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**UNITED STATES  
SECURITIES AND EXCHANGE COMMISSION**  
Washington, D.C. 20549

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**Form 10-K**

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

For the fiscal year ended December 31, 2005

or

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

For the transition period from \_\_\_\_\_ to \_\_\_\_\_

Commission File Number: 000-29089

**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 No.)*

**630 Fifth Avenue, Suite 2100, New York, New York 10111**  
*(Address of principal executive offices including zip code)*

**Registrant's telephone number, including area code:**  
**(212) 994-8200**

**Securities registered pursuant to Section 12(b) of the Act:**

**None**  
*(Title of each Class)*

**None**  
*(Name of each exchange on which registered)*

**Securities registered pursuant to Section 12(g) of the Act:**

**Common Stock, \$.01 Par Value**

Indicate by check mark if the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

Indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. Yes  No

Indicate by check mark whether the registrant (1) has filed all reports required to be filed by Section 13 or 15(d) of the Securities Exchange Act of 1934 during the preceding 12 months (or for such shorter period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days. Yes  No

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

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

Large accelerated filer  Accelerated Filer  Non-accelerated filer

Indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Exchange Act). Yes  No

The aggregate market value of voting stock held by non-affiliates of the registrant as of June 30, 2005 was: \$175,968,403. There were 45,656,056 shares of the registrant's Common Stock outstanding as of February 15, 2006.

**DOCUMENTS INCORPORATED BY REFERENCE**

Portions of the definitive proxy statement for the registrant's 2006 Annual Meeting of Stockholders to be held on June 14, 2006, which definitive proxy statement will be filed with the Securities and Exchange Commission not later than 120 days after the registrant's fiscal year of December 31, 2005, are incorporated by reference into Part III of this Annual Report on Form 10-K.

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## NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains 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,” “future,” “project,” and similar terms. Forward-looking statements include statements about our timelines for completing research, preclinical studies, clinical trials, timelines for releasing data from clinical trials, timelines for initiating new clinical trials, expectations regarding research, preclinical studies, clinical trials and regulatory processes, expectations regarding test results, future product research and development activities, the expected effectiveness of therapeutic drugs, vaccines, and combinations in treating diseases, applicability of our heat shock protein technology to multiple cancers and infectious diseases, competitive position, plans for regulatory filings, the sufficiency of our clinical trials in renal cell carcinoma to support a biologics license application for product approval, possible receipt of future regulatory approvals, the performance of collaborative partners in our strategic license and partnering collaborations, expected cash needs, plans for sales and marketing, implementation of 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. These risks and uncertainties include, among others, that clinical trials may not demonstrate that our products are both safe and more effective than current standards of care; that we may be unable to obtain the regulatory authorization necessary to conduct additional clinical trials; that we may not be able to enroll sufficient numbers of patients in our clinical trials; that we may be unable to obtain the regulatory review or approval necessary to commercialize our product candidates because the United States Food and Drug Administration (“FDA”) or other regulatory agencies are not satisfied with our trial protocols or the results of our trials; that we may fail to adequately protect our intellectual property or that it is determined that we infringe on the intellectual property of others; our ability to raise additional capital; changes in financial markets, regulatory requirements and geopolitical developments; and the solvency of counter-parties under material agreements, subleases and general real estate risks.

We have included more detailed descriptions of these risks and uncertainties and other risks and uncertainties applicable to our business in Item 1A. “Risk Factors” of this Annual Report on Form 10-K. We encourage you to read those descriptions carefully. We caution investors not to place significant reliance on forward-looking statements contained in this document; such statements need to be evaluated in light of all the information contained in this document. Furthermore, the statements speak only as of the date of this document, and we undertake no obligation to update or revise these statements.

Oncophage® is a registered trademark of Antigenics and Aroplatin™ is a trademark of Antigenics. Gleevec® is a registered trademark of Novartis. All rights reserved.

**PART I**

**Item 1. Business**

**Our Business**

**Overview**

Antigenics Inc. (including its subsidiaries, also referred to in this Annual Report on Form 10-K as “Antigenics”, the “Company”, “we”, “us”, and “our”) is a biotechnology company developing technologies and products to treat cancers, infectious diseases and autoimmune disorders, primarily based on immunological approaches. Our most advanced product candidate is Oncophage<sup>®</sup> (vitespen; formerly HSPPC-96), a personalized therapeutic cancer vaccine candidate that has been tested, or is currently being tested, in several cancer indications, including in Phase 3 clinical trials for the treatment of renal cell carcinoma, the most common type of kidney cancer, and for metastatic melanoma. Oncophage is also being tested in Phase 2 and Phase 1 clinical trials in a range of indications as both monotherapy and in combination with other therapeutic agents. Our product candidate portfolio also includes (1) AG-858, a personalized therapeutic cancer vaccine in a Phase 2 clinical trial for the treatment of chronic myelogenous leukemia (“CML”), (2) AG-707, a therapeutic vaccine program in a Phase 1 clinical trial for the treatment of genital herpes, (3) Aroplatin™, a liposomal chemotherapeutic in a Phase 1 clinical trial for the treatment of solid tumors and non-Hodgkin’s lymphoma (“NHL”), and (4) QS-21, an adjuvant used in numerous vaccines including, but not limited to, hepatitis, lyme disease, human immunodeficiency virus (“HIV”), influenza, cancer, and malaria. Our related business activities include research and development, regulatory and clinical affairs, clinical manufacturing, business development, marketing and administrative functions that support these activities.

**Our Products Under Development**

**Introduction**

Heat shock proteins, our founding technology platform, form the basis for our most advanced product candidate, Oncophage, and for our AG-858 and AG-707 product candidates. We have observed clinical activity in Phase 1, Phase 1/2, Phase 2 and Phase 3 trials of Oncophage in terms of improvement or stabilization of disease in multiple cancer indications. This includes data demonstrating complete disappearance (a complete response) or substantial shrinkage (a partial response) of tumor lesions in a portion of patients with renal cell carcinoma, melanoma and lymphoma and potential survival benefits in certain metastatic melanoma patients. Additionally, in a portion of patients who were rendered disease-free by surgery and received Oncophage, we have observed signs of positive impact on disease such as disease free survival in resectable pancreatic cancer and increased survival in a subset population in stage IV colon cancer. In our studies to date, the vaccine has shown that it may have a favorable safety profile. The most common side effects have been mild to moderate injection site reactions and transient low-grade fevers. We believe that this human data further supports the broad applicability and corresponding commercial potential of our heat shock protein product candidates.

Oncophage is a personalized therapeutic cancer vaccine that is based on a heat shock protein called gp96, and it is currently in Phase 3 clinical trials for renal cell carcinoma and metastatic melanoma. Oncophage has received Fast Track designation and Orphan Drug designation from the US Food and Drug Administration, also known as the FDA, for both renal cell carcinoma and metastatic melanoma. Oncophage has Orphan Drug status for renal cell carcinoma from the European Medicines Agency (“EMA”).

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AG-858 is a personalized therapeutic cancer vaccine based on a different heat shock protein called HSP70, which is being tested in combination with Gleevec™ (imatinib mesylate, Novartis) in a Phase 2 clinical trial for the treatment of CML, a cancer of the blood system.

AG-707 is our therapeutic vaccine program for the treatment of genital herpes. AG-707 is a multivalent vaccine (a type of vaccine that addresses multiple components of the virus) that consists of a heat shock protein (Hsc70) associated with multiple synthetic herpes simplex virus-2 peptides. Based on the results of completed toxicology studies and other preclinical activities, we submitted to the FDA an investigational new drug application (“IND”) for AG-707 during the second quarter of 2005 and in October 2005, initiated a Phase 1 clinical trial of AG-707.

Aroplatin is a novel liposomal third-generation platinum chemotherapeutic that has been studied by Antigenics in two Phase 1 trials of patients with colorectal cancer and other solid tumors and is currently being evaluated in a Phase 1 dose-escalation trial in solid malignancies and NHL. Platinum chemotherapeutics are cancer drugs containing the metallic element platinum, which has been shown to have some anti-cancer effects. In the case of Aroplatin, the active platinum drug component is encapsulated in a liposome, which is a spherical particle of phospholipids that are components of human cell membranes. We have developed a new formulation of Aroplatin. A Good Laboratory Practices (“GLP”) toxicology study comparing the old and new formulations of Aroplatin was completed during the second quarter of 2005. The results from this study and other studies describing characterization of the new formulation were submitted to the FDA during the third quarter of 2005 in an IND amendment prior to initiating the ongoing Phase 1 study.

Our technologies also include ATRA-IV (formerly known as ATRAGEN) and QS-21. ATRA-IV is a liposomal, intravenous formulation of all-*trans*-retinoic acid (“ATRA”), a derivative of vitamin A. ATRA is approved and marketed in an oral formulation call Vesanoid® (tretinoin, Hoffman-LaRoche) for the treatment of acute promyelocytic leukemia. Our liposomal formulation of ATRA-IV is designed to increase its bioavailability, or amount of drug absorbed into the body. During 2006 we plan on studying ATRA-IV in combination with Oncophage. QS-21, is an adjuvant, or companion compound, being studied by our partners in both therapeutic and prophylactic vaccines to enhance the immune response.

Through our preclinical research programs, we intend to develop additional novel compounds to treat cancer, infectious diseases, and autoimmune diseases that are designed to be more efficacious and safer than conventional therapies. We are currently studying the effect of Oncophage in combination with other agents. We are validating process improvements to make higher-activity Oncophage. Our preclinical program is also focused on a “next-generation” Oncophage vaccine, which incorporates several important innovations. With these advances, we expect to be able to manufacture sufficient quantities of a personalized cancer vaccine for patient treatment from much smaller tumor tissue samples.

### ***Heat Shock Protein Technology***

Heat shock proteins, also known as HSPs, are also called stress proteins. HSPs are a group of proteins that are induced when a cell undergoes various types of environmental stresses like heat, cold and oxygen deprivation. HSPs are present in all cells in all life forms from bacteria to mammals, and their structure and function are similar across these diverse life forms. Under normal conditions, heat shock proteins play a major

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role in protein folding and transporting fragments of proteins called peptides, including antigenic peptides, within a cell, and are thus called “chaperones.” Antigenic peptides are those portions of a protein that stimulate an immune response when recognized by the immune system. Because HSPs chaperone peptides within the cell, they bind a broad array of antigenic peptides and facilitate their recognition by the immune system. Thus, HSPs play an integral role in the presentation of the antigenic “fingerprint” to the immune system.

Although heat shock proteins are normally found inside cells, they also serve an important purpose when found extracellularly, meaning outside of cells. When they are found outside of cells, it indicates that a cell has undergone necrosis, a type of rupturing cell death caused by disease, mutation or injury, whereby a cell’s contents are spilled into the body tissue. Extracellular HSPs send a powerful “danger signal” to the immune system that initiates a cascade of events capable of generating a targeted immune response against the infection or disease responsible for the necrotic cell death.

Combined, the intracellular and extracellular functions of heat shock proteins form the basis of our technology. The “chaperoning” nature of heat shock proteins allows us to produce vaccines containing all the antigenic peptides of a given disease. In the case of cancer, the vaccines are personalized, consisting of heat shock proteins purified from a patient’s tumor cells, which remain bound, or complexed, to the broad array of peptides produced by that patient’s tumor. These heat shock protein-peptide complexes, also known as HSPPCs, when injected into the skin, have the ability to stimulate a powerful cellular immune response capable of targeting and killing the cancer cells from which these complexes were derived. Because cancer is a highly variable disease from one patient to another, we believe that a personalized vaccination approach is required to generate a more robust and targeted immune response.

For certain diseases, such as genital herpes, we do not believe that a personalized vaccination approach is required. For example, in our AG-707 product candidate for the treatment of genital herpes, we complex, or bind, several defined antigenic herpes peptides to a heat shock protein (Hsc70) that we genetically engineer creating an HSPPC. This HSPPC, when injected into the skin, is designed to elicit a cellular immune response to the synthetic peptides carried by the heat shock protein.

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### **Product Development Portfolio**

Below is a table showing the clinical status of our lead product candidates under development by Antigenics.

<b>Product</b>	<b>Phase 3 (a)</b>	<b>Phase 2</b>	<b>Phase 1/2</b>
Oncophage	Renal cell carcinoma Part I (a)(b) Renal cell carcinoma Part II (a)(c) Metastatic melanoma (a)(b)	Colorectal cancer (b) Non-Hodgkin's lymphoma (b) Gastric cancer (b) Metastatic renal cell carcinoma (b) Lung cancer (b) Metastatic melanoma (b) CML (a)(c)	Pancreatic cancer (b)
AG-858			
AG-707			Genital herpes (c)
Aroplatin		Colorectal cancer (b)	Solid tumors (b) Solid tumors/NHL (c)(d)

(a) These are multicenter trials being conducted in the U.S. as well as internationally.

(b) These trials are closed to enrollment.

(c) These trials are enrolling patients.

(d) Utilizing a new formulation.

### **Oncophage**

#### **Introduction**

Oncophage, our most advanced product candidate, is a personalized therapeutic cancer vaccine that is based on heat shock protein gp96 and is currently in Phase 3 clinical trials for the treatment of renal cell carcinoma and metastatic melanoma. Each Oncophage vaccine is made from a patient's tumor tissue. After a surgeon removes a patient's tumor, a portion of that tumor tissue is frozen and shipped overnight to our manufacturing facility in Massachusetts. In our Phase 3 trials, we have required a minimum of five to seven grams of tumor tissue to yield a sufficient amount of Oncophage for clinical use.

Using a proprietary manufacturing process that takes approximately eight to ten hours per individual patient lot, we isolate the heat shock protein-peptide complexes, also known as HSPPCs, from the tumor tissue. Through this isolation process, the HSPPCs are extracted and purified from the tumor tissue, then formulated in sterile saline solution and packaged in standard single injection vials. After the performance of quality control testing, including sterility testing, we ship Oncophage frozen back to the hospital pharmacy for administration after a patient has recovered from surgery, which is usually four to six weeks later. A medical professional administers Oncophage by injecting the product into the skin weekly for four weeks and every other week thereafter until that patient's supply of Oncophage is depleted.

Although we believe that our technology is applicable to all cancer types, our initial focus with Oncophage is on cancers that have poor or no available treatment options and that typically yield larger quantities of tumor tissue from the surgical procedure.

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We filed an IND for Oncophage in November 1996 that the FDA allowed on December 20, 1996. We started enrolling patients in our first clinical trial at Memorial Sloan-Kettering Cancer Center in New York, New York in November 1997. To date, we have treated over 750 cancer patients with Oncophage in our clinical trials. We have ongoing Phase 2 trials in lung cancer and metastatic renal cell carcinoma, and we have completed enrollment in part I of a Phase 3 trial for renal cell carcinoma and a Phase 3 trial for metastatic melanoma. Additionally, part II of our Phase 3 trial in renal cell carcinoma has been initiated. Because Oncophage is a novel therapeutic cancer vaccine that is personalized for each patient, meaning it is derived from the patient's own tumor, it may experience a long regulatory review process and high development costs, either of which could delay or prevent our commercialization efforts. For additional information regarding regulatory risks and uncertainties, please read the risks identified under "Risk Factors."

We believe that the collective results from our clinical trials show that Oncophage has a favorable safety profile. We also believe that these results show that treatment with Oncophage can generate immunological and anti-tumor responses.

### **Oncophage Clinical Programs**

#### ***Renal cell carcinoma***

*Background.* Renal cell carcinoma is the most common type of kidney cancer. The American Cancer Society estimates that there will be approximately 38,890 new cases of kidney cancer in the United States in 2006, and about 12,840 people will die from the disease in 2006. Renal cell carcinoma accounts for about 90 percent of all kidney tumors. By the time renal cell carcinoma is diagnosed in these patients, about one-third of them will have developed metastatic disease.

The current standard of care for patients with non-metastatic renal cell carcinoma consists of a nephrectomy, meaning the surgical removal of the kidney, followed by observation. For patients with metastatic disease, FDA approved treatments include intravenous high-dose interleukin-2, or IL-2, a human cytokine, which is a hormone-like protein that facilitates communication between cells of the immune system. The response rate, which includes partial responses and complete responses, of patients who are treated with high-dose interleukin-2 is approximately 15 percent. Treatment with high-dose interleukin-2 often causes severe adverse side effects. These side effects often can lead to discontinuation of treatment. Unlike for metastatic renal cell carcinoma noted above, there is no FDA approved treatment for non-metastatic renal cell carcinoma at the present time.

*Clinical Trials.* In a Phase 1/2 trial conducted at M.D. Anderson Cancer Center, in Houston, Texas, the investigator enrolled patients with metastatic renal cell carcinoma. The trial was opened for enrollment on February 4, 1998, and 38 patients with renal cell carcinoma were treated in the study. Of the 38 treated patients, the investigator reported that one patient had a complete response and two patients had a partial response. Another nine patients showed no substantial change in their disease status, which is referred to as disease stabilization. The reported median time from surgery to worsening or progression of disease (time to progression) was 2.9 months and the reported median time from surgery to death (survival) was 15 months from date of surgery. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. No serious adverse events were reported with treatment with Oncophage.

A Phase 2 trial for patients with metastatic renal cell carcinoma was initiated at M.D. Anderson Cancer Center in March 1999. Findings from this trial were presented at the 39th annual meeting of the American

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Society of Clinical Oncology, also known as ASCO, in June 2003. At the ASCO meeting, the clinical investigators reported preliminary data on 61 patients with metastatic renal cell carcinoma treated with at least one dose of Oncophage. One patient was reported to have had a complete response, two additional patients were reported to have had partial responses and 18 patients were reported to have had disease stabilization. Final results of the study are being evaluated. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. In this trial patients were treated with Oncophage until progression and IL-2 after progression. No significant toxicity was observed to be associated with Oncophage treatment.

Oncophage received Fast Track designation for the treatment of renal cell carcinoma from the FDA in October 2001. Oncophage is the first personalized therapeutic cancer vaccine to receive Fast Track designation. Oncophage received Orphan Drug status in renal cell carcinoma from the FDA in May 2002 and from the EMEA in June 2005.

We initiated a Phase 3, multicenter, international trial for non-metastatic renal cell carcinoma in 2000 into which the first patient was randomized in February 2001. We did not submit a special protocol assessment to the FDA for this trial, as the guidance for such was not finalized until May 2002. Such an assessment would generally seek confirmation that the FDA would consider the clinical trial protocol acceptable for purposes of product approval. We are conducting this trial at sites located in the following countries — USA, Canada, Belgium, Germany, France, Austria, Sweden, Switzerland, Norway, Spain, UK, Netherlands, Israel, Russia and Poland. On September 2, 2003, the FDA imposed a partial clinical hold on our Phase 3 clinical trials because of inadequate data to support specifications for product purity, identity, potency, and pH. The FDA provided comments and requested additional information. During the pendency of the partial clinical hold, we could not enroll any additional patients in our Phase 3 trials in renal cell carcinoma and melanoma. Patients who were already enrolled or in the screening process for enrollment were allowed to continue with the study procedures including therapy with Oncophage. We produced information in response to the FDA comments mentioned above in a submission on October 22, 2003. On November 24, 2003, we announced that the FDA had lifted the partial clinical hold. The FDA had additional comments suggesting that we should attempt to reduce the variability among assay readings, that we should use patients' full names rather than initials on the vaccine tubes, that we should comment on the use of different formulations for the melanoma and renal cell carcinoma Oncophage trials, and, finally, that we should use SAS rather than Excel as our statistical computer program. The FDA did not impose any conditions or limitations when it lifted the partial clinical hold in November 2003. After the clinical hold was lifted, we submitted, during 2004, our validation package to the FDA for the qualified potency assays and in May 2005 we successfully concluded discussions with the FDA.

Validation of the assays refers, in general terms, to establishing the robustness and reproducibility of the assays on an ongoing basis and under various different conditions to demonstrate that the qualified potency assays, accepted by the FDA for continuation of the clinical trial, work consistently.

In late December 2003, we announced achievement of what we view as a major milestone of this trial. A planned interim analysis of the data from our Phase 3 renal cell carcinoma trial was conducted. Based on its review of the safety data, efficacy data and other information regarding the trial, the independent Data Monitoring Committee, also known as the DMC, a panel of cancer specialists who are reviewing the safety and conduct of the trial at regular intervals but are not otherwise involved in the study, recommended that the trial proceed as planned and advised that there was no need to change the number of patients we planned to enroll in

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this trial. The DMC also declared the design and conduct of the trial to be sound and raised no safety concerns. We remain blinded to the efficacy data from the trial. The members of the DMC are only affiliated with us through this DMC relationship. We pay the members \$2,000 per meeting pursuant to individual contracts.

