PROSPECTUS SUPPLEMENT (To Prospectus Dated July 14, 2003)

1,175,375 Shares



Common Stock

We are offering 1,175,375 shares of our common stock to certain purchasers pursuant to this prospectus supplement. Our common stock is quoted on the Nasdaq National Market under the symbol "ARIA." On December 1, 2003, the reported last sale price of our common stock on Nasdaq was \$8.45 per share.

Before deciding whether to invest in our common stock, you should consider carefully the risks that we have described under the heading "Risk Factors" on page S-5 of this prospectus supplement and page 4 of the accompanying prospectus.

	Per Share	Total
Public Price	\$8.00	\$9,403,000
Proceeds to ARIAD Pharmaceuticals, Inc. (before expenses)	\$8.00	\$9,403,000

Pursuant to an engagement letter entered into with the placement agents for the offering of our common stock in October 2003, we are obligated to pay the placement agents an aggregate fee of 6.5% of the gross proceeds we receive in this offering, or \$611,195.

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 this prospectus supplement or the accompanying prospectus. Any representation to the contrary is a criminal offense.

The date of this prospectus supplement is December 2, 2003.

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ABOUT THIS PROSPECTUS SUPPLEMENT

This prospectus supplement and the accompanying prospectus dated July 14, 2003 relate to the offer by us of 1,175,375 shares of our common stock. You should read this prospectus supplement along with the accompanying prospectus carefully before you invest. These documents contain important information you should consider when making your investment decision. This prospectus supplement contains information about the common stock offered hereby and the prospectus contains information about our securities generally. This prospectus supplement may add, update or change information in the prospectus. You should rely only on the information provided in this prospectus supplement, the accompanying prospectus or incorporated by reference in the accompanying prospectus. We have not authorized anyone to provide you with any other information.

PROSPECTUS SUPPLEMENT SUMMARY

This summary highlights information contained elsewhere or incorporated by reference in this prospectus supplement and the accompanying prospectus. This summary does not contain all of the information that you should consider before deciding to invest in our common stock. You should read this entire prospectus supplement and the accompanying prospectus carefully including the "Risk Factors" section beginning on page S-5 of this prospectus supplement and on page 4 of the accompanying prospectus and our consolidated financial statements and the related notes and the other documents incorporated by reference in the accompanying prospectus.

About ARIAD Pharmaceuticals

We were organized as a Delaware corporation in April 1991. Our principal executive offices are located at 26 Landsdowne Street, Cambridge, Massachusetts 02139-4234, and our telephone number is (617) 494-0400.

We are engaged in the discovery and development of breakthrough medicines that regulate cell signaling with small molecules. Breakthrough medicines are products, created *de novo*, that may be used to treat diseases in innovative ways. We are developing a comprehensive approach to the treatment of cancer and are primarily focused on a series of product candidates for targeted oncology indications. We have developed a proprietary portfolio of cell-signaling regulation technologies (our ARGENT technologies) to control intracellular processes with small molecules, useful in regulated protein and cell therapy and providing versatile tools for use in cell biology, functional genomics, proteomics and drug discovery research. Additionally, we have an exclusive license to pioneering technology and patents related to the discovery, development, and use of drugs to regulate NF- κ B cell-signaling activity, which can be used to treat medically important disorders, including inflammation, cancer and osteoporosis.

Since our inception in 1991, we have devoted substantially all of our resources to our research and development programs. We receive no revenue from the sale of pharmaceutical products, and most of our revenue to date has been received in connection with our past relationship with Aventis Pharmaceuticals, Inc. Except for the gain on the sale of our fifty percent interest in the Hoechst-ARIAD Genomics Center LLC to Aventis in December 1999, which resulted in net income for fiscal 1999, we have not been profitable since inception. We expect to incur substantial operating losses for the foreseeable future, primarily due to costs associated with our pharmaceutical product development programs, clinical trials, and product manufacturing. We expect that losses will fluctuate from quarter to quarter and that these fluctuations may be substantial. As of September 30, 2003, we had an accumulated deficit of \$150.3 million.

Our business strategy aims to balance near-term revenues from product partnering and technology licensing with independent product development and commercialization. With respect to the development and commercialization of our lead product candidates, our goals are to: (1) build a comprehensive cancer-focused franchise; (2) develop our oncology product candidates independently as far as possible before partnering them; (3) establish the commercial infrastructure to market or co-market our cancer product candidates in the United States; (4) enter into worldwide partnerships with pharmaceutical or biotechnology companies, after obtaining definitive clinical data, to develop our cancer product candidates and commercialize them outside the United States; (5) enter into worldwide partnerships with medical device companies to develop and commercialize our lead product candidate, AP23573, in drug-delivery stents to decrease reblockage of arteries following angioplasty and stenting. With respect to our core technologies and intellectual property, our goals are to license our NF-κB technology to pharmaceutical and biotechnology companies that are conducting research on the discovery of drugs that modulate NF-κB cell signaling and/or are marketing such drugs and to license our ARGENT technology to pharmaceutical and biotechnology companies to accelerate their drug discovery. In addition, we may jointly develop product candidates incorporating our ARGENT technology with companies that have proprietary therapeutic genes, cellular systems or gene delivery vectors. As of the date of this prospectus supplement, we have not entered into any partnerships for any of our lead product candidates and there can be no assurance that we will be successful in achieving our strategies and generating future revenue streams.

ARIAD and the ARIAD logo are our registered trademarks and ARGENT is our trademark. Other trademarks and trade names appearing in this prospectus supplement and the accompanying prospectus are the property of their holders. Our internet website address is http://www.ariad.com, and all rights thereto, are registered in the name of and owned by ARIAD Pharmaceuticals, Inc. Our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K which have been filed with the SEC are available to you free of charge through a hyperlink on our

internet website. The information on our website is not intended to be a part of this prospectus supplement. Our web site address is included in this document as an inactive textual reference only.

The Offering

Common stock offered in this offering 1,175,375 shares
Common stock to be outstanding after this offering 46,796,669 shares

Use of proceeds For research and development, clinical trials, product

manufacturing, intellectual property protection and enforcement, working capital and other general corporate purposes. See "Use of

Proceeds."

Dividend policy We have never declared or paid any cash dividends on our capital

stock. We intend to retain any future earnings to finance the growth and development of our business and do not anticipate

paying any cash dividends in the foreseeable future.

