

ANTIGENICS INC /DE/  
Form S-3/A  
July 10, 2003

**Table of Contents**

As filed with the Securities and Exchange Commission on July 10, 2003

Registration No. 333-104832

**UNITED STATES SECURITIES AND EXCHANGE COMMISSION**

Washington, D.C. 20549

**Pre-Effective Amendment No. 2 to**

**FORM S-3**

**REGISTRATION STATEMENT UNDER THE SECURITIES ACT OF 1933**

**ANTIGENICS INC.**

(Exact name of registrant as specified in its charter)

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

**06-1562417**  
(I.R.S. Employer  
Identification Number)

**630 Fifth Avenue, Suite 2100  
New York, New York 10111  
(212) 994-8200**

(Address, including zip code, and telephone number, including area code, of registrant's principal executive offices)

**Garo H. Armen, Ph.D.  
Chief Executive Officer and Chairman  
Antigenics Inc.  
630 Fifth Avenue, Suite 2100  
New York, New York 10111  
(212) 994-8200**

(Name, address, including zip code, and telephone number, including area code, of agent for service)

with copies to:  
**Paul M. Kinsella, Esq.  
Ropes & Gray LLP  
One International Place  
Boston, Massachusetts 02110  
(617) 951-7000**

Approximate date of commencement of proposed sale to the public:  
From time to time after the effective date of this Registration Statement.

If the only securities being registered on this form are being offered pursuant to dividend or interest reinvestment plans, please check the following box.

If any of the securities being registered on this form are to be offered on a delayed or continuous basis pursuant to Rule 415 under the Securities Act of 1933, as amended (the Securities Act ) other than securities offered only in connection with dividend or interest reinvestment plans, check the following box.

Edgar Filing: ANTIGENICS INC /DE/ - Form S-3/A

If this form is filed to register additional securities for an offering pursuant to Rule 462(b) under the Securities Act, please check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If this form is a post-effective amendment filed pursuant to Rule 462(c) under the Securities Act, check the following box and list the Securities Act registration statement number of the earlier effective registration statement for the same offering. o

If delivery of the prospectus is expected to be made pursuant to Rule 434, please check the following box. o

**The registrant hereby amends this registration statement on such date or dates as may be necessary to delay its effective date until the registrant shall file a further amendment which specifically states that this registration statement shall thereafter become effective in accordance with Section 8(a) of the Securities Act or until the registration statement shall become effective on such date as the Securities and Exchange Commission, acting pursuant to said Section 8(a), may determine.**

---

**Table of Contents**

The information in the prospectus is not complete and may be changed. We may not sell these securities until the registration statement filed with the Securities and Exchange Commission is effective. This prospectus is not an offer to sell these securities and we are not soliciting an offer to buy these securities in any state where an offer is not permitted.

Subject to Completion, dated July 10, 2003

**PROSPECTUS**

\$100,000,000

**ANTIGENICS INC.**

Common Stock, Preferred Stock and Debt Securities

We may offer to the public from time to time in one or more series or issuances:

shares of our common stock;

shares of our preferred stock; or

debt securities consisting of debentures, notes or other evidences of indebtedness.

Our common stock trades on the Nasdaq National Market under the symbol AGEN.

This prospectus provides you with a general description of the securities that we may offer. Each time we sell securities, we will provide a prospectus supplement that will contain specific information about the terms of that offering. The prospectus supplement may also add, update or change information contained in this prospectus. You should read both this prospectus and any prospectus supplement together with additional information described under the heading **Where You Can Find More Information** before you make your investment decision. We will reflect any fundamental change to the terms of the offering in a post-effective amendment to the registration statement which includes this prospectus.

**Investing in our securities involves a high degree of risk. Before buying any of our securities, you should carefully consider the matters described under **Risk Factors** beginning on page 3 and any comparable section in a prospectus supplement.**

We will sell the securities to underwriters or dealers, through agents, or directly to investors.

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

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

The date of this prospectus is \_\_\_\_\_, 2003.

**TABLE OF CONTENTS**

ABOUT THIS PROSPECTUS

RISK FACTORS

NOTE REGARDING FORWARD-LOOKING STATEMENTS

ANTIGENICS INC.

USE OF PROCEEDS

RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS

DESCRIPTION OF COMMON STOCK

DESCRIPTION OF PREFERRED STOCK

DESCRIPTION OF DEBT SECURITIES

ANTI-TAKEOVER EFFECTS OF DELAWARE LAW AND OF OUR CHARTER AND BY-LAWS

PLAN OF DISTRIBUTION

LEGAL MATTERS

EXPERTS

INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE

WHERE YOU CAN FIND MORE INFORMATION

EX-23.1 CONSENT OF KPMG LLP

---

**Table of Contents**

**TABLE OF CONTENTS**

	<b>Page</b>
About This Prospectus	3
Risk Factors	3
Note Regarding Forward-Looking Statements	3
Antigenics Inc.	3
Use of Proceeds	3
Ratio of Earnings to Fixed Charges and Preferred Stock Dividends	3
Description of Common Stock	4
Description of Preferred Stock	5
Description of Debt Securities	6
Anti-Takeover Effects of Delaware Law and of Our Charter and By-Laws	14
Plan of Distribution	15
Legal Matters	16
Experts	16
Incorporation of Certain Documents by Reference	17
Where You Can Find More Information	17
Oncophage®, Aroplatin and Qulvax-FELV are trademarks of Antigenics Inc. Other trademarks included herein are the property of their respective owners.	

**Table of Contents**

**ABOUT THIS PROSPECTUS**

This prospectus is part of the Registration Statement that we filed with the Securities and Exchange Commission, or SEC, using a shelf registration process. Under the shelf process, we may, from time to time, issue and sell to the public any combination of the securities described in the registration statement in one or more offerings.

**RISK FACTORS**

You should carefully consider the following risk factors before you decide to purchase any of our securities. Any of these risks could have a material adverse impact on our business, financial condition, operating results or cash flows. This could cause the trading price of our securities to decline, and you may lose part or all of your investment.

**RISKS RELATED TO OUR BUSINESS**

**IF WE INCUR OPERATING LOSSES FOR LONGER THAN WE EXPECT, WE MAY BE UNABLE TO CONTINUE OUR OPERATIONS.**

From our inception through March 31, 2003, we have generated net losses totaling \$227 million. Our net losses for the three months ended March 31, 2003, and for the years ended December 31, 2002, 2001, and 2000 were \$13 million, \$56 million, \$74 million and \$47 million, respectively. We expect to incur increasing and significant losses over the next several years as we continue our clinical trials, apply for regulatory approvals, continue development of our technologies, and expand our operations. Phase III clinical trials are particularly expensive to conduct. We do not expect to generate significant revenues for several years.

**IF WE ARE UNABLE TO EXECUTE A LONG-TERM SUPPLY AGREEMENT, WE MAY NOT GENERATE FURTHER REVENUES.**

To date, we have generated product sales revenue from only one product, our feline leukemia vaccine named Quilvax-FELV . Our revenues from Quilvax-FELV were \$0.9 million, \$2.6 million, \$1.6 million and \$363,000 for the three months ended March 31, 2003 and for the years ended 2002, 2001 and 2000, respectively. These revenues are generated through sales of Quilvax-FELV to our marketing partner Virbac, S.A. Our original supply agreement with Virbac, S.A. expired in July 2002, at which point we began to supply product to Virbac, S.A. through month-to-month supply agreements. A long-term supply agreement is under negotiation. If a long-term agreement is not executed, or if we cease to ship them product on a month-to-month basis, we may not generate further revenues from the sale of this product, which is the only product we currently sell. However, the foregone profits from sales of this product would not be substantial. In addition, any regulatory, marketing or other difficulties we experience with Quilvax-FELV, could jeopardize that revenue stream.

**IF WE FAIL TO OBTAIN THE CAPITAL NECESSARY TO FUND OUR OPERATIONS, WE WILL BE UNABLE TO ADVANCE OUR DEVELOPMENT PROGRAMS AND COMPLETE OUR CLINICAL TRIALS.**

On March 31, 2003, we had approximately \$103.1 million in cash, cash equivalents and short-term investments. In January 2003, we sold 6,250,000 shares of our common stock, raising net proceeds of \$59.5 million. We expect that we could fund our development programs, clinical trials, and other operating expenses into the third quarter of 2004. We plan to raise additional funds prior to that time. For the three months ended March 31, 2003, our average monthly cash used in operating activities plus our average monthly capital expenditures was approximately \$4.9 million. We anticipate additional capital expenditures ranging from \$10 million to \$15 million for the remainder of 2003. Since our inception, we have financed our operations primarily through the sale of equity. In order to finance our future operations, we will be required to raise additional funds in the capital markets, through arrangements with corporate partners, or from other sources. Additional financing, however, may not be available on favorable terms or at all. If we are unable to raise additional funds when we need them, we may be required to delay, reduce or eliminate some or all of our development programs and some or all of our clinical trials, including the development programs and clinical trials supporting our lead cancer vaccine, Oncophage. We also may be forced to license technologies to others under the agreements which allocate to third parties substantial portions of the potential value of these technologies.

**WE MAY NOT RECEIVE SIGNIFICANT PAYMENTS FROM COLLABORATORS DUE TO UNSUCCESSFUL RESULTS IN EXISTING COLLABORATIONS OR FAILURE TO ENTER INTO FUTURE COLLABORATIONS.**

Part of our strategy is to develop and commercialize some of our products by continuing our existing collaborative arrangements with academic and corporate collaborators and licensees and by entering into new collaborations. Our success depends on our ability to negotiate such agreements and on the success of the other parties in performing research, preclinical and clinical testing. Our collaborations involving QS-21, for example, depend on our partners successfully completing clinical trials and obtaining regulatory approvals. These activities

## Edgar Filing: ANTIGENICS INC /DE/ - Form S-3/A

frequently fail to produce marketable products. For example, in March 2002, Elan Corporation and Wyeth Ayerst Laboratories announced a decision to permanently cease dosing patients in their Phase IIA clinical trial of their lead Alzheimer's vaccine containing our QS-21 adjuvant. Several of our agreements also require us to transfer important rights to our collaborators and licensees. As a result of collaborative agreements, we may not completely control the nature, timing or cost of bringing these products to market. These collaborators and licensees could choose not to devote resources to these arrangements or, under certain circumstances, may terminate these arrangements early. They may cease pursuing the program or elect to collaborate with a different company. In addition, these collaborators and licensees, outside of their arrangements with us, may develop technologies or products that are competitive with those that we are developing. From time to time we may also become involved in disputes with our collaborators. As a result of these factors, our strategic collaborations may not yield revenues. In addition, we may be unable to enter into new collaborations or enter into new collaborations on favorable terms. Failure to generate significant revenue from collaborations would increase our need to fund our operations through sales of securities.

**WE MUST RECEIVE SEPARATE REGULATORY APPROVALS FOR EACH OF OUR DRUGS AND VACCINES FOR EACH TYPE OF DISEASE BEFORE WE CAN MARKET AND SELL THEM IN THE UNITED STATES OR INTERNATIONALLY.**

We and our collaborators cannot sell any drug or vaccine until it receives regulatory approval from federal, state and local governmental authorities in the United States, including the United States Food and Drug Administration, or FDA, and from similar agencies in other countries. Oncophage and any other drug candidate could take a significantly longer time to gain regulatory approval than we expect or may never gain approval.

We expect to announce the preliminary results from our Phase III trial of Oncophage for patients with renal cell carcinoma during the fourth quarter of 2003. Because Oncophage is our flagship product candidate, negative or inconclusive results would have a significant negative impact on our prospects. Similarly, if the preliminary results from our Phase III trial of Oncophage for patients with melanoma are not positive, our prospects would be impacted adversely. Furthermore, positive preliminary results from these trials would not assure that the final results of the clinical trials will demonstrate efficacy. Sometimes interim data is not predictive of final results. In addition, clinical trial results are subject to varying interpretations. The FDA and other regulatory agencies must interpret the results prior to approving Oncophage for commercial sale in a particular indication. These regulatory agencies may not view data generated from our clinical trials as sufficient for approval. If the results in our Phase III trials are not sufficiently positive to garner approval from regulatory agencies, we may abandon development of Oncophage for the applicable indication or we may expend considerable resources repeating the trials with reduced prospects for generating revenue in the near term.