On July 20, 2004, we held a meeting with the FDA medical review team for Oncophage in renal cell carcinoma. The medical review team is specifically focused on the review of patient safety, product efficacy, clinical protocols and clinical development plan-related issues. This compares to the product review team, which is focused on the review of non-clinical issues such as product features, chemistry, manufacturing, and formulation. The purpose of the meeting with the medical review team was to address issues surrounding the clinical development plan for product registration of Oncophage in renal cell carcinoma. This was a “Type A” meeting; such meetings are typically held to review critically important issues for the development of a product and are scheduled within 30 days of the meeting request. The FDA expressed agreement with our overall proposed registration plan. This plan includes using the current Phase 3 trial as part of our product registration strategy and dividing the study into two parts. We commenced study initiation activities in a part II Phase 3 trial in February 2005 having received agreement from the FDA. Following the data analysis of our current Phase 3 clinical trial, part I, we intend to consult with the FDA and present additional data and rationale to determine if a biologics license application (“BLA”) filing could be achieved while part II of the trial is still ongoing. In the event such a determination is made, we would complete preparation and submission of a BLA. We would expect that the FDA review process of such application would take approximately 6 months from the date of filing if priority review is granted and that commercialization will commence if approval is granted.

The FDA has indicated that, by itself, part I of our Phase 3 clinical trial in renal cell carcinoma is not sufficient to support a BLA filing. As noted above, we have expanded our clinical development and registration plan by initiating a second part to this Phase 3 trial in a similar patient population. The FDA has approved this registration plan, which comprises two components — part I and part II. The FDA considers part II of the trial as potentially providing the definitive evidence of safety and efficacy; however, we expect that part I will be accepted as part of the BLA filing. While the FDA has expressly excluded the possibility that part I of our renal cell carcinoma trial alone can support a BLA filing, we intend to complete part I, which is a large, controlled study, perform data analysis, and review the data closely. Should the results from part I of the trial be clearly positive in terms of clinical outcomes, we plan to submit the data to the FDA and request that the agency reconsider its position regarding the use of the data from part I of the trial alone to support a BLA filing, while part II of the study is continuing. We expect to support this position with data that may demonstrate that Oncophage used in part I of the study should be considered sufficiently characterized. We would expect to derive that data from the additional tests we performed on frozen stored portions of product administered to patients prior to December 2003 using our potency assays. We are currently reviewing these test results and will submit the data to the FDA as part of any BLA filing for Oncophage. We believe that the FDA is unlikely to reverse its position unless part I of the trial demonstrates significant benefit to patients. We believe that demonstration of efficacy might be persuasive given (1) part I of our Phase 3 renal cell carcinoma trial is designed to show that patients being treated with Oncophage have a statistically significant benefit in recurrence-free survival over patients in the observation arm, (2) Oncophage has a favorable safety profile, particularly when compared with the toxicity associated with many cancer drugs, (3) part I of the trial represents the largest single randomized trial to date in this patient population and, (4) the patients with the stage of renal cell carcinoma addressed in this trial have no approved post-surgical treatment options. Other companies have submitted BLAs, and obtained approvals, based on data from non-definitive Phase 2 and Phase 3 studies while they complete confirmatory

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studies. We are not aware of a situation in which the FDA has reconsidered its position that a clinical trial could not be considered pivotal, and therefore would not support licensure, because of its determination that the product candidate was insufficiently characterized. However, as noted previously, we plan to attempt to demonstrate that our product candidate should be considered sufficiently characterized. There is no assurance that we will be successful in demonstrating that our product is sufficiently characterized or that the FDA would accept such a strategy. The FDA usually requires prospective, rather than retrospective, testing.

During the quarter ended September 30, 2004, part I of our Phase 3 renal cell carcinoma trial was closed to enrollment. The protocol stipulates that analysis of this trial should occur when a pre-specified number of events occur. An event is defined as a recurrence of a patient's renal cell carcinoma or the death of a patient prior to disease recurrence. All patients are reviewed for determination of disease recurrence, on a blinded basis and regardless of the clinical investigator's assessment of the presence of disease recurrence, by an independent Clinical Events Committee ("CEC") comprised of expert radiologists and an expert oncologist. No assurance can be provided that the actual CEC determined events will be sufficient to have met the pre-specified number of events to trigger an analysis under the protocol.

Based on current trends, we anticipate this analysis to be complete in late March 2006, with top-line data available shortly thereafter. If the efficacy data demonstrates a statistically significant improvement in the primary endpoint for patients treated with Oncophage, and if the FDA accepts the data from this trial as being pivotal and sufficient to support product registration, we would expect to file a BLA within six months after completing the data analysis.

### **Melanoma**

*Background.* Melanoma is the most serious form of skin cancer. According to the American Cancer Society, melanoma accounts for only about four percent of skin cancer cases, yet it causes most skin cancer deaths. The American Cancer Society also estimates that physicians will diagnose about 62,190 new cases of melanoma in the United States in 2006 and that the disease will kill approximately 7,910 people in 2006. The incidence of melanoma is growing at a rate of approximately three percent per year based on a report from the American Cancer Society.

Oncologists treat advanced or metastatic melanoma, also known as stage III or IV, with surgery, radiation therapy, immunotherapy, or chemotherapy, depending on the case. Approximately 15% of all melanoma patients at the time of their first diagnosis have stage III or stage IV disease. Existing treatments have not significantly improved overall survival of patients with metastatic melanoma. The median survival of patients with stage III melanoma varies widely according to published literature. According to published literature, the median survival of patients with late stage III melanoma is about 24 months and patients with stage IV melanoma have a median survival of about seven months. Although oncologists use various treatments, the only FDA approved therapies for patients with metastatic melanoma are high-dose intravenous interleukin-2 and alpha interferon, another human cytokine.

*Clinical Trials.* We have treated 36 patients in a Phase 1/2 clinical trial, evaluating Oncophage as a treatment for late stage III and early stage IV metastatic melanoma, as well as 45 patients in a Phase 2 clinical trial for patients with stage IV disease. In the Phase 1/2 study, which evaluated HSPPC-96 vaccination in patients with advanced non-metastatic or limited metastatic melanoma (Stage III N2 or Stage IV), 13 of 20 patients (65%) treated with vaccine and who also had complete surgical removal of all cancer are still alive after 4.5 years

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compared to one of 16 (6%) patients that still had some cancer left after surgery and is still alive after 3.5 years. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. The investigator reported data from the Phase 2 trial showed that 28 patients had residual disease after surgery and, of these patients, five patients responded favorably to Oncophage, including one who was reported to have achieved a complete response for more than five years. The investigators also reported that Oncophage vaccination generated anti-melanoma immune responses in about one-half of the patients. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. Results of this Phase 2 trial were presented by the investigators at the ASCO meeting in May 2001 and the American Association for Cancer Research, also known as AACR, meeting in October 2001 where it was selected by the conference organizers as one of six presentations out of over 800 to be highlighted and presented to the press. In October 2002, the results from this trial were published in the *Journal of Clinical Oncology*, the official journal of ASCO.

Oncophage received Fast Track designation from the FDA for the treatment of metastatic melanoma in February 2002. Oncophage received Orphan Drug status in metastatic melanoma from the FDA in July 2002. In February 2002, we initiated a multicenter, international Phase 3 trial in metastatic melanoma. We are conducting this trial at sites located in the following countries — USA, UK, Italy, Poland, Sweden, Hungary, Australia, Russia and Ukraine. On September 2, 2003, the FDA imposed a partial clinical hold on our Phase 3 clinical trials because of inadequate data to support specifications for our product purity, identity, potency, and pH (see *Renal Cell Carcinoma* section above). We believe this study will not qualify as registrational due to the relatively high failure rate in vaccine manufacturing. The vaccine could not be produced for approximately 30% of patients in this study. We have not had detailed discussions or formally asked the FDA if our overall product approval strategy for Oncophage in melanoma is acceptable. We did not cover these issues during our July 20, 2004 Type A meeting with the FDA, since that meeting focused on our clinical trial in renal cell carcinoma.

During the quarter ended September 30, 2004, we completed enrollment in our Phase 3 trial in metastatic melanoma. Our overall manufacturing success rate for this trial was approximately 70%. During 2004 we indicated that we did not believe this trial would qualify as registrational. In October 2005, we announced preliminary survival data from this trial noting that in all randomized (intent-to-treat) stage IV M1a patients, median survival improved by more than 50 percent in the Oncophage-treated arm compared with those in the physician's choice treatment arm (20.9 months versus 12.8 months), which included the current array of therapies such as chemotherapeutics, biological agents and/or surgery, although this difference was not statistically significant. The M1a category of stage IV melanoma patients (a category defined by the American Joint Committee on Cancer) was prospectively stratified for in this trial. Patients in this category are routinely identified in a clinical setting with distant metastases in the skin, subcutaneous tissue, or distant lymph nodes. Overall, patients in the intent-to-treat Oncophage arm (M1a, b and c combined) fared similarly to those in the physician's choice arm in terms of survival. This preliminary analysis was not statistically significant. Final analysis of this clinical trial is expected to commence during the first quarter of 2006.

### **Other Cancers**

Oncophage has also been studied in other cancers, including colorectal cancer, NHL, pancreatic cancer and gastric cancer. Data from some of these trials is summarized below. During 2005 we completed enrollment of our Phase 2 clinical trial in non-small cell lung cancer ("NSCLC") and patients are receiving treatment and being evaluated for recurrence of disease.

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*Colorectal.* Results from a Phase 2 clinical trial in patients with metastatic colorectal cancer were published as a featured article in the August 15, 2003 issue of *Clinical Cancer Research*. The paper presented data on 29 patients with stage IV colorectal cancer that had spread to the liver who had undergone complete resection, or surgical removal, of their metastasized disease. The paper also showed that in the trial, patients who responded immunologically to the vaccine (52 percent of study subjects) had a statistically significant survival advantage compared with patients who did not respond immunologically. Responders demonstrated a two-year overall survival rate of 100 percent, compared with 50 percent for nonresponders, and a disease-free survival rate of 51 percent, compared with 8 percent among nonresponders. These results were statistically significant. The data generated as part of this study is undergoing final review as part of the clinical study report preparation process. This trial has been closed to enrollment.

*Non-Hodgkin's Lymphoma.* Findings from a Phase 2, open-label, single-arm study for newly diagnosed or relapsed low-grade indolent, or slow-growing, NHL were presented by the principal investigator from the trial at the ASCO meeting in June 2003. The study was conducted at M. D. Anderson Cancer Center. Of the 10 patients who received Oncophage in the Phase 2 trial up to that point in time, there were responses reported in six: one partial response, two minor responses and three disease stabilizations. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. These findings were updated at the American Society of Hematology, or ASH, 45th annual meeting in December 2003. The study's lead investigator reported indications of clinical activity in eight out of 14 evaluable patients treated up to that point in time in the trial, including one partial response, two minor responses and five disease stabilizations. Oncophage was reported to be well tolerated and without significant adverse effects in this study. In total, 17 patients received Oncophage during the study and were followed for survival. 15, or 88%, of the 17 patients were alive as of the date of the last follow-up. The duration of follow-up for these 15 patients ranged from four months to 50 months (more than four years); for 10, or 59%, of the 17 patients, the documented survival was greater than two years. The data generated as part of this study is undergoing final review as part of the clinical study report preparation process. This trial has been closed to enrollment.

*Gastric.* Data from a Phase 1/2 clinical trial evaluating Oncophage as a treatment for metastatic gastric cancer was presented at the ASCO meeting in 2002. The investigators reported preliminary data for 15 patients with gastric cancer (stage II to stage IV) who underwent surgery, then Oncophage vaccination. At 32 months post-surgery, three were still disease-free, nine had survived, and the mean disease-free and overall survival rates were seven months and over 16 months, respectively. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. No toxicity was observed to be associated with Oncophage treatment. This trial was conducted with clinical investigators at the Johannes Gutenberg-University Hospital in Mainz, Germany, Technical University of Munich in Germany, and the Russian Oncology Research Center in Moscow, Russia. The data generated as part of this study is undergoing final review as part of the clinical study report preparation process. This trial has been closed to enrollment.

*Pancreatic.* In early 1999, we conducted a pilot Phase 1 clinical trial evaluating Oncophage as a treatment for resectable pancreatic cancer. We conducted the trial with clinical investigators at the Memorial Sloan-Kettering Cancer Center. Initially, five patients were treated. Subsequently, five more patients were treated. Updated data from this pilot study were presented at the 12th annual European Cancer Conference, also known as ECCO, in September 2003. These data were highlighted in a press release issued by the Federation of European Cancer Societies during the ECCO conference. In this trial, which included 10 evaluable patients, the

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manufacture of Oncophage was feasible and no toxicity associated with vaccination was observed. Follow-up data from patients in this Phase 1 trial of Oncophage indicates a median overall survival of over 26 months, with one patient still alive and disease-free after more than five years and two other patients alive and disease-free 2.7 and 2.6 years after treatment. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. This trial has been closed to enrollment.

### **Manufacturing**

Oncophage is manufactured in our 162,000 square-foot manufacturing and research and development facility in Lexington, Massachusetts. We are currently leasing approximately 132,000 square-feet of this facility, and based on our lease terms, will expand to 162,000 square feet in March 2006. We estimate that the facility's current capacity, for Oncophage and AG-858 combined, is approximately 10,000 patient courses per year, expandable to between 40,000 and 50,000 patient courses per year. On average, it takes eight to ten hours of direct processing time to manufacture a patient batch of Oncophage. We currently have 11 employees in our manufacturing department.

After manufacturing, Oncophage is tested and released by our quality systems staff. The quality control organization, consisting of 9 employees, performs a series of release assays designed to ensure that the product meets all applicable specifications. Our quality assurance staff, consisting of 10 employees, also reviews manufacturing and quality control records prior to batch release in an effort to assure conformance with current Good Manufacturing Practices, also known as cGMP, as mandated by the FDA and foreign regulatory agencies.

Our Oncophage manufacturing staff is rigorously trained and routinely evaluated for conformance to manufacturing procedures and quality standards. This oversight is intended to ensure compliance with FDA regulations and to provide consistent vaccine output. Our quality control and quality assurance staff is similarly trained and evaluated as part of our effort to ensure consistency in the testing and release of the product, materials, equipment and facilities.

### **AG-858**

AG-858 is a personalized therapeutic cancer vaccine based on our heat shock protein technology for the treatment of CML, a type of cancer characterized by the proliferation of abnormal white blood cells. AG-858 consists of purified HSPPCs based on a specific heat shock protein called HSP70. Because CML is a cancer of the blood, these HSPPCs are purified from a patient's white blood cells, which are obtained through leukapheresis, a method of blood filtration through a machine whereby white blood cells are removed and other blood cell types are returned to the donor.

*Background.* The American Cancer Society estimates that there will be about 35,070 new cases of all types of leukemia in 2006 in the United States. Of these, about 4,500 cases will be diagnosed as CML. The current standard of care for CML is treatment with Gleevec<sup>®</sup> (imatinib mesylate, Novartis).

*Clinical Trials.* In April 2003, we initiated an international, multicenter Phase 2 trial combining AG-858 with Gleevec in patients with CML unresponsive to medical treatment with Gleevec. In May 2004, we voluntarily placed enrollment of this study on hold to modify the cell collection procedure. The study resumed on

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July 24, 2004. The trial will evaluate the safety and cytogenetic response (changes in the amount of tumor cells in the patient's blood) of this combination treatment in approximately 40 patients with chronic phase CML who are currently receiving Gleevec treatment but are cytogenetically positive. During 2005, we expanded enrollment in this trial to study longer duration of treatment.

### **Manufacturing**

We manufacture AG-858 in our facility in Lexington, Massachusetts. The facility's current capacity, for Oncophage and AG-858 combined, is approximately 10,000 patient courses per year, expandable to between 40,000 and 50,000 patient courses per year. On average, it takes 20 to 25 hours of direct processing time to manufacture a patient batch of AG-858. We have developed a revised manufacturing process for AG-858 to reduce this processing time to 8 to 10 hours. This process is currently being evaluated in preclinical animal models.

The manufacturing process for AG-858 is based on similar principles as those used for Oncophage. After manufacturing, AG-858 is tested and released by our quality systems staff. The quality control organization performs a series of release assays designed to ensure that the product meets all applicable specifications. Our quality assurance staff also reviews manufacturing and quality control records prior to batch release in an effort to assure conformance with cGMP as mandated by the FDA and key foreign regulatory agencies.

Our AG-858 manufacturing staff is trained and routinely evaluated for conformance to manufacturing procedures and quality standards. This oversight is intended to ensure compliance with FDA regulations and to provide consistent vaccine output. Our quality control and quality assurance staff is similarly trained and evaluated as part of our effort to ensure consistency in the testing and release of the product, materials, equipment and facilities.

### **AG-707**

AG-707 is our therapeutic vaccine product candidate based on our heat shock protein technology for the treatment of genital herpes, a chronic disease caused by herpes simplex virus-2, or HSV-2. We initially developed our first-generation herpes vaccine, AG-702, prior to developing AG-707. AG-702 consisted of HSPPCs that we manufactured by complexing, or binding, a heat shock protein to a single synthetic peptide of HSV-2 homology and is referred to as a monovalent vaccine. In theory, this monovalent vaccine would only address approximately 40 percent of the patient population due to variances in patients' genetic makeup. AG-707 is a multivalent vaccine (a type of vaccine that addresses multiple targets) containing multiple synthetic HSV-2 peptides. The multivalent AG-707 is therefore designed to address HSV-2 infection in a broad population of patients (up to 90 percent of those affected). AG-707 is designed to be an off-the-shelf product because the antigenic profile of HSV-2 is similar in all patients, so personalization of the products is not required. The most common side effects of AG-702 and AG-707 have been injection site reactions or transient low-grade fevers. Laboratory experiments to characterize and formulate AG-707 have demonstrated specific immune responses to the synthetic HSV-2 peptides using human donor blood and reduced disease severity in animals treated with product prior to exposure to HSV-2 virus. Based on the results of completed toxicology studies and other pre-clinical activities, we submitted to the FDA, and the FDA agreed to, an IND for AG-707 during the second half of 2005. We do not anticipate further developing AG-702 given that AG-707 should be beneficial to a larger number of patients with genital herpes.

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*Background.* The US Centers for Disease Control and Prevention estimated in surveys from 1997 that about one in five people in the United States ages 12 or older is infected with HSV-2. The World Health Organization estimated in 1995 that approximately 21 million people worldwide are infected each year. Genital herpes is currently treated with palliative topical drugs or antiviral agents that reduce further replication of the virus during the period of treatment.

*Clinical Trials.* We initiated a Phase 1 clinical trial of AG-702 as a proof-of-principle study in the fourth quarter of 2001 at The University of Washington. This is a dose-escalation study in both healthy volunteers and genital herpes patients. In October 2005, we initiated a multicenter Phase 1 clinical trial of AG-707. The study will evaluate the safety profile and immune response of patients to AG-707 with and without our QS-21 proprietary adjuvant (a substance designed to improve immune response to vaccination) at three dose levels compared with placebo or adjuvant alone.

### **Manufacturing**

The synthetic peptide components used in AG-707 are manufactured for us by a contract manufacturer. A contract manufacturer also produced the genetically engineered Hsc70 used in AG-702. We plan to continue using contract manufacturers to produce the genetically engineered Hsc70, and the synthetic peptides for AG-707. The purification of genetically engineered Hsc70 complexing with synthetic peptides, fill and finish operations are performed in our Lexington, Massachusetts facility.

### **Aroplatin**

Aroplatin is a novel liposomal formulation of a third-generation platinum chemotherapeutic structurally similar to oxaliplatin, a treatment for colorectal cancer. Although structural similarity does not guarantee similar clinical benefit, laboratory studies comparing Aroplatin to oxaliplatin showed that Aroplatin suppressed tumor growth, caused a reduction in tumor size, and provided a 50% increase in survival as compared to control animals. This data represents a five-fold improvement to results seen from the oxaliplatin arm of the study. Laboratory studies also indicate that Aroplatin has considerable anti-tumor activity, which is the ability to kill cancer cells. This anti-tumor activity has been demonstrated in over 10 tumor cell lines with results that are at least three fold, or better, than those of cisplatin and/or carboplatin, two other approved platinum chemotherapeutic agents. Platinum chemotherapeutics are cancer drugs containing the metallic element platinum, which has been shown to have some anti-cancer effects. Platinum chemotherapeutics have shown the ability to shrink solid tumors and, often in combination with non-platinum anti-cancer agents, have demonstrated moderate ability to slow the spread of several types of solid tumor cancers. Published results that demonstrate activity of Aroplatin against tumors cells resistant to cisplatin and carboplatin suggest that Aroplatin may be useful in cancers that are already resistant to platinum agents. Aroplatin is also formulated in liposomes, a round shell of phospholipids, which are basic components of human cell membranes. Liposome formulation has been shown to increase drug bioavailability, or the amount of time and specific distribution within the body, which can extend the treatment effect. In some cases, liposomal drugs have been shown to accumulate at the site of a tumor, delivering higher concentrations of the drug to a disease target. The liposomal delivery system can also help to reduce the damaging effects of some drugs on healthy tissues. Clinical data collected to date with Aroplatin indicates that it has the safety profile similar to that of a chemotherapeutic agent; the most common side effect being suppression of formation of new red or white blood cells and platelets in the bone marrow. Thus, based on

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its chemical structure, which makes it active against platinum resistant tumors, and its liposomal formulation, we believe that Aroplatin will have some advantages for the treatment of certain cancers when compared with current platinum-based chemotherapeutics such as carboplatin and cisplatin. We have developed a new formulation of Aroplatin to enhance its pharmacological (drug reaction) activity, and a GLP toxicology study comparing the old and new formulations of Aroplatin was completed during the second quarter of 2005. The results from this study and studies describing characterization of the new formulation formed the basis of an IND amendment that we submitted to the FDA during the third quarter of 2005.