Nasdaq National Market symbol ARIA

The number of shares of our common stock to be outstanding after this offering is based on the number of shares of common stock outstanding as of December 1, 2003 and does not include:

- 5,664,452 shares issuable upon exercise of stock options outstanding under our stock option plans as of that date at a weighted average exercise price of \$4.48; and
- 517,645 shares available as of that date for future grant or issuance pursuant to our employee stock purchase plan and stock option plans.

RISK FACTORS

Investing in our common stock involves a high degree of risk. Before purchasing our common stock, you should carefully consider the following risk factors as well as all other information contained in this prospectus supplement and the accompanying prospectus and incorporated by reference into the accompanying prospectus, including our financial statements and the related notes. The risks and uncertainties described below are not the only ones facing us. Additional risks and uncertainties that we are unaware of, or that we currently deem immaterial, also may become important factors that affect us. If any of the following risks occur, our business, financial condition or results of operations could be materially and adversely affected. In that case, the trading price of our common stock could decline, and you may lose some or all of your investment.

Risks Related to this Offering

Management will have broad discretion as to the use of the proceeds from this offering.

We have not designated the amount of net proceeds we will receive from this offering for any particular purpose. Accordingly, our management will have broad discretion as to the application of these net proceeds and could use them for purposes other than those contemplated at the time of this offering. Our stockholders may not agree with the manner in which our management chooses to allocate and spend the net proceeds.

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

Because the price per share of our common stock being offered is substantially higher than the 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 a public offering price of \$8.00 per share in this offering and a pro forma net tangible book value per share of our common stock of \$1.12 as of September 30, 2003 (on a pro forma basis to reflect our sale of 6,438,114 shares of common stock at \$6.35 per share pursuant to a prospectus supplement dated October 3, 2003), if you purchase shares of common stock in this offering, you will suffer immediate and substantial dilution of \$6.72 per share in the net tangible book value of the common stock.

Additional Risks Related to Our Business, Industry and an Investment in our Common Stock

See the section entitled "Risk Factors" beginning on page 4 of the accompanying prospectus, for a discussion of additional risks associated with our business, industry and this offering.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

This prospectus supplement, the accompanying prospectus and the documents incorporated by reference in the accompanying prospectus contain "forward-looking statements" concerning our operations, economic performance and financial condition. These forward-looking statements include, but are not limited to, statements about our plans, objectives, expectations and intentions and other statements contained in this prospectus supplement and the accompanying prospectus that are not historical facts. When used in this prospectus supplement and the accompanying prospectus, the words "anticipates," "believes," "continue," "could," "estimates," "expects," "intends," "may," "plans," "seeks," "should" or "will" or the negative of these terms or similar expressions are generally intended to identify forward-looking statements. Forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and within the meaning of Section 21E of the Securities Exchange Act of 1934, as amended, are included, for example, in the discussions in this prospectus supplement and the accompanying prospectus about:

- our strategy;
- sufficiency of our cash resources;
- revenues from existing and new collaborations;
- product development;
- our research and development and other expenses;

- our intellectual property; and
- our operational and legal risks.

These forward-looking statements involve risks and uncertainties. Actual results may differ materially from those expressed or implied in those statements. Factors that could cause these differences include, but are not limited to, those discussed under "Risk Factors" in this prospectus supplement and the accompanying prospectus.

USE OF PROCEEDS

We estimate that the net proceeds we will receive from this common stock offering will be \$8.7 million, after deducting the estimated offering expenses payable by us and the fee payable to the placement agents of our October 2003 common stock offering. We intend to use the net proceeds from this offering to fund research and development, clinical trials, product manufacturing, intellectual property protection and enforcement, working capital and other general corporate purposes.

We have not determined the amounts we plan to spend on any of the areas listed above or the timing of these expenditures. As a result, our management will have broad discretion to allocate the net proceeds from this offering for any purpose. Pending application of the net proceeds, we intend to invest the net proceeds of the offering in short-term, investment-grade, interest-bearing securities.

PLAN OF DISTRIBUTION

The shares of common stock offered hereby are being offered for sale directly by us to institutional investors. No underwriter, dealer or agent is involved in this offering.

Pursuant to an engagement letter entered into with the placement agents for the offering of our common stock in October 2003, we are obligated to pay the placement agents an aggregate fee of 6.5% of the gross proceeds we receive in this offering, or \$611,195.

LEGAL MATTERS

Certain legal matters in connection with the legality of the offering of the common stock hereby is being passed upon for us by Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts. Members of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., and certain members of their families and trusts for their benefit, own an aggregate of approximately 14,000 shares of our common stock.

PROSPECTUS

ARIAD PHARMACEUTICALS, INC.

7,500,000 SHARES OF COMMON STOCK

This prospectus will allow us to issue up to a total of 7,500,000 shares of our common stock from time to time at prices and on terms to be determined at or prior to the time of the offering. We will provide you with specific terms of any offering in one or more supplements to this prospectus. You should read this document and any prospectus supplement carefully before you invest.
Our common stock is listed on the Nasdaq National Market under the symbol "ARIA." On July 11, 2003, the last reported sale price of our common stock was \$4.47 per share. Prospective purchasers of common stock are urged to obtain current information as to the market prices of our common stock.
You should consider carefully the risks that we have described in "Risk Factors" beginning on page 4 before deciding whether to invest in our common stock.
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 July 14, 2003.

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ABOUT THIS PROSPECTUS

This prospectus is part of a registration statement that we filed with the Securities and Exchange Commission, or SEC, utilizing a "shelf" registration process. Under this shelf process, we may sell up to 7,500,000 shares of our common stock in one or more offerings. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering.

This prospectus does not contain all of the information included in the registration statement. For a more complete understanding of the offering of the securities, you should refer to the registration statement, including its exhibits. The prospectus supplement may also add, update or change information contained in this prospectus. You should carefully read this prospectus, the applicable prospectus supplement, the information and documents incorporated by reference and the additional information under the heading "Where You Can Find More Information" before making an investment decision.

This prospectus may not be used to consummate sales of common stock, unless it is accompanied by a prospectus supplement. To the extent there are inconsistencies between any prospectus supplement, this prospectus and any documents incorporated by reference, the document with the most recent date will control.

ABOUT ARIAD PHARMACEUTICALS

We were organized as a Delaware corporation in April 1991. Our principal executive offices are located at 26 Landsdowne Street, Cambridge, Massachusetts 02139-4234, and our telephone number is (617) 494-0400.