**THE REGULATORY APPROVAL PROCESS IS UNCERTAIN, TIME-CONSUMING AND EXPENSIVE.**

The process of obtaining and maintaining regulatory approvals for new therapeutic products is lengthy, expensive and uncertain. It also can vary substantially, based on the type, complexity and novelty of the product. Our flagship product candidate, Oncophage, is a novel cancer therapeutic vaccine that is personalized for each patient. To date, the FDA and foreign regulatory agencies have approved only a limited number of cancer therapeutic vaccines for commercial sale and have relatively little experience in reviewing personalized medicine therapies. This lack of experience may lengthen the regulatory review process for Oncophage, increase our development costs and delay or prevent commercialization.

To obtain regulatory approvals, we must, among other requirements, complete carefully controlled and well-designed clinical trials demonstrating that a particular drug or vaccine is safe and effective for the applicable disease. Several biotechnology companies have failed to obtain regulatory approvals because regulatory agencies were not satisfied with the structure of clinical trials or the ability to interpret the data from the trials; we may encounter similar problems. The timing and success of a clinical trial is dependent on enrolling sufficient patients in a timely manner, avoiding adverse patient reactions, and demonstrating in a scientifically significant manner the efficacy of a product. We rely on third party clinical investigators to conduct our clinical trials and as a result, we may encounter delays outside our control. Future clinical trials may not show that our drugs and vaccines are safe and effective. In addition, we or the FDA might delay or halt the clinical trials, including our Phase III trials of Oncophage, for various reasons, including:

failure to comply with extensive FDA regulations;

the product may not appear to be more effective than current therapies;

the product may have unforeseen or significant adverse side effects or other safety issues;

the time required to determine whether the product is effective may be longer than expected;

we may be unable to adequately follow or evaluate patients after treatment with the product;

patients may die during a clinical trial because their disease is too advanced or because they experience medical problems that may not be related to the product;



sufficient numbers of patients may not enroll in our clinical trials; or

we may be unable to produce sufficient quantities of the product to complete the trial.

Furthermore, regulatory authorities, including the FDA, may have varying interpretations of our pre-clinical and clinical trial data, which could delay, limit or prevent regulatory approval or clearance. Any delays or difficulties in obtaining regulatory approval or clearances for our drugs or vaccines may:

adversely affect the marketing of any products we or our collaborators develop;

impose significant additional costs on us or our collaborators;

diminish any competitive advantages that we or our collaborators may attain; and

limit our ability to receive royalties and generate revenue and profits.

If we do not receive regulatory approval for our products in a timely manner, we will not be able to commercialize them, and, therefore, our business will suffer.

**EVEN IF WE RECEIVE REGULATORY APPROVAL FOR OUR PRODUCTS, THE FDA MAY IMPOSE LIMITATIONS ON THE INDICATED USES FOR WHICH OUR PRODUCTS MAY BE MARKETED OR SUBSEQUENTLY WITHDRAW APPROVAL.**

The FDA and international regulatory authorities generally approve products for particular indications. If an approval is for a limited indication, this limitation could reduce the size of the potential market for that product. Product approvals, once granted, may be withdrawn if problems occur after initial marketing. Failure to comply with applicable FDA and other regulatory requirements can result in, among other things, warning letters, fines, injunctions, civil penalties, recall or seizure of products, total or partial suspension of production, refusal of the government to renew our marketing applications and criminal prosecution.

**IF WE ARE UNABLE TO PURIFY HEAT SHOCK PROTEINS FROM SOME CANCER TYPES, THE SIZE OF OUR POTENTIAL MARKET WOULD DECREASE.**

Heat shock proteins occur naturally in the human body and activate powerful cellular immune responses. Our ability to successfully commercialize Oncophage for a particular cancer type depends on our ability to purify heat shock proteins from that type of cancer. Based on our clinical trials conducted to date, in renal cell carcinoma, we have been able to manufacture Oncophage from 93% of the tumors delivered to our manufacturing facility; for melanoma, 87%; for colorectal cancer, 98%; for gastric cancer, 81%; for lymphoma, 89%; and for pancreatic cancer, 30%. The relatively low rate for pancreatic cancer is due to the abundance of proteases in pancreatic tissue. Proteases are enzymes that break down proteins. These proteases may degrade the heat shock proteins during the purification process. We have recently made process development advances that have improved the manufacture of Oncophage from pancreatic tissue. In an expanded Phase I pancreatic cancer study, Oncophage was manufactured from five of five tumor samples (100%), bringing the aggregate success rate for this cancer type to 46%.

We may encounter this problem or similar problems with other types of cancers as we expand our research. If we cannot overcome these problems, the number of cancer types that Oncophage could treat would be limited.

**IF WE FAIL TO SUSTAIN AND FURTHER BUILD OUR INTELLECTUAL PROPERTY RIGHTS, COMPETITORS WILL BE ABLE TO TAKE ADVANTAGE OF OUR RESEARCH AND DEVELOPMENT EFFORTS TO DEVELOP COMPETING PRODUCTS.**

If we are not able to protect our proprietary technology, trade secrets and know-how, our competitors may use our inventions to develop competing products. We currently have exclusive rights to 74 issued United States patents and 112 foreign patents. We also have rights to 60 pending United States patent applications and 112 pending foreign patent applications. However, our patents may not protect us against our competitors. The standards which the United States Patent and Trademark Office uses to grant patents, and the standards which courts use to interpret patents, are not always applied predictably or uniformly and can change, particularly as new technologies develop. Consequently, the level of protection, if any, that will be provided by our patents if we attempt to enforce them and they are challenged in court, is uncertain. In addition, the type and extent of patent claims that will be issued to us in the future is uncertain. Any patents which are issued may not contain claims which will permit us to stop competitors from using similar technology.

In addition to our patented technology, we also rely on unpatented technology, trade secrets and confidential information. We may not be able to effectively protect our rights to this technology or information. Other parties may independently develop substantially equivalent information and techniques or otherwise gain access to or disclose our technology. We generally require each of our employees, consultants, collaborators, and certain contractors to execute a confidentiality agreement at the commencement of an employment, consulting, collaborative or contractual relationship with us. However, these agreements may not provide effective protection of our technology or information or, in the event of unauthorized use or disclosure, they may not provide adequate remedies.

## Edgar Filing: ANTIGENICS INC /DE/ - Form S-3/A

WE MAY INCUR SUBSTANTIAL COSTS AS A RESULT OF LITIGATION OR OTHER PROCEEDINGS RELATING TO PATENT AND OTHER INTELLECTUAL PROPERTY RIGHTS AND WE MAY BE UNABLE TO PROTECT OUR RIGHTS TO, OR USE, OUR TECHNOLOGY.

If we choose to go to court to stop someone else from using the inventions claimed in our patents, that individual or company has the right to ask the court to rule that our patents are invalid and should not be enforced against that third party. These lawsuits are expensive and would consume time and other resources even if we were successful in stopping the infringement of our patents. In addition, there is a risk that the court will decide that our patents are not valid and that we do not have the right to stop the other party from using the inventions. There is also the risk that, even if the validity of our patents is upheld, the court will refuse to stop the other party on the ground that such other party's activities are not covered by (that is, do not infringe) our patents.

Furthermore, a third party may claim that we are using inventions covered by such third party's patents and may go to court to stop us from engaging in our normal operations and activities. These lawsuits are expensive and would consume time and other resources. There is a risk that a court would decide that we are infringing the third party's patents and would order us to stop the activities covered by the patents. In addition, there is a risk that a court will order us to pay the other party damages for having violated the other party's patents. The biotechnology industry has produced a proliferation of patents, and it is not always clear to industry participants, including us, which patents cover various types of products. The coverage of patents is subject to interpretation by the courts, and the interpretation is not always uniform. We know of patents issued to third parties relating to heat shock proteins and alleviation of symptoms of cancer, respectively. We have reviewed these patents, and we believe, as to each claim in the patents, that we either do not infringe the claim of the patents or that the claim is invalid. Moreover, patent holders sometimes send communications to a number of companies in related fields, suggesting possible infringement, and we, like a number of biotech companies, have received this type of communication, including with respect to the third party patents mentioned above. If we are sued for patent infringement, we would need to demonstrate that our products either do not infringe the patent claims of the relevant patent and/or that the patent claims are invalid, and we may not be able to do this. Proving invalidity, in particular, is difficult since it requires a showing of clear and convincing evidence to overcome the presumption of validity enjoyed by issued patents. Additionally, one of the patent applications licensed to us contains claims that are substantially the same as claims in three of the third party patents relating to heat shock proteins. The United States Patent and Trademark Office has declared an interference proceeding with respect to our pending U.S. Patent Application Serial No. 08/527,391 and two of these third party patents (U.S. Patent No. 5,747,332 and U.S. Patent No. 6,066,716) to resolve this conflict. Our request to have the third patent (U.S. Patent No. 6,433,141) included within the interference is under consideration by the Patent and Trademark Office. The claims of our application are concerned with technology relating to certain heat shock protein-peptide complexes and methods for preparing those complexes. In an interference proceeding, the party with the earliest effective filing date has certain advantages. Although we believe that our claims have an earlier effective filing date than the conflicting claims of the other patents, if this third party were to prevail in the interference proceeding, it could result in abandonment of our patent application and the potential need to seek a license from this party which may not be available on reasonable terms, if at all.

Some of our competitors may be able to sustain the costs of complex patent litigation more effectively than we can because they have substantially greater resources. In addition, any uncertainties resulting from the initiation and continuation of any litigation could have a material adverse effect on our ability to continue our operations.

WE FACE LITIGATION THAT COULD RESULT IN SUBSTANTIAL DAMAGES AND MAY DIVERT MANAGEMENT'S TIME AND ATTENTION FROM OUR BUSINESS.

Antigenics, our chairman and chief executive officer, Garo H. Armen, Ph.D., and two brokerage firms that served as underwriters in our initial public offering have been named as defendants in a civil class action lawsuit filed on November 5, 2001 in the Federal District Court in the Southern District of New York. Dr. Armen was dismissed without prejudice from these claims in October 2002. Several of plaintiff's claims against Antigenics were dismissed with leave to amend in February 2003. For more detail regarding the status of the litigation as of March 31, 2003, please see the description under Item 1, Legal Proceedings in our Quarterly Report on Form 10-Q for the quarter ended March 31, 2003.

The suit alleges that these underwriters charged secret excessive commissions to certain of their customers in return for allocations of our stock in the offering. The suit also alleges that shares of our stock were allocated to certain of the underwriters' customers based upon an agreement by such customers to purchase additional shares of our stock in the secondary market. We could be required to pay substantial damages and, regardless of the outcome, the lawsuit may cause a diversion of our management's time and attention from our business.

In addition, we are involved in other litigation and may become involved in additional litigation with our commercial partners or with others. Any such litigation could be expensive in terms of out-of-pocket costs and management time, and the outcome of any such litigation will be uncertain.

IF WE FAIL TO KEEP KEY MANAGEMENT AND SCIENTIFIC PERSONNEL, WE MAY BE UNABLE TO SUCCESSFULLY DEVELOP OUR THERAPEUTIC DRUGS OR VACCINES, CONDUCT CLINICAL TRIALS AND OBTAIN FINANCING.

We are highly dependent on our senior management and scientific personnel, particularly Garo H. Armen, Ph.D., our chairman and chief executive officer, Pramod K. Srivastava, Ph.D., our scientific founder, a member of our board of directors and chairman of our scientific advisory board, Russell Herndon, our president and chief operating officer, and Elma Hawkins, Ph.D., our vice chairman. Since our manufacturing process is unique, our manufacturing and quality control personnel are also very important. The competition for these and other qualified personnel in the biotechnology field is intense. We have no employment agreements with Dr. Armen or Mr. Herndon. We have an employment agreement with Dr. Hawkins. The initial expiration date of Dr. Hawkins' employment agreement was June 1, 1999, and since that date her employment agreement has automatically renewed for one-year periods. Dr. Hawkins' employment agreement will continue to automatically renew for one-year periods unless either party decides not to renew the employment agreement. If we are not able to attract and retain qualified scientific, technical and managerial personnel, we may be unable to achieve our business objectives. In addition, we do not carry key employee insurance policies.