### ***Clinical Trials***

We initiated a Phase 2 trial for advanced colorectal cancer unresponsive to medical treatment in 2002. This single-arm, open-label trial, conducted at the Arizona Cancer Center, was designed to evaluate the effect of Aroplatin alone in patients whose disease is not responsive to standard first-line cancer treatments (5-fluorouracil/leucovorin or capecitabine and irinotecan). In September 2003, the investigators presented findings from this trial at ECCO. One out of the 15 evaluable patients demonstrated a partial clinical response, and two experienced disease stabilization. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. In addition, researchers observed that Aroplatin appears well tolerated in this pretreated patient population. This trial is closed to enrollment.

In January 2003, we also initiated at the John Wayne Cancer Center, in Santa Monica, California, a Phase 1/2 trial of Aroplatin for a variety of advanced solid tumors amenable to platinum therapy. This study is closed to enrollment.

In October 2005, we initiated a Phase 1, dose-escalation trial of the reformulated Aroplatin in solid malignancies and NHL. This study is currently enrolling patients.

### ***Manufacturing***

Aroplatin is manufactured for us by contract manufacturers. These contract manufacturers also produce drug products for other pharmaceutical companies at clinical and commercial scale and are periodically inspected and qualified by US and foreign regulatory agencies.

## **QS-21**

### ***Introduction***

QS-21 is an adjuvant, or a substance added to vaccines and other immunotherapies, that is designed to enhance the body's immune response to the antigen contained within the treatment. QS-21 is best known for its ability to stimulate antibody, or humoral, immune response, and has also been shown to activate cellular immunity. A natural product, QS-21 is a triterpene glycoside, or saponin, a natural compound purified from the bark of a South American tree called *Quillaja saponaria*. It is sufficiently characterized with a known molecular structure, thus distinguishing it from other adjuvant candidates, which are typically emulsions, polymers or biologicals.

QS-21 has been tested in more than 90 clinical trials involving, in aggregate, over 3,100 patients in a variety of cancer indications and infectious diseases. These studies have been carried out by academic institutions

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predominantly located in the United States and by global pharmaceutical companies at more than 20 international sites. A number of these studies have shown QS-21 to be significantly more effective in stimulating antibody responses than aluminum hydroxide or aluminum phosphate, the only adjuvants used in approved vaccines in the United States today. None of these QS-21 trials have been pivotal.

### ***Partnered QS-21 Programs***

We are actively pursuing a strategy of commercializing QS-21 through licensing to other pharmaceutical and biotechnology companies. A number of pharmaceutical and biotechnology companies have licensed QS-21 for a variety of human diseases. Companies with QS-21 programs include GlaxoSmithKline plc, Progenics Pharmaceuticals, Inc., Elan Corporation, plc (“Elan”), and Pharmexa A/S. In January 2005, Pharmexa announced it had licensed QS-21 for use with a vaccine entering Phase 2 clinical trials. In return for rights to use QS-21, these companies have agreed to pay us license fees, milestone payments, and royalties on product sales. We have retained worldwide manufacturing rights and have the right to subcontract manufacturing for QS-21. In addition to these companies, we have developed a number of academic collaborations to test new vaccine concepts and products containing QS-21. Currently, there are no pivotal trials ongoing with QS-21. GlaxoSmithKline, P.L.C., however, has released data on a proof of concept study in malaria that we believe will form the basis for Phase 3 trials utilizing QS-21.

During 2002, Elan, a sponsor that had been investigating a product candidate for Alzheimer’s disease, notified us of patients who were reported to show clinical signs consistent with inflammation of the central nervous system. The investigators reported “possible” causality with the study drug. We do not have details regarding these events. To our knowledge, however, there is no report of a causal connection between QS-21 and development of inflammation of the central nervous system. In one study investigating the product candidate for Alzheimer’s disease, no events involving inflammation of the central nervous system have been reported from the study arm in which only QS-21 was administered. Additionally, no events of inflammation of the central nervous system have been reported to us from any other studies of drugs containing adjuvant QS-21. Following the investigation conducted by Elan, Elan modified the product candidate being evaluated in combination with QS-21 to reduce or eliminate the risk of central nervous system inflammation, and in 2005 reinitiated clinical studies of the modified product candidate with QS-21.

### ***Manufacturing***

In March 2004 we entered into a supply agreement for the production of QS-21. The manufacturer is capable of producing up to 2 million doses per batch for investigational use at its facility. We have retained worldwide manufacturing rights and have the right to subcontract manufacturing for QS-21. We have initiated plans to develop commercial manufacturing capability and capacity to be prepared to exercise these manufacturing rights as our licensing partners progress with their clinical development programs.

### ***Preclinical Activities***

Our lead preclinical program is focused on validating a higher-activity Oncophage vaccine. This vaccine is produced using an improved manufacturing process. This process may also allow us to produce Oncophage from smaller amounts of tumor tissue. We anticipate completing preclinical animal studies in 2006.

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During 2004, we launched a preclinical program to evaluate Oncophage in combination with other compounds such as other biologic and chemotherapeutic products. Some of these combination experiments will be conducted in collaboration with prospective pharmaceutical partners who have expressed an interest in studying certain of their compounds in combination with Oncophage.

We intend to initiate Phase 1/2 trials of Oncophage in combination with ATRA-IV for advanced disease in multiple tumor types. ATRA-IV is a liposomal formulation of ATRA, all-*trans*-retinoic acid, which can be given intravenously. ATRA is a derivative of retinol, otherwise known as vitamin A. We acquired ATRA-IV through our acquisition of Aronex Pharmaceuticals, Inc. in July 2001. Combination treatment with ATRA-IV and Oncophage may improve the overall effectiveness of both treatments.

Our “next-generation” Oncophage vaccine, which incorporates several important innovations, isolates the antigenic “fingerprint” from less tumor tissue and complexes the repertoire to heat shock proteins in a test tube. We expect to be able to manufacture sufficient quantities of a personalized cancer vaccine from much smaller tumor tissue samples. This approach would be designed to treat patients with earlier stages of disease in a broader array of cancers. Clinical trials conducted with first-generation Oncophage would not be repeated, in indications where the first-generation could continue to be used for treatment of cancers in which it is currently being evaluated in Phase 3 clinical trials.

During 2005, we launched preclinical studies to investigate the use of heat shock protein technology for the treatment of autoimmune disorders. AU-801 is our newly designated autoimmune disorder therapeutic. We will continue preclinical studies to validate a lead compound for this program in 2006. We anticipate completing preclinical development to support clinical trials in the first half of 2007.

### **Intellectual Property Portfolio**

We devote significant resources to protecting and expanding our intellectual property portfolio. We seek to protect our core technologies through a combination of patents, trade secrets and know-how. We currently have exclusive rights to 81 issued United States patents and 125 foreign patents. We also have rights to 78 pending United States patent applications and 259 pending foreign patent applications. Our issued patents cover our core technologies including (i) HSPs such as Oncophage and AG-858 for treatment of cancers; (ii) HSPs such as AG-702/707 for treatment of infections; (iii) HSPs for treatment of autoimmune disorders; (iv) saponin adjuvants such as QS-21; and (v) liposomal drugs, including Aroplatin. In addition, several patent applications are related to technology based on HSP receptors. The following tables provide detailed information regarding the United States patents and patent applications relating to our product candidates and technologies and their uses. The tables encompass less than all of our 206 issued patents and 337 pending patent applications because a substantial portion of our patent portfolio is directed to alternative and/or non-core technologies.

<b>Products or Technologies</b>	<b>Oncophage &amp; AG-858</b>	<b>AG-707</b>	<b>HSPs in Autoimmune Disorders</b>	<b>HSP Receptors</b>
Number of issued US patents	12	9	1	1
Expiration range	2015 – 2018	2015 – 2017	2017	2019
Number of pending US patent applications	7	2	0	6
Number of issued foreign patents	5	19	2	0
Expiration range	2015 – 2018	2015 – 2016	2018	—
Number of pending foreign patent applications	21	8	4	13

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We also have rights to 48 issued US patents and 33 US patent applications, 46 issued foreign patents and 119 foreign patent applications directed to various other HSP technologies. With the exception of one patent application that we own outright, all of our patent applications relating to Oncophage, AG-858 and AG-702/707 are licensed exclusively to us.

<b>Products or Technologies</b>	<b>QS-21</b>	<b>Aroplatin</b>
Number of issued US patents	4	3
Expiration range	2008 – 2018	2010 – 2020
Number of pending US patent applications	4	6
Number of issued foreign patents	37	10
Expiration range	2008 – 2019	2006 – 2011
Number of pending foreign patent applications	19	12

All patents and applications relating to QS-21 are owned by Antigenics. All of the foreign patents and one foreign patent application relating to Aroplatin and all of the US patents and one US patent application relating to Aroplatin are licensed exclusively to us. We own five US patent applications and 11 foreign applications relating to Aroplatin.

It is worth noting that:

- patent applications in the United States are currently maintained in secrecy until they are published, generally 18 months after they are first filed in any country;
- patent applications in other countries, likewise, generally are not published until 18 months after they are first filed in any country;
- publication of technological developments in the scientific or patent literature often lags behind the date of these developments; and
- searches of prior art may not reveal all relevant prior inventions.

In addition to our patents, we rely on our trade secrets and know-how to provide a competitive advantage, and we intend to continue to develop and protect this proprietary information. We take active measures to control access to know-how and trade secrets through confidentiality agreements, which we generally require all of our employees, consultants and scientific collaborators to execute upon the commencement of an employment or consulting relationship with us. These agreements generally provide that all confidential information developed or made known to the individual by us during the course of the individual's relationship with us is to be kept confidential and not disclosed to third parties except in specific circumstances. In the case of employees and consultants, the agreements generally provide that all inventions conceived by the individual in the course of rendering services to us are assigned to us and become our exclusive property.

With the exception of one patent application that we own outright, all of our heat shock protein patents and patent applications directed to Oncophage, AG-858, and AG-702/707 have been exclusively licensed to us by the following academic institutions:

***Mount 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 Mount Sinai a royalty on the net sales of products covered by the licensed patent rights and also provided Mount Sinai with a 0.45% equity interest in the Company (approximately 62,000 shares) valued at approximately \$90,000 at the time of issuance. The term of the Mount Sinai agreement ends when the last of the licensed patents expires (2018) or becomes no longer valid. If we fail to pay royalties that are due under the agreement, Mount Sinai may issue written notice to us. If we continue to fail to pay royalties after 60 days of the written notice, Mount Sinai can terminate the agreement. The Mount 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, which have been achieved. If we fail to comply with the due diligence provisions of the agreement, Mount Sinai could take actions to convert our exclusive license to a non-exclusive license after six months written notice. The Mount Sinai Agreement does not contain any milestone payment provisions.

***Fordham University***

During 1995, 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 sponsor Dr. Srivastava's research. Through the Fordham agreement, we obtained an exclusive, perpetual, worldwide license to all of the intellectual property, including all the patent rights, which 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 (2018) or when the patents become no longer valid. The agreement does not contain any milestone payment provisions or any 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. During the term of this agreement, we paid Fordham approximately \$2,374,000.

***University of Connecticut***

***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 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 and again on December 31, 2003 to: (1) extend the term of the research agreement to December 31, 2003 and then to December 31, 2008, and (2) provide for an annual payment of \$1,200,000 payable quarterly at the rate of \$300,000 during 2003 and then an annual payment of \$1,350,000 payable quarterly at the rate of \$337,500 from 2004 to 2008. UConn may terminate the research agreement upon

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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 by 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 (2019) or becomes no longer valid. UConn may terminate the agreement: (1) if, after 30 days written notice for breach, we continue to 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. As of December 31, 2005, we have paid approximately \$20,000 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 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. As of December 31, 2005, we have paid approximately \$135,000 to UConn under the license agreement, as amended.

With the exception of four patent applications that we own outright, all of our Aroplatin patents and the following corporation and institution have exclusively licensed patent applications to us:

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

In December 2000, Aronex Pharmaceuticals, Inc., a company we acquired in July 2001, entered into a license agreement with Sumitomo Pharmaceuticals Co., Ltd. In September 2003, this agreement was amended and restated with Antigenics. The license agreement grants us the exclusive right to an issued US patent application that contains certain claims that relate to Aroplatin. Except for the treatment of hepatoma, the license

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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 in 2020. 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 materially defaults in its performance under the license agreement. Prior to our acquisition of Aronex Pharmaceuticals, Inc., Sumitomo received a \$500,000 up-front payment in 2001 from Aronex Pharmaceuticals, Inc. 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 diligence provisions.

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

In June 1988, a predecessor to Aronex Pharmaceuticals, Inc. 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 the University of Texas' patent rights 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 term 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.

### **Regulatory Compliance**

Governmental authorities in the United States and other countries extensively regulate the preclinical and clinical testing, manufacturing, labeling, storage, record keeping, advertising, promotion, export, marketing and distribution, among other things, of our investigational product candidates. In the United States, the FDA under the Federal Food, Drug, and Cosmetic Act, the Public Health Service Act and other federal statutes and regulations, subject pharmaceutical products to rigorous review.

In order to obtain approval of a new product from the FDA, we must, among other requirements, submit proof of safety and efficacy as well as detailed information on the manufacture and composition of the product. In most cases, this proof entails extensive preclinical, clinical, and laboratory tests. The FDA may also require confirmatory trials, post-marketing testing and extra surveillance to monitor the effects of approved products or place conditions on any approvals that could restrict the commercial applications of these products.

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The first stage of the FDA approval process for a new biologic or drug involves completion of preclinical studies and the submission of the results of these studies to the FDA. This, together with proposed clinical protocols, manufacturing information, analytical data and other information, in an IND, must become effective before human clinical trials may commence. Preclinical studies involve laboratory evaluation of product characteristics and animal studies to assess the efficacy and safety of the product. The FDA regulates preclinical studies under a series of regulations called the current “Good Laboratory Practices” regulations. If the sponsor violates these regulations, in some cases, the FDA may invalidate the studies and require that the sponsor replicate those studies.

After the IND becomes effective, a sponsor may commence human clinical trials. The sponsor typically conducts human clinical trials in three sequential phases, but the phases may overlap. In Phase 1 trials, the sponsor tests the product in a small number of patients or healthy volunteers, primarily for safety at one or more doses. Phase 1 trials in cancer are often conducted with patients that are not healthy who have end-stage or metastatic cancer. In Phase 2, in addition to safety, the sponsor evaluates the efficacy of the product in a patient population somewhat larger than Phase 1 trials. Phase 3 trials typically involve additional testing for safety and clinical efficacy in an expanded population at geographically dispersed test sites. The sponsor must submit to the FDA a clinical plan, or “protocol,” accompanied by the approval of the institutions participating in the trials, prior to commencement of each clinical trial. The FDA may order the temporary or permanent discontinuation of a clinical trial at any time.

The sponsor must submit to the FDA the results of the preclinical and clinical testing, together with, among other things, detailed information on the manufacture and composition of the product, in the form of a new drug application or, in the case of a biologic, like Oncophage or AG-858, a BLA. In a process which can take a year or more, the FDA reviews this application and, when and if it decides that adequate data is available to show that the new compound is both safe and effective for a particular indication and that other applicable requirements have been met, approves the drug or biologic for marketing. The amount of time taken for this approval process is a function of a number of variables, including the quality of the submission and studies presented and the potential contribution that the compound will make in improving the treatment of the disease in question.

Congress enacted the Food and Drug Administration Modernization Act of 1997 in part to ensure the availability of safe and effective drugs, biologics, and medical devices by expediting the FDA review process for new products. The Modernization Act establishes a statutory program for the approval of Fast Track products, including biologics. A Fast Track product is defined as a new drug or biologic intended for the treatment of a serious or life-threatening condition that demonstrates the potential to address unmet medical needs for this condition. Under the Fast Track program, the sponsor of a new drug or biologic may request the FDA to designate the drug or biologic as a Fast Track product at any time during the clinical development of the product. This designation assures access to FDA personnel for consultation throughout the development process and provides an opportunity to request priority review of a marketing application providing a six-month review timeline for the designated product. Our most advanced product, Oncophage, has been designated by the FDA as a Fast Track product in renal cell carcinoma and metastatic melanoma. We cannot predict whether these designations will impact the timing or likelihood of FDA approval of Oncophage.

The Modernization Act specifies that the FDA must determine if the product qualifies for Fast Track designation within 60 days of receipt of the sponsor’s request. The FDA can base approval of a marketing

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application for a Fast Track product on an effect on a clinical endpoint or on another endpoint that is reasonably likely to predict clinical benefit. The FDA may subject approval of an application for a Fast Track product to:

- post-approval studies to validate the surrogate endpoint or confirm the effect on the clinical endpoint; and
- prior review of all promotional materials.

In addition, the FDA may withdraw its approval of a Fast Track product on a number of grounds, including the sponsor's failure to conduct any required post-approval study with due diligence.

If a preliminary review of the clinical data suggests that a Fast Track product may be effective, the FDA may initiate review of sections of a marketing application for a Fast Track product before the sponsor completes the application. This rolling review is available if the applicant provides a schedule for submission of remaining information and pays applicable user fees. However, the time periods specified under the Prescription Drug User Fee Act concerning timing goals to which the FDA has committed in reviewing an application, do not begin until the sponsor submits the complete application.

The Orphan Drug Program provides a mechanism for the FDA to acknowledge that a product is designed to treat a disease with limited prevalence in the United States. An orphan drug designation bestows certain advantages including extending marketing exclusivity if the product is ultimately approved for marketing, considerations in trial size and design based on the actual patient population, and tax credits for some research and development expenses. We hold orphan drug designations for Oncophage in renal cell carcinoma and in metastatic melanoma.

The FDA may, during its review of a new drug application or biologics license application, ask for additional test data. If the FDA does ultimately approve a product, it may require post-marketing testing, including potentially expensive Phase 4 studies, and extra surveillance to monitor the safety and effectiveness of the drug. In addition, the FDA may in some circumstances impose restrictions on the use of the drug that may be difficult and expensive to administer, and may require prior approval of promotional materials.

Before approving a new drug application or a BLA, the FDA may inspect the facilities at which the product is manufactured and will not approve the product unless the manufacturing facilities appear to be in compliance with cGMP. In order to accomplish this inspection, a local field division of the FDA is responsible for completing this inspection and providing a recommendation for or against approval. We are in communication with the field division of the FDA regarding our manufacturing facilities. This effort is intended to assure appropriate facility and process design to avoid potentially lengthy delays in product approvals due to inspection deficiencies.

Similarly, before approving a new drug or biologics application, the FDA may also conduct pre-licensing inspections of the company, its contract research organizations and/or its clinical trial sites to ensure that clinical, safety, quality control and other regulated activities are compliant with Good Clinical Practices or GCP or GLP for specific non-clinical toxicology studies.

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To assure such cGMP, GCP and GLP compliance, the applicants must incur significant time, money and effort in the area of training, record keeping, production, and quality control. Following approval, the manufacture, holding, and distribution of a product must continue to devote significant resources to maintain full compliance in these areas.

The labeling, advertising, promotion, marketing, and distribution of a drug or biologic product must be in compliance with FDA regulatory requirements. Failure to comply with applicable requirements can lead to the FDA demanding that production and shipment cease, and, in some cases, that the manufacturer recall products, or to enforcement actions that can include seizures, injunctions, and criminal prosecution. These failures can also lead to FDA withdrawal of approval to market a product.

Sales of pharmaceutical products outside the United States are subject to foreign regulatory requirements that vary widely from jurisdiction to jurisdiction. Whether or not we have obtained FDA approval, we must obtain approval of a product by comparable regulatory authorities of international jurisdictions prior to the commencement of marketing the product in those jurisdictions. We are also subject to GMP, GCP and GLP compliance obligations, and are subject to inspection by international regulatory authorities. International requirements may in some circumstances be more rigorous than U.S. requirements and may require additional investment in manufacturing process development, non-clinical studies, clinical studies, and record keeping that are not required for U.S. regulatory compliance or approval. The time required to obtain this approval may be longer or shorter than that required for FDA approval and can also require significant resources in time, money and labor.