We are engaged in the discovery and development of breakthrough medicines that regulate cell signaling with small molecules. Breakthrough medicines are products, created *de novo*, that may be used to treat diseases in innovative ways. We are developing a comprehensive approach to the treatment of cancer and are primarily focused on a series of product candidates for targeted oncology indications. We have also developed a proprietary portfolio of cell-signaling regulation technologies, including ARGENT Signaling, ARGENT Transcription and RPD Secretion Technologies (RegTech cell-signaling technologies) to control intracellular processes with small molecules, useful in regulated protein and cell therapy and providing versatile tools for use in cell biology, functional genomics, proteomics and drug discovery research. Additionally, we have an exclusive license to pioneering technology and patents related to the discovery, development, and use of drugs that regulate NF-κB cell-signaling activity, which has been implicated in many major diseases.

Since our inception in 1991, we have devoted substantially all of our resources to our research and development programs. We receive no revenue from the sale of pharmaceutical products, and most of our revenue to date has been received in connection with our past relationship with Aventis Pharmaceuticals, Inc. (Aventis). Except for the gain on the sale of our fifty percent interest in the Hoechst-ARIAD Genomics Center LLC (the Genomics Center) to Aventis in December 1999, which resulted in net income for fiscal 1999, we have not been profitable since inception. We expect to incur substantial operating losses for the foreseeable future, primarily due to costs associated with our pharmaceutical product development programs, clinical trials, and product manufacturing. We expect that losses will fluctuate from quarter to quarter and that these fluctuations may be substantial. As of March 31, 2003, we had an accumulated deficit of \$141.6 million.

Our business strategy aims to balance near-term revenues from product partnering and technology licensing with independent product development and commercialization. With respect to the development and commercialization of our lead product candidates, our goals are to: (1) enter into a partnership with a pharmaceutical or biotechnology company to develop and commercialize our lead product candidate, AP23573, to treat cancer; (2) enter into partnerships with medical device companies to develop and commercialize our lead product candidate, AP23573, in drug-delivery stents to decrease reblockage of arteries following angioplasty and stenting; (3) independently develop as many of our product candidates as possible through at least phase 2 before partnering them; (4) establish the commercial infrastructure to market or comarket our anti-cancer product candidates in the United States; and (5) enter into partnerships for our other product candidates outside the United States. With respect to our core technologies and intellectual property, our goals are to license our NF-κB technology to pharmaceutical and biotechnology companies conducting research on the discovery of drugs that modulate NF-κB cell signaling and/or marketing such drugs and to license our RegTech cell-signaling technologies to pharmaceutical and biotechnology companies to accelerate their drug discovery. In addition, we may jointly develop product candidates incorporating our ARGENT cell-signaling regulation technology, especially with companies that have proprietary therapeutic genes, cellular systems or gene delivery vectors. As of June 30, 2003, we have not entered into any partnerships for any of our lead product candidates and there can be no assurance that we will be successful in achieving our strategies and generating future revenue streams.

"ARIAD," the ARIAD logo, ARGENT, RPD and RegTech are trademarks of ARIAD Pharmaceuticals, Inc. Other trademarks and trade names appearing in this prospectus are the property of their holders. Our internet website address is http://www.ariad.com, and all rights thereto, are registered in the name of, and owned by, ARIAD Pharmaceuticals, Inc. Our annual reports on Form 10-K, quarterly reports on Form 10-Q and current reports on Form 8-K which have been filed with the SEC are available to you free of charge through a hyperlink on our internet website. The information on our website is not intended to be a part of this prospectus. Our web site address is included in this document as an inactive textual reference only.

RISK FACTORS

Investing in our securities involves risk. Before making an investment decision, you should carefully consider the following risks as well as other information we include or incorporate by reference in this prospectus. The risks and uncertainties we have described below are not the only ones facing ARIAD Pharmaceuticals. Additional risks and uncertainties not presently known to us or that we currently deem immaterial may also affect our business operations.

If any of the matters included in the following risks were to occur, our business, financial condition, results of operations, cash flows or prospects could be materially adversely affected. In such case, the value of our securities could decline and you could lose all or part of your investment.

Risks Relating to Our Business

Insufficient funding may jeopardize our research and development programs and may prevent commercialization of our products and technologies.

We have funded our operations to date through sales of equity securities, debt and operating revenue. Most of our operating revenue to date has been generated through previous collaborative research and development agreements. We do not have any committed funding from any pharmaceutical company to advance any of our product development programs. Although we intend to seek additional funding from product-based collaborations, technology licensing, and public or private financings, additional funding may not be available on terms acceptable to us, or at all. Accordingly, we may not be able to secure the significant funding which is required to maintain and continue each of our research and development programs at their current levels or at levels that may be required in the future. If we cannot secure adequate financing, we may be required to delay, scale back or eliminate one or more of our research and development programs or to enter into license or other arrangements with third parties to commercialize products or technologies that we would otherwise seek to develop ourselves.

We may never succeed in developing marketable drugs or generating product revenues.

We are a development stage company, and our main focus is drug discovery and product development. We do not currently have any product revenues, and we may not succeed in developing or commercializing any products which will generate product revenues. We do not expect to have any products on the market for several years, if at all. We are exploring human diseases at the cellular level and attempting to develop product candidates that intervene with these processes. As with all science, we face much trial and error, and we may fail at numerous stages along the way. If we are not able to enter into agreements with one or more companies experienced in the development and manufacture of gene-transfer vectors, we will not be able to market our regulated protein and cellular therapy product candidates. If we are not able to enter into agreements with one or more medical device companies experienced in the development, manufacture, and marketing of vascular stents, we will not be able to generate product revenues from the marketing of vascular stents that deliver AP23573. If we are not successful in developing or marketing our product candidates, we will not be profitable.

We have incurred significant losses to date and may never be profitable.

We have incurred significant operating losses in each year since our formation in 1991 and have an accumulated deficit of \$141.6 million from our operations through March 31, 2003. Losses have resulted principally from costs incurred in research and development of product candidates and from general and administrative costs associated with our operations. It is likely that we will incur significant operating losses for the foreseeable future. We currently have no product revenues and limited

commitments for future licensing revenues, and may never be able to generate such revenues. If our losses continue and we are unable to successfully develop, commercialize, manufacture and market our product candidates and/or to enter into agreements and licenses of our intellectual property, we may never generate sufficient revenues to achieve profitability. Even if we are able to commercialize any of our product candidates or enter into agreements or licenses in the future, we may never generate sufficient revenues to have profitable operations.

We have no experience in manufacturing any of our product candidates, which raises uncertainty as to our ability to develop and commercialize our product candidates.