We sponsor research in Dr. Srivastava's laboratory at the University of Connecticut Health Center in exchange for the right to license discoveries made in that laboratory with our funding. Dr. Srivastava is a member of the faculty of the University of Connecticut School of Medicine. The regulations and policies of the University of Connecticut Health Center govern the relationship between a faculty member and a commercial enterprise. These regulations and policies prohibit Dr. Srivastava from becoming our employee. Furthermore, the University of Connecticut may modify these regulations and policies in the future to further limit Dr. Srivastava's relationship with us. Dr. Srivastava has a consulting agreement with us, which includes financial incentives for him to remain associated with us, but that may not be enough to compel him to remain associated with us even during the time covered by the consulting agreement. In addition, this agreement does not restrict his ability to compete against us after his association is terminated. This agreement expires in March 2005, but will be automatically extended for additional one-year periods unless either party decides not to extend the agreement. If Dr. Srivastava were to terminate this affiliation with us, we may not have access to future discoveries he makes that could advance our technologies.

**IF WE FAIL TO OBTAIN ADEQUATE LEVELS OF REIMBURSEMENT FOR OUR THERAPEUTIC DRUGS OR VACCINES FROM THIRD PARTY PAYERS, THE COMMERCIAL POTENTIAL OF OUR THERAPEUTIC DRUGS OR VACCINES WILL BE SIGNIFICANTLY LIMITED.**

Our profitability will depend on the extent to which government authorities, private health insurance providers and other organizations provide reimbursement for the cost of our therapeutic drugs or vaccines. Many patients will not be capable of paying for our therapeutic drugs or vaccines themselves. A primary trend in the United States health care industry is toward cost containment. Large private payers, managed care organizations, group purchasing organizations and similar organizations are exerting increasing influence on decisions regarding the use of particular treatments. Furthermore, many third party payers limit reimbursement for newly approved health care products. Cost containment measures may prevent us from becoming profitable.

**PRODUCT LIABILITY AND OTHER CLAIMS AGAINST US MAY REDUCE DEMAND FOR OUR PRODUCTS OR RESULT IN SUBSTANTIAL DAMAGES.**

We face an inherent risk of product liability exposure related to testing our therapeutic drugs or vaccines in human clinical trials and will face even greater risks when we sell our drugs or vaccines commercially. An individual may bring a product liability claim against us if one of our drugs or vaccines causes, or merely appears to have caused, an injury. Product liability claims may result in:

- decreased demand for our therapeutic drugs or vaccines;
- injury to our reputation;
- withdrawal of clinical trial volunteers;
- costs of related litigation; and
- substantial monetary awards to plaintiffs.

We manufacture Oncophage from a patient's tumor and a medical professional must inject Oncophage into that same patient. A patient may sue us if we, a hospital or a delivery company fails to deliver the removed tumor or that patient's Oncophage. We anticipate that the logistics of shipping will become more complex as the number of patients we treat increases, and it is possible that all shipments will not be made without incident. In addition, administration of Oncophage at a hospital poses another chance for delivery to the wrong patient. Currently, we do not have insurance that covers loss of or damage to Oncophage and do not know whether insurance will be available to us at a reasonable price or at all.

We have limited product liability coverage for clinical research use of product candidates as well as for the commercial sale of Quilvax-FELV. Our product liability policy provides \$10 million aggregate coverage and \$10 million per occurrence. This limited insurance coverage may be insufficient to fully compensate us for future claims.

## Edgar Filing: ANTIGENICS INC /DE/ - Form S-3/A

### WE MAY INCUR SIGNIFICANT COSTS COMPLYING WITH ENVIRONMENTAL LAWS AND REGULATIONS.

We use hazardous, infectious and radioactive materials in our operations, which have the potential of being harmful to human health and safety or the environment. We store these flammable, corrosive, toxic, infectious, radioactive materials and various wastes resulting from their use at our facility pending ultimate use and disposal. We are subject to a variety of federal, state and local laws and regulations governing use, generation, storage, handling and disposal of these materials. We may incur significant costs complying with both current and future environmental health and safety laws and regulations. In particular, we are subject to regulation by the Occupational Safety and Health Administration, the Environmental Protection Agency, the Drug Enforcement Agency, the Department of Transportation, the Center for Disease Control and Prevention, the National Institutes of Health, the International Air Transportation Association and various state and local agencies. We are also subject to regulation under the Toxic Substances Control Act and the Resource Conservation development programs. At anytime one or more of the aforementioned agencies could adopt regulation that may affect our operations. We are unable to predict whether any agency will adopt new regulations that could have an adverse material effect on our or on our programs.

Although our current procedures and programs for handling, storage and disposal of these materials comply with federal, state and local laws and regulations, we cannot entirely eliminate the risk of accidental injury or contamination from these materials. Although we have limited pollution liability coverage (\$2,000,000) and a workers' compensation liability policy, in the event of an accident or accidental release, we could be held liable for resulting damages, which could be substantial.

### OUR COMPETITORS IN THE BIOTECHNOLOGY AND PHARMACEUTICAL INDUSTRIES MAY HAVE SUPERIOR PRODUCTS, MANUFACTURING CAPABILITY OR MARKETING EXPERTISE.

Our business may fail because we face intense competition from major pharmaceutical companies and specialized biotechnology companies engaged in the development of therapeutic drugs or vaccines and other therapeutic products, including heat shock proteins directed at cancer, infectious diseases, autoimmune disorders, and degenerative disorders. Several of these companies have products that utilize similar technologies and/or personalized medicine techniques, such as Dendreon's Provenge and Mylovenge, Stressgen's HspE7, AVAX's M-Vax and O-Vax, Intracel's OncoVax and Cell Genesys's GVAX vaccines. Additionally, many of our competitors, including large pharmaceutical companies, have greater financial and human resources and more experience. Our competitors may:

- commercialize their products sooner than we commercialize ours;

- develop safer or more effective therapeutic drugs or preventive vaccines and other therapeutic products;

- implement more effective approaches to sales and marketing;

- establish superior proprietary positions; or

- discover technologies that may result in medical insights or breakthroughs which may render our drugs or vaccines obsolete even before they generate any revenue.

More specifically, if we receive regulatory approvals, some of our therapeutic drugs or vaccines will compete with well-established, FDA approved therapies such as interleukin-2 and interferon-alpha for kidney cancer and melanoma that have generated substantial sales over a number of years. We anticipate that we will face increased competition in the future as new companies enter our markets and scientific developments surrounding immunotherapy and other cancer therapies continue to accelerate.

### WE PLAN TO CONSOLIDATE OUR OPERATIONS IN A NEW FACILITY WHICH COULD CAUSE A TEMPORARY DISRUPTION IN OUR BUSINESS.

We recently signed a lease for a facility in Lexington, Massachusetts. We intend to consolidate our Woburn and Framingham operations into this facility in phases over the next several years. The first phase, which we intend to complete during 2003, will involve the transfer of our Woburn manufacturing and administrative operations to the Lexington facility. We expect that the build-out costs associated with the first phase will be approximately \$15 million. We do not expect to initiate the build-out of the second phase, related to the Framingham operations, until 2005. It is possible that our business operations could be temporarily disrupted as a result of this facilities consolidation.

### RISKS RELATED TO OUR STOCK

#### OUR OFFICERS AND DIRECTORS MAY BE ABLE TO BLOCK PROPOSALS FOR A CHANGE IN CONTROL.

Antigenics Holdings L.L.C. is a holding company that owns shares of our common stock and as of March 31, 2003, Antigenics Holdings L.L.C. controlled approximately 28% of our outstanding common stock. Due to this concentration of ownership, Antigenics Holdings L.L.C. may be able to prevail on all matters requiring a stockholder vote, including:

the election of directors;

the amendment of our organizational documents; or

the approval of a merger, sale of assets or other major corporate transaction.

Certain of our directors and officers directly and indirectly own approximately 73.9% of Antigenics Holdings L.L.C. and, if they elect to act together, can control Antigenics Holdings L.L.C. In addition, several of our directors and officers directly and indirectly own approximately 4% of our outstanding common stock.

**PROVISIONS IN OUR CHARTER DOCUMENTS COULD PREVENT OR FRUSTRATE ANY ATTEMPTS TO REPLACE OUR CURRENT MANAGEMENT BY STOCKHOLDERS.**

Our certificate of incorporation and bylaws contain provisions that could make it more difficult for a third party to acquire us without consent of our board of directors. Our certificate of incorporation provides for a staggered board and removal of directors only for cause. Accordingly, stockholders may elect only a minority of our board at any annual meeting, which may have the effect of delaying or preventing changes in management. In addition, our certificate of incorporation currently permits our board of directors to issue up to 25,000,000 shares of preferred stock and to determine the terms of those shares of stock without any further action by our stockholders. Our issuance of preferred stock could make it more difficult for a third party to acquire a majority of our outstanding voting stock and thereby effect a change in the composition of our board of directors. Our certificate of incorporation also provides that our stockholders may not take action by written consent. Our bylaws require advance notice of stockholder proposals and nominations, and permit only our president or a majority of our board of directors to call a special stockholder meeting. These provisions may have the effect of preventing or hindering any attempts by our stockholders to replace our current management. In addition, Delaware law also prohibits a corporation from engaging in a business combination with any holder of 15% or more of its capital stock until the holder has held the stock for three years unless, among other possibilities, the board of directors approves the transaction. The board may use this provision to prevent changes in our management. Also, under applicable Delaware law, our board of directors may adopt additional anti-takeover measures in the future.

**OUR STOCK HAS LOW TRADING VOLUME AND OUR PUBLIC TRADING PRICE HAS BEEN VOLATILE.**

Since our initial public offering on February 4, 2000, the per share price of our common stock has fluctuated between \$6.60 and \$71.50 with an average daily trading volume for the three months ended March 31, 2003 of approximately 343,000. The market has experienced significant price and volume fluctuations that are often unrelated to the operating performance of individual companies. In addition to general market volatility, many factors may have a significant adverse effect on the market price of our stock, including:

announcements of decisions made by public officials;

results of our preclinical and clinical trials;

announcements of technological innovations or new commercial products by us or our competitors;

developments concerning proprietary rights, including patent and litigation matters;

publicity regarding actual or potential results with respect to products under development by us or by our competitors;

regulatory developments; and

quarterly fluctuations in our revenues and other financial results.

**THE SALE OF A SUBSTANTIAL NUMBER OF SHARES COULD CAUSE THE MARKET PRICE OF OUR STOCK TO DECLINE.**

The sale by us or the resale by stockholders of shares of our common stock could cause the market price of our common stock to decline. As of March 31, 2003, we had approximately 39,371,000 shares of common stock outstanding. All of these shares are eligible for sale on the Nasdaq National Market, although certain of the shares are subject to sale volume and other limitations.

We have filed registration statements to permit the sale of 6,436,831 shares of common stock under our equity incentive plan and certain equity plans that we assumed in the acquisitions of Aquila Biopharmaceuticals, Inc. and Aronex Pharmaceuticals, Inc. We have also filed a registration statement to permit the sale of 300,000 shares of common stock under our employee stock purchase plan. As of March 31, 2003, options to purchase approximately 4,703,000 shares of our stock upon exercise of options with a weighted average exercise price per share of \$11.09 were outstanding. Many of these options are subject to vesting that generally occurs over a period of up to five years following the date of grant. As of March 31, 2003, warrants to purchase approximately 153,000 shares of our common stock with a weighted average exercise price per share of \$40.69 were outstanding.

**NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This prospectus and the documents we have incorporated by reference may contain forward-looking statements. Generally, these statements can be identified by the use of terms like believe, expect, anticipate, plan, may, will, could, estimate, potential, opportunity, similar terms. Forward-looking statements may include statements about our future product research and development activities, the expected effectiveness of our therapeutic drugs and vaccines in treating diseases, applicability of our heat shock protein technology to multiple cancers and infectious diseases, our competitive position, plans for regulatory filings, receipt of future regulatory approvals, timing of additional clinical trials, release of data from clinical trials, our expected cash needs, plans for sales and marketing, implementation of our corporate strategy, and future financial performance. These forward-looking statements involve a number of risks and uncertainties that could cause actual results to differ materially from those suggested by the forward-looking statements. Forward-looking statements should be considered in light of all of the information included or referred to in this prospectus, including the information provided under the heading **RISK FACTORS** beginning on page 3. You should not place undue reliance on our forward-looking statements.

**ANTIGENICS INC.**

**Business Overview**

We are a biotechnology firm developing products to treat cancers, infectious diseases, and autoimmune disorders. Our lead product candidates are: (1) Oncophage®, a personalized therapeutic cancer vaccine in Phase III clinical trials for the treatment of renal cell carcinoma and melanoma, (2) Aroplatin™, a liposomal formulation of a third-generation platinum chemotherapeutic in Phase II clinical trials for the treatment of colorectal cancer and other types of solid tumor cancers, (3) AG-858, a personalized therapeutic cancer vaccine in a Phase II clinical trial for the treatment of chronic myelogenous leukemia, and (4) AG-702/AG-70X, a therapeutic vaccine program in Phase I development for the treatment of genital herpes.