We are also planning for compliance with the various federal and state laws pertaining to health care “fraud and abuse,” including anti-kickback laws and false claims laws. Anti-kickback laws make it illegal for a prescription drug manufacturer to solicit, offer, receive, or pay any remuneration in exchange for, or to induce, the referral of business, including the purchase or prescription of a particular drug. False claims laws prohibit anyone from knowingly and willingly presenting, or causing to be presented for payment to third party payors, including Medicare and Medicaid, claims for reimbursed drugs or services that are false or fraudulent, claims for items or services not provided as claimed, or claims for medically unnecessary items or services.

Under the laws of the United States, the countries of the European Union and other nations, we and the institutions where we sponsor research are subject to obligations to ensure the protection of personal information of human subjects participating in our clinical trials. We have instituted procedures that we believe will enable us to comply with these requirements and the contractual requirements of our data sources. The laws and regulations in this area are evolving and further regulation, if adopted, could affect the timing and the cost of future clinical development activities.

We are also subject to regulation under the Occupational Safety and Health Act, the Toxic Substances Control Act, the Resource Conservation and Recovery Act, and other current and potential future federal, state, or local regulations. Our research and development activities involve the controlled use of hazardous materials, chemicals, biological materials, and various radioactive compounds. We believe that our procedures comply with the standards prescribed by local, state and federal regulations; however, the risk of injury or accidental contamination cannot be completely eliminated. We conduct our research and manufacturing activities in voluntary compliance with the National Institutes of Health Guidelines for Recombinant DNA Research.

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We are subject to the United States Foreign Corrupt Practices Act that prohibits corporations and individuals from engaging in specified activities to obtain or retain business or to influence a person working in an official capacity. Under this act, it is illegal to pay, offer to pay, or authorize the payment of anything of value to any foreign government official, government staff member, political party, or political candidate in an attempt to obtain or retain business or to otherwise influence a person working in an official capacity. Our present and future business has been and will continue to be subject to various other laws and regulations.

### **Competition**

Competition in the pharmaceutical and biotechnology industries is intense. Many pharmaceutical or biotechnology companies have products on the market and are actively engaged in the research and development of products for the treatment of cancer, infectious diseases and autoimmune disorders. In addition, many competitors focus on immunotherapy as a treatment for cancer, infectious diseases, and autoimmune disorders. In particular, some of these companies are developing cancer vaccines produced from a patient's own cells or tissue. Others are focusing on developing heat shock protein products. Prior to regulatory approval, we may compete for access to patients with other products in clinical development, with products approved for use in the indications we are studying, or with off-label use of products in the indications we are studying. In addition, we compete for funding, access to licenses, personnel, and third-party collaborations. Many competitors have substantially greater financial, manufacturing, marketing, sales, distribution, and technical resources, and more experience in research and development, clinical trials, and regulatory matters, than we do. A competing company developing, or acquiring rights to, a more efficacious therapeutic product for the same diseases we are targeting, or one which offers significantly lower costs of treatment, could render our products noncompetitive or obsolete.

Academic institutions, governmental agencies, and other public and private research institutions conduct significant amounts of research in biotechnology, medicinal chemistry, and pharmacology. These entities have become increasingly active in seeking patent protection and licensing revenues for their research results. They also compete with us in recruiting and retaining skilled scientific talent.

We are aware of certain programs and products under development by others that may compete with our programs and products. Several companies, including Accentia Biopharmaceuticals, Inc., Avax Technologies Inc., Biomira Inc., Cell Genesys Inc., Dendreon Corporation, Geron Corporation, Medarex, Inc., Oxford Biomedica PLC, LipoNova GmbH, Stressgen Biotechnologies Corporation, Therion Biologics, Intracel Corporation, Faville, Inc., Genitope Corporation, and Breakthrough Therapeutics are developing treatments for cancer based on modulation of the immune system, including cancer vaccines. In addition, several companies, including Pfizer Inc, Bristol Myers-Squibb Company, Genentech, Inc., Hoffman-LaRoche Inc., Merck & Co., Inc., Schering-Plough Corporation, AstraZeneca PLC, GlaxoSmithKline plc, Novartis AG and Wyeth, have expertise in, and are developing products for the treatment of cancer, infectious diseases, and autoimmune disorders. We are aware of one competitor, Dendreon Corporation, who received Fast Track designation for Provenge, an autologous cancer vaccine for the treatment of prostate cancer. In December 2005, Bayer AG and Onyx Pharmaceuticals, Inc. received FDA approval to market sorafenib for the treatment of advanced renal cell carcinoma. In January 2006, Pfizer Inc. received FDA approval to market sunitinib for the treatment of advanced kidney cancer. These approvals, as well as their ongoing development of these compounds for therapy in renal cell cancer have the potential to provide increased competition and reduced market potential for our product's lead indication.

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Certain companies to which we have licensed QS-21 have also licensed vaccine adjuvants from direct competitors, such as Coley Pharmaceutical Group, Corixa Corporation and Avant Immunotherapeutics. The existence of products developed by these and other competitors, or other products of which we are not aware or which other companies may develop in the future, may adversely affect the marketability of products we develop.

### **Employees**

As of February 15, 2006, we had 171 employees, of whom 17 have PhDs and 2 have MDs. None of our employees are subject to a collective bargaining agreement. We believe that we have good relations with our employees.

### **Corporate History**

Antigenics L.L.C. was formed as a Delaware limited liability company in 1994 and was converted to Antigenics Inc., a Delaware corporation, in February 2000 in conjunction with our initial public offering of common stock.

### **Availability of Periodic SEC Reports**

Our Internet website address is [www.antigenics.com](http://www.antigenics.com). We make available free of charge through our website our annual reports on Form 10-K, quarterly reports on Form 10-Q, current reports on Form 8-K, and amendments to those reports filed or furnished pursuant to Section 13(a) or 15(d) of the Exchange Act as soon as reasonably practicable after we electronically file such material with, or furnish such material to, the SEC. The contents of our website are not part of, or incorporated into, this document.

**Item 1A. Risk Factors**

Our future operating results could differ materially from the results described in this Annual Report on Form 10-K due to the risks and uncertainties described below. We cannot assure investors that our assumptions and expectations will prove to have been correct. Important factors could cause our actual results to differ materially from those indicated or implied by forward-looking statements. See “Note Regarding Forward-Looking Statements” on page 2 of this Annual Report on Form 10-K. Such factors that could cause or contribute to such differences include those factors discussed below.

**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 December 31, 2005, we have generated net losses totaling approximately \$410 million. Our net losses for the years ended December 31, 2005, 2004, and 2003, were approximately \$74.1 million, \$56.2 million, and \$65.9 million, respectively. We expect to incur significant losses over the next several years as we continue our clinical trials, apply for regulatory approvals, and continue development of our technologies. Phase 3 clinical trials are particularly expensive to conduct, and in February 2005 we initiated part II of our Phase 3 clinical trial in renal cell carcinoma. Furthermore, our ability to generate cash from operations is dependent on if and when we will be able to commercialize our product candidates. Although we implemented cost-cutting measures late in 2005, the anticipated savings may not be at the levels anticipated. If we incur operating losses for longer than we expect, we may be unable to continue our operations.

***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 December 31, 2005, we had approximately \$61.7 million in cash, cash equivalents, and short-term investments. With our current working capital we expect that we can fund our planned development programs, clinical trials, and other operating expenses into early 2007. We plan to attempt to raise additional funds prior to that time. For the year ended December 31, 2005, the sum of our average monthly cash used in operating activities plus our average monthly capital expenditures was approximately \$5.7 million. Total capital expenditures for the year ended December 31, 2005 were \$2.7 million and we anticipate capital expenditures of up to \$1.2 million during 2006. Since our inception, we have financed our operations principally by sales of equity and convertible debt instruments. 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 will 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 most advanced product candidate, Oncophage. We also may be forced to license technologies to others under agreements that allocate to third parties substantial portions of the potential value of these technologies.

***We have significant long-term debt, and we may not be able to make interest or principal payments when due.***

As of December 31, 2005, our total long-term debt, excluding the current portion, was approximately \$50.0 million. Our 5.25% convertible senior notes due 2025 do not restrict our ability or the ability of our subsidiaries

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to incur additional indebtedness, including debt that effectively ranks senior to the notes. On each of February 1, 2012, February 1, 2015 and February 1, 2020, holders may require us to purchase their notes for cash equal to 100% of the principal amount of the notes, plus any accrued and unpaid interest. Holders may also require us to repurchase their notes upon a fundamental change, as defined, at a repurchase price, in cash, equal to 100% of the principal amount of the notes to be repurchased, plus any accrued and unpaid interest and, in some cases, an additional “make-whole” premium. Our ability to satisfy our obligations will depend upon our future performance, which is subject to many factors, including the factors identified in this “Risk Factors” section, and other factors beyond our control. If we are not able to generate sufficient cash flow from operations in the future to service our indebtedness, we may be required, among other things:

- to seek additional financing in the debt or equity markets;
- to refinance or restructure all or a portion of our indebtedness, including the notes;
- to sell assets; and/or
- to reduce or delay planned expenditures on research and development and/or commercialization activities.

Such measures might not be sufficient to enable us to service our debt. In addition, any such financing, refinancing, or sale of assets might not be available on economically favorable terms.

To date, we have had negative cash flow from operations. For the years ended December 31, 2005, 2004, and 2003, net cash used in operating activities was approximately \$66.3 million, \$60.2 million, and \$51.7 million, respectively. Assuming no additional interest-bearing debt is incurred and none of the notes are converted, redeemed, repurchased, or exchanged before February 1, 2012, our debt service requirements (payments of principal and interest) are approximately \$6.8 million during 2006, \$2.7 million during 2007 and \$2.6 million annually during 2008 and thereafter until the notes are no longer outstanding.

***Because the FDA has told us that part I of our current Phase 3 trial in renal cell carcinoma, by itself, will not be sufficient to support a biologics license application for product approval, unless the FDA changes its position, we would not expect to generate product revenue from sales of Oncophage for at least several years, if ever.***

On September 3, 2003, the FDA placed our Phase 3 Oncophage clinical trials in renal cell carcinoma and in melanoma on partial clinical hold. The FDA’s written correspondence instituting the partial clinical hold indicated that Oncophage was not sufficiently characterized. On October 22, 2003, we submitted to the FDA additional specifications for purity, identity, potency and pH, which represent product characterization data, and on November 23, 2003, the FDA lifted the partial clinical hold. Even though the FDA lifted the partial clinical hold, the FDA has informed us that, for purposes of part I of our Phase 3 trial in renal cell carcinoma and our Phase 3 trial in melanoma, Oncophage has been insufficiently characterized and that the results obtained with an insufficiently characterized product could not be used to provide efficacy data in support of a biologics license application, or BLA. The FDA deemed the Oncophage provided to patients before December 2003 to be insufficiently characterized because it had not undergone the full battery of tests required for drugs used in pivotal trials. Some of these tests, such as potency assays, were not fully developed until after September 2003. The imposition of the partial clinical hold prevented us from enrolling new patients in our Phase 3 clinical trials

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between September 3, 2003 and November 21, 2003. We believe that we addressed the comments the FDA raised in connection with the partial clinical hold. After the clinical hold was lifted, the FDA asked us to implement the use of potency assays to release vaccine lots for all trials of Oncophage, including our Phase 3 trials. Subsequently, we submitted, during 2004, our validation package to the FDA for the potency assays, and in May 2005 we successfully concluded discussions with the FDA. Validation of the assays refers, in general terms, to establishing the robustness and reproducibility of the assays on an ongoing basis and under various different conditions to demonstrate that the potency assays work consistently. The potency assays have been used to test product administered since December 2003, and we have performed tests on frozen stored portions of product administered to patients prior to December 2003. We are currently reviewing these test results. This data will be submitted to FDA as part of any BLA filing for Oncophage. We believe we have addressed all product characterization issues raised by the FDA to date.

Because the FDA has indicated that, by itself, part I of our ongoing Phase 3 clinical trial in renal cell carcinoma is not sufficient to support a BLA filing, we have expanded our clinical development plan by initiating a part II to this Phase 3 trial in a similar patient population. The FDA has agreed with this registration plan, which comprises two components — part I and part II. The FDA has told us that they consider part II of the trial as potentially providing the definitive evidence of safety and efficacy; however, we expect that part I will be accepted as part of the BLA filing. While the FDA has expressly excluded the possibility that part I of our renal cell carcinoma trial alone can support a BLA filing, we intend to complete part I, which is a large, controlled study, perform data analysis, and review the data closely. Should the results from the first part of the trial be clearly positive in terms of clinical outcomes, we plan to submit the data to the FDA and request that the agency reconsider its position regarding the use of the data from part I of the trial alone to support a BLA filing. We expect to support that position with data that may demonstrate that Oncophage used in part I of the study should be considered sufficiently characterized. We would expect to derive that data from the additional tests we performed on frozen stored portions of the product administered to patients prior to December 2003. We are currently reviewing these test results which we expect to have completed in time for any BLA filing. We believe that the FDA is unlikely to reverse its position unless part I of the trial demonstrates significant benefit to patients. We believe that demonstration of efficacy might be persuasive because (1) part I of our Phase 3 renal cell carcinoma trial is designed to show that patients being treated with Oncophage have a statistically significant benefit in terms of recurrence-free survival over patients in the observation arm, (2) Oncophage appears to have a favorable safety profile, particularly when compared with the toxicity associated with many cancer drugs, (3) part I of the trial represents the largest single randomized trial to date in this patient population, and (4) the patients with the stage of renal cell carcinoma addressed in this trial have no approved post-surgical treatment options. Other companies have submitted BLAs, and obtained approvals, based on data from non-definitive Phase 2 and Phase 3 studies while they complete confirmatory studies. We are not aware of a situation, however, in which the FDA has reconsidered its position that a clinical trial could not be considered pivotal, and therefore would not support licensure, because of its determination that the product candidate had been insufficiently characterized. However, as noted previously, we plan to attempt to demonstrate that our product candidate should be considered sufficiently characterized. There is no assurance that we will be successful in demonstrating that our product candidate is sufficiently characterized or that the FDA would accept such a strategy. The FDA usually requires prospective, rather than retrospective, testing.

Even if we are able to demonstrate that the Oncophage used in part I of the trial should be considered sufficiently characterized and part I of the trial demonstrates significant benefit to patients, the FDA may

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continue to adhere to its current position that the data from this part of the trial cannot, by itself, support a BLA filing. In addition, the FDA may interpret the results of our two potency tests as not indicating that the Oncophage used in part I of the trial is sufficiently characterized. Furthermore, part I may not reach statistical significance for its primary endpoint, or the FDA could determine that making Oncophage available based on the part I results is not in the best interests of patients. We estimate that completing part II of the study will take at least three years and cost between \$20 million and \$40 million. Furthermore, subject to securing additional financing and the part I results, we intend to continue with part II of the renal cell carcinoma study unless and until the FDA indicates that it is not necessary.

We may not be able to secure additional financing to complete part II of the renal cell carcinoma trial even if the results from part I of the trial are positive. If we cannot secure additional financing, we may become insolvent.

***Because we expect to conduct additional Phase 3 clinical trials of Oncophage in the treatment of melanoma prior to submitting a BLA for this indication, we will not commercialize Oncophage in this indication for several years, if ever.***

We have concluded enrollment in a Phase 3 trial of Oncophage in patients with metastatic melanoma and in October 2005 released preliminary survival data. We anticipate commencing final analysis of this trial in the first quarter of 2006. Due to a relatively high failure rate in vaccine manufacturing, this study will not, by itself, support a BLA filing. Even if we had not experienced the high manufacturing failure rate, the FDA has indicated that this study, like part I of our Phase 3 renal cell carcinoma study, could not, by itself, support a BLA filing because the FDA views the Oncophage administered to patients in this study prior to December 2003 as insufficiently characterized. We have not yet had any specific discussions with the FDA regarding our clinical development plan for melanoma. Accordingly, we do not know the types of studies that the FDA will require to support a BLA filing. Even if the FDA were to indicate agreement with our clinical development plan, that plan may fail to support a BLA filing for many reasons, including failure of the trials to demonstrate that Oncophage is safe and effective in this indication, failure to conduct the studies in compliance with the clinical trial protocols, or a change in the FDA's views.

***Our commercial launch of Oncophage may be delayed or prevented, which would diminish our business prospects.***

In December 2003, we announced that the Data Monitoring Committee, or DMC, had convened as scheduled for the interim analysis of part I of our Phase 3 clinical trial of Oncophage in the treatment of renal cell carcinoma. The DMC is a panel of cancer specialists who review the safety and conduct of the trial at regular intervals but are not otherwise involved in the study. The DMC has no direct relationship with the FDA but can make recommendations regarding the further conduct of the trial, and we report those recommendations to the FDA. The use of the DMC is intended to enhance patient safety and trial conduct. The DMC recommended that the trial proceed as planned and did not require that we change the number of patients required to meet the trial's objectives. Part I of our Phase 3 renal cell carcinoma trial is designed with the intent to show that patients in the Oncophage arm demonstrate a statistically significant benefit in recurrence-free survival over the patients in the observation arm. We interpreted the recommendation by the DMC that we would not need to add patients in

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order to potentially achieve the study objectives as an encouraging development, indicating that the trial could demonstrate the intended efficacy outcomes without increasing the number of patients in the trial. The DMC's recommendations do not assure either that the trial will demonstrate statistically significant results or that the trial will prove adequate to support approval of Oncophage for commercialization in the treatment of patients with renal cell carcinoma. The assessment of the interim analysis by the DMC is preliminary. The final data from the trial may not demonstrate efficacy and safety. Furthermore, data from clinical trials are subject to varying interpretations.

Inconclusive or negative data from part I of our Phase 3 renal cell carcinoma trial would have a significant negative impact on our prospects. If the results in any of our clinical trials are not positive, we may abandon development of Oncophage for the applicable indication.

In October 2005 we announced preliminary survival data from our Phase 3 metastatic melanoma trial noting that in all randomized (intent-to-treat) stage IV M1a patients, median survival improved by more than 50 percent in the Oncophage-treated arm compared with those in the physician's choice treatment arm (20.9 months versus 12.8 months), which included the current array of therapies such as chemotherapeutics, biological agents and/or surgery, although this difference was not statistically significant. The M1a category of stage IV melanoma patients (a category defined by the American Joint Committee on Cancer, or AJCC) was prospectively stratified for in this trial. Patients in this category are routinely identified in a clinical setting with distant metastases in the skin, subcutaneous tissue or distant lymph nodes. Overall, patients in the intent-to-treat Oncophage arm (M1a, b and c combined) fared similarly to those in the physician's choice arm in terms of survival, although this result was not statistically significant. The final analysis of the data from this trial may not demonstrate a statistically significant survival benefit for any cohort within the treatment arm or on an overall basis. As we have previously stated, this study will not, by itself support a BLA filing.

### ***The drug development and 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. We must provide the FDA and foreign regulatory authorities with preclinical and clinical data demonstrating that our products are safe and effective before they can be approved for commercial sale. Clinical development, including preclinical testing, is a long, expensive and uncertain process. It may take us several years to complete our testing, and failure can occur at any stage of testing. Interim results of preclinical or clinical studies do not necessarily predict their final results, and acceptable results in early studies might not be seen in later studies. Any preclinical or clinical test may fail to produce results satisfactory to the FDA. Preclinical and clinical data can be interpreted in different ways, which could delay, limit or prevent regulatory approval. Negative or inconclusive results from a preclinical study or clinical trial, adverse medical events during a clinical trial or safety issues resulting from products of the same class of drug could cause a preclinical study or clinical trial to be repeated or a program to be terminated, even if other studies or trials relating to the program are successful.

Our most advanced product candidate, Oncophage, is a novel therapeutic cancer vaccine that is personalized for each patient, meaning it is derived from the patient's own tumor. To date, the FDA has not approved any therapeutic cancer vaccines for commercial sale, and foreign regulatory agencies have approved only a limited number. Both the FDA and foreign regulatory agencies, including the European Medicines Agency responsible

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for product approvals in Europe, and Health Canada responsible for product approvals in Canada, have relatively little experience in reviewing personalized oncology therapies, and the partial clinical hold that the FDA had placed, and subsequently lifted, on our Phase 3 Oncophage clinical trials primarily related to product characterization issues partially associated with the personalized nature of Oncophage. Oncophage may experience a long regulatory review process and high development costs, either of which could delay or prevent our commercialization efforts. We have also initiated communications with regulatory health authorities in other jurisdictions to discuss requirements for the approval of Oncophage in renal cell carcinoma. As of December 31, 2005, we have spent approximately 11 years and \$204 million on our research and development program in heat shock proteins for cancer.

To obtain regulatory approvals, we must, among other requirements, complete carefully controlled and well-designed preclinical studies and clinical trials demonstrating that a particular product candidate 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 or conduct of the preclinical studies and clinical trials or the ability to interpret the data from the trials; similar problems could delay or prevent us from obtaining approvals. We initiated part II of our Phase 3 trial for Oncophage in renal cell carcinoma in early 2005. Even after reviewing our protocol for this trial, the FDA and other regulatory agencies may not consider the trial to be adequate for registration and may disagree with our overall strategy to seek approval for Oncophage in renal cell carcinoma. In this event, the potential commercial launch of Oncophage would be at risk, which would likely have a materially negative impact on our ability to generate revenue and our ability to secure additional funding.