We have no experience in, and currently lack the resources and capability to, manufacture any of our product candidates on a large scale. Our ability to conduct clinical trials and commercialize our product candidates will depend, in part, on our ability to manufacture our products on a large scale, either directly or through third parties, at a competitive cost and in accordance with cGMP and other regulatory requirements. We depend on third-party manufacturers or collaborative partners for the production of our product candidates for preclinical studies and clinical trials and intend to use third-party manufacturers to produce any products we may eventually commercialize. We have no experience in developing, manufacturing, or marketing drug-delivery vascular stents, and we will be completely dependent on our medical device partners, if any, to conduct these activities. If we are not able to obtain contract manufacturing on commercially reasonable terms and obtain or develop the necessary technologies for manufacturing, we may not be able to conduct or complete clinical trials or commercialize our product candidates, and we do not know whether we will be able to develop such capabilities. If we are not able to develop cell processing methods that comply with regulatory guidelines known as current Good Tissue Practices, or cGTP, we may not be able to commercialize our regulated cellular therapy product.

Significant additional losses or insufficient funding may cause us to default on certain covenants of our loan documents.

At March 31, 2003, we had \$7.5 million outstanding under a term loan agreement with a bank, pursuant to which we are required to maintain certain financial and non-financial covenants, including minimum cash and cash equivalent balances of \$10.0 million, a default of any of which would allow the bank to demand payment of its loan. We currently maintain sufficient cash balances to fund payment of this loan if demand for payment were made. However, if we are unable to raise adequate financing to fund continuing operations or otherwise to refinance our loan, we may not be able to maintain compliance with loan covenants, may be required to pay off the loan and may be required to reduce our spending on operations.

We may expend significant capital resources on the enforcement and licensing of our NF- κ B patent portfolio and be unable to generate revenues from these efforts, if we are unable to enforce or license our NF- κ B patents to pharmaceutical and biotechnology companies.

We are the exclusive licensee of a family of patents, three in the U.S. and one in Europe, including a pioneering U.S. patent covering methods of treating human disease by regulating NF-κB cell-signaling activity, or the NF-κB'516 Patent, awarded to a team of inventors from the Whitehead Institute for Biomedical Research, Massachusetts Institute of Technology and Harvard University. We have initiated a licensing program to generate revenues from the discovery, development, manufacture and sale of products covered by our NF-κB patent portfolio. These patents may be challenged and subsequently narrowed, invalidated or circumvented, which would materially impact our ability to generate licensing revenues from them.

On June 25, 2002, we, together with these academic institutions, filed a lawsuit in the United States District Court for the District of Massachusetts, or the U.S. District Court, against Eli Lilly and Company, or Lilly, alleging infringement upon issuance of certain claims of the NF- κ B'516 Patent, or the

NF-κB'516 Claims, through sales of Lilly's osteoporosis drug, Evista®, and its septic shock drug, Xigris®. On August 26, 2002, Lilly filed in the U.S. District Court a motion to dismiss or, alternatively, for summary judgment, or Lilly's Combined Motion, challenging the validity of the NF-κB'516 Claims. We filed a response to Lilly's Combined Motion on October 17, 2002, and Lilly filed a reply on November 17, 2002. Oral argument on Lilly's Combined Motion was heard in the U.S. District Court on November 21, 2002. On May 12, 2003, the U.S. District Court issued a Memorandum of Decision and Order denying Lilly's Combined Motion. Lilly's Answer to Plaintiff's Complaint and Counterclaims was filed with the U.S. District Court on May 27, 2003. On June 19, 2003, ARIAD's Answer to Lilly's Answer and Counterclaims was filed and a trial scheduling conference pursuant to Rule 16(b) of the Federal Rules of Civil Procedure occurred in order for the case to proceed to the discovery phase leading to trial. The Markman hearing (on patent claim construction) in the case is scheduled to be heard on January 13, 2004.

If the NF-κB'516 Claims are invalidated, it could have a significant adverse impact on our ability to generate revenues from our NF-κB licensing program. As exclusive licensee of this patent, we are obligated for the costs expended for its enforcement. Accordingly, we anticipate expending significant capital and management resources pursuing this litigation for an indeterminate period, and the outcome is uncertain. Significant expenditures to enforce these patent rights without generating revenues or accessing additional capital could adversely impact our ability to further our research and development programs at the current levels or at levels that may be required in the future.

Because we do not own all of the outstanding stock of our subsidiary, ARIAD Gene Therapeutics, Inc., or AGTI, we may not realize all of the potential future economic benefit from products developed based on technology licensed to or owned by our subsidiary.

Our subsidiary, AGTI, holds licenses from Harvard University, Stanford University and other universities relating to our ARGENT cell-signaling regulation technology, a key component of our programs in regulated protein therapy and cellular therapy, and owns the intellectual property on our mTOR inhibitors (including AP23573) derived from our ARGENT programs. The two directors of AGTI are also members of the Board of Directors of the Company. Minority stockholders of AGTI, including Harvard University, Stanford University, several of our scientific advisors, and several current and former members of our management and Board of Directors, own 20% of the issued and outstanding capital stock of AGTI. We own the remaining 80% of the issued and outstanding capital stock of AGTI.

We do not currently have a license agreement with AGTI that provides us with rights to commercialize product candidates based on our ARGENT cell-signaling regulation technology or mTOR inhibitors derived from our ARGENT programs. In the event that we commercialize product candidates based on our ARGENT cell-signaling regulation technology or mTOR inhibitors derived from our ARGENT programs, we will have to negotiate the terms of a license or other agreements with AGTI on terms to be determined or acquire all of the capital stock of AGTI that we do not currently own. The economic benefit to our stockholders from such products, if any, that we commercialize will be diminished by any royalties or other payments paid under a future agreement, if any, with AGTI. The economic benefit to our stockholders from products, if any, would be reduced in an amount based on such future agreements and the percentage owned by the minority stockholders of AGTI.

Alternatively, we may acquire all of the interests of the minority stockholders in AGTI for cash, shares of our common stock or other securities, if any. AGTI has a right of first refusal on the sale to third parties of 73% of the minority stockholders' AGTI shares (representing 14.6% of the outstanding capital stock of AGTI). AGTI does not have a call option, or a right to require the minority stockholders to sell their shares to us, for any of these shares. If we acquire these minority interests, it may result in dilution to our stockholders. The economic value of the minority stockholders' interests is difficult to quantify in the absence of a public market, and the market price of our publicly traded common stock may not accurately reflect its value. Accordingly, the market could

change its perception of the value of these minority interests in our subsidiary at any time in reaction to our increased emphasis on these product candidates, announcements regarding these product candidates or for other reasons, any of which could result in a decline in our stock price. In addition, if we acquire the minority interests at a cost greater than the value attributed to them by the market, this also could result in a decline in our stock price. If we choose to acquire these minority interests through a short-form merger in which we do not solicit the consent of the minority stockholders of AGTI, we could become subject to an appraisal procedure, which would result in additional expense and diversion of management resources.