This description of our business contains forward-looking statements that are subject to risks and uncertainties. These statements include those regarding the anticipated applicability of our technology, our commercialization plans, and the timing of our clinical trials and the announcement of results from those trials. Please refer to the section entitled **Note Regarding Forward-Looking Statements** on page 3 for a more complete identification of forward-looking statements and a description of some risks and uncertainties that could cause actual results to differ materially from those indicated in the forward-looking statements.

Oncophage, AG-858 and AG-702/70X are based on our proprietary heat shock protein technology. Published research suggests that heat shock proteins play a central role in the generation of immune responses against cancer cells and cells infected with viruses and other pathogens. Based on preclinical and clinical studies of our heat shock protein technology, we believe that it will be applicable to all types of cancer and many infectious diseases.

We have generated data in multiple human clinical trials using our heat shock protein product candidates demonstrating complete clinical responses in a portion of patients with measurable metastatic disease in several types of cancer. Additionally, in a subset of patients who were rendered free of disease by surgery, we have observed prolonged disease-free survival in three different types of cancer. In our studies to date, virtually no toxicity has been observed. We believe that these human data further support the broad applicability and corresponding commercial potential of our heat shock protein product candidates.

**Lead Product Candidates**

***Oncophage***

Oncophage is a personalized therapeutic cancer vaccine based on our heat shock protein technology. We initiated a Phase III trial of Oncophage in renal cell carcinoma, commonly referred to as kidney cancer, during the fourth quarter of 2000. This trial is an international, multi-center, randomized, controlled study comparing treatment with Oncophage to observation in patients who are at high risk of recurrence after surgical removal of their primary tumor. We expect to announce results of the interim analysis of the data from this trial in the fourth quarter of 2003. During 2002, we initiated a Phase III trial in metastatic melanoma, and we plan to initiate an additional Phase III study in melanoma in the second half of 2003. We expect to complete the ongoing Phase III melanoma trial in 2004. Oncophage has received fast track designation, as well as orphan drug designation, from the United States Food and Drug Administration for both renal cell carcinoma and metastatic melanoma. Other clinical research evaluating Oncophage includes clinical trials for colorectal cancer, gastric cancer, lymphoma, and pancreatic cancer.

***Aroplatin***

## Edgar Filing: ANTIGENICS INC /DE/ - Form S-3/A

Aroplatin is a novel, liposomal formulation of a compound from the family of DACH platinum compounds. DACH platinum compounds are third-generation platinum compounds that are based on the chemical structure diaminocyclohexane and contain the metallic element platinum, which has been shown to be active against a number of cancers. Liposomal formulations of drugs are generally formulations that encapsulate the active drug ingredient in a liposome, which is a spherical particle of a lipid or fatty substance. During 2002, we initiated a Phase II trial of Aroplatin in advanced colorectal cancer and in 2003 initiated a Phase I/II trial of Aroplatin in various other types of solid tumor cancers. We expect to release data from the Phase II colorectal cancer trial in the third quarter of 2003.

### **AG-858**

AG-858 is a personalized therapeutic cancer vaccine also based on our heat shock protein technology. During 2003, we initiated a Phase II trial of AG-858 in combination with Gleevec™ (imatinib mesylate, Novartis) for the treatment of chronic myelogenous leukemia (CML). CML is a cancer of the blood characterized by the uncontrolled proliferation of abnormal white blood cells. We expect to complete this trial in the first half of 2004.

### **AG-702/AG-70X**

AG-702/AG-70X is our therapeutic vaccine program for the treatment of genital herpes based on our heat shock protein technology. We initiated a pilot Phase I clinical trial of AG-702 in the fourth quarter of 2001 which we expect to complete during 2003. AG-702 is a vaccine formulation containing one antigen, or target, of the herpes virus. During 2003, we expect to initiate a Phase I/II clinical trial of AG-70X, a vaccine formulation that contains multiple antigens, or targets, for the treatment of genital herpes.

### **Heat Shock Protein Technology**

Three of our four lead product candidates, Oncophage, AG-858 and AG-702/70X, are based on our proprietary heat shock protein technology. Heat shock proteins are present in all organisms from bacteria to mammals and their structure and function are similar across these diverse life forms. Heat shock proteins are a class of proteins that play a major role in transporting peptides, or fragments of proteins, within a cell and are thus often called chaperones. In this capacity, heat shock proteins bind to the broad antigenic repertoire or fingerprint of the cell in which they reside.

The ability of heat shock proteins to chaperone peptides is key to our technology. These characteristics of heat shock proteins allow us to produce a vaccine containing the antigenic fingerprint of a given disease. When we purify heat shock proteins from tumor cells or pathogen-infected cells, the heat shock proteins remain bound to the broad repertoire of peptides produced by the tumor or pathogen creating what we call heat shock protein-peptide complexes (HSPPCs). Our core technology is premised on the ability of these HSPPCs, when injected into the skin, to stimulate a powerful T-cell-based immune response capable of targeting and killing the cancer cells or infected cells from which these HSPPCs were derived.

We have 45 issued U.S. patents and 33 U.S. patent applications pending that cover our heat shock protein technology as well as issued and pending patents in a number of foreign territories. Our issued U.S. patents that cover our heat shock protein technology expire between 2015 and 2018. With the exception of one patent application that we own outright, all of our heat shock protein patents and patent applications relating to Oncophage, AG-858, and AG-702/70X have been exclusively licensed to us by the following academic institutions.

#### *Mt. Sinai School of Medicine*

In November 1994, we entered into a patent license agreement with the Mount Sinai School of Medicine. Through the Mount Sinai agreement, we obtained an exclusive worldwide license to patent rights relating to the heat shock protein technology that resulted from the research and development performed by Dr. Pramod Srivastava, our founding scientist and one of our directors. We agreed to pay Mt. Sinai a royalty on the net sales of products covered by the licensed patent rights and also provided Mt. Sinai with an equity interest in the company. The term of the Mt. Sinai agreement ends when the last of the licensed patents expires (2015). If we fail to pay royalties that are due under the agreement, Mt. Sinai may issue written notice to us. If we continue to fail to pay royalties after 60 days of the written notice, Mt. Sinai can terminate the agreement. The Mt. Sinai agreement requires us to use due diligence to make the products covered by the licensed patent rights commercially available, including a requirement for us to use best efforts to reach a number of developmental milestones. If we fail to comply with the due diligence provisions of the agreement, Mt. Sinai could take actions to convert our exclusive license to a non-exclusive license after six months written notice. The Mt. Sinai Agreement does not contain any milestone payment provisions.

#### *Fordham University*

During 1993, Dr. Srivastava moved his research to Fordham University. We entered into a sponsored research and technology license agreement with Fordham in March 1995 relating to the continued development of the heat shock protein technology and agreed to make payments to Fordham to sponsor Dr. Srivastava's research. Through the Fordham agreement, we obtained an exclusive, perpetual, worldwide

## Edgar Filing: ANTIGENICS INC /DE/ - Form S-3/A

license to all of the intellectual property, including all the patent rights, that resulted from the research and development performed by Dr. Srivastava at Fordham. We also agreed to pay Fordham a royalty on the net sales of products covered by the Fordham agreement through the last expiration date on the patents under the agreement (2017). The agreement does not contain any milestone payment provisions or any due diligence provisions. Dr. Srivastava moved his research to the University of Connecticut Health Center during 1997 and, accordingly, the parts of the agreement related to payments for sponsored research at Fordham terminated in mid-1997.

### *University of Connecticut*

We have two agreements with the University of Connecticut: (1) a research agreement under which we pay the University of Connecticut to sponsor research in Dr. Srivastava's laboratory and which provides us with an option to license technologies discovered and developed as a result of that research, and (2) a license agreement that provides us with the exclusive, worldwide rights to technologies discovered and developed under the research agreement. Each agreement is discussed in more detail below.

### Research Agreement

In February 1998, we entered into a research agreement with the University of Connecticut Health Center, or UConn, and Dr. Srivastava relating to the continued development of the heat shock protein technology. The research agreement provides us with an option to license inventions stemming from the research that we sponsor at UConn and provides certain pre-determined royalty rates for licensed inventions. The research agreement had an initial term of five years and called for minimum payments to UConn totaling \$5,000,000, payable quarterly at a rate of \$250,000 (contingent upon the continuing employment of Dr. Srivastava by UConn). The research agreement was amended during 2002 to: (1) extend the term of the research agreement to December 31, 2003, and (2) provide for an annual payment of \$1,200,000 payable quarterly at the rate of \$300,000 during 2003. UConn may terminate the research agreement upon 60 days written notice if it is unable to fulfill the terms of the research agreement. We can terminate the research agreement by giving 30 days written notice in the event that Dr. Srivastava terminates his employment with UConn or is otherwise unable to continue his research at UConn.

### License Agreement

In May 2001, we entered into a license agreement with UConn. Through the license agreement, we obtained an exclusive worldwide license to patent rights resulting from inventions discovered under the research agreement. The term of the license agreement ends when the last of the licensed patents expires (2018) or becomes no longer valid. UConn may terminate the agreement: (1) if, after 30 days written notice, we fail to make any payments due under the License Agreement, or (2) we cease to carry on our business related to the patent rights or if we initiate or conduct actions in order to declare bankruptcy. We may terminate the agreement upon 90 days written notice. The license agreement contains aggregate milestone payments of approximately \$1.2 million for each product we develop covered by the licensed patent rights. These milestone payments are contingent upon regulatory filings, regulatory approvals, and commercial sales of products. We have also agreed to pay UConn a royalty on the net sales of products covered by the license agreement as well as annual license maintenance fees beginning in May 2006. Royalties otherwise due on the net sales of products covered by the license agreement may be credited against the annual license maintenance fee obligations. To date, we have paid approximately \$55,000 to UConn under the license agreement. The license agreement gives us complete discretion over the commercialization of products covered by the licensed patent rights but also requires us to use commercially reasonable diligent efforts to introduce commercial products within and outside the United States. If we fail to meet these due diligence requirements, UConn may be able to terminate the license agreement.

### Amendment Agreement

In March 2003, we entered into an amendment agreement that amended certain provisions of both the research agreement and the license agreement. The amendment agreement provides that any time we elect to exercise our option to license inventions discovered or developed as a result of research we sponsor at UConn, such inventions will be automatically covered under the terms of our existing license agreement with UConn. In consideration for execution of the amendment agreement and for the license of additional patent rights, we agreed to pay UConn an up-front payment and to make future payments for each patent or patent application with respect to which we exercise our option under the research agreement. To date, we have paid approximately \$42,000 to UConn under the amendment agreement.

### **Liposomal Platinum Technology**

One of our lead product candidates, Aroplatin, is based on a liposomal platinum technology. Platinum compounds such as cisplatin and carboplatin are widely-used in cancer chemotherapy. However, current platinum drugs are not always effective because tumors frequently are resistant to these compounds at the outset of treatment or become resistant during treatment. We expect third-generation platinum chemotherapeutics, like Aroplatin, to overcome some of the resistance seen with earlier generations of platinum chemotherapeutics. Aroplatin's active drug ingredient is encapsulated in a liposome, which is a spherical particle of a lipid or fatty substance. Drugs encapsulated in liposomes have been shown in certain cases to accumulate at certain tumor sites, effecting an higher concentration and longer duration of drug action at the target site (where beneficial effects may occur) while maintaining a lower concentration and shorter duration at other sites in the body (where side effects may occur). In addition, the liposomal delivery system helps to reduce the damaging effects of some drugs on healthy tissues,



## Edgar Filing: ANTIGENICS INC /DE/ - Form S-3/A

improving the drug's safety profile. We believe that Aroplatin's liposomal formulation offers a more favorable toxicity profile compared to that of other platinum drugs and may increase the concentration and duration of the active drug ingredient at the tumor site.

We have 3 issued U.S. patents and 7 U.S. patent applications pending that relate to Aroplatin as well as issued and pending patents in a number of foreign territories. Our issued U.S. patents expire between 2008 and 2010. With the exception of five patent applications that we own outright, all of our Aroplatin patents and patent applications have been exclusively licensed to us by the following corporation and institution.