We may not complete our planned preclinical studies or clinical trials on schedule or at all. We may not be able to confirm the safety and efficacy of our potential drugs in long-term clinical trials, which may result in a delay or failure to commercialize our products. The timing and success of a clinical trial is dependent on enrolling sufficient patients in a timely manner, avoiding serious or significant adverse patient reactions, and demonstrating efficacy of the product candidate in order to support a favorable risk versus benefit profile. Because we rely on third-party clinical investigators and contract research organizations to conduct our clinical trials, we may encounter delays outside our control, particularly if our relationships with any third-party clinical investigators or contract research organizations are adversarial. The timing and success of our Phase 3 trials, in particular, are also dependent on the FDA and other regulatory agencies accepting each trial's protocol, statistical analysis plan, product characterization tests, and clinical data. If we are unable to satisfy the FDA and other regulatory agencies with such matters, including the specific matters noted above, or our Phase 3 trials yield inconclusive or negative results, we will be required to modify or expand the scope of our Phase 3 studies or conduct additional Phase 3 studies to support BLA filings, including additional studies beyond the new part II Phase 3 trial in renal cell carcinoma and our proposed additional Phase 3 trial in melanoma. In addition, the FDA may request additional information or data that is not readily available. Delays in our ability to respond to such an FDA request would delay, and failure to adequately address all FDA concerns would prevent, our commercialization efforts.

Also, we, or the FDA, might further delay or halt our clinical trials for various reasons, including but not limited to:

- we may fail to comply with extensive FDA regulations;
- a product candidate may not appear to be more effective than current therapies;

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- a product candidate may have unforeseen, undesirable or significant adverse side effects, toxicities or other characteristics;
- the time required to determine whether a product candidate is effective may be longer than expected;
- we may be unable to adequately follow or evaluate patients after treatment with a product candidate;
- 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 candidate;
- sufficient numbers of patients may not enroll in our clinical trials; or
- we may be unable to produce sufficient quantities of a product candidate to complete the trial.

Furthermore, regulatory authorities, including the FDA, may have varying interpretations of our preclinical and clinical trial data, which could delay, limit, or prevent regulatory approval or clearance. Any delays or difficulties in obtaining regulatory approvals or clearances for our product candidates 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 are delayed in these activities or do not receive regulatory approval for our product candidates in a timely manner, we will have to incur additional development expense and, subject to securing additional financing, we will not be able to commercialize them in the timeframe anticipated, and, therefore, our business will suffer.

***We must receive separate regulatory approvals for each of our product candidates for each type of disease indication before we can market and sell them in the United States or internationally.***

We and our collaborators cannot sell any drug or vaccine until we receive regulatory approval from governmental authorities in the United States and from similar agencies in other jurisdictions. Oncophage and any other drug candidate could take a significantly longer time to gain regulatory approval than we expect or may never gain approval or may gain approval for only limited indications.

***Even if we do receive regulatory approval for our product candidates, the FDA or international regulatory authorities will impose limitations on the indicated uses for which our products may be marketed or subsequently withdraw approval, or take other actions against us or our products adverse to our business.***

The FDA and international regulatory authorities generally approve products for particular indications. If an approval is for a limited indication, this limitation reduces 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 marketing applications and criminal prosecution.

***Delays enrolling patients in our studies will slow or prevent completion of clinical trials.***

We have encountered in the past, and may encounter in the future, delays in initiating trial sites and in enrolling patients into our clinical trials. Future enrollment delays will postpone the dates by which we expect to complete the impacted trials and the potential receipt of regulatory approvals. If we fail to enroll sufficient numbers of patients in clinical trials, the trials may fail to demonstrate the efficacy of a product candidate at a statistically significant level. While such trials may help support our efforts to obtain marketing approval, they generally would not, by themselves, be sufficient for obtaining approval. In our cancer trials, enrollment difficulties may arise due to many factors, including the novel nature of Oncophage, the identification of patients' meeting the specific criteria for inclusion in our trials, the speed by which participating clinical trial sites review our protocol and allow enrollment, and any delay in contract negotiations between us and the participating clinical trial sites. In addition, we may encounter problems in our clinical trials due to increased pharmaceutical industry demand for clinical trial patients as well as limited patient availability due to the advanced disease state of the target patient population. Even if our patient enrollment is adequate, patients may die during a clinical trial if their disease is too advanced or because they experience problems that may be unrelated to the product candidate. A high dropout rate in a trial may undermine the ability to gain statistically significant data from the study.

***Because part I and part II of our Phase 3 clinical trials in renal cell carcinoma are event-driven studies, we cannot predict with certainty when data analysis will commence.***

Part I and part II of our Phase 3 trials in renal cell carcinoma are event-driven trials. Based on current trends, we anticipate that the analysis of part I of our Phase 3 trial in renal cell carcinoma will be complete in late March 2006.

During the quarter ended September 30, 2004, part I of our Phase 3 renal cell carcinoma trial was closed to enrollment. The protocol stipulates that analysis of this trial should occur when a pre-specified number of events occur. An event is defined as a recurrence of a patient's renal cell carcinoma or the death of a patient prior to disease recurrence. All patients are reviewed for determination of disease recurrence, on a blinded basis and regardless of the clinical investigator's assessment of the presence of disease recurrence, by an independent Clinical Events Committee ("CEC") comprised of expert radiologists and an expert oncologist. No assurance can be provided that the actual CEC determined events will be sufficient to have met the pre-specified number of events to trigger an analysis under the protocol.

***If new data from our research and development activities continues to modify our strategy, then we expect to continually adjust our projections of timelines and costs of programs; this uncertainty may depress the market price of our stock and increase our expenses.***

Because we are focused on novel technologies, our research and development activities, including our preclinical studies and clinical trials, involve the ongoing discovery of new facts and the generation of new data, based on which we determine next steps for a relevant program. These developments are sometimes a daily occurrence and constitute the basis on which our business is conducted. We need to make determinations on an ongoing basis as to which of these facts or data will influence timelines and costs of programs. We may not always be able to make such judgments accurately, which may increase the costs we incur attempting to commercialize our product candidates. These issues are pronounced in our efforts to commercialize Oncophage, which represents an unprecedented approach to the treatment of cancer.

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We may need to successfully address a number of technological challenges in order to complete development of our products. Moreover, these products may not be effective in treating any disease or may prove to have undesirable or unintended side effects, toxicities or other characteristics that may preclude our obtaining regulatory approval or prevent or limit commercial use.

***Failure to enter into significant collaboration agreements may hinder our efforts to commercialize Oncophage and will increase our need to rely on equity sales to fund our operations.***

We are engaged in efforts to partner Oncophage, our most advanced product candidate, with a pharmaceutical or larger biotech company to assist us with global commercialization. While we have been pursuing these business development efforts for several years, we have not negotiated a definitive agreement relating to the potential commercialization of Oncophage. Many larger companies may be unwilling to commit to a substantial agreement prior to receipt of additional clinical data or, in the absence of such data, may demand economic terms that are unfavorable to us. Even if Oncophage generates favorable clinical data, we may not be able to negotiate a transaction that provides us with favorable economic terms. While some other biotechnology companies have negotiated large collaborations, we may not be able to negotiate any agreements with terms that replicate the terms negotiated by those other companies. We may not, for example, obtain significant upfront payments or substantial royalty rates. Some larger companies are skeptical of the commercial potential and profitability of a personalized product candidate like Oncophage. If we fail to enter into such collaboration agreements, our efforts to commercialize Oncophage may be undermined. In addition, if we do not raise funds through collaboration agreements, we will need to rely on sales of additional securities to fund our operations. Sales of additional equity securities may substantially dilute the ownership of existing stockholders.

***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 product candidates by continuing our existing 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 and preclinical and clinical testing. Our collaborations involving QS-21, for example, depend on our licensees successfully completing clinical trials and obtaining regulatory approvals. These activities frequently fail to produce marketable products. For example, in March 2002, Elan Corporation and Wyeth Ayerst Laboratories announced a decision to cease dosing patients in their Phase 2A clinical trial of their AN-1792 Alzheimer's vaccine containing our QS-21 adjuvant after several patients experienced clinical signs consistent with inflammation in the central nervous system. Several of our agreements also require us to transfer important rights and regulatory compliance responsibilities to our collaborators and licensees. As a result of collaborative agreements, we will not completely control the nature, timing, or cost of bringing these product candidates to market. Our 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 programs or elect to collaborate with different companies. 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 revenue. 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.

***If we are unable to purify heat shock proteins from some cancer types, we may have difficulty successfully completing our clinical trials and, even if we do successfully complete our clinical trials, the size of our potential market could decrease.***

Our ability to successfully develop and commercialize Oncophage or AG-858 for a particular cancer type depends on our ability to purify heat shock proteins from that type of cancer. If we experience difficulties in purifying heat shock proteins for a sufficiently large number of patients in our clinical trials, including our Phase 3 clinical trials, it may lower the probability of a successful analysis of the data from these trials and, ultimately, the ability to obtain FDA approval. Our overall manufacturing success rate to date for part I of our Phase 3 trial in renal cell carcinoma is 92%; for our Phase 3 trial in metastatic melanoma, it is 70%. Our inability to manufacture adequate amounts of Oncophage for approximately 30% of the patients randomized in the Oncophage treatment arm of the metastatic melanoma trial undermines the potential for the trial to meet its pre-specified clinical endpoints. To address this lower success rate for melanoma, we instituted an inhibitor process to avoid the breakdown of proteins. Subsequent to the implementation of this change, we successfully produced Oncophage for 18 of 23 patients, a success rate of approximately 78%, whereas previously we had produced Oncophage for 123 of 179 patients. The small sample size used subsequent to our process change may make the reported improvement in our manufacturing success unreliable as a predictor of future success.

We have successfully manufactured product for 100%, 14 of 14, of the patients randomized to treatment in our Phase 2 lung cancer trial and 95%, 21 of 22 patients, randomized to treatment in our Phase 2 metastatic renal cell carcinoma trial. Based on our completed earlier clinical trials and our ongoing clinical trials conducted in renal cell carcinoma (including part I of our Phase 3 trial), we have been able to manufacture Oncophage from 93% of the tumors delivered to our manufacturing facility; for melanoma (including our Phase 3 trial), 78%; for colorectal cancer, 98%; for gastric cancer, 81%; for lymphoma, 89%; and for pancreatic cancer, 46%. 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 made process development advances that have improved the manufacture of Oncophage from pancreatic tissue. In an expanded Phase 1 pancreatic cancer study, Oncophage was manufactured from five of five tumor samples (100%), bringing the aggregate success rate for this cancer type, which was previously 30%, to 46%. We have successfully manufactured AG-858 from approximately 83% of the patient samples received.

We may encounter problems with other types of cancer as we expand our research. If we cannot overcome these problems, the number of cancer types that our heat shock protein product candidates could treat would be limited. In addition, if we commercialize our heat shock protein product candidates, we may face claims from patients for whom we are unable to produce a vaccine.

***Manufacturing problems may cause product launch delays and unanticipated costs.***

If Oncophage is approved for sale, we expect we would be required to manufacture substantially more than we have been required to manufacture for clinical and preclinical trials. We have no experience manufacturing Oncophage in commercial quantities, and we can provide no assurance that we will be able to do so successfully. We may experience higher manufacturing failure rates than we have in the past if and when we attempt to substantially increase production volume.

Furthermore, because Oncophage is a personalized biologic, it requires product characterization steps that are more onerous than those required for most chemical pharmaceuticals. Accordingly, we employ multiple steps

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to attempt to control the manufacturing processes. Minor deviations in these manufacturing processes could result in unacceptable changes in the vaccine that result in production failures.

In addition, we may only be able to produce Oncophage at our facility in Lexington, Massachusetts. A number of factors could cause production interruptions at this facility, including equipment malfunctions, labor or employment retention problems, natural disasters, power outages, terrorist activities, or disruptions in the operations of our suppliers.

We have no clinical or commercial-scale manufacturing capabilities for our products other than Oncophage and AG-858. In order to continue to develop our other products, apply for regulatory approvals and commercialize these products, we or our licensees or collaborators will need to develop, contract for or otherwise arrange for the necessary manufacturing capabilities. We currently rely and expect to continue to rely, upon other third parties, potentially including our collaborators, to produce materials required for preclinical studies and clinical trials and for these products.

There are a limited number of contract manufacturers that operate under the FDA's good manufacturing practices regulations capable of manufacturing our products other than Oncophage. If we are unable to arrange for third-party manufacturing of these products, or to do so on commercially reasonable terms, we may not be able to complete development of our products or commercialize them.

Reliance on third-party manufacturers entails risks to which we would not be subject if we manufactured products ourselves, including reliance on the third party for regulatory compliance, the possibility of breach of the manufacturing agreement by the third party because of factors beyond our control and the possibility of termination or non-renewal of the agreement by the third party, based on its own business priorities, at a time that is costly or inconvenient for us.

We may in the future elect to manufacture some of our products other than Oncophage in our own manufacturing facilities. We would need to invest substantial additional funds and recruit qualified personnel in order to build or lease and operate any manufacturing facilities.

Manufacturing is also subject to extensive government regulation. Regulatory authorities must approve the facilities in which human healthcare products are produced. In addition, facilities are subject to ongoing inspections and minor changes in manufacturing processes may require additional regulatory approvals, either of which could cause us to incur significant additional costs and lose revenue.

***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 at least 81 issued U.S. patents and 125 foreign patents. We also have rights to at least 78 pending U.S. patent applications and 259 pending foreign patent applications. However, our patents may not protect us against our competitors. Our patent positions, and those of other pharmaceutical and biotechnology companies, are generally uncertain and involve complex legal, scientific and factual questions. The standards which the United States Patent and Trademark

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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, is uncertain. In addition, the type and extent of patent claims that will be issued to us in the future is uncertain. Any patents that are issued may not contain claims that 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.

***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 a 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 grounds that such other party's activities do not infringe our patents.

We may not have rights under some patents or patent applications related to some of our existing and proposed products or processes. Third parties may own or control these patents and patent applications in the United States and abroad. Therefore, in some cases, such as those described below, in order to develop, use, manufacture, sell or import some of our existing or proposed products or develop or use some of our existing or proposed processes, we or our collaborators may choose to seek, or be required to seek, licenses under third-party patents issued in the United States and abroad, or those that might issue from United States and foreign patent applications. In such an event, we likely would be required to pay license fees or royalties or both to the licensor. If licenses are not available to us on acceptable terms, we or our collaborators may not be able to exploit these products or processes.

Furthermore, a third party may claim that we are using inventions covered by such third party's patents or other intellectual property rights 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 substantial 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

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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 those patents, that we either do not infringe the claim 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 biotechnology companies, have received this type of communication, including with respect to the third-party patents mentioned above, as well as a communication alleging infringement of a patent relating to certain gel-fiberglass structures. 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, which we may not be able to do. 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, two of the patent applications licensed to us contain claims that are substantially the same as claims in a third-party patent relating to heat shock proteins. We have asked the United States Patent and Trademark Office to declare an interference with this third-party patent, U.S. Patent No. 6,713,608 which we believe is owned by the Science & Technology Corporation @ UNM (University of New Mexico). We believe that the invention of U.S. Patent No. 6,713,608 is the same as that of earlier-filed U.S. Patents No. 5,747,332, 6,066,716, and 6,433,141, which we believe are owned by the University of New Mexico and which were involved in a previous interference proceeding with one of those two applications. During that interference proceeding, we were awarded priority based upon our earlier effective filing date. Accordingly, we believe that the United States Patent and Trademark Office would declare an interference between our pending patent applications and this latest third-party patent and that the claims of U.S. Patent No. 6,713,608 would be deemed invalid. Although we believe that we should prevail against this third-party patent in an interference proceeding, there is no guarantee that that will be the outcome. Additionally, a third party has filed a notice of opposition to European patent EP 0750513 B1 which has claims relating to AG-702/707, to which we hold the exclusive license. We believe this patent claims valid subject matter and intend to defend the opposition. However, there is no guarantee that this patent will not be revoked or that we may not have to amend the claims.

***We may become involved in expensive patent litigation or other proceedings, which could result in our incurring substantial costs and expenses or substantial liability for damages or require us to stop our development and commercialization efforts.***

There has been substantial litigation and other proceedings regarding patent and other intellectual property rights in the pharmaceutical and biotechnology industries. We may become a party to patent litigation or other proceedings regarding intellectual property rights. Interference proceedings before the United States Patent and Trademark Office may be necessary to establish which party was the first to invent a particular invention.

The cost to us of any patent litigation or other proceeding, even if resolved in our favor, could be substantial. Some of our competitors may be able to sustain the cost of such litigation or proceedings more effectively than we can because of their substantially greater financial resources. If a patent litigation or other proceeding is resolved against us, we or our collaborators may be enjoined from using, manufacturing, selling or importing our products or processes without a license from the other party and we may be held liable for significant damages. We may not be able to obtain any required licenses on commercially acceptable terms or at all.

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Uncertainties resulting from the initiation and continuation of patent litigation or other proceedings could have a material adverse effect on our ability to enter into collaborations with other entities, obtain financing or compete in the marketplace. Patent litigation and other proceedings may also absorb significant management time.

***Our patent protection for any compound or product that we seek to develop may be limited to a particular method of use or indication such that, if a third party were to obtain approval of the compound or product for use in another indication, we could be subject to competition arising from off-label use.***

Although we generally seek the broadest patent protection available for our proprietary compounds, we may not be able to obtain patent protection for the actual composition of matter of any particular compound and may be limited to protecting a new method of use for the compound or otherwise restricted in our ability to prevent others from exploiting the compound. If we are unable to obtain patent protection for the actual composition of matter of any compound that we seek to develop and commercialize and must rely on method of use patent coverage, we would likely be unable to prevent others from manufacturing or marketing that compound for any use that is not protected by our patent rights. If a third party were to receive marketing approval for the compound for another use, physicians might nevertheless prescribe it for indications that are not described in the product's labeling or approved by the FDA or other regulatory authorities. Even if we have patent protection of the prescribed indication, as a practical matter, we likely would have little recourse as a result of this off-label use. In that event, our revenues from the commercialization of the compound would likely be adversely affected.

***If we fail to comply with our obligations in our intellectual property licenses with third parties, we could lose license rights that are important to our business.***

We are a party to various license agreements under which we receive the right to practice and use important third party patent rights. We may enter into additional licenses in the future. Our existing licenses impose, and we expect future licenses will impose, various diligence, milestone payment, royalty, insurance and other obligations on us. If we fail to comply with these obligations, the licensor may have the right to terminate the license, in which event we might not be able to market any product that is covered by the licensed patents.

***If we fail to maintain positive relationships with particular individuals, we may be unable to successfully develop our product candidates, conduct clinical trials, and obtain financing.***

Pramod K. Srivastava, Ph.D., a member of our Board of Directors, the Chairman of our Scientific and Medical Advisory Board, and a consultant to us, and Garo H. Armen, Ph.D., the Chairman of our Board of Directors and our Chief Executive Officer, who together founded Antigenics in 1994, have been, and continue to be, integral to building the Company and developing our technology. If either of these individuals decreases his contributions to the Company, our business could be adversely impacted.

Dr. Srivastava is not an employee of Antigenics and has other professional commitments. 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

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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 Antigenics, which includes financial incentives for him to remain associated with us, but these may not prove sufficient to prevent him from severing his relationship with Antigenics, even during the time covered by the consulting agreement. In addition, this agreement does not restrict Dr. Srivastava's ability to compete against us after his association with Antigenics is terminated. This agreement was to expire in March 2005 but was extended for an additional one-year period until March 2006. The Company expects to enter into an amended and restated consulting agreement with Dr. Srivastava prior to expiration of the existing consulting agreement. If Dr. Srivastava were to terminate his affiliation with us or devote less effort to advancing our technologies, we may not have access to future discoveries that could advance our technologies.

Effective December 1, 2005, the Company entered into an employment agreement (the "Agreement") with Dr. Armen. Subject to earlier termination as provided in the Agreement, the Agreement shall have an original term of one year and shall be automatically extended thereafter for successive terms of one year each, unless either party provides notice to the other at least ninety days prior to the expiration of the original or any extension term. We do not carry key employee insurance policies for Dr. Armen or any other employee.

We also rely greatly on employing and retaining other highly trained and experienced senior management and scientific personnel. Since our manufacturing process is unique, our manufacturing and quality control personnel are very important. The competition for these and other qualified personnel in the biotechnology field is intense. If we are not able to attract and retain qualified scientific, technical, and managerial personnel, we probably will be unable to achieve our business objectives.