Because members of our management team and/or Board of Directors beneficially own a material percentage of the capital stock of our subsidiary, AGTI, and we have agreements with AGTI, there may be conflicts of interest present in dealings between ARIAD and AGTI.

Four members of our management team and/or Board of Directors own or have the right to acquire up to approximately 6.1% of the outstanding capital stock of AGTI. Harvey J. Berger, M.D., our Chairman, Chief Executive Officer and President, owns 3.4%, David L. Berstein, Esq., our Senior Vice President and Chief Patent Counsel, owns 0.3%, John D. Iuliucci, Ph.D., our Senior Vice President, Drug Development, owns 0.7% and Jay R. LaMarche, one of our directors, owns 1.7%. These same individuals beneficially own approximately 7.0% of our outstanding common stock. Additionally, Dr. Berger and Mr. LaMarche are the two members comprising the Board of Directors of AGTI. As part of the formation of AGTI, we entered into certain agreements with AGTI to provide for the operations of AGTI. As a result, the market may perceive conflicts of interest to exist in dealings between AGTI and us. AGTI is the exclusive licensee of the ARGENT cell-signaling intellectual property from Harvard University and Stanford University and of related technologies from other universities, and owns the intellectual property on our mTOR inhibitors (including AP23573) derived from our ARGENT programs. Because of the apparent conflicts of interest, the market may be more inclined to perceive the terms of any transaction between us and AGTI as being unfair to us.

The loss of key members of our scientific and management staff could delay and may prevent the achievement of our research, development and business objectives.

Our Chairman, Chief Executive Officer and President, Harvey J. Berger, M.D.; our Senior Vice President and Chief Patent Counsel, David L. Berstein, Esq.; our Senior Vice President, Drug Development, John D. Iuliucci, Ph.D.; our Senior Vice President and Chief Business Officer, Fritz Casselman; our Senior Vice President, Science and Technology, Timothy P. Clackson, Ph.D.; and other key officers and members of our scientific staff responsible for areas such as drug development, clinical trials, regulatory affairs, drug discovery, manufacturing and intellectual property protection and licensing are important to our specialized scientific business. We also are dependent upon a few of our scientific advisors to assist in formulating our research and development strategy. The loss of, and failure to promptly replace, any member of our management team could significantly delay and may prevent the achievement of our research, development and business objectives. While we have entered into employment agreements with all of our officers, these officers may not remain with us.

We may not be able to protect our intellectual property relating to our research programs, technologies and products.

We and our licensors have issued patents and pending patent applications covering research methods useful in drug discovery, new chemical compounds discovered in our drug discovery programs, certain components, configurations and uses of our cell-signaling regulation technologies, products-in-development, and methods and materials for conducting pharmaceutical research. We have an ongoing licensing program to generate revenues from the use of our ARGENT cell-signaling regulation technologies and our NF-κB intellectual property. Pending patent applications may not issue as patents and may not issue in all countries in which we develop, manufacture or sell our products or in countries where others develop,

manufacture and sell products using our technologies. In addition, patents issued to us or our licensors may be challenged and subsequently narrowed, invalidated or circumvented. In that event, such patents may not afford meaningful protection for our technologies or product candidates, which would materially impact our ability to develop and market our product candidates and to generate licensing revenues from our gene regulation patent portfolio. Certain technologies utilized in our research and development programs are already in the public domain. Moreover, a number of our competitors have developed technologies, filed patent applications or obtained patents on technologies and compositions that are related to our business and may cover or conflict with our patent applications. Such conflicts could limit the scope of the patents that we may be able to obtain or may result in the denial of our patent applications. If a third party were to obtain intellectual proprietary protection for any of these technologies, we may be required to challenge such protections, terminate or modify our programs that rely on such technologies or obtain licenses for use of these technologies.

We may be unable to develop or commercialize our product candidates, if we are unable to obtain or maintain certain licenses.

We have entered into license agreements for some of our technologies, either directly or through AGTI. We are currently attempting to obtain additional licenses for technology useful to our programs. Our inability to obtain any one or more of these licenses, on commercially reasonable terms, or at all, or to circumvent the need for any such license, could cause significant delays and cost increases and materially affect our ability to develop and commercialize our product candidates. We also use gene sequences or proteins encoded by those sequences and other biological materials in each of our research programs which are, or may become, patented by others and to which we would be required to obtain licenses in order to develop or market our product candidates. Some of our programs, including, for example, our regulated protein therapy program, may require the use of multiple proprietary technologies, especially gene-transfer vectors and therapeutic genes. Obtaining licenses for these technologies may require us to make cumulative royalty payments or other payments to several third parties, potentially reducing amounts paid to us or making the cost of our products commercially prohibitive. Manufacturing of gene-transfer vectors may also require licensing technologies and intellectual property from third parties.

Some of our licenses obligate us to exercise diligence in pursuing the development of product candidates, to make specified milestone payments and to pay royalties. In some instances, we are responsible for the costs of filing and prosecuting patent applications. These licenses generally expire upon the earlier of a fixed term of years after the date of the license or the expiration of the applicable patents, but each license is also terminable by the other party upon default by us of our obligations. Our inability or failure to meet our diligence requirements or make any payments required under these licenses would result in a reversion to the licensor of the rights granted which, with respect to the licenses pursuant to which we have obtained exclusive rights, would materially and adversely affect our ability to develop and market products based on our licensed technologies.

We may be unable to access or manufacture vectors or other gene-transfer technologies that we will need to develop and commercialize our regulated protein and cellular therapy product candidates.

We may not be able to access the gene-transfer technologies required to develop, manufacture, and commercialize our regulated protein therapy and cellular therapy product candidates. We are reliant on our ability to enter into license agreements with academic institutions, genetherapy companies and/or contract manufacturers that can provide us with rights to the necessary technology, production methods, and components of gene-delivery systems. The inability to reach an appropriate agreement with such an entity on reasonable commercial terms could delay or prevent the preclinical evaluation, clinical testing and/or commercialization of our product candidates. Our inability to access gene-transfer technology,

including suitable manufacturing methods, would have significant adverse effects on some of our product candidates, including their development timelines. If we do not market our product candidates, we will never become profitable. In addition, the intellectual property landscape covering gene-transfer technologies is uncertain and fragmented. Accordingly, if we select one partner as a source for selected intellectual property rights, we may find that we have not licensed sufficient rights to be able to commercialize our products or we may be forced to acquire additional rights or discontinue marketing our product candidates unexpectedly.