### *Sumitomo Pharmaceuticals Co., Ltd.*

In December 2000, Aronex Pharmaceuticals, a company we acquired in July 2001, entered into a license agreement with Sumitomo Pharmaceuticals Co., Ltd. The license agreement grants us the exclusive right to an allowed U.S. patent application that contains certain claims to the active ingredient in Aroplatin. Except for the treatment of hepatoma, the license agreement gives us the exclusive right to make, use, develop, import and sell Aroplatin in the United States. The term of the license agreement ends when the licensed patent expires. As the Sumitomo patent has not issued yet, the term of the license agreement would end 17 years after the date that the Sumitomo patent is issued. Either party may terminate the license agreement by giving written notice to the other party upon the occurrence of the following events: (1) if the other party makes an assignment for the benefit of creditors, is the subject of bankruptcy proceedings, or has a trustee or receiver appointed for substantially all of its assets, (2) if the other party becomes insolvent, or (3) if the other party defaults in its performance under the license agreement. Prior to our acquisition of Aronex Pharmaceuticals, Sumitomo received a \$500,000 up-front payment in 2001 from Aronex Pharmaceuticals and will receive subsequent milestone payments from us in the aggregate of up to \$3.5 million if regulatory filings, regulatory approval and sales in connection with Aroplatin occur. We agreed to pay Sumitomo royalties on the net sales of Aroplatin in the United States upon commercialization of the product. The license agreement does not contain any due diligence provisions.

### *University of Texas Board of Regents/University of Texas M.D. Anderson Cancer Center*

In June 1988, a predecessor to Aronex Pharmaceuticals entered into an exclusive license agreement with: (1) The Board of Regents of The University of Texas System, and (2) The University of Texas System Cancer Center, collectively referred to as the University of Texas. As amended, the exclusive license agreement grants us the exclusive, worldwide license to patents containing claims that relate to Aroplatin. The term of the exclusive license agreement expires when the last licensed patent expires (2010). Either party may terminate the agreement upon 60 days written notice if the other party materially breaches any material terms of the exclusive license agreement. The agreement requires that we meet certain diligence provisions, specifically the conduct of ongoing and active research, developmental activities, marketing, clinical testing, or a licensing program, directed towards the production and sale of Aroplatin. If we fail to comply with these diligence provisions, the University of Texas may be able to terminate the exclusive license agreement upon 90 days written notice. The University of Texas also has the right to terminate the exclusive license agreement in the event that: (1) we discontinue our business, (2) we have a receiver or trustee appointed for our assets, or (3) we are the subject of a bankruptcy proceeding. We agreed to pay the University of Texas royalties on the net sales of Aroplatin. The applicable royalty percentage is dependent on the level of net sales of Aroplatin. We have also agreed to make a \$200,000 milestone payment to the University of Texas if the FDA approves a new drug application for Aroplatin. To date, we have not made any payments to the University of Texas under the license agreement.

We maintain our principal operations in Woburn, Massachusetts and our executive offices in New York, New York. The address for our executive offices is 630 Fifth Avenue, Suite 2100, New York, New York 10111 and our telephone number is (212) 994-8200.

## **USE OF PROCEEDS**

Except as otherwise provided in the applicable prospectus supplement, we intend to use the net proceeds from the sale of the securities offered by this prospectus for general corporate purposes, which may include working capital, capital expenditures, research and development expenditures, clinical trial expenditures, acquisitions of new technologies, and investments. Additional information on the use of net proceeds from the sale of securities offered by this prospectus may be set forth in the prospectus supplement relating to the specific offering.

## **RATIO OF EARNINGS TO FIXED CHARGES AND PREFERRED STOCK DIVIDENDS**

The following table sets forth our dollar coverage deficiency. The ratio of earnings to fixed charges is not disclosed since it is a negative number in each year and period shown below. Each time we offer debt securities, we will provide an updated table setting forth our ratio of earnings to fixed charges on a historical basis in the applicable prospectus supplement, if required. Each time we offer shares of preferred stock, we will provide a table setting forth our ratio of combined fixed charges and preferred stock dividends to earnings, if required.

	1998	For The Year Ended December 31,			2002	For The Three Months ended March 31, 2003
		1999	2000	2001		
			(in thousands)			
Ratio of Earnings to Fixed Charges						
Coverage deficiency	\$ (8,904)	\$ (18,124)	\$ (46,729)	\$ (73,541)	\$ (55,878)	\$ (13,492 )

**Table of Contents**

**DESCRIPTION OF COMMON STOCK**

The following summary of the terms of our common stock is subject to and qualified in its entirety by reference to our charter and by-laws, copies of which are on file with the SEC as exhibits to previous SEC filings. Please refer to "Where You Can Find More Information" below for directions on obtaining these documents.

We have authority to issue 100,000,000 shares of common stock. As of May 30, 2003, we had 39,386,747 shares of common stock outstanding.

**General**

Subject to preferences that may apply to shares of preferred stock outstanding at the time, the holders of outstanding shares of common stock are entitled to receive dividends out of assets legally available for payment of dividends, as the board of directors may from time to time determine. Each stockholder is entitled to one vote for each share of common stock held on all matters submitted to a vote of stockholders. Our certificate of incorporation does not provide for cumulative voting for the election of directors, which means that the holders of a majority of the shares voted can elect all of the directors then standing for election. The common stock is not entitled to preemptive rights and is not subject to conversion or redemption. Each outstanding share of common stock offered by this prospectus will, when issued, be fully paid and nonassessable.

**Transfer Agent and Registrar**

The transfer agent and registrar for our common stock is American Stock Transfer and Trust Company. Its telephone number is (800) 937-5449.

**Table of Contents**

**DESCRIPTION OF PREFERRED STOCK**

We currently have authorized 25,000,000 shares of undesignated preferred stock, none of which were issued and outstanding as of the date of this prospectus. As of the date of this prospectus, we do not have any equity securities that would be senior to, or on par with, our authorized preferred stock.

**General**

Under Delaware law and our charter, our board of directors is authorized, without stockholder approval, to issue shares of preferred stock from time to time in one or more series. Subject to limitations prescribed by Delaware law and our charter and by-laws, the board of directors can determine the number of shares constituting each series of preferred stock and the designation, preferences, voting powers, qualifications, and special or relative rights or privileges of that series. These may include provisions concerning voting, redemption, dividends, dissolution or the distribution of assets, conversion or exchange, and other subjects or matters as may be fixed by resolution of the board or an authorized committee of the board.

Our board of directors could authorize the issuance of shares of preferred stock with terms and conditions which could have the effect of discouraging a takeover or other transaction which holders of some, or a majority, of our common stock might believe to be in their best interests or in which holders of some, or a majority, of our common stock might receive a premium for their shares over the then market price of those shares.

If we offer a specific series of preferred stock under this prospectus, we will describe the terms of the preferred stock in the prospectus supplement for such offering and will file a copy of the certificate establishing the terms of the preferred stock with the SEC. To the extent required, this description will include:

the title and stated value;

the number of shares offered, the liquidation preference per share and the purchase price;

the dividend rate(s), period(s) and/or payment date(s), or method(s) of calculation for such dividends;

whether dividends will be cumulative or non-cumulative and, if cumulative, the date from which dividends will accumulate;

the procedures for any auction and remarketing, if any;

the provisions for a sinking fund, if any;

the provisions for redemption, if applicable;

any listing of the preferred stock on any securities exchange or market;

whether the preferred stock will be convertible into Antigenics common stock, and, if applicable, the conversion price (or how it will be calculated) and conversion period;

whether the preferred stock will be exchangeable into debt securities, and, if applicable, the exchange price (or how it will be calculated) and exchange period;

voting rights, if any, of the preferred stock;

a discussion of any material and/or special U.S. federal income tax considerations applicable to the preferred stock;

**Table of Contents**

the relative ranking and preferences of the preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of the affairs of Antigenics; and

any material limitations on issuance of any class or series of preferred stock ranking senior to or on a parity with the series of preferred stock as to dividend rights and rights upon liquidation, dissolution or winding up of Antigenics.

The preferred stock offered by this prospectus will, when issued, be fully paid and nonassessable and will not have, or be subject to, any preemptive or similar rights.

**Transfer Agent and Registrar**

The transfer agent and registrar for any series or class of preferred stock will be set forth in the applicable prospectus supplement.

**DESCRIPTION OF DEBT SECURITIES**

We will issue the debt securities offered by this prospectus and any accompanying prospectus supplement under an indenture to be entered into between Antigenics and the trustee identified in the applicable prospectus supplement. The terms of the debt securities will include those stated in the indenture and those made part of the indenture by reference to the Trust Indenture Act of 1939, as in effect on the date of the indenture. We have filed a copy of the form of indenture as an exhibit to the registration statement in which this prospectus is included. The indenture will be subject to and governed by the terms of the Trust Indenture Act of 1939.

We may offer under this prospectus up to an aggregate principal amount of \$100,000,000 in debt securities; or if debt securities are issued at a discount, or in a foreign currency, foreign currency units or composite currency, the principal amount as may be sold for an initial public offering price of up to \$100,000,000. Unless otherwise specified in the applicable prospectus supplement, the debt securities will represent direct, unsecured obligations of Antigenics and will rank equally with all of our other unsecured indebtedness.

The following statements relating to the debt securities and the indenture are summaries qualified in their entirety to the detailed provisions of the indenture.

**General**

We may issue the debt securities in one or more series with the same or various maturities, at par, at a premium, or at a discount. We will describe the particular terms of each series of debt securities in a prospectus supplement relating to that series, which we will file with the SEC.

The prospectus supplement will set forth, to the extent required, the following terms of the debt securities in respect of which the prospectus supplement is delivered:

the title of the series;

the aggregate principal amount;

the issue price or prices, expressed as a percentage of the aggregate principal amount of the debt securities;

any limit on the aggregate principal amount;

the date or dates on which principal is payable;

the interest rate or rates (which may be fixed or variable) or, if applicable, the method used to determine such rate or rates;

**Table of Contents**

the date or dates from which interest, if any, will be payable and any regular record date for the interest payable;

the place or places where principal and, if applicable, premium and interest, is payable;

the terms and conditions upon which we may, or the holders may require us to, redeem or repurchase the debt securities;

the denominations in which such debt securities may be issuable, if other than denominations of \$1,000 or any integral multiple of that number;

whether the debt securities are to be issuable in the form of certificated debt securities (as described below) or global debt securities (as described below);

the portion of principal amount that will be payable upon declaration of acceleration of the maturity date if other than the principal amount of the debt securities;

the currency of denomination;

the designation of the currency, currencies or currency units in which payment of principal and, if applicable, premium and interest, will be made;

if payments of principal and, if applicable, premium or interest, on the debt securities are to be made in one or more currencies or currency units other than the currency of denomination, the manner in which the exchange rate with respect to such payments will be determined;

if amounts of principal and, if applicable, premium and interest may be determined by reference to an index based on a currency or currencies or by reference to a commodity, commodity index, stock exchange index or financial index, then the manner in which such amounts will be determined;

the provisions, if any, relating to any collateral provided for such debt securities;

any addition to or change in the covenants and/or the acceleration provisions described in this prospectus or in the indenture;

any events of default, if not otherwise described below under **Events of Default** ;

the terms and conditions, if any, for conversion into or exchange for shares of common stock or preferred stock;

any depositaries, interest rate calculation agents, exchange rate calculation agents or other agents; and

the terms and conditions, if any, upon which the debt securities shall be subordinated in right of payment to other indebtedness of Antigenics.

We may issue discount debt securities that provide for an amount less than the stated principal amount to be due and payable upon acceleration of the maturity of such debt securities in accordance with the terms of the indenture. We may also issue debt securities in bearer form, with or without coupons. If we issue discount debt securities or debt securities in bearer form, we will describe material U.S. federal income tax considerations and other material special considerations which apply to these debt securities in the applicable prospectus supplement.

We may issue debt securities denominated in or payable in a foreign currency or currencies or a foreign currency unit or units. If we do, we will describe the restrictions, elections, and general tax considerations relating to

## **Table of Contents**

the debt securities and the foreign currency or currencies or foreign currency unit or units in the applicable prospectus supplement.

### **Exchange and/or Conversion Rights**

We may issue debt securities which can be exchanged for or converted into shares of common stock or preferred stock. If we do, we will describe the term of exchange or conversion in the prospectus supplement relating to these debt securities.

### **Transfer and Exchange**

We may issue debt securities that will be represented by either:

book-entry securities, which means that there will be one or more global securities registered in the name of a depository or a nominee of a depository; or

certificated securities, which means that they will be represented by a certificate issued in definitive registered form.