### ***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 ("IPO") have been named as defendants in a federal civil class action lawsuit. The suit alleges that the brokerage arms of the investment banking firms charged secret excessive commissions to certain of their customers in return for allocations of our IPO. The suit also alleges that shares of our stock were allocated to certain of the investment banking firms' customers based upon agreements by such customers to purchase additional shares of our stock in the secondary market. To date, the plaintiffs have not asserted a specific amount of damages. We have submitted settlement papers with the Federal District Court for the Southern District of New York, which the court preliminarily approved. Regardless of the outcome, participation in a lawsuit diverts our management's time and attention from our business and may result in requiring us to pay substantial damages.

In addition, we are involved in other litigation and may become involved in additional litigation. Any such litigation could be expensive in terms of out-of-pocket costs and management time, and the outcome of any such litigation is uncertain.

***If we fail to obtain adequate levels of reimbursement for our product candidates from third-party payers, the commercial potential of our product candidates 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 product candidates. Many patients will not be capable of paying for our product candidates by 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.

It is not clear that public and private insurance programs will determine that Oncophage or our other product candidates come within a category of items and services covered by their insurance plans. For example, although the federal Medicare program covers drugs and biological products, the program takes the position that the FDA's treatment of a product as a drug or biologic does not require the Medicare program to treat the product in the same manner. Accordingly, it is possible that the Medicare program will not cover Oncophage or our other product candidates if they are approved for commercialization. It is also possible that there will be substantial delays in obtaining coverage of Oncophage or our other product candidates and that, if coverage is obtained, there may be significant restrictions on the circumstances in which there would be reimbursement. Where insurance coverage is available, there may be limits on the payment amount. Congress and the Medicare program periodically propose significant reductions in the Medicare reimbursement amounts for drugs and biologics. Such reductions could have a material adverse effect on sales of any of our product candidates that receive marketing approval. In December 2003, the President of the United States signed the Medicare Prescription Drug, Improvement, and Modernization Act of 2003. The future impact of this legislation on our product candidates is uncertain. Effective January 1, 2004, Medicare payments for many drugs administered in physician's offices were reduced significantly. This provision impacts many drugs used in cancer treatment by oncologists and urologists. The payment methodology changes in future years, and it is unclear how the payment methodology will impact reimbursement for Oncophage, if it receives regulatory approval, and incentives for physicians to recommend Oncophage relative to alternative therapies.

***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 product candidates in human clinical trials and will face even greater risks if we sell our product candidates commercially. An individual may bring a product liability claim against us if one of our product candidates causes, or merely appears to have caused, an injury. Product liability claims may result in:

- decreased demand for our product candidates;
- injury to our reputation;
- withdrawal of clinical trial volunteers;
- costs of related litigation; and
- substantial monetary awards to plaintiffs.

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We manufacture Oncophage and AG-858 from a patient's cancer cells, and a medical professional must inject Oncophage or AG-858 into the patient from which it was manufactured. A patient may sue us if we, a hospital, or a shipping company fails to deliver the removed cancer tissue or that patient's Oncophage or AG-858. We anticipate that the logistics of shipping will become more complex if 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 or AG-858 at a hospital poses risk of delivery to the wrong patient. Currently, we do not have insurance that covers loss of or damage to Oncophage or AG-858, and we 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. Our product liability policy provides \$10 million aggregate coverage and \$10 million per occurrence. This limited insurance coverage may be insufficient to fully cover us for future claims.

### ***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 hazardous (flammable, corrosive, toxic), infectious, and radioactive materials, and various wastes resulting from their use, at our facilities pending use and ultimate 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 Centers for Disease Control and Prevention, the National Institutes of Health, the International Air Transportation Association, and various state and local agencies. At any time, one or more of the aforementioned agencies could adopt regulations that may affect our operations. We are also subject to regulation under the Toxic Substances Control Act and the Resource Conservation Development programs.

Although we believe that our current procedures and programs for handling, storage, and disposal of these materials comply with federal, state, and local laws and regulations, we cannot eliminate the risk of accidents involving contamination from these materials. Although we have limited pollution liability coverage (\$2 million) 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 substantially in excess of any available insurance coverage and could substantially disrupt our business.

### ***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 product candidates and other therapeutic products, including heat shock proteins directed at cancer, infectious diseases, and autoimmune disorders. Several of these companies have products that utilize similar technologies and/or personalized medicine techniques, such as Dendreon's Sipuleucel-T, with Fast Track designation and currently in Phase 3 trials for prostate cancer, and Lapuleucel-T in Phase 1 trials for ovarian, colorectal and breast cancer, Stressgen's HspE7 currently in or completed Phase 2 trials in HPV-related diseases, such as internal genital warts, recurrent respiratory papillomatosis and cervical dysplasia, AVAX's AC Vaccine therapeutic platform vaccines in clinical

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trials for melanoma and non small-cell lung cancer and approved for sale in Switzerland for melanoma, Intracel's OncoVax, currently approved for administration in the Netherlands, Switzerland and Israel and in a Phase 3 trial in the U.S. for colon cancer, Liponova's Reniale, completed Phase 3 trials for renal cell carcinoma, Vical's Allovectin with a special protocol assessment for a Phase 3 trial for metastatic melanoma, Favril's FavID currently in a Phase 3 trial for non-Hodgkin's lymphoma (NHL), Accentia's BiovaxID currently in a Phase 3 trial for NHL, Genitope's MyVax in a Phase 3 trial for NHL, and Cell Genesys' GVAX vaccines currently in trials for prostate (Phase 3), AML (Phase 1), pancreas (Phase 2), lung cancer (Phase 2), and myeloma (Phase 1). Patents have been issued in both the U.S. and Europe related to Stressgen's heat shock protein technology. In particular, U.S. patents 6,797,491, 6,657,055, 6,524,825, 6,495,347, 6,338,952 and 6,335,183; and European patents EP700445 and EP1002110 are issued. Additionally, many of our competitors, including large pharmaceutical companies, have greater financial and human resources and more experience than we do. Our competitors may:

- commercialize their product candidates sooner than we commercialize our own;
- develop safer or more effective therapeutic drugs or preventive vaccines and other therapeutic products;
- implement more effective approaches to sales and marketing;
- establish superior intellectual property positions; or
- discover technologies that may result in medical insights or breakthroughs, which render our drugs or vaccines obsolete, possibly before they generate any revenue.

More specifically, if we receive regulatory approvals, some of our product candidates will compete with FDA-approved therapies such as interleukin-2 and interferon-alpha for renal cell carcinoma and melanoma, which have generated substantial sales over a number of years. In addition, prior to regulatory approval, we may compete for access to patients with other products in clinical development, with products approved for use in the indications we are studying, or with off-label use of products in the indications we are studying. We anticipate that we will face increased competition in the future as new companies enter markets we seek to address and scientific developments surrounding immunotherapy and other traditional cancer therapies continue to accelerate. For example, with the recent approval by the FDA of sorafenib tablets and sunitinib for the treatment of patients with advanced renal cell carcinoma, or kidney cancer, fewer patients may be available for our clinical trials.

### **Risks Related to our Common 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 December 31, 2005, Antigenics Holdings L.L.C. controlled approximately 24% 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.

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Certain of our directors and officers, including our chief executive officer, directly and indirectly own approximately 70% 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.

### ***A single, otherwise unaffiliated, stockholder holds a substantial percentage of our outstanding capital stock.***

According to publicly filed documents, Mr. Brad M. Kelley beneficially owns 5,546,240 shares of our outstanding common stock and 31,620 shares of our series A convertible preferred stock. The shares of preferred stock are currently convertible at any time into 2,000,000 shares of common stock at an initial conversion price of \$15.81, are non-voting, and carry a 2.5% annual dividend yield. If Mr. Kelley had converted all of the shares of preferred stock on December 31, 2005, he would have held approximately 16% of our outstanding common stock. We currently have a right of first refusal agreement with Mr. Kelley that provides us with limited rights to purchase certain of Mr. Kelley's shares if he proposes to sell them to a third party.

Mr. Kelley's substantial ownership position provides him with the ability to substantially influence the outcome of matters submitted to our stockholders for approval. Furthermore, collectively, Mr. Kelley and Antigenics Holdings L.L.C. control approximately 37% of our outstanding common stock as of April 6, 2005, providing substantial ability, if they vote in the same manner, to determine the outcome of matters submitted to a stockholder vote. If Mr. Kelley were to convert all of his preferred stock into common stock, the combined percentage would increase to 39%. Additional purchases of our common stock by Mr. Kelley also would increase both his own percentage of outstanding voting rights and the percentage combined with Antigenics Holdings L.L.C. (Mr. Kelley's shares of preferred stock do not carry voting rights; the common stock issuable upon conversion, however, carries the same voting rights as other shares of common stock.)

### ***Provisions in our organizational documents could prevent or frustrate attempts by stockholders to replace our current management.***

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, under our certificate of incorporation, our Board of Directors may issue additional shares of preferred stock and determine the terms of those shares of stock without any further action by our stockholders. Our issuance of additional 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 director nominations and permit only our President or a majority of the Board of Directors to call a special stockholder meeting. These provisions may have the effect of preventing or hindering attempts by our stockholders to replace our current management. In addition, Delaware law 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. Our Board of Directors 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 its public trading price has been volatile.***

Between our initial public offering on February 4, 2000 and December 31, 2005 and for the twelve months ended December 31, 2005, the closing price of our common stock has fluctuated between \$4.72 and \$52.63 per share and \$4.76 and \$10.00 per share, respectively, with an average daily trading volume for the year ended December 31, 2005 of approximately 350,000 shares. 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:

- continuing operating losses, which we expect over the next several years as we continue our clinical trials;
- announcements of decisions made by public officials;
- results of our preclinical and clinical trials;
- announcements of technological innovations or new commercial products by 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 financial results.

***The sale of a significant number of shares could cause the market price of our stock to decline.***

The sale by us or the resale by stockholders of a significant number of shares of our common stock could cause the market price of our common stock to decline. As of December 31, 2005, we had approximately 45,591,000 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 sales volume and other limitations.

We have filed registration statements to permit the sale of 10,436,831 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. We have also filed a registration statement to permit the sale of 100,000 shares of common stock under our directors' deferred compensation plan. As of December 31, 2005, options to purchase approximately 6,005,000 shares of our common stock with a weighted average exercise price per share of \$8.75 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 December 31, 2005, warrants to purchase approximately 8,910 shares of our common stock with a weighted average exercise price per share of \$54.71 were outstanding. The market price of our common stock may decrease based on the expectation of such sales. On August 12, 2004, we filed a registration statement with respect to an aggregate of \$100 million of our common stock, preferred stock, and debt. That registration statement has become effective, and we may offer and sell any of those securities from time to time. On May 24, 2005, we filed a registration statement with respect to an aggregate of \$50 million of 5.25% Convertible Senior Notes due 2025 and 4,645,115 shares of our common stock that would be issued upon conversion of the notes, subject to adjustment for any stock split, stock dividend,

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or any other event or transaction that results in an increase in the number of shares issuable upon conversion of the notes. That registration statement has become effective, and those notes and shares may be offered and sold from time to time by the selling security holders listed in the related prospectus. The market price of our common stock may decrease based on investor expectations that we will issue a substantial number of shares of common stock or securities convertible into common stock at low prices.

***Because we are a relatively small public company, we have been disproportionately negatively impacted by the Sarbanes-Oxley Act of 2002 and related regulations, which have increased our costs and required additional management resources.***

The Sarbanes-Oxley Act of 2002, which became law in July 2002, has required changes in some of our corporate governance, securities disclosure, and compliance practices. In response to the requirements of that Act, the SEC and the NASDAQ have promulgated new rules and listing standards covering a variety of subjects. Compliance with these new rules and listing standards significantly increased our legal, financial, and accounting costs, which we expect to increase as we expand our operations. In addition, the requirements have taxed a significant amount of management's and the Board of Directors' time and resources. Likewise, these developments have made it more difficult for us to attract and retain qualified members of our Board of Directors, particularly independent directors, or qualified executive officers. Because we are a relatively small public company, we expect to be disproportionately negatively impacted by these changes in securities laws and regulations, which have increased our costs and required additional management resources.

Our internal control over financial reporting (as defined in Rules 13a-15 of the Exchange Act of 1934, as amended) is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of our financial statements for external purposes in accordance with generally accepted accounting principles. Because of its inherent limitations, internal control over financial reporting may not prevent or detect all deficiencies or weaknesses in our financial reporting. While our management has concluded in our annual report on Form 10-K for the year ended December 31, 2005 that there were no material weaknesses in our internal control over financial reporting as of December 31, 2005, our procedures are subject to the risk that our controls may become inadequate because of changes in conditions or as a result of a deterioration in compliance with such procedures. No assurance is given that our procedures and processes for detecting weaknesses in our internal control over financial reporting will be effective.

### **Item 1B. *Unresolved Staff Comments***

We have received no written comments from the staff of the Securities and Exchange Commission regarding our periodic or current reports that (1) we believe are material, (2) were issued not less than 180 days before the end of our 2005 fiscal year, and (3) remain unresolved.

### **Item 2. *Properties***

We signed a lease agreement, effective August 2003, for a 162,000 square-foot facility in Lexington, Massachusetts, which terminates in August 2013. We have an option to renew this lease for two additional ten-year periods. We began occupying approximately 94,000 square-feet of this new facility, beginning in October 2003. Based on the terms of our lease agreement our space increased to 132,000 square feet on August 2005 with a second expansion to 162,000 square feet to take place in March 2006.

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We also lease approximately 40,000 square feet of laboratory, office and manufacturing space in Framingham, Massachusetts under a lease agreement that terminates in September 2010. We have an option to renew the lease for two additional five-year periods. We have sublet this entire facility.

In addition, we lease approximately 30,000 square feet of laboratory and office space in The Woodlands, Texas, a suburb of Houston, under a lease that expires in January 2008. We are not actively using this facility.

We maintain our executive offices in New York, New York, in an office building in which we lease approximately 10,000 square feet. Our New York lease terminates in December 2006.

The Company believes substantially all of its property and equipment is in good condition and that it has sufficient capacity to meet its current operational needs. We do not anticipate experiencing significant difficulty in retaining occupancy of any of our manufacturing or office facilities and will do so through lease renewals prior to expiration or through replacing them with equivalent facilities.

### **Item 3. Legal Proceedings**

Antigenics, our Chairman and Chief Executive Officer Garo Armen, and two investment banking 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 for the Southern District of New York on behalf of a class of purchasers of our stock between February 3, 2000 and December 6, 2000. Similar complaints were filed against about 300 other issuers, their underwriters, and in many instances their directors and officers. These cases have been coordinated under the caption *In re Initial Public Offering Securities Litigation*, Civ. No. 21 MC 92 (SAS), by order dated August 9, 2001. The suit against Antigenics and Dr. Armen alleges that the brokerage arms of the investment banking firms 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 investment banking firms' customers based upon agreements by such customers to purchase additional shares of our stock in the secondary market. The complaint alleges that Antigenics is liable under Section 11 of the Securities Act of 1933, as amended (the Securities Act), and Dr. Armen is liable under Sections 11 and 15 of the Securities Act because our registration statement did not disclose these alleged practices. On April 19, 2002, the plaintiffs in this action filed an amended class action complaint, which contains new allegations. Again, similar amended complaints were filed with respect to the other 300 companies. In addition to the claims in the earlier complaint, the amended complaint alleges that Antigenics and Dr. Armen violated Sections 10(b) and 20 of the Securities Exchange Act and SEC Rule 10b-5 by making false and misleading statements and/or omissions in order to inflate our stock price and conceal the investment banking firms' alleged secret arrangements. The claims against Dr. Armen, in his individual capacity, have been dismissed without prejudice. On July 15, 2002, Antigenics and Dr. Armen joined the Issuer Defendants' Motion to Dismiss the Consolidated Amended Complaints. By order of the Court, this motion set forth all "common issues," i.e., all grounds for dismissal common to all or a significant number of Issuer Defendants. The hearing on the Issuer Defendants' Motion to Dismiss and the other Defendants' motions to dismiss was held on November 1, 2002. On February 19, 2003, the Court issued its opinion and order on the Issuer Defendants' Motion to Dismiss. The Court granted Antigenics' motion to dismiss the Rule 10b-5 and Section 20 claims with leave to amend and denied our motion to dismiss the Section 11 and Section 15 claims. On June 14, 2004, papers formalizing a proposed settlement among the plaintiffs, Issuer Defendants, and insurers were presented to the Federal District

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Court for the Southern District of New York. In an Opinion and Order dated February 15, 2005, the Court granted preliminary approval of the settlement. If the settlement becomes effective, Antigenics anticipates that it will not incur significant out-of-pocket costs, after insurance. Accordingly, an accrual has not been recorded at December 31, 2005.

A third party has filed a notice of opposition to European patent EP 0750513 B1 which has claims relating to AG-702/707, to which we hold the exclusive license. We believe this patent claims valid subject matter and intend to defend the opposition. However, there is no guarantee that this patent will not be revoked or that we may not have to amend the claims.

We currently are a party to other legal proceedings as well. While we currently believe that the ultimate outcome of any of these proceedings will not have a material adverse effect on our financial position, results of operations, or liquidity, litigation is subject to inherent uncertainty. Furthermore, litigation consumes both cash and management attention.

#### **Item 4. Submission of Matters to a Vote of Security Holders**

No matters were submitted to stockholders for a vote during the fourth quarter of 2005.

#### **Executive Officers of the Registrant**

Set forth below is certain information regarding our executive officers, including their age, as of March 1, 2006:

<u>Name</u>	<u>Age</u>	<u>Title</u>
Garo H. Armen, Ph.D.	53	Chairman of the Board and Chief Executive Officer
Peter Thornton	41	Senior Vice President and Chief Financial Officer
Renu Gupta, MD	50	Senior Vice President, Development
Roman M. Chiczc, Ph.D.	43	Senior Vice President, Research and Preclinical Development
Bruce Leicher	50	Vice President and General Counsel

GARO H. ARMEN, PH.D. co-founded Antigenics in 1994 and has been the Chairman of the Board and Chief Executive Officer since inception. He currently serves as a director of Elan Corporation, plc and a director of Color Kinetics Inc. Dr. Armen is also the founder and president of the Children of Armenia Fund. Since 1990, Dr. Armen has been the managing general partner of Armen Partners, L.P., an investment partnership specializing in public and private healthcare and biotechnology investments.

PETER THORNTON has served as our Senior Vice President and Chief Financial Officer since June 2004. His professional experience includes 18 years of financial and operating experience in the United States and Europe. Mr. Thornton joined the Company from the international biopharmaceutical company Elan Corporation, plc., having held senior management positions in business operations and corporate finance. He was most recently Elan's senior vice president of business operations, focusing on general management and operational

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leadership of several business units, and restructuring and divestiture activities as part of Elan's recovery plan. Prior to joining Elan in 1994, Mr. Thornton worked at the international accounting firm of KPMG in Dublin and Paris for approximately seven years. Mr. Thornton is a director of CyDex, Inc., a specialty pharmaceutical company. Mr. Thornton earned his bachelor's degree in commerce from University College, Cork, Ireland, and is a fellow of the Institute of Chartered Accountants in Ireland.

RENU GUPTA, MD joined Antigenics as Senior Vice President of Development in November 2003. During the period 2001 through 2003, Dr. Gupta worked as a self-employed consultant for a range of biopharmaceutical companies. During the years 2000 to 2001, Dr. Gupta was employed at Novartis where she was the vice president and head of US clinical research and development. Dr. Gupta also spent 1998 through 2000 at Covance as Vice President, and head of Medical, Safety and Therapeutics and from 1989 through 1998 at Bristol-Myers Squibb, where she was responsible for high-level global marketing strategy, clinical research and business development. Dr. Gupta received her bachelor and medical degrees from the University of Zambia, completed her research training at the Wistas Institute of Anatomy and Biology, and completed her medical training at Albert Einstein Medical Center in Philadelphia and the University of Pennsylvania's Children's Hospital of Philadelphia.

ROMAN M. CHICZ, PH.D. joined Antigenics as Senior Vice President of Research and Preclinical Development in July 2004. Prior to this position Dr. Chicz was a co-founder and Vice President of Discovery Research at ZYCOS Inc. from its inception in 1996 until its acquisition in 2004. During his tenure at ZYCOS, Dr. Chicz was responsible for the identification and validation of novel anti-viral and oncology drugs, product development support and management of the Aventis Pasteur oncology alliance. He also played a key role in business development and private financing of the company. Prior to ZYCOS, Dr. Chicz served as a principal scientist and postdoctoral fellow at Harvard University. Dr. Chicz received his Bachelor's degree in chemistry from Occidental College and his doctorate in biochemistry from Purdue University.