Competing technologies may render some or all of our programs or future products noncompetitive or obsolete.

Many well-known pharmaceutical, healthcare and biotechnology companies, academic and research institutions and government agencies, which have substantially greater capital, research and development capabilities and experience than us or our potential partners, are presently engaged in one or more of the following activities:

- Developing products based on cell signaling, genomics, proteomics, computational chemistry and protein and cellular therapies;
- Conducting research and development programs for the treatment of each of the disease areas in which we are focused; and
- Manufacturing, promoting, marketing and selling pharmaceutical or medical device products for treatment of diseases in all of the disease areas in which we are focused.

Some of these entities already have products on the market or product candidates in clinical trials or in more advanced preclinical studies than we do. By virtue of having or introducing competitive products on the market before us, these entities may gain a competitive advantage. Competing technologies may render some or all of our programs or future products noncompetitive or obsolete, and we may not be able to make the enhancements to our technology necessary to compete successfully with newly emerging technologies. If we are unable to successfully compete in our chosen markets, we will not become profitable.

If our product candidates are not accepted by physicians and insurers, we will not be successful.

Our success is dependent on the acceptance of our product candidates. Our product candidates may not achieve significant market acceptance among patients, physicians or third-party payors, even if we obtain necessary regulatory and reimbursement approvals. Failure to achieve significant market acceptance of our product candidates will harm our business. We believe that recommendations by physicians and health care payors will be essential for market acceptance of any product candidates. There is continued concern in the marketplace regarding the potential safety and effectiveness of gene and cell therapy products generally. Physicians and health care payors may conclude that any of our product candidates are not safe.

If we are unable to establish sales, marketing and distribution capabilities or to enter into agreements with third parties to do so, we may be unable to successfully market and sell any products.

We currently have no sales, marketing or distribution capabilities. If we are unable to establish sales, marketing or distribution capabilities either by developing our own sales, marketing and distribution organization or by entering into agreements with others, we may be unable to successfully sell any products that we are able to begin to commercialize. If we are unable to effectively sell our products, our ability to generate revenues will be harmed. We may not be able to hire, in a timely manner, the qualified sales and marketing personnel we need, if at all. In addition, we may not be able to enter into any marketing or distribution agreements on acceptable terms, if at all. If we cannot establish

sales, marketing and distribution capabilities as we intend, either by developing our own capabilities or entering into agreements with third parties, sales of future products, if any, may be harmed.

If we develop a product for commercial use, a subsequent product liability-related claim or recall could have an adverse effect on our business.

Our business exposes us to potential product liability risks inherent in the testing, manufacturing and marketing of pharmaceutical products, and we may not be able to avoid significant product liability exposure. A product liability-related claim or recall could be detrimental to our business. In addition, except for insurance covering product use in our clinical trials, we do not currently have any product liability insurance, and we may not be able to obtain or maintain such insurance on acceptable terms, or we may not be able to obtain any insurance to provide adequate coverage against potential liabilities. Our inability to obtain sufficient insurance coverage at an acceptable cost or otherwise to protect against potential product liability claims could prevent or limit the commercialization of any products that we develop.

Risks Relating to Governmental Approvals

We have limited experience in conducting clinical trials, which may cause delays in commencing and completing clinical trials of our product candidates.

Clinical trials must meet FDA and foreign regulatory requirements. We have limited experience in designing, conducting and managing the preclinical studies and clinical trials necessary to obtain regulatory approval for our product candidates in any country. We may encounter problems in clinical trials that may cause us or the FDA or foreign regulatory agencies to delay, suspend or terminate our clinical trials at any phase. These problems could include the possibility that we may not be able to manufacture sufficient quantities of cGMP materials for use in our clinical trials, conduct clinical trials at our preferred sites, enroll a sufficient number of patients for our clinical trials at one or more sites or begin or successfully complete clinical trials in a timely fashion, if at all. Furthermore, we, the FDA or foreign regulatory agencies may suspend clinical trials at any time if we or they believe the subjects participating in the trials are being exposed to unacceptable health risks or if we or they find deficiencies in the clinical trial process or conduct of the investigation. If clinical trials of any of our product candidates fail, we will not be able to market the product candidate which is the subject of the failed clinical trials. The FDA and foreign regulatory agencies could also require additional clinical trials, which would result in increased costs and significant development delays. Our failure to adequately demonstrate the safety and effectiveness of a pharmaceutical product candidate under development could delay or prevent regulatory approval of the product candidate and could have a material adverse effect on our business.

We may not be able to obtain government regulatory approval for our product candidates prior to marketing.

To date, we have not submitted a marketing application for any product candidate to the FDA or any foreign regulatory agency, and none of our product candidates have been approved for commercialization in any country. Prior to commercialization, each product candidate would be subject to an extensive and lengthy governmental regulatory approval process in the United States and in other countries. We may not be able to obtain regulatory approval for any product candidate we develop or even if approval is obtained, the labeling for such products may place restrictions on their use that could materially impact the marketability and profitability of the product subject to such restrictions. We have limited experience in designing, conducting and managing the clinical testing necessary to obtain such regulatory approval. Satisfaction of these regulatory requirements, which includes satisfying the FDA and foreign regulatory authorities that the product is both safe and effective for its intended therapeutic uses,

typically takes several years or more depending upon the type, complexity and novelty of the product and requires the expenditure of substantial resources.

Furthermore, the regulatory requirements governing our product candidates are uncertain. In particular, the FDA and other regulatory agencies have suspended certain gene and cellular therapy clinical trials due to concerns about the potential safety of certain gene-transfer vectors, which may lead to additional regulatory requirements for such products. Uncertainty with respect to the regulatory requirements for all of our product candidates may result in excessive costs or extensive delays in the regulatory approval process, adding to the already lengthy review process. If regulatory approval of a product is granted, such approval will be limited to those disease states and conditions for which the product is proven safe and effective, as demonstrated by clinical trials, and our products will be subject to ongoing regulatory reviews. Although we have been granted orphan drug designation by the FDA for AP1903, the small-molecule drug used in our graft-vs-host disease cellular therapy product candidate, this designation may be challenged by others or may prove to be of no practical benefit.

We will not be able to sell our product candidates, if we or our third-party manufacturers fail to comply with FDA manufacturing regulations.