We will specify in the prospectus supplement applicable to a particular offering whether the debt securities offered will be book-entry or certificated securities.

### **Certificated Debt Securities**

If you hold certificated debt securities, you may transfer or exchange such debt securities at the trustee's office or at the paying agent's office or agency in accordance with the terms of the indenture. You will not be charged a service charge for any transfer or exchange of certificated debt securities but may be required to pay an amount sufficient to cover any tax or other governmental charge payable in connection with such transfer or exchange.

You may effect the transfer of certificated debt securities and of the right to receive the principal of, premium, and/or interest, if any, on the certificated debt securities only by surrendering the certificate representing the certificated debt securities and having us or the trustee issue a new certificate to the new holder.

### **Global Securities**

If we decide to issue debt securities in the form of one or more global securities, then we will register the global securities in the name of the depository for the global securities or the nominee of the depository, and the global securities will be delivered by the trustee to the depository for credit to the accounts of the holders of beneficial interests in the debt securities.

The prospectus supplement will describe the specific terms of the depository arrangement for debt securities of a series that are issued in global form. None of our company, the trustee, any payment agent or the security registrar will have any responsibility or liability for any aspect of the records relating to or payments made on account of beneficial ownership interests in a global debt security or for maintaining, supervising or reviewing any records relating to these beneficial ownership interests.

### **No Protection in the Event of Change of Control**

The indenture does not have any covenants or other provisions providing for a put or increased interest or otherwise that would afford holders of debt securities additional protection in the event of a recapitalization transaction, a change of control of Antigenics or a highly leveraged transaction. If we offer any covenants or provisions of this type with respect to any debt securities covered by this prospectus, we will describe them in the applicable prospectus supplement.

**Table of Contents**

**Covenants**

Unless otherwise indicated in this prospectus or a prospectus supplement, the debt securities will not have the benefit of any covenants that limit or restrict our business or operations, the pledging of our assets or the incurrence by us of indebtedness. We will describe in the applicable prospectus supplement any material covenants in respect of a series of debt securities.

**Consolidation, Merger and Sale of Assets**

We have agreed in the indenture that we will not consolidate with or merge into any other person or convey, transfer, sell or lease our properties and assets substantially as an entirety to any person, unless:

the person formed by the consolidation or into or with which we are merged or the person to which our properties and assets are conveyed, transferred, sold or leased, is a corporation organized and existing under the laws of the U.S., any state or the District of Columbia or a corporation or comparable legal entity organized under the laws of a foreign jurisdiction and, if we are not the surviving person, the surviving person has expressly assumed all of our obligations, including the payment of the principal of and, premium, if any, and interest on the debt securities and the performance of the other covenants under the indenture; and

immediately after giving effect to the transaction, no event of default, and no event which, after notice or lapse of time or both, would become an event of default, has occurred and is continuing under the indenture.

**Events of Default**

Unless otherwise specified in the applicable prospectus supplement, the following events will be events of default under the indenture with respect to debt securities of any series:

we fail to pay any principal or premium, if any, when it becomes due;

we fail to pay any interest within 30 days after it becomes due;

we fail to observe or perform any other covenant in the debt securities or the indenture for 60 days after written notice specifying the failure from the trustee or the holders of not less than 25% in aggregate principal amount of the outstanding debt securities of that series; and

certain events involving bankruptcy, insolvency or reorganization of Antigenics or any of our significant subsidiaries.

The trustee may withhold notice to the holders of the debt securities of any series of any default, except in payment of principal of or premium, if any, or interest on the debt securities of a series, if the trustee considers it to be in the best interest of the holders of the debt securities of that series to do so.

If an event of default (other than an event of default resulting from certain events of bankruptcy, insolvency or reorganization) occurs, and is continuing, then the trustee or the holders of not less than 25% in aggregate principal amount of the outstanding debt securities of any series may accelerate the maturity of the debt securities. If this happens, the entire principal amount, plus the premium, if any, of all the outstanding debt securities of the affected series plus accrued interest to the date of acceleration will be immediately due and payable. At any time after the acceleration, but before a judgment or decree based on such acceleration is obtained by the trustee, the holders of a majority in aggregate principal amount of outstanding debt securities of such series may rescind and annul such acceleration if:

all events of default (other than nonpayment of accelerated principal, premium or interest) have been cured or waived;



**Table of Contents**

all lawful interest on overdue interest and overdue principal has been paid; and

the rescission would not conflict with any judgment or decree.

In addition, if the acceleration occurs at any time when Antigenics has outstanding indebtedness which is senior to the debt securities, the payment of the principal amount of outstanding debt securities may be subordinated in right of payment to the prior payment of any amounts due under the senior indebtedness, in which case the holders of debt securities will be entitled to payment under the terms prescribed in the instruments evidencing the senior indebtedness and the indenture.

If an event of default resulting from certain events of bankruptcy, insolvency or reorganization occurs, the principal, premium and interest amount with respect to all of the debt securities of any series will be due and payable immediately without any declaration or other act on the part of the trustee or the holders of the debt securities of that series.

The holders of a majority in principal amount of the outstanding debt securities of a series will have the right to waive any existing default or compliance with any provision of the indenture or the debt securities of that series and to direct the time, method and place of conducting any proceeding for any remedy available to the trustee, subject to certain limitations specified in the indenture.

No holder of any debt security of a series will have any right to institute any proceeding with respect to the indenture or for any remedy under the indenture, unless:

the holder gives to the trustee written notice of a continuing event of default;

the holders of at least 25% in aggregate principal amount of the outstanding debt securities of the affected series make a written request and offer reasonable indemnity to the trustee to institute a proceeding as trustee;

the trustee fails to institute a proceeding within 60 days after such request; and

the holders of a majority in aggregate principal amount of the outstanding debt securities of the affected series do not give the trustee a direction inconsistent with such request during such 60-day period.

These limitations do not, however, apply to a suit instituted for payment on debt securities of any series on or after the due dates expressed in the debt securities.

**Modification and Waiver**

From time to time, we and the trustee may, without the consent of holders of the debt securities of one or more series, amend the indenture or the debt securities of one or more series, or supplement the indenture, for certain specified purposes, including:

to provide that the surviving entity following a change of control of Antigenics permitted under the indenture will assume all of our obligations under the indenture and debt securities;

to provide for certificated debt securities in addition to uncertificated debt securities;

to comply with any requirements of the SEC under the Trust Indenture Act of 1939;

to cure any ambiguity, defect or inconsistency, or make any other change that does not materially and adversely affect the rights of any holder; and

to appoint a successor trustee under the indenture with respect to one or more series.

**Table of Contents**

From time to time we and the trustee may, with the consent of holders of at least a majority in principal amount of the outstanding debt securities, amend or supplement the indenture or the debt securities, or waive compliance in a particular instance by us with any provision of the indenture or the debt securities. We may not, however, without the consent of each holder affected by such action, modify or supplement the indenture or the debt securities or waive compliance with any provision of the indenture or the debt securities in order to:

- reduce the amount of debt securities whose holders must consent to an amendment, supplement, or waiver to the indenture or such debt security;
- reduce the rate of or change the time for payment of interest;
- reduce the principal of or change the stated maturity of the debt securities;
- make any debt security payable in money other than that stated in the debt security;
- change the amount or time of any payment required or reduce the premium payable upon any redemption, or change the time before which no such redemption may be made;
- waive a default in the payment of the principal of, premium, if any, or interest on the debt securities or a redemption payment; or
- take any other action otherwise prohibited by the indenture to be taken without the consent of each holder affected by the action.

**Defeasance of Debt Securities and Certain Covenants in Certain Circumstances**

The indenture permits us, at any time, to elect to discharge our obligations with respect to one or more series of debt securities by following certain procedures described in the indenture. These procedures will allow us either:

to defease and be discharged from any and all of our obligations with respect to any debt securities except for the following obligations (which discharge is referred to as legal defeasance):

- (1) to register the transfer or exchange of such debt securities;
- (2) to replace temporary or mutilated, destroyed, lost or stolen debt securities;
- (3) to compensate and indemnify the trustee; or
- (4) to maintain an office or agency in respect of the debt securities and to hold monies for payment in trust; or

to be released from our obligations with respect to the debt securities under certain covenants contained in the indenture, as well as any additional covenants which may be contained in the applicable supplemental indenture (which release is referred to as covenant defeasance).

In order to exercise either defeasance option, we must deposit with the trustee or other qualifying trustee, in trust for that purpose:

money;

U.S. Government Obligations (as described below) or Foreign Government Obligations (as described below) which through the scheduled payment of principal and interest in accordance with their terms will provide money; or

## **Table of Contents**

a combination of money and/or U.S. Government Obligations and/or Foreign Government Obligations sufficient in the written opinion of a nationally-recognized firm of independent accountants to provide money; which in each case specified above, provides a sufficient amount to pay the principal of, premium, if any, and interest, if any, on the debt securities of the series, on the scheduled due dates or on a selected date of redemption in accordance with the terms of the indenture.

In addition, defeasance may be effected only if, among other things:

in the case of either legal or covenant defeasance, we deliver to the trustee an opinion of counsel, as specified in the indenture, stating that as a result of the defeasance neither the trust nor the trustee will be required to register as an investment company under the Investment Company Act of 1940;

in the case of legal defeasance, we deliver to the trustee an opinion of counsel stating that we have received from, or there has been published by, the Internal Revenue Service a ruling to the effect that, or there has been a change in any applicable federal income tax law with the effect that (and the opinion shall confirm that), the holders of outstanding debt securities will not recognize income, gain or loss for U.S. federal income tax purposes solely as a result of such legal defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner, including as a result of prepayment, and at the same times as would have been the case if legal defeasance had not occurred;

in the case of covenant defeasance, we deliver to the trustee an opinion of counsel to the effect that the holders of the outstanding debt securities will not recognize income, gain or loss for U.S. federal income tax purposes as a result of covenant defeasance and will be subject to U.S. federal income tax on the same amounts, in the same manner and at the same times as would have been the case if covenant defeasance had not occurred; and

certain other conditions described in the indenture are satisfied.

If we fail to comply with our remaining obligations under the indenture and applicable supplemental indenture after a covenant defeasance of the indenture and applicable supplemental indenture, and the debt securities are declared due and payable because of the occurrence of any undefeased event of default, the amount of money and/or U.S. Government Obligations and/or Foreign Government Obligations on deposit with the trustee could be insufficient to pay amounts due under the debt securities of the affected series at the time of acceleration. We will, however, remain liable in respect of these payments.

The term **U.S. Government Obligations** as used in the above discussion means securities which are direct obligations of or non-callable obligations guaranteed by the United States of America for the payment of which obligation or guarantee the full faith and credit of the United States of America is pledged.

The term **Foreign Government Obligations** as used in the above discussion means, with respect to debt securities of any series that are denominated in a currency other than U.S. dollars (1) direct obligations of the government that issued or caused to be issued such currency for the payment of which obligations its full faith and credit is pledged or (2) obligations of a person controlled or supervised by or acting as an agent or instrumentality of such government the timely payment of which is unconditionally guaranteed as a full faith and credit obligation by that government, which in either case under clauses (1) or (2), are not callable or redeemable at the option of the issuer.

### **Regarding the Trustee**

We will identify the trustee with respect to any series of debt securities in the prospectus supplement relating to the applicable debt securities. You should note that if the trustee becomes a creditor of Antigenics, the indenture and the Trust Indenture Act of 1939 limit the rights of the trustee to obtain payment of claims in certain cases, or to realize on certain property received in respect of any such claim, as security or otherwise. The trustee and its

**Table of Contents**

affiliates may engage in, and will be permitted to continue to engage in, other transactions with us and our affiliates. If, however, the trustee, acquires any conflicting interest within the meaning of the Trust Indenture Act of 1939, it must eliminate such conflict or resign.

The holders of a majority in principal amount of the then outstanding debt securities of any series may direct the time, method and place of conducting any proceeding for exercising any remedy available to the trustee. If an event of default occurs and is continuing, the trustee, in the exercise of its rights and powers, must use the degree of care and skill of a prudent person in the conduct of his or her own affairs. Subject to that provision, the trustee will be under no obligation to exercise any of its rights or powers under the indenture at the request of any of the holders of the debt securities, unless they have offered to the trustee reasonable indemnity or security.

**Table of Contents**

**ANTI-TAKEOVER EFFECTS OF DELAWARE LAW AND OF OUR CHARTER AND BY-LAWS**

The following paragraphs summarize certain provisions of the Delaware General Corporation Law and our charter and by-laws. The summary is subject to and qualified in its entirety by reference to the Delaware General Corporation Law and to our charter and by-laws, copies of which are on file with the SEC. Please refer to "Where You Can Find More Information" below for directions on obtaining these documents.