BRUCE LEICHER joined Antigenics as Vice President and General Counsel in November 2005. Mr. Leicher has 25 years of legal experience and has developed a specific expertise in representing biopharmaceutical companies. Mr. Leicher joined the Company from Millennium Pharmaceuticals, Inc. where he was employed from January 2003 through November 2005 and most recently served as vice president, chief pharmaceutical counsel and compliance officer. Prior to that, Mr. Leicher was Of Counsel to and Co-Chair of the Lifesciences Practice Group at Hill & Barlow from January 2002 to December 2002, and in 2001 Mr. Leicher was engaged in private legal practice. Prior to 2001, Mr. Leicher also held significant positions in the biotechnology industry, serving as vice president and general counsel to Curis, Inc. and vice president-law to Genetics Institute, Inc. Mr. Leicher earned a bachelor's degree in psychology from the University of Rochester in New York and a J.D. from Georgetown University Law Center.

**PART II**

**Item 5. Market for the Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities**

Our common stock has been traded on The NASDAQ National Market under the symbol “AGEN” since February 4, 2000.

The following table sets forth, for the periods indicated, the high and low sale prices per share of our common stock as reported on the NASDAQ National Market.

	<u>High</u>	<u>Low</u>
<b>2004</b>		
First Quarter	\$ 12.46	\$ 9.21
Second Quarter	11.61	7.01
Third Quarter	8.75	5.94
Fourth Quarter	11.38	4.51
<b>2005</b>		
First Quarter	10.24	6.10
Second Quarter	7.35	5.30
Third Quarter	6.72	5.15
Fourth Quarter	6.07	4.62
<b>2006</b>		
First Quarter (through March 1, 2006)	4.61	7.22

As of February 15, 2006, there were approximately 2,000 holders of record and approximately 30,000 beneficial holders of our common stock.

We have never paid cash dividends on our common stock and we do not anticipate paying any cash dividends in the foreseeable future. We currently intend to retain future earnings, if any, for the future operation and expansion of our business. Any future payment of dividends on our common stock will be at the discretion of our Board of Directors and will depend upon, among other things, our earnings, financial condition, capital requirements, level of indebtedness and other factors that our Board of Directors deem relevant.

**Securities Authorized For Issuance Under Equity Compensation Plans**

<u>Plan Category</u>	<u>Number of Securities to be Issued Upon Exercise of Outstanding Options, Warrants and Rights (1)</u>	<u>Weighted-average Exercise Price of Outstanding Options, Warrants and Rights</u>	<u>Number of Securities Remaining Available for Future Issuance under Equity Compensation Plan (Excluding Securities Reflected in Column (a)) (2)</u>
	(a)	(b)	(c)
Equity compensation plans approved by security holders	6,045,764	\$ 8.75	3,751,600
Equity compensation plans not approved by security holders	—		—
<b>Total</b>	<u>6,045,764</u>		<u>3,751,600</u>

(1) Includes (i) 1,128 options outstanding at a weighted average exercise price of \$48.56 assumed in connection with our merger with Aronex Pharmaceuticals, Inc. in July 2001; (ii) 32,037 options outstanding at a

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weighted average exercise price of \$13.16 assumed in our merger with Aquila Biopharmaceuticals Inc. in November 2000; and (iii) 41,028 shares issuable under our Directors' Deferred Compensation Plan at a weighted average price of \$7.20.

- (2) Includes 149,776 shares that may be issued under our 1999 Employee Stock Purchase Plan and 58,972 shares available under our Directors' Deferred Compensation Plan.

### **Item 6. Selected Financial Data**

We have derived the consolidated balance sheet data set forth below as of December 31, 2005 and 2004, and the consolidated statement of operations data for each of the years in the three-year period ended December 31, 2005, from our audited consolidated financial statements included elsewhere in this annual report. The consolidated balance sheet data as of December 31, 2002 and 2001, and the consolidated statement of operations data for the year ended December 31, 2001, is unaudited. It is based on audited data for the relevant periods as adjusted for discontinued operations accounting treatment related to the sale of manufacturing rights to our feline leukemia virus vaccine and certain other assets in March 2004, which adjustments have not been audited as of these dates or for these years.

You should read the selected consolidated financial data in conjunction with "Management's Discussion and Analysis of Financial Condition and Results of Operations" and our consolidated financial statements and the notes to those consolidated financial statements included elsewhere in this report.

Given our history of incurring operating losses, management believes that it is more likely than not that any deferred tax assets, net of deferred tax liabilities, will not be realized. Therefore, no income tax benefit has been recognized in the consolidated financial statements because of the loss before income taxes and the need to recognize a valuation allowance on net deferred tax assets (see (3) below).

Changes in cash, cash equivalents and short-term investments, total current assets, total assets, and stockholders' equity in the periods presented below include the effects of the receipt of net proceeds from our debt offering, equity offerings, the exercise of stock options and warrants, and employee stock purchases that totaled approximately \$48.3 million, \$54.6 million, \$92.5 million, \$56.7 million, and \$0.9 million in 2005, 2004, 2003, 2002, and 2001, respectively.

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	For the Year Ended December 31,				
	2005	2004	2003	2002	2001
	(In thousands, except per share data)				(Unaudited)
<b>Consolidated Statement of Operations Data:</b>					
Revenue	\$ 630	\$ 707	\$ 985	\$ 784	\$ 2,949
Operating Expenses:					
Cost of sales	—	(5)	—	—	—
Research and development	(47,080)	(41,718)	(46,264)	(37,478)	(31,259)
General and administrative	(25,868)	(25,784)	(21,682)	(20,673)	(13,762)
Acquired in-process research and development (1)	—	(2,888)	—	—	(34,596)
Severance costs	(1,596)	—	—	—	—
Loss from operations	(73,914)	(69,688)	(66,961)	(57,367)	(76,668)
Interest (expense) income, net	(191)	929	919	1,225	2,684
Non-operating income	1	8	—	—	—
Loss from continuing operations	(74,104)	(68,751)	(66,042)	(56,142)	(73,984)
Income from discontinued operations (2)	—	12,589	108	264	443
Net loss	(74,104)	(56,162)	(65,934)	(55,878)	(73,541)
Dividends on series A convertible preferred stock	(790)	(790)	(224)	—	—
Net loss attributable to common stockholders (3)(4)	\$ (74,894)	\$ (56,952)	\$ (66,158)	\$ (55,878)	\$ (73,541)
Loss from continuing operations per common share, basic and diluted	\$ (1.64)	\$ (1.56)	\$ (1.70)	\$ (1.71)	\$ (2.63)
Income from discontinued operations, per common share, basic and diluted	\$ —	\$ 0.28	\$ —	\$ 0.01	\$ 0.02
Net loss attributable to common stockholders per common share, basic and diluted	\$ (1.64)	\$ (1.27)	\$ (1.70)	\$ (1.70)	\$ (2.61)
Weighted average number of shares outstanding, basic and diluted	45,577	44,685	38,989	32,905	28,143
	December 31,				
	2005	2004	2003	2002	2001
			(In thousands)	(Unaudited)	(Unaudited)
<b>Consolidated Balance Sheet Data:</b>					
Cash, cash equivalents and short-term investments	\$ 61,748	\$ 86,921	\$ 87,978	\$ 57,720	\$ 60,868
Total current assets	66,962	92,604	91,821	62,395	63,987
Total assets	104,151	133,058	140,080	89,063	93,546
Total current liabilities	19,145	19,204	22,105	9,971	16,208
Long-term debt, less current portion	50,044	4,512	10,245	12	194
Stockholders' equity	31,899	106,443	105,246	77,757	75,925

- (1) We recorded charges to operations for the write-off of in-process research and development acquired with the purchase of intellectual property from Mojave Therapeutics Inc. in July 2004 and in our merger with Aronex Pharmaceuticals, Inc. in July 2001.

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- (2) In March 2004, we sold our manufacturing rights and related assets for a feline leukemia virus vaccine to Virbac S.A. This sale and activity related to these assets has been treated as a discontinued operation for all periods presented.
- (3) Given our history of incurring operating losses, no income tax benefit is recognized in our consolidated financial statements because of the loss before income taxes and the need to recognize a valuation allowance on net deferred tax assets.
- (4) Effective July 1, 2001, we adopted Statement of Financial Accounting Standards (“SFAS”) No. 141, “Business Combinations” and effective January 1, 2002 adopted SFAS No. 142, “Goodwill and Other Intangibles.” As a result, we have ceased amortization of all goodwill beginning January 1, 2002. Had SFAS No. 142 been adopted by us effective January 1, 2001, net loss attributable to common stockholders and net loss attributable to common stockholder per common share, basic and diluted, would have been as follows (in thousands, except per share data):

	<u>2001</u>
Net loss attributable to common stockholders, as reported	\$(73,541)
Goodwill and assembled workforce amortization	480
Pro forma net loss attributable to common stockholders	<u>\$(73,061)</u>
Net loss attributable to common stockholders per common share, basic and diluted:	
As reported	\$ (2.61)
Pro forma	(2.60)

**Item 7. Management's Discussion and Analysis of Financial Condition and Results of Operations**

**OVERVIEW**

We are currently researching and/or developing product candidates to treat cancers, infectious diseases and autoimmune disorders. Since our inception in March 1994, our activities have primarily been associated with the development of our heat shock protein technology and our most advanced product candidate, Oncophage, a personalized therapeutic cancer vaccine. Our business activities have included product research and development, intellectual property prosecution, manufacturing therapeutic vaccines for clinical trials, regulatory and clinical affairs, corporate finance and development activities, marketing, and integration of our acquisitions.

We have incurred significant losses since our inception. As of December 31, 2005, we had an accumulated deficit of \$409,963,000. Since our inception, we have financed our operations principally by sales of equity and convertible debt instruments. On January 25, 2005, we raised net proceeds of approximately \$48,000,000 through the issuance of 5.25% Convertible Senior Notes due 2025 (see Note 15 of our notes to consolidated financial statements). For the years ended December 31, 2005 and 2004, we raised through the sale of equity, exercises of stock options and proceeds from our employee stock purchase plan approximately \$327,000 and \$54,617,000, respectively.

We expect that we will be able to fund our operations and capital expenditures into early 2007 with our current working capital. We also expect, as we have in the past, to attempt to raise additional funds in advance of depleting our current funds. Satisfying long-term liquidity needs may require the successful commercialization of Oncophage or other product candidates and will require additional capital. As part of an effort to conserve funds, on December 6, 2005, we announced that we had refocused our programs and priorities, including the postponement and deceleration of a number of our projects. To match our updated business strategy, we also reduced our workforce by approximately 30%.

**Historical Results of Operations**

***Year Ended December 31, 2005 Compared To The Year Ended December 31, 2004***

*Revenue:* We generated \$630,000 and \$707,000 of research and development revenue during the years ended December 31, 2005 and 2004, respectively. Revenues from research and development activities include revenues earned on shipments of QS-21 to our QS-21 licensees, license fees, and grant revenue earned. The decrease in research and development revenue is attributable to the expiration of a grant and to a large non-recurring shipment of QS-21 during 2004, which is partially offset by increased license fees earned in 2005.

*Research and Development:* Research and development expenses include the costs associated with our internal research and development activities, including salaries and benefits, occupancy costs, clinical manufacturing costs, related administrative costs, and research and development conducted for us by outside advisors, such as sponsored university-based research partners, including the University of Connecticut Health Center, and clinical research organizations, as well as expenses related to grant revenue. Research and development expense increased 13% to \$47,080,000 for the year ended December 31, 2005 from \$41,718,000 for the year ended December 31, 2004. The increase was primarily due to payroll-related expenses for additional

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personnel assisting with our research and development activities, costs incurred to advance our development programs, start-up costs related to part II of our Oncophage renal cell carcinoma Phase 3 trial, increased fees related to the close out activities of our other Phase 3 trials, and costs incurred due to a reduction in headcount. Payroll-related expenses increased \$2,877,000 in comparison to 2004. Clinical trial related expenses increased \$1,941,000 in comparison to 2004, as the result of our close out activities of part I of our Phase 3 clinical trial in renal cell carcinoma and our Phase 3 clinical trial in metastatic melanoma (due to the completion of enrollment during the third quarter of 2004) coupled with the initiation of our part II Phase 3 clinical trial in renal cell carcinoma. Expenses related to our research and development programs increased \$853,000 in comparison to 2004 due primarily to the toxicology studies performed on our new formulation of Aroplatin and on AG-707, and increased contract manufacturing of Aroplatin. Other research and development costs decreased \$309,000.

*General and Administrative:* General and administrative expenses consist primarily of personnel costs, facility expenses, and professional fees. General and administrative expenses increased to \$25,868,000 for the year ended December 31, 2005 from \$25,784,000 for the year ended December 31, 2004. This increase included a \$527,000 increase in fees related to additional consulting services driven by our preparations for potential commercialization of Oncophage. Payroll-related expenses increased \$343,000 in comparison to 2004. Facility-related expenses have increased \$201,000 in comparison to 2004 due largely to increased costs related to increased headcount prior to the elimination of positions in conjunction with our steps taken to improve our operating efficiency. These increases were largely offset by a \$534,000 decrease in legal fees in 2005 compared to 2004 and a \$414,000 decrease in our non-cash charge for options granted and earned by outside advisors, directors and employees for 2005 compared to 2004. Other general and administrative expenses decreased \$39,000.

*Acquired In-Process Research and Development:* Acquired in-process research and development of \$2,888,000 for the year ended December 31, 2004 related to the charge for the purchase from Mojave Therapeutics Inc. ("Mojave") of all of their intellectual property and certain scientific assets relating to their heat shock protein based antigen delivery system and other technologies. The total purchase price of the assets (comprised of a cash payment of \$200,000 and the value of common stock issued of \$2,688,000) was allocated to incomplete acquired technologies under development but not yet technologically feasible or commercialized and which had no alternative future uses. At the date of the acquisition, none of the purchased technologies under development by Mojave had achieved technological feasibility and none were being sold on the market. There still remains substantial risk and significant uncertainty concerning the remaining course of technical development. Because of the great uncertainty associated with these issues and the remaining effort associated with development of these technologies, the development projects had not established technological feasibility at the acquisition date.

*Severance Costs:* In June 2005, we took steps to improve our operating efficiency through the prioritization of our development portfolio and a streamlining of our infrastructure. Consequently, we eliminated 26 positions. In December 2005, we further updated our business strategy and refocused our programs and priorities, including the postponement and deceleration of a number of our projects. To match these priorities, we eliminated 65 positions. We recorded charges of \$1,596,000 during the year ended December 31, 2005 related to the elimination of these positions. As of December 31, 2005, we have paid \$642,000 of these expenses. Our remaining cash payment obligation of approximately \$954,000, which is included in accrued liabilities in our consolidated balance sheet, is to be paid through July 2006.

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A summary of severance and related costs is as follows:

	<u>Charge to Operations</u>	<u>Amount Paid</u>	<u>Liability at December 31, 2005</u>
Severance and payroll taxes	\$1,375,000	\$543,000	\$ 832,000
Outplacement	167,000	78,000	89,000
Other	54,000	21,000	33,000
Total	<u>\$1,596,000</u>	<u>\$642,000</u>	<u>\$ 954,000</u>

*Interest Expense:* Interest expense increased to \$2,963,000 for the year ended December 31, 2005 from \$531,000 for the year ended December 31, 2004. This increase relates primarily to interest on our 5.25% convertible senior notes due 2025 that were issued on January 25, 2005.

*Interest Income:* Interest income increased to \$2,773,000 for the year ended December 31, 2005 from \$1,460,000 for the year ended December 31, 2004. This increase is largely attributable to a rise in interest rates earned on our cash, cash equivalents, and short-term investments. Our average interest rate increased from 1.4% for the year ended December 31, 2004 to 2.9% for the year ended December 31, 2005.

*Discontinued Operations:* Due to the sale of our manufacturing rights for feline leukemia virus vaccine and related assets to Virbac in 2004, we have reported this portion of our business as discontinued operations in accordance with Statement of Financial Accounting Standards ("SFAS") No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*.

### **Year Ended December 31, 2004 Compared To The Year Ended December 31, 2003**

*Revenue:* We generated \$690,000 of research and development revenue and \$17,000 of QA-21 product revenue during the year ended December 31, 2004 and \$985,000 of research and development revenue and no product revenue during the year ended December 31, 2003. Revenues from research and development activities include revenues earned on shipments of QS-21 to our QS-21 licensees, grant payments and license fees earned. The decrease in research and development revenue is attributable to lower shipments of QS-21 during the year ended December 31, 2004 compared to the year ended December 31, 2003 and to a large non-recurring shipment of QS-21 during the first half of 2003.

*Cost of Sales:* Cost of sales, which is related entirely to product revenue on the sale of QA-21, was \$4,800, or 28% of product sales, for the year ended December 31, 2004.

*Research and Development:* Research and development expenses include the costs associated with our internal research and development activities including salaries and benefits, occupancy costs, clinical manufacturing costs, related administrative costs and research and development conducted for us by outside advisors, such as sponsored university-based research partners, including the University of Connecticut Health Center where we sponsor research, and clinical research organizations, as well as expenses related to grant revenue. Research and development expense decreased 10% to \$41,718,000 for the year ended December 31, 2004 from \$46,264,000 for the year ended December 31, 2003. The decrease was primarily due to reduced clinical trial related expenses as we completed enrollment for part I of our Phase 3 renal cell carcinoma trial and

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our Phase 3 metastatic melanoma trial during 2004. As compared to the year ended December 31, 2003, trial related expenses have decreased \$5,250,000. In addition, depreciation expense decreased \$2,061,000 due mostly to the exiting of the Woburn and Framingham facilities during the first quarter of 2004 following the consolidation of these activities into a single larger facility in Lexington adequate to meet our long-term needs. Offsetting these expense decreases was a \$1,820,000 increase in research and development payroll related expenses due to growth in headcount and employee payroll expense, including a severance payment for a terminated executive, and a \$945,000 increase in other research and development expenses for the year ended December 31, 2004 when compared to the year ended December 31, 2003.

*General and Administrative:* General and administrative expenses consist primarily of personnel costs, office expenses and professional fees. General and administrative expenses increased 19% to \$25,784,000 for the year ended December 31, 2004 from \$21,682,000 for the year ended December 31, 2003. This increase is attributable to a \$1,026,000 increase in personnel compensation associated with the growth of our operations including a non-recurring severance payment to one of our executives, and a \$411,000 increase in non-payroll personnel related expenses primarily related to travel costs. Professional fees increased \$2,820,000 due mainly to increased consulting services, accounting and legal fees, and additional recruiting expenses driven by the growth of our business and increased regulatory compliance costs. Offsetting these increases is a decrease in facility related expenses of \$650,000 primarily due to the sublease of the Framingham facility. Other general and administrative expenses increased \$495,000.

*Acquired In-Process Research and Development:* Acquired in-process research and development of \$2,888,000 for the year ended December 31, 2004 related to the charge for the purchase from Mojave of all of their intellectual property and certain scientific assets relating to their heat shock protein based antigen delivery system and other technologies. The total purchase price of the assets (comprised of a cash payment of \$200,000 and the value of common stock issued of \$2,688,000) was allocated to incomplete acquired technologies under development but not yet technologically feasible or commercialized and which had no alternative future uses. At the date of the acquisition, none of the purchased technologies under development by Mojave had achieved technological feasibility and none were being sold on the market. There still remains substantial risk and significant uncertainty concerning the remaining course of technical development. Because of the great uncertainty associated with these issues and the remaining effort associated with development of these technologies, the development projects had not established technological feasibility at the acquisition date.

*Interest Expense:* Interest expense increased 115% to \$531,000 for the year ended December 31, 2004 from \$247,000 for the year ended December 31, 2003. This increase relates to the increase of the average balance of our interest bearing debt relating to the new facility in Lexington, Massachusetts.

*Interest Income:* Interest income increased 25% to \$1,460,000 for the year ended December 31, 2004 from \$1,166,000 for the year ended December 31, 2003. This increase is due primarily to an increased average monthly cash and investment balance as well as rising interest rates. Our average interest rate increased from 1.2% for the year ended December 31, 2003 to 1.4% for the year ended December 31, 2004.

*Discontinued Operations:* Due to the sale of our manufacturing rights for the FeLV vaccine and related assets to Virbac, we have reported the results of those operations as discontinued in accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*.

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### Research and Development Programs

Prior to 2002, we did not track costs on a per project basis, and therefore have estimated the allocation of our total research and development costs to each of our three largest research and development programs. These research and development programs contain our four lead product candidates, Oncophage, AG-858, AG-702/707, and Aroplatin, as indicated in the following table.

Research and Development Program	Product	Year Ended December 31,				Prior to 2002	Total
		2005	2004	2003	2002		
Heat Shock Proteins for Cancer	Oncophage & AG-858	\$ 37,836,000	\$ 35,462,000	\$ 40,052,000	\$ 31,046,000	\$ 60,075,000	\$ 204,471,000
Heat Shock Proteins for Infectious Diseases	AG-702/707	3,001,000	2,682,000	2,376,000	1,248,000	2,820,000	12,127,000
Liposomal Cancer Treatments*	Aroplatin	3,214,000	1,112,000	1,263,000	2,061,000	1,442,000	9,092,000
Other Research and Development Programs		3,029,000	2,462,000	2,573,000	3,123,000	8,383,000	19,570,000
Total Research and Development Expenses		\$ 47,080,000	\$ 41,718,000	\$ 46,264,000	\$ 37,478,000	\$ 72,720,000	\$ 245,260,000

\* Prior to 2001 costs were incurred by Aronex Pharmaceuticals, Inc., a company we acquired in July 2001.