Before we can begin to commercially manufacture our product candidates, we must either secure manufacturing in an approved manufacturing facility or obtain regulatory approval of our own manufacturing facility and processes. In addition, the manufacturing of our product candidates must comply with cGMP and/or cGTP requirements of the FDA and requirements by regulatory agencies in other countries. These requirements govern, among other things, quality control and documentation procedures. We, or any third-party manufacturer of our product candidates, may not be able to comply with these requirements, which would prevent us from selling such products. Material changes to the manufacturing processes of our products after approvals have been granted are also subject to review and approval by the FDA or other regulatory agencies.

Even if we bring products to market, we may be unable to effectively price our products or obtain adequate reimbursement for sales of our products, which would prevent our products from becoming profitable.

If we succeed in bringing our product candidates to the market, they may not be considered cost-effective, and coverage and adequate payments may not be available or may not be sufficient to allow us to sell our products on a competitive basis. In both the United States and elsewhere, sales of medical products and treatments are dependent, in part, on the availability of reimbursement from third-party payors, such as health maintenance organizations and other private insurance plans and governmental programs such as Medicare. Third-party payors are increasingly challenging the prices charged for pharmaceutical products and services. Our business is affected by the efforts of government and third-party payors to contain or reduce the cost of health care through various means. In the United States, there have been and will continue to be a number of federal and state proposals to implement government controls on pricing. Similar government pricing controls exist in varying degrees in other countries. In addition, the emphasis on managed care in the United States has increased and will continue to increase the pressure on the pricing of pharmaceutical products. We cannot predict whether any legislative or regulatory proposals will be adopted or the effect these proposals or managed care efforts may have on our business.

Risks Relating to Our Common Stock

Results of our operations and general market conditions for biotechnology stocks could result in the sudden change in the value of our stock.

As a biopharmaceutical company, we have experienced significant volatility in our common stock. Fluctuations in our operating results and general market conditions for biotechnology stocks could have a significant impact on the volatility of our common stock price. In the past twelve months, our

stock price ranged from a high bid price of \$4.84 to a low bid price of \$1.20. Factors contributing to such volatility include: results and timing of preclinical studies and clinical trials; evidence of the safety or effectiveness of pharmaceutical products; announcements of new collaborations; failure to enter into collaborations; our funding requirements; announcements of technological innovations or new therapeutic products; developments relating to intellectual property rights, including licensing and litigation, including our litigation with Eli Lilly and Company; governmental regulation; policies regarding recombinant DNA and gene therapy; healthcare or cost-containment legislation; general market trends for the biotechnology industry and related high-technology industries; the impact of changing interest rates and policies of the Federal Reserve; and public policy pronouncements.

SPECIAL NOTE REGARDING FORWARD-LOOKING STATEMENTS

The Securities and Exchange Commission encourages companies to disclose forward-looking information so that investors can better understand a company's future prospects and make informed investment decisions. This prospectus contains such "forward-looking statements" within the meaning of the Private Securities Litigation Reform Act of 1995. These statements may be made directly in this prospectus, and they may also be made a part of this prospectus by reference to other documents filed with the Securities and Exchange Commission, which is known as "incorporation by reference."

Words such as "may," "anticipate," "estimate," "expects," "projects," "intends," "plans," "believes" and words and terms of similar substance used in connection with any discussion of future operating or financial performance, identify forward-looking statements. All forward-looking statements are management's present expectations of future events and are subject to a number of risks and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. These risks include, but are not limited to, risks and uncertainties regarding our preclinical studies, our ability to conduct clinical trials of its product candidates and the results of such trials, as well as risks and uncertainties relating to economic conditions, markets, products, competition, intellectual property, services and prices, key employees, future capital needs, dependence on our collaborators and other factors. Please also see the discussion of risks and uncertainties under "Risk Factors."

In light of these assumptions, risks and uncertainties, the results and events discussed in the forward-looking statements contained in this prospectus or in any document incorporated by reference might not occur. Investors are cautioned not to place undue reliance on the forward-looking statements, which speak only as of the date of this prospectus or the date of the document incorporated by reference in this prospectus. We are not under any obligation, and we expressly disclaim any obligation, to update or alter any forward-looking statements, whether as a result of new information, future events or otherwise. All subsequent forward-looking statements attributable to us or to any person acting on our behalf are expressly qualified in their entirety by the cautionary statements contained or referred to in this section.

USE OF PROCEEDS

We cannot assure you that we will receive any proceeds in connection with shares of common stock offered pursuant to this prospectus. Unless otherwise indicated in the applicable prospectus supplement, we intend to use any net proceeds from the sale of our common stock for our operations and for other general corporate purposes, including, but not limited to, repayment or refinancing of existing indebtedness or other corporate borrowings, working capital, intellectual property protection and enforcement, capital expenditures, investments, acquisitions and repurchases and redemption of our securities. Pending application of the net proceeds as described above, we may initially invest the net proceeds in short-term, investment-grade, interest-bearing securities or apply them to the reduction of short-term indebtedness.

PLAN OF DISTRIBUTION

We may offer the common stock from time to time pursuant to underwritten public offerings, negotiated transactions, block trades or a combination of these methods. We may sell the common stock (1) through underwriters or dealers, (2) through agents, and/or (3) directly to one or more purchasers, or through a combination of such methods. We may distribute the common stock from time to time in one or more transactions at:

- a fixed price or prices, which may be changed;
- prices related to the prevailing market prices; or
- negotiated prices.

We may directly solicit offers to purchase the common stock being offered by this prospectus. We may also designate agents to solicit offers to purchase the common stock from time to time. We will name in a prospectus supplement any underwriter or agent involved in the offer or sale of our common stock.

If we utilize a dealer in the sale of the common stock being offered by this prospectus, we will sell the common stock to the dealer, as principal. The dealer may then resell the common stock to the public at varying prices to be determined by the dealer at the time of resale.

If we utilize an underwriter in the sale of the common stock being offered by this prospectus, we will execute an underwriting agreement with the underwriter at the time of sale, and we will provide the name of any underwriter in the prospectus supplement which the underwriter will use to make resales of the common stock to the public. In connection with the sale of the common stock, we may compensate the underwriter in the form of underwriting discounts or commissions. The underwriter may sell the common stock to or through dealers, and the underwriter may compensate those dealers in the form of discounts, concessions or commissions.

With respect to underwritten public offerings, negotiated transactions and block trades, we will provide in the applicable prospectus supplement any compensation we pay to underwriters, dealers or agents in connection with the offering of the common stock, and any discounts, concessions or commissions allowed by underwriters to participating dealers. Underwriters, dealers and agents participating in the distribution of the common stock may be deemed to be underwriters within the meaning of the Securities Act of 1933, as amended (the "Securities Act") and any discounts and commissions received by them and any profit realized by them on resale of the common stock may be deemed to be underwriting discounts and commissions. We may enter into agreements to indemnify underwriters, dealers and agents against civil liabilities, including liabilities under the Securities Act, or to contribute to payments they may be required to make in respect thereof.