**Delaware Law**

Section 203 of the Delaware General Corporation Law is applicable to corporate takeovers of Delaware corporations. Subject to exceptions enumerated in Section 203, Section 203 provides that a corporation shall not engage in any business combination with any interested stockholder for a three-year period following the date that the stockholder becomes an interested stockholder unless:

prior to that date, the board of directors of the corporation approved either the business combination or the transaction that resulted in the stockholder becoming an interested stockholder;

upon consummation of the transaction that resulted in the stockholder becoming an interested stockholder, the interested stockholder owned at least 85% of the voting stock of the corporation outstanding at the time the transaction commenced, though some shares may be excluded from the calculation; and

on or subsequent to that date, the business combination is approved by the board of directors of the corporation and by the affirmative votes of holders of at least two-thirds of the outstanding voting stock that is not owned by the interested stockholder.

Except as specified in Section 203, an interested stockholder is generally defined to include any person who, together with any affiliates or associates of that person, beneficially owns, directly or indirectly, 15% or more of the outstanding voting stock of the corporation, or is an affiliate or associate of the corporation and was the owner of 15% or more of the outstanding voting stock of the corporation, any time within three years immediately prior to the relevant date. Under some circumstances, Section 203 makes it more difficult for an interested stockholder to effect various business combinations with a corporation for a three-year period. Our certificate of incorporation and by-laws do not exclude the company from the restrictions imposed under Section 203. We expect that the provisions of Section 203 may encourage companies interested in acquiring us to negotiate in advance with our board of directors. These provisions may have the effect of deterring hostile takeovers or delaying changes in control of Antigenics, which could depress the market price of our stock and which could deprive stockholders of opportunities to realize a premium on shares of our stock held by them.

**Charter and By-Law Provisions**

Our certificate of incorporation and by-laws contain provisions that could discourage potential takeover attempts and make more difficult attempts by stockholders to change management. Our certificate of incorporation provides that stockholders may not take action by written consent but may only act at a stockholders' meeting, and that only our president or a majority of our board of directors may call special meetings of the stockholders. Our by-laws also require that stockholders provide advance notice of business to be brought by a stockholder before the annual meeting. Our certificate of incorporation includes provisions classifying the board of directors into three classes with staggered three-year terms. In addition, our directors may only be removed from office for cause. Under our certificate of incorporation and by-laws, the board of directors determines the size of the board and may fill vacancies on the board. The by-laws provide that stockholders may not make nominations for directors at any annual or special meeting unless the stockholder intending to make a nomination notifies Antigenics of the stockholder's intention a specified period in advance and furnishes certain information.

**Table of Contents**

**PLAN OF DISTRIBUTION**

We may sell the securities being offered by us in this prospectus:

directly to purchasers;

through agents;

through dealers;

through underwriters; or

through a combination of any of these methods of sale.

We and our agents and underwriters may sell the securities being offered by us in this prospectus from time to time in one or more transactions:

at a fixed price or prices, which may be changed;

at market prices prevailing at the time of sale;

at prices related to such prevailing market prices; or

at negotiated prices.

We may solicit directly offers to purchase securities. We may also designate agents from time to time to solicit offers to purchase securities. Any agent that we designate, who may be deemed to be an underwriter as that term is defined in the Securities Act, may then resell such securities to the public at varying prices to be determined by such agent at the time of resale. We may engage in at the market offerings only of our common stock. An at the market offering is an offering of our common stock at other than a fixed price to or through a market maker. Under Rule 415(a)(4) of the Securities Act, the total value of at the market offerings made under this prospectus may not exceed 10% of the aggregate market value of our common stock held by non-affiliates. Any underwriter that we engage for an at the market offering would be named in a post-effective amendment to the registration statement containing this prospectus. Additional details of our arrangement with the underwriter, including commissions or fees paid by us and whether the underwriter is acting as principal or agent, would be described in the related prospectus supplement.

If we use underwriters to sell securities, we would enter into an underwriting agreement with the underwriters at the time of the sale to them. The names of the underwriters would be set forth in the prospectus supplement which would be used by them together with this prospectus to make resales of the securities to the public. In connection with the sale of the securities offered, the underwriters may be deemed to have received compensation from us in the form of underwriting discounts or commissions. Underwriters may also receive commissions from purchasers of the securities.

Underwriters may also use dealers to sell securities. If this happens, the dealers may receive compensation in the form of discounts, concessions or commissions from the underwriters and/or commissions from the purchasers for whom they may act as agents.

## **Table of Contents**

Underwriting compensation paid by us to underwriters in connection with the offering of the securities offered in this prospectus, and discounts, concessions or commissions allowed by underwriters to participating dealers, would be set forth in the applicable prospectus supplement.

Underwriters, dealers, agents and other persons may be entitled, under agreements that may be entered into with us, to indemnification by us against certain civil liabilities, including liabilities under the Securities Act, or to contribution with respect to payments which they may be required to make in respect of such liabilities. Underwriters and agents may engage in transactions with, or perform services for, us in the ordinary course of business. If so indicated in the applicable prospectus supplement, we will authorize underwriters, dealers, or other persons to solicit offers by certain institutions to purchase securities pursuant to contracts providing for payment and delivery on a future date or dates. The obligations of any purchaser under these contracts would be subject only to those conditions described in the applicable prospectus supplement, and the prospectus supplement would set forth the price to be paid for securities pursuant to those contracts and the commissions payable for solicitation of the contracts.

Any underwriter may engage in over-allotment, stabilizing and syndicate short covering transactions and penalty bids in accordance with Regulation M of the Securities Exchange Act of 1934. Over-allotment involves sales in excess of the offering size, which creates a short position. Stabilizing transactions involve bids to purchase the underlying security so long as the stabilizing bids do not exceed a specified maximum. Syndicate short covering transactions involve purchases of securities in the open market after the distribution has been completed in order to cover syndicate short positions. Penalty bids permit the underwriters to reclaim selling concessions from dealers when the securities originally sold by such dealers are purchased in covering transactions to cover syndicate short positions. These transactions may cause the price of the securities sold in an offering to be higher than it would otherwise be. These transactions, if commenced, may be discontinued by the underwriters at any time.

Each series of securities offered under this prospectus would be a new issue with no established trading market, other than our common stock, which is listed on the Nasdaq National Market. Any shares of our common stock sold pursuant to a prospectus supplement will be listed on the Nasdaq National Market or on an exchange on which the common stock offered is then listed, subject (if applicable) to official notice of issuance. Any underwriters to whom we sell securities for public offering and sale may make a market in the securities that they purchase, but the underwriters will not be obligated to do so and may discontinue any market making at any time without notice. We may elect to list any of the securities we may offer from time to time for trading on an exchange or on the Nasdaq National Market, but we are not obligated to do so.

The anticipated date of delivery of the securities offered hereby will be set forth in the applicable prospectus supplement relating to each offering.

## **LEGAL MATTERS**

Our counsel, Ropes & Gray LLP, Boston, Massachusetts, will pass on the validity of the securities offered by this prospectus and any accompanying prospectus supplement. Paul M. Kinsella, a partner at Ropes & Gray LLP, is our Secretary.

## **EXPERTS**

The consolidated financial statements of Antigenics Inc. and subsidiaries as of December 31, 2002 and 2001, and for each of the years in the three-year period ended December 31, 2002, have been incorporated by reference herein and in the registration statement in reliance upon the report of KPMG LLP, independent accountants, incorporated by reference herein, and upon the authority of said firm as experts in accounting and auditing. The audit report covering the December 31, 2002 consolidated financial statements refers to a change in accounting for purchase method business combinations completed after June 30, 2001 and a change in accounting for goodwill and intangible assets effective January 1, 2002.

**Table of Contents**

**INCORPORATION OF CERTAIN DOCUMENTS BY REFERENCE**

The SEC allows us to incorporate by reference information from other documents that we file with them, which means that we can disclose important information by referring to those documents. The information incorporated by reference is considered to be part of this prospectus, and information that we file later with the SEC will automatically update and supersede this information. We incorporate by reference the documents listed below and any future filings we make with the SEC under Sections 13(a), 13(c), 14 or 15(d) of the Securities Exchange Act of 1934 prior to the sale of all the securities covered by this prospectus:

our Annual Report on Form 10-K for the fiscal year ended December 31, 2002 filed with the SEC on March 27, 2003 (File No. 000-29089);  
our Quarterly Report on Form 10-Q for the quarter ended March 31, 2003 filed with the SEC on May 15, 2003 (File No. 000-29089);  
our Current Reports on Form 8-K filed with the SEC on January 8, 2003, January 27, 2003, and June 11, 2003 (File No. 000-29089);  
our Proxy Statement on Schedule 14A filed with the SEC on April 28, 2003 (File No. 000-29089); and  
the description of our common stock contained in our Registration Statement on Form 8-A, filed on January 24, 2000 (File No. 000-29089), including any amendment or reports filed for the purpose of updating such description.

We will provide to you, without charge, upon your written or oral request, a copy of any or all of the documents that we incorporate by reference, including exhibits. Please direct requests to: Investor Relations at Antigenics Inc., 630 Fifth Avenue, New York, New York 10111, where the phone number is (212) 994-8200.

**WHERE YOU CAN FIND MORE INFORMATION**

You should rely only on the information contained in this prospectus. We have not authorized any person to provide you different information. You should not assume that the information in this prospectus is accurate as of any date other than the date on the cover.

We file annual, quarterly, and special reports and proxy statements and other information with the SEC. You may read and copy any document that 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 on the SEC's web site at <http://www.sec.gov>.



**Table of Contents****PART II****INFORMATION NOT REQUIRED IN PROSPECTUS****ITEM 14. OTHER EXPENSES OF ISSUANCE AND DISTRIBUTION**

The expenses in connection with the securities being registered are as follows:

	<b>Amount To Be Paid</b>
Registration fee	\$ 5,015.48
Printing and Engraving Expenses	100,000.00
Legal fees and expenses	250,000.00
Accounting fees and expenses	200,000.00
Miscellaneous	4,984.52
	<hr/>
Total	\$560,000.00

All of the above figures, except the SEC registration fee, are estimated, and we will pay all of the above expenses.

**ITEM 15. INDEMNIFICATION OF DIRECTORS AND OFFICERS**

Section 145 of the Delaware General Corporation Law provides that a corporation may indemnify any person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding, whether civil, criminal, administrative or investigative, other than an action by or in the right of the corporation, by reason of the fact that the person is or was a director, officer, employee or agent of the corporation or is or was serving at the corporation's request as a director, officer, employee or agent of another corporation, partnership, joint venture, trust or other enterprise, against expenses, including attorneys' fees, judgments, fines and amounts paid in settlement actually and reasonably incurred by the person in connection with the action, suit or proceeding if the person acted in good faith and in a manner the person reasonably believed to be in or not opposed to the best interests of the corporation, and, with respect to any criminal action or proceeding, had no reasonable cause to believe the person's conduct was unlawful. The power to indemnify applies to actions brought by or in the right of the corporation as well, but only to the extent of expenses, including attorneys' fees but excluding judgments, fines and amounts paid in settlement, actually and reasonably incurred by the person in connection with the defense or settlement of the action or suit. And with the further limitation that in these actions no indemnification shall be made in the event of any adjudication of negligence or misconduct in the performance of his duties to the corporation, unless a court believes that in light of all the circumstances indemnification should apply.

Article V of Antigenics' By-laws provides that Antigenics shall, to the extent legally permitted, indemnify each person who was or is a party or is threatened to be made a party to any threatened, pending or completed action, suit or proceeding by reason of the fact that he is or was, or has agreed to become, a director or officer of Antigenics, or is or was serving, or has agreed to serve, at the request of Antigenics, as a director, officer or trustee of, or in a similar capacity with, another corporation, partnership, joint venture, trust or other enterprises. The indemnification provided for in Article V is expressly not exclusive of any other rights to which those seeking indemnification may be entitled under any law, agreement or vote of stockholders or disinterested directors or otherwise, and shall inure to the benefit of the heirs, executors and administrators of such persons.

Section 145(g) of the Delaware General Corporation Law and Article V of By-laws of Antigenics provide that the company shall have the power to purchase and maintain insurance on behalf of its officers, directors, employees and agents, against any liability asserted against and incurred by such persons in any such capacity.

