration statement on Form 8-A, filed on July 26, 2000, including any amendment or reports filed for the purpose of updating such description.

You can request a copy of these filings, at no cost, by writing or telephoning us at the following address or telephone number:

Arena Pharmaceuticals, Inc.
6166 Nancy Ridge Drive
San Diego, California 92121
(858) 453-7200
Attn: Investor Relations

You should rely only on the information contained in this prospectus or any supplement and in the documents incorporated by reference. We have not authorized anyone else to provide you with different information. You should not assume that the information in this prospectus or any supplement or in the documents incorporated by reference is accurate on any date other than the date on the front of those documents.

This prospectus is part of a registration statement we filed with the SEC (Registration No. 333-112542). That registration statement and the exhibits filed along with the registration statement contain more information about the shares sold by the selling stockholders. Because information about documents referred to in this prospectus is not always complete, you should read the full documents which are filed as exhibits to the registration statement. You may read and copy the full registration statement and its exhibits at the SEC's public reference rooms or their website.

11,227,933 SHARES OF COMMON STOCK

ARENA PHARMACEUTICALS, INC.

PROSPECTUS

April 20, 2004

No dealer, salesperson or other individual has been authorized to give any information or to make any representations other than contained or incorporated by reference in this prospectus, and if given or made, such information or representations must not be relied upon as having been authorized by Arena. This prospectus does not constitute an offer or solicitation by anyone in any jurisdiction in which such offer or solicitation is not authorized or in which the person making such offer is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation. Neither the delivery of this prospectus nor any sale made hereunder shall, under any circumstance, create any implication that there has not been any change in the affairs of Arena since the date hereof.

QuickLinks

TABLE OF CONTENTS
ABOUT ARENA PHARMACEUTICALS, INC.
RISK FACTORS
FORWARD-LOOKING STATEMENTS
ISSUANCE OF COMMON STOCK TO THE SELLING STOCKHOLDERS
USE OF PROCEEDS
SELLING STOCKHOLDERS
PLAN OF DISTRIBUTION
VALIDITY OF COMMON STOCK
EXPERTS
WHERE YOU CAN FIND MORE INFORMATION
INCORPORATION OF INFORMATION BY REFERENCE