Shares of our common stock sold pursuant to the registration statement of which this prospectus is a part will be authorized for quotation and trading on the Nasdaq National Market. In connection with firm commitment underwritten offerings of our common stock registered hereunder, certain persons participating in such offerings may engage in transactions that stabilize, maintain or otherwise affect the price of our common stock to facilitate such offerings. This may include over-allotments or short sales of the common stock, which involve the sale by persons participating in such offerings of more shares of common stock than we sold to them. In these circumstances, these persons would cover such over-allotments or short positions by making purchases in the open market or by exercising their over-allotment option. In addition, these persons may stabilize or maintain the price of

the common stock by bidding for or purchasing the common stock in the open market or by imposing penalty bids, whereby selling concessions allowed to dealers participating in the offering may be reclaimed if the shares of common stock sold by them are repurchased in connection with stabilization transactions. The effect of these transactions may be to stabilize or maintain the market price of our common stock at a level above that which might otherwise prevail in the open market. These transactions may be discontinued at any time.

The underwriters, dealers and agents may engage in other transactions with us, or perform other services for us, in the ordinary course of their business.

LEGAL MATTERS

Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C., Boston, Massachusetts, will pass upon the validity of the issuance of the common stock offered by this prospectus. Members of Mintz, Levin, Cohn, Ferris, Glovsky and Popeo, P.C. and certain members of their families and trusts for their benefit own an aggregate of approximately 14,000 shares of our common stock.

EXPERTS

The financial statements incorporated in this prospectus by reference from the Company's Annual Report on Form 10-K for the year ended December 31, 2002 have been audited by Deloitte & Touche LLP, independent auditors, as stated in their report, which is incorporated herein by reference, and have been so incorporated in reliance upon the report of such firm given upon their authority as experts in accounting and auditing.

WHERE YOU CAN FIND MORE INFORMATION

We are subject to the reporting requirements of the Securities Exchange Act of 1934, as amended, and file annual, quarterly and current reports, proxy statements and other information with the SEC. You may read and copy these reports, proxy statements and other information at the SEC's public reference facilities at Judiciary Plaza, 450 Fifth Street, N.W., Room 1200, Washington, D.C. 20549. You can request copies of these documents by writing to the SEC and paying a fee for the copying cost. Please call the SEC at 1-800-SEC-0330 for more information about the operation of the public reference facilities. SEC filings are also available at the SEC's Web site at http://www.sec.gov. Our common stock is listed on the Nasdaq National Market, and you can read and inspect our filings at the offices of the National Association of Securities Dealers, Inc. at 1735 K Street, Washington, D.C. 20006.

This prospectus is only part of a Registration Statement on Form S-3 that we have filed with the SEC under the Securities Act of 1933 and therefore omits certain information contained in the Registration Statement. We have also filed exhibits and schedules with the Registration Statement that are excluded from this prospectus, and you should refer to the applicable exhibit or schedule for a complete description of any statement referring to any contract or other document. You may inspect a copy of the Registration Statement, including the exhibits and schedules, without charge, at the public reference room or obtain a copy from the SEC upon payment of the fees prescribed by the SEC.

INCORPORATION OF DOCUMENTS BY REFERENCE

The SEC allows us to "incorporate by reference" information that we file with them. Incorporation by reference allows us to disclose important information to you by referring you to those other documents. The information incorporated by reference is an important part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We filed a Registration Statement on Form S-3 under the Securities Act of 1933, as amended, with the SEC with respect to the common stock being offered pursuant to this prospectus. This prospectus omits certain information contained in the Registration Statement, as permitted by the SEC. You should refer to the Registration Statement, including the exhibits, for further information about us and the common stock being offered pursuant to this prospectus. Statements in this prospectus regarding the provisions of certain documents filed with, or incorporated by reference in, the Registration Statement are not necessarily complete and each statement is qualified in all respects by that reference. Copies of all or any part of the Registration Statement, including the documents incorporated by reference or the exhibits, may be obtained upon payment of the prescribed rates at the offices of the SEC listed above in "Where to Find More Information." The documents we are incorporating by reference are:

- (a) Our annual report on Form 10-K for the fiscal year ended December 31, 2002;
- (b) Our definitive proxy statement on Schedule 14A filed on May 15, 2003;
- (c) Our quarterly report on Form 10-Q for the fiscal quarter ended March 31, 2003;
- (d) Our current reports on Form 8-K filed on January 3, 2003, January 14, 2003, February 4, 2003, February 24, 2003, March 11, 2003, May 7, 2003, May 9, 2003, May 14, 2003, May 19, 2003; May 30, 2003; June 12, 2003; July 3, 2003; July 7, 2003 and July 14, 2003;
- (e) The description of our common stock contained in our registration statement on Form 10 filed on June 25, 1993, including any amendment or report filed for the purpose of updating such description; and
- (f) The description of our preferred share purchase rights contained in our registration statement on Form 8-A filed on June 19, 2002, including any amendment or report filed for the purpose of updating such description.

In addition, all documents subsequently filed by us pursuant to Section 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934, as amended, before the date our offering is terminated or complete are deemed to be incorporated by reference into, and to be a part of, this prospectus.

Any statement contained in this prospectus or in a document incorporated or deemed to be incorporated by reference into this prospectus will be deemed to be modified or superseded for purposes of this prospectus to the extent that a statement contained in this prospectus or any other subsequently filed document that is deemed to be incorporated by reference into this prospectus modifies or supersedes the statement. Any statement so modified or superseded will not be deemed, except as so modified or superseded, to constitute a part of this prospectus.

You may request, orally or in writing, a copy of these documents, which will be provided to you at no cost, by contacting: Investor Relations, ARIAD Pharmaceuticals, Inc., 26 Landsdowne Street, Cambridge, Massachusetts 02139-4234. Our telephone number is (617) 494-0400.

You should rely only on information contained in, or incorporated by reference into, this prospectus and any prospectus supplement. We have not authorized anyone to provide you with information different from that contained in this prospectus or incorporated by reference in this prospectus. We are not making offers to sell the securities in any jurisdiction in which such an offer or solicitation is not authorized or in which the person making such offer or solicitation is not qualified to do so or to anyone to whom it is unlawful to make such offer or solicitation.