Antigenics has entered into indemnification agreements with each of its directors and executive officers and has obtained insurance covering its directors and officers against losses and insuring Antigenics against certain of its obligations to indemnify its directors and officers.

**Table of Contents**

Section 102(b)(7) of the Delaware General Corporation Law provides that a corporation may eliminate or limit the personal liability of a director to the corporation or its stockholders for monetary damages for breach of fiduciary duty as a director, provided that such provisions shall not eliminate or limit the liability of a director (i) for any breach of the director's duty of loyalty to the corporation or its stockholders, (ii) for acts or omissions not in good faith or which involve intentional misconduct or a knowing violation of law, (iii) under Section 174 of the Delaware General Corporation Law, or (iv) for any transaction from which the director derived an improper personal benefit. No such provision shall eliminate or limit the liability of a director for any act or omission occurring prior to the date when such provision becomes effective.

Section 6 of Article FIFTH of the Certificate of Incorporation of Antigenics eliminates a director's personal liability for monetary damages to Antigenics and its stockholders to the fullest extent permitted under the Delaware General Corporation Law.

**ITEM 16. EXHIBITS**

<b>Exhibit Number</b>	<b>Description of Document</b>
1.1	Form of Underwriting Agreement.*
3.1	Amended and Restated Certificate of Incorporation of Antigenics Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K dated June 10, 2002 (File No. 000-29089) and incorporated herein by reference.
3.2	Amended and Restated By-laws of Antigenics Inc. Filed as Exhibit 3.2 to our Current Report on Form 8-K dated June 10, 2002 (File No. 000-29089) and incorporated herein by reference.
4.2	Form of Warrant to purchase Common Stock, together with a list of holders. Filed as Exhibit 4.2 to our Registration Statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
4.5	Form of Common Stock Purchase Warrant. Filed as Exhibit 4.3 to Current Report on Form 8-K dated April 17, 2000 (File No. 0-20111) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.6	Form of Common Stock Purchase Warrant. Filed as Exhibit 4.2 to Current Report on Form 8-K dated April 17, 2000 (File No. 0-20111) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.7	Registration Rights Agreement dated August 2, 1989 by and among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.2 to the Registration Statement on Form S-1 (File No. 333-47418) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.8	First Amendment to Registration Rights Agreement dated April 18, 1990, by and among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.3 to the Registration Statement on Form S-1 (File No. 333-47418) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.9	Second Amendment to Registration Rights Agreement dated October 31, 1991, by and among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.4 to the Registration Statement on Form S-1 (File No. 333-47418) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.10	Third Amendment to Registration Rights Agreement, dated September 10, 1993, among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.24 to the Registration Statement on Form S-1 (File No. 333-71166) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.11	

## Edgar Filing: ANTIGENICS INC /DE/ - Form S-3/A

Fourth Amendment to Registration Rights Agreement dated January 20, 1994, among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.5 to the Annual Report on Form 10-K/A for the year ended December 31, 1999 (File No. 0-20111) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.

- 4.12 Form of Warrant to Purchase of Common Stock issued to Paramount Capital Inc. Filed as Exhibit 1.2 to the Registration Statement on Form S-1 (File No. 333-67599) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.

**Table of Contents**

Exhibit Number	Description of Document
4.13	Common Stock Purchase Warrant issued to Genzyme Corporation. Filed as Exhibit 10.3 to Current Report on Form 8-K dated June 4, 1999 (File No. 0-20111) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.14	Form of Indenture. Filed as Exhibit 4.14 to Amendment No. 1 to Form S-3 dated July 23, 2002 (File No. 333-90380) and incorporated herein by reference.
4.15	Certificate of Designation of Preferred Stock. *
5.1	Opinion of Ropes & Gray LLP. Included with the initial filing of this registration statement.
12.1	Statement Regarding Calculation of Ratio of Earnings to Fixed Charges. Previously filed with Pre-Effective Amendment No. 1 to this registration statement.
23.1	Consent of KPMG LLP.
23.2	Consent of Ropes & Gray LLP. Included in the opinion filed as Exhibit 5.1 to the initial filing of this registration statement.
24.1	Power of Attorney. Included on signature page to the initial filing of this registration statement.
25.1	Statement of Eligibility of Trustee on Form T-1. **

\*To be filed by amendment or by Current Report on Form 8-K pursuant to Item 601(b) of Regulation S-K.

\*\*To be filed separately pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939.

**Table of Contents**

**ITEM 17. UNDERTAKINGS**

(a) The undersigned hereby undertakes:

(1) To file, during any period in which offers or sales are being made, a post-effective amendment to this registration statement

(i) To include any prospectus required by Section 10(a)(3) of the Securities Act of 1933;

(ii) To reflect in the prospectus any facts or events arising after the effective date of the registration statement (or the most recent post-effective amendment thereof) which, individually or in the aggregate, represent a fundamental change in the information set forth in the registration statement. Notwithstanding the foregoing, any increase or decrease in the volume of securities offered (if the total dollar value of securities offered would not exceed that which was registered) and any deviation from the low or high end of the estimated maximum offering range may be reflected in the form of prospectus filed with the Commission pursuant to Rule 424(b) if, in the aggregate, the changes in volume and price represent no more than 20 percent change in the maximum aggregate offering price set forth in the Calculation of Registration Fee table in the effective registration statement; and

(iii) To include any material information with respect to the plan of distribution not previously disclosed in the registration statement or any material change to such information in the registration statement;

provided, however, that paragraphs (a)(1)(i) and (a)(1)(ii) do not apply if the registration statement is on Form S-3, Form S-8 or Form F-3, and the information required to be included in a post-effective amendment by those paragraphs is contained in periodic reports filed with or furnished to the Commission by the registrant pursuant to Section 13 or 15(d) of the Securities Exchange Act of 1934 that are incorporated by reference in the registration statement.

(2) That, for the purpose of determining any liability under the Securities Act of 1933, each such post-effective amendment shall be deemed to be a new registration statement relating to the securities offered therein, and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(3) To remove from registration by means of a post-effective amendment any of the securities being registered which remain unsold at the termination of the offering.

(b) The undersigned registrant hereby undertakes that, for purposes of determining any liability under the Securities Act of 1933, each filing of the registrant's annual report pursuant to Section 13(a) or section 15(d) of the Securities Exchange Act of 1934 that is incorporated by reference in the registration statement shall be deemed to be a new registration statement relating to the securities offered therein and the offering of such securities at that time shall be deemed to be the initial bona fide offering thereof.

(c) Insofar as indemnification for liabilities arising under the Securities Act of 1933 may be permitted to directors, officers or controlling persons of the registrant pursuant to the foregoing provisions, or otherwise, the registrant has been advised that in the opinion of the Securities and Exchange Commission such indemnification is against public policy as expressed in the Act and is, therefore, unenforceable. In the event that a claim for indemnification against such liabilities (other than the payment by the registrant of expenses incurred or paid by a director, officer or controlling person of the registrant in the successful defense of any action, suit or proceeding) is asserted by such director, officer or controlling person in connection with the securities being registered, the registrant will, unless in the opinion of its counsel the matter has been settled by controlling precedent, submit to a court of appropriate jurisdiction the question whether such indemnification by it is against public policy as expressed in the Act and will be governed by the final adjudication of such issue.

(d) The undersigned registrant hereby undertakes to file an application for the purpose of determining the eligibility of the trustee to act under subsection (a) of Section 310 of the Trust Indenture Act in accordance with the rules and regulations prescribed by the Securities and Exchange Commission under Section 305(b)(2) of the Act.

**Table of Contents**

**SIGNATURES**

Pursuant to the requirements of the Securities Act of 1933, the registrant certifies that it has reasonable grounds to believe that it meets all of the requirements for filing on Form S-3 and has duly caused this Pre-Effective Amendment No. 2 to the registration statement to be signed on its behalf by the undersigned, thereunto duly authorized, in the City of New York, State of New York, as of July 10, 2003.

ANTIGENICS INC.

By: /s/ Garo H. Armen

\_\_\_\_\_  
 Garo Armen, Ph.D.  
 Chief Executive Officer and Chairman  
 of the Board of Directors

Pursuant to the requirements of the Securities Act of 1933, this Pre-Effective Amendment No. 2 to the registration statement has been signed below by the following persons in the capacities and as of July 10, 2003.

<u>Signature</u>	<u>Title</u>
/s/ Garo H. Armen	
Garo Armen, Ph.D.	Chief Executive Officer and Chairman of the Board of Directors (Principal Executive Officer and Principal Financial and Accounting Officer)
*	Director
Pramod K. Srivastava, Ph.D.	
*	Director
Noubar Afeyan, Ph.D.	
*	Vice Chairman of the Board of Directors
Gamil G. de Chadarevian	
*	Director
Tom Dechaene	
*	Director
Frank V. AtLee III	

**Table of Contents**

<b>Signature</b>	<b>Title</b>
<hr/>	
*	Director
<hr/>	
Margaret M. Eisen	
*	Director
<hr/>	
Wadih Jordan	
*	Director
<hr/>	
Mark Kessel	
*	Director
<hr/>	
Martin Taylor	

\*By: /s/ GARO H. ARMEN

**Table of Contents****EXHIBIT INDEX**

<b>Exhibit Number</b>	<b>Description of Document</b>
1.1	Form of Underwriting Agreement.*
3.1	Amended and Restated Certificate of Incorporation of Antigenics Inc. Filed as Exhibit 3.1 to our Current Report on Form 8-K dated June 10, 2002 (File No. 000-29089) and incorporated herein by reference.
3.2	Amended and Restated By-laws of Antigenics Inc. Filed as Exhibit 3.2 to our Current Report on Form 8-K dated June 10, 2002 (File No. 000-29089) and incorporated herein by reference.
4.2	Form of Warrant to purchase Common Stock, together with a list of holders. Filed as Exhibit 4.2 to our Registration Statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
4.5	Form of Common Stock Purchase Warrant. Filed as Exhibit 4.3 to Current Report on Form 8-K dated April 17, 2000 (File No. 0-20111) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.6	Form of Common Stock Purchase Warrant. Filed as Exhibit 4.2 to Current Report on Form 8-K dated April 17, 2000 (File No. 0-20111) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.7	Registration Rights Agreement dated August 2, 1989 by and among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.2 to the Registration Statement on Form S-1 (File No. 333-47418) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.8	First Amendment to Registration Rights Agreement dated April 18, 1990, by and among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.3 to the Registration Statement on Form S-1 (File No. 333-47418) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.9	Second Amendment to Registration Rights Agreement dated October 31, 1991, by and among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.4 to the Registration Statement on Form S-1 (File No. 333-47418) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.10	Third Amendment to Registration Rights Agreement, dated September 10, 1993, among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.24 to the Registration Statement on Form S-1 (File No. 333-71166) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.11	Fourth Amendment to Registration Rights Agreement dated January 20, 1994, among Aronex Pharmaceuticals, Inc. and certain of its stockholders. Filed as Exhibit 10.5 to the Annual Report on Form 10-K/A for the year ended December 31, 1999 (File No. 0-20111) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.12	Form of Warrant to Purchase of Common Stock issued to Paramount Capital Inc. Filed as Exhibit 1.2 to the Registration Statement on Form S-1 (File No. 333-67599) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.



**Table of Contents**

Exhibit Number	Description of Document
4.13	Common Stock Purchase Warrant issued to Genzyme Corporation. Filed as Exhibit 10.3 to Current Report on Form 8-K dated June 4, 1999 (File No. 0-20111) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
4.14	Form of Indenture. Filed as Exhibit 4.14 to Amendment No. 1 to Form S-3 dated July 23, 2002 (File No. 333-90380) and incorporated herein by reference.
4.15	Certificate of Designation of Preferred Stock. *
5.1	Opinion of Ropes & Gray LLP. Included with the initial filing of this registration statement.
12.1	Statement Regarding Calculation of Ratio of Earnings to Fixed Charges. Previously filed with Pre-Effective Amendment No. 1 to this registration statement.
23.1	Consent of KPMG LLP.
23.2	Consent of Ropes & Gray LLP. Included in the opinion filed as Exhibit 5.1 to the initial filing of this registration statement.
24.1	Power of Attorney. Included on signature page to the initial filing of this registration statement.
25.1	Statement of Eligibility of Trustee on Form T-1. **

\* To be filed by amendment or by Current Report on Form 8-K pursuant to Item 601(b) of Regulation S-K.

\*\* To be filed separately pursuant to Section 305(b)(2) of the Trust Indenture Act of 1939.