We have allocated direct and indirect costs to each program based on certain assumptions and our review of the status of each program, payroll related expenses and other overhead costs based on estimated usage by each program. Our lead product candidates are in various stages of development as described below. Significant additional expenditures will be required if we complete our clinical trials, start new trials, apply for regulatory approvals, continue development of our technologies, expand our operations, and bring our product candidates to market. The eventual total cost of each clinical trial is dependent on a number of uncertainties such as trial design, length of the trial, number of clinical sites, and number of patients. The process of obtaining and maintaining regulatory approvals for new therapeutic products is lengthy, expensive and uncertain. Because the successful development of our most advanced product candidate, Oncophage, is uncertain, and because AG-858, AG-707, and Aroplatin are in early-stage clinical development, we are unable to reliably estimate the cost of completing our research and development programs, the timing of bringing such programs to market, and, therefore, when material cash inflows are likely to commence.

#### **Product Development Portfolio**

##### **Oncophage**

We started enrolling patients in our first clinical trial studying Oncophage in November 1997. To date, over 750 patients have been treated with Oncophage in our various clinical trials. We have ongoing Phase 2 trials in lung cancer and metastatic renal cell carcinoma, and we have completed enrollment in part I of a Phase 3 trial for renal cell carcinoma and a Phase 3 trial for metastatic melanoma. Because Oncophage is a novel therapeutic cancer vaccine that is personalized for each patient, meaning it is derived from the patient's own tumor, it may experience a long regulatory review process and high development costs, either of which could delay or prevent our commercialization efforts. For additional information regarding regulatory risks and uncertainties, please read the risks identified under Item 1A. "Risk Factors" of this Annual Report on Form 10-K.

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On September 3, 2003, the FDA placed our Phase 3 Oncophage clinical trials on partial clinical hold because of inadequate data to support specifications for product purity, identity, potency, and pH. With FDA consent, we continued to treat and monitor patients who were already enrolled in the trials as of that date. On October 22, 2003 we provided information in response to the FDA comments received, and on November 23, 2003, the agency lifted the partial clinical hold.

On December 22, 2003, we announced the result of the planned interim analysis of the data from our Phase 3 trial of Oncophage in renal cell carcinoma. Based on its review of the safety data, efficacy data, and other information regarding the trial, the independent Data Monitoring Committee (“DMC”) for the trial, a panel of cancer specialists who are reviewing the safety and conduct of the trial at regular intervals but are not otherwise involved in the study, recommended that the trial proceed as planned and did not require that we change the number of patients we planned to enroll in this trial for a successful analysis of part I of the Phase 3 trial. At the interim analysis, the DMC also declared the design and conduct of the trial sound and raised no safety concerns.

In July 2004, we held a meeting with the medical review team of the FDA for Oncophage in renal cell carcinoma. The medical review team is specifically focused on the review of issues related to patient safety, product efficacy, clinical protocols, and clinical development plans. The purpose of the meeting was to address issues surrounding the clinical development plan for product registration of Oncophage in renal cell carcinoma. The FDA expressed agreement with our overall proposed registration plan. This plan includes our using data from part I of the Phase 3 trial as part of our product registration strategy as well as conducting a second part of the trial in a similar patient population. We commenced study initiation activities for part II of this trial in February 2005. The FDA has indicated that, by itself, part I of the trial is not sufficient to support a biologics license application, also known as a BLA, as they consider part II of the trial as potentially providing the definitive evidence of safety and efficacy. We intend to complete part I, perform analysis, and review the data closely. Should the results from the first part of the trial be clearly positive in terms of clinical outcomes, we plan to submit data to the FDA and request that the agency reconsider its position regarding the use of the data from part I of the trial alone to support a BLA filing, while part II of the study is continuing. There is no assurance that we will be successful in demonstrating that Oncophage is sufficiently characterized or that the FDA will accept such a strategy.

During the quarter ended September 30, 2004, part I of our Phase 3 renal cell carcinoma trial was closed to enrollment. The protocol stipulates that analysis of this trial should occur when a pre-specified number of events occur. An event is defined as a recurrence of a patient’s renal cell carcinoma or the death of a patient prior to disease recurrence. All patients are reviewed for determination of disease recurrence, on a blinded basis and regardless of the clinical investigator’s assessment of the presence of disease recurrence, by an independent Clinical Events Committee (“CEC”) comprised of expert radiologists and an expert oncologist. No assurance can be provided that the actual CEC determined events will be sufficient to have met the pre-specified number of events to trigger an analysis under the protocol.

Based on current trends, we anticipate this analysis to be complete in late March 2006, with top-line data available shortly thereafter. If the efficacy data demonstrates a statistically significant improvement in the primary endpoint for patients treated with Oncophage, and if the FDA accepts the data from this trial as being pivotal and sufficient to support product registration, we would expect to file a BLA within six months after completing the data analysis.

During the quarter ended September 30, 2004 we also completed enrollment of our ongoing Phase 3 trial in metastatic melanoma. Our overall manufacturing success rate for this trial was approximately 70%. During 2004

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we indicated that we did not believe this trial would qualify as registrational. In October 2005, we announced preliminary survival data from this trial noting that in all randomized (intent-to-treat) stage IV M1a patients, median survival improved by more than 50 percent in the Oncophage-treated arm compared with those in the physician's choice treatment arm (20.9 months versus 12.8 months), which included the current array of therapies such as chemotherapeutics, biological agents and/or surgery, although this difference was not statistically significant. The M1a category of stage IV melanoma patients (a category defined by the American Joint Committee on Cancer) was prospectively stratified for in this trial. Patients in this category are routinely identified in a clinical setting with distant metastases in the skin, subcutaneous tissue or distant lymph nodes. Overall, patients in the intent-to-treat Oncophage arm (M1a, b and c combined) fared similarly to those in the physician's choice arm in terms of survival. This preliminary analysis was not statistically significant. Final analysis of this clinical trial is expected to commence during the first quarter of 2006.

We initiated a Phase 2 trial of Oncophage in lung cancer during 2004. Enrollment was completed in this trial during September 2005. We intend to initiate Phase 1/2 trials of Oncophage in combination with ATRA-IV for advanced disease in multiple tumor types. ATRA-IV is a liposomal formulation of ATRA, all-*trans*-retinoic acid, that can be given intravenously. ATRA is a derivative of retinol, otherwise known as vitamin A. We acquired ATRA-IV through our acquisition of Aronex Pharmaceuticals, Inc. in July 2001. Combination treatment with ATRA-IV and Oncophage may improve the overall effectiveness of both treatments.

### *AG-858*

In December 2002, we reported interim data from a pilot Phase 1 clinical trial conducted at the University of Connecticut School of Medicine using HSP70, a purified HSP70 and its associated antigens, for the treatment of chronic myelogenous leukemia, or CML. In April 2003, we initiated a Phase 2 trial in CML combining AG-858, our HSP70 based product candidate, with Gleevec (imatinib mesylate, Novartis) in patients with CML unresponsive to medical treatment with Gleevec. In May 2004, we voluntarily placed enrollment of this study on hold to modify the cell collection procedure. The study resumed on July 24, 2004. The trial will evaluate the safety and cytogenetic response (changes in the amount of tumor cells in the patient's blood) of this combination treatment in approximately 40 patients with chronic phase CML who are currently receiving Gleevec treatment but are cytogenetically positive. We plan to study longer duration of treatment and therefore are adding additional patients to this trial.

### *AG-707*

The first potential off-the-shelf application of our HSP technology, AG-707, is an investigational therapeutic vaccine product candidate directed at the virus that causes genital herpes (herpes simplex virus type 2, or HSV-2). We initiated a proof-of principle Phase 1 trial for AG-702, a monovalent (single-antigen) vaccine and predecessor to AG-707, in the fourth quarter of 2001. AG-707 is a multivalent vaccine containing multiple synthetic HSV-2 peptides. Based on the results of completed toxicology studies and other pre-clinical activities, we submitted to the FDA an investigational new drug application ("IND") for AG-707 during the second quarter of 2005 and in October 2005, initiated a Phase 1 clinical trial of AG-707. We do not anticipate further developing AG-702 given that AG-707 should be beneficial to a larger number of patients with genital herpes.

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### *Aroplatin*

We initiated a Phase 2 trial with Aroplatin for advanced colorectal cancer unresponsive to medical treatment in 2002. This single-arm, open-label trial, conducted at the Arizona Cancer Center, was designed to evaluate the effect of Aroplatin alone in patients whose disease is not responsive to standard first-line cancer treatments (5-fluorouracil/leucovorin or capecitabine and irinotecan). In September 2003, the investigators presented findings from this trial at the European Cancer Conference, also known as ECCO. One out of the 15 evaluable patients demonstrated a partial clinical response and two experienced disease stabilization. Because this was a single-arm study without a comparator arm, statistical significance is not calculable. Researchers observed that Aroplatin appears well tolerated in this pretreated patient population. This trial is closed to enrollment.

In January 2003, we also initiated at the John Wayne Cancer Center, in Santa Monica, California, a Phase 1/2 trial of Aroplatin for a variety of advanced solid tumors amenable to platinum therapy. This study is closed to enrollment.

We have developed a new formulation of Aroplatin, and completed a Good Laboratory Practices toxicology study comparing the old and new formulations of Aroplatin in 2005. The results from this study and studies describing characterization of the new formulation were submitted in an IND amendment to the FDA during the third quarter of 2005. We initiated a Phase 1, dose-escalation trial of the reformulated Aroplatin in solid malignancies and NHL (non-Hodgkin's lymphoma) in October 2005.

### **Liquidity and Capital Resources**

We have incurred annual operating losses since inception, and, as of December 31, 2005, we had an accumulated deficit of \$409,963,000. We expect to incur increasing and significant losses over the next several years if we continue our clinical trials, apply for regulatory approvals, continue development of our technologies, and expand our operations. Phase 3 trials are particularly expensive to conduct, and we initiated part II of our Phase 3 clinical trial in renal cell carcinoma during February 2005. Since our inception, we have financed our operations primarily through the sale of equity, issuance of convertible notes, interest income earned on cash, cash equivalents, and short-term investment balances, and debt provided through secured lines of credit. From our inception through December 31, 2005, we have raised aggregate net proceeds of \$399,224,000 through the sale of equity, the exercise of stock options and warrants, proceeds from our employee stock purchase plan, and the issuance of convertible notes, and borrowed \$20,523,000 under two credit facilities. At December 31, 2005, we had debt outstanding of approximately \$54,170,000.

We expect that we will be able to fund our capital expenditures and operations into early 2007 with our current working capital. During December 2005, we implemented a series of actions to reduce our cash burn rate and preserve our cash. These actions included reducing headcount from 251 to approximately 170, cost saving activities, and a focusing and streamlining of our research and development activities. As a result, we anticipate that our cash burn rate will be approximately \$45 million, on an annualized basis, from April 2006 onwards, subsequent to the completion of analysis of our ongoing Phase 3 trials in renal cell carcinoma and metastatic melanoma. In order to fund our needs through 2007 and beyond, we will need to raise additional funds and may attempt to do so by: (1) out-licensing technologies or products to one or more corporate partners, (2) renegotiating license agreements with current corporate partners, (3) completing an outright sale of assets, (4) securing additional debt financing and/or (5) completing offerings of equity securities. Our ability to successfully enter into

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any such arrangements is uncertain and if funds are not available, or not available on terms acceptable to us, we may be required to revise our planned clinical trials, other development activities, capital expenditures, and/or the scale of our operations. We expect to attempt to raise additional funds in advance of depleting our current funds; however, we may not be able to raise funds or raise amounts sufficient to meet the long-term needs of the business. Satisfying long-term liquidity needs may require the successful commercialization of Oncophage or other product candidates and, at this time, we cannot reliably estimate if or when that will occur, and will require additional capital as discussed above. Please see the “Forward-Looking Statements” section and the risks highlighted under Item 1A. “Risk Factors” of this Annual Report on Form 10-K.

Our future cash requirements include, but are not limited to, supporting our clinical trial efforts and continuing our other research and development programs. Since inception we have entered into various agreements with institutions and clinical research organizations to conduct and monitor our current clinical studies. Under these agreements, subject to the enrollment of patients and performance by the applicable institution of certain services, we have estimated our payments to be \$67,821,000 over the term of the studies. Through December 31, 2005, approximately \$40,625,000 has been expensed as research and development expenses in the accompanying consolidated statements of operations and \$35,834,000 has been paid related to these clinical studies. The timing of our expense recognition and future payments related to these agreements are subject to the enrollment of patients and performance by the applicable institution of certain services. In addition, we have entered into sponsored research agreements related to our product candidates that require payments of approximately \$9,149,000, of which \$5,239,000 has been paid through December 31, 2005. The actual amounts we pay out related to these agreements, if any, will depend on a range of factors outside of our control, including the success of our preclinical and clinical development efforts with respect to product candidates being developed which incorporate the patents, the content and timing of decisions made by the United States Patent and Trademark Office (“USPTO”), the FDA and other regulatory authorities, the existence and scope of third party intellectual property, the reimbursement and competitive landscape around such products, and other factors affecting operating results. As we expand our clinical studies we plan to enter into additional agreements. We anticipate significant additional expenditures will be required to complete our clinical trials, apply for regulatory approvals, continue development of our technologies and expand our operations, and bring our product candidates to market. Part of our strategy is to develop and commercialize some of our product candidates by continuing our existing collaborative arrangements with academic and corporate partners and licensees, and by entering into new collaborations. As a result of our collaborative agreements, we will not completely control the efforts to attempt to bring those product candidates to market. We have various agreements, for example, with corporate partners that allow the use of our QS-21 adjuvant in numerous vaccines. These agreements grant exclusive worldwide rights in some fields of use and co-exclusive or non-exclusive rights in others. The agreements call for royalties to be paid to us by the partner on its future sales of licensed vaccines that include QS-21, which may or may not be achieved.

Our cash, cash equivalents, and short-term investments at December 31, 2005 were \$61,748,000, a decrease of \$25,173,000 from December 31, 2004. During the year ended December 31, 2005, we used cash primarily to finance our operations, including our Oncophage clinical trials. Net cash used in operating activities for the years ended December 31, 2005 and 2004 was \$66,326,000 and \$60,225,000, respectively. The increase resulted primarily from the increase in the activity to support our Oncophage clinical trials and ongoing development activities. As we develop our technologies and further our clinical trial programs, we expect to increase our

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spending. Our future ability to generate cash from operations will depend on achieving regulatory approval of our product candidates, market acceptance of such product candidates, achieving benchmarks as defined in existing collaborative agreements, and our ability to enter into new collaborations. Please see the "Forward-Looking Statements" section and the risks highlighted under Item 1A. "Risk Factors" of this Annual Report on Form 10-K.

Net cash provided by investing activities for the year ended December 31, 2005 was \$41,771,000 as compared to \$3,934,000 for the year ended December 31, 2004. During the year ended December 31, 2005 we had net maturities of \$42,470,000 in short-term investments compared with net purchases of \$7,690,000 during the year ended December 31, 2004. Additionally, our investment in equipment, furniture and fixtures decreased \$1,310,000 to \$2,660,000 for the year ended December 31, 2005 from \$3,970,000 for the year ended December 31, 2004. We anticipate capital expenditures of up to \$1,200,000 during 2006. We received proceeds of \$12,552,000 for the divestiture of our manufacturing and certain intellectual property rights to the feline leukemia vaccine during 2004, which represents a non-recurring gain, and we received \$2,139,000 during the year ended December 31, 2005 and \$3,399,000 during the year ended December 31, 2004 pertaining to the reduction of our restricted cash balance. In addition, we made a \$177,000 net contribution to Applied Genomic Technology Capital Fund ("AGTC"), a limited partnership, during the year ended December 31, 2005 compared to \$375,000 during the year ended December 31, 2004. Our remaining commitment to AGTC as of December 31, 2005 is \$450,000 with contributions made as requested by the general partner.

Net cash provided by financing activities was \$41,792,000 for the year ended December 31, 2005 as compared to \$47,854,000 for the year ended December 31, 2004. Prior to 2005, our primary source of financing had been from equity sales. During the years ended December 31, 2005 and 2004, proceeds from our employee stock purchase plan totaled approximately \$327,000 and \$106,000, respectively. During the year ended December 31, 2004, we received net proceeds from the sale of equity and the exercise of stock options of approximately \$54,510,000.

In January 2005, we received net proceeds of approximately \$48,000,000 from the issuance of our convertible senior notes. In July 2003 we entered into a \$17,100,000 debt facility to finance the first phase of build-out of our Lexington facility. Through December 31, 2005, we have borrowed \$17,042,000 under this facility. Specific assets, including certain leasehold improvements and a cash security deposit (restricted cash) of \$2,983,000 secure the loans drawn on the credit facility. At December 31, 2005, we had a \$4,024,000 debt balance under this credit facility.

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The tables below summarize our contractual obligations as of December 31, 2005:

	Total	Payments Due by Period			
		Less than 1 Year	1 – 3 Years	3 – 5 Years	More than 5 Years
Long-Term Debt (1)	\$ 71,297,000	\$ 6,816,000	\$ 5,294,000	\$ 5,250,000	\$ 53,937,000
Operating Leases	21,046,000	3,723,000	6,246,000	5,593,000	5,484,000
Research Agreement (2)	4,050,000	1,350,000	2,700,000	—	—
Total	<u>\$ 96,393,000</u>	<u>\$ 11,889,000</u>	<u>\$ 14,240,000</u>	<u>\$ 10,843,000</u>	<u>\$ 59,421,000</u>

- (1) Includes fixed interest payments and assumes that the convertible senior debt is converted on February 1, 2012. In certain circumstances, it could be converted before then. In addition, if the debt is not converted, it matures on February 1, 2025. If the debt were outstanding until maturity, there would be additional interest payments of \$34,125,000 in the years 2012 through 2025.
- (2) Represents research agreement with the University of Connecticut Health Center.

Effective July 19, 2002, we sublet part of our Framingham manufacturing, research and development, and office space to GTC Biotherapeutics, Inc. (“GTC”), and we have leased related leasehold improvements and equipment under agreements which expire on December 31, 2006. GTC has an option to extend this lease until September 2010. Under the terms of our original lease, we are obligated to pay our landlord approximately 7% of our rental income. Effective March 17, 2004, we sublet an additional part of our Framingham manufacturing, research and development, and office space to PP Manufacturing, whose lease expires on September 30, 2010. As a result of the PP Manufacturing lease agreement, we amended our agreement with GTC effective March 16, 2004, adjusting the leaseable square footage. In addition, until February 2006 we sublet part of our Texas facility to two small private companies. In January 2006, we entered into a sublease for part of our New York office space with a private company under an agreement expiring in December 2006. We are contractually entitled to receive rental income of \$1,532,000 in 2006; \$707,000 in 2007; \$531,000 in 2008; \$515,000 in 2009; and \$386,000 in 2010. The collection of this income, however, is subject to uncertainty.

We are currently involved in certain legal proceedings as detailed in Item 3 above and Note 16 to our consolidated financial statements. We do not believe these proceedings will have a material adverse effect on our consolidated financial position, results of operations or liquidity. Litigation however, is subject to inherent uncertainty.

### **Inflation**

We believe that inflation has not had a material adverse effect on our business, results of operations, or financial condition.

### **Related Parties**

As of December 31, 2005 and 2004, we had invested \$2,550,000 and \$2,250,000, respectively, in a limited partnership, AGTC, and have received \$123,000 as a distribution from this partnership. Our total capital commitment to AGTC is \$3,000,000. One of our directors, Noubar Afeyan, Ph.D., is the Chairman, Senior

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Managing Director, and CEO of a partnership of funds that includes the general partner of AGTC and, until its dissolution during 2004, NewcoGen Group Inc. For additional details, refer to Note 5 to our consolidated financial statements. Garo H. Armen, Ph.D., our Chairman and Chief Executive Officer, was a director of NewcoGen Group Inc. until its dissolution during 2004.

As detailed in Note 11 to our consolidated financial statements, our predecessor company, Founder Holdings, Inc., which, indirectly, remains a significant stockholder, approved a stock option plan pursuant to which our officers, directors, employees and consultants may be granted options in the predecessor company. In accordance with U.S. generally accepted accounting principles, options granted under this plan are accounted for as compensation expense by us and treated as a contribution to stockholders' equity.

We currently have QS-21 license and supply agreements with Neuralab Limited, a wholly owned subsidiary of Elan Corporation, plc, for use of QS-21 with an antigen in the field of Alzheimer's disease. Garo H. Armen, Ph.D., our Chairman and Chief Executive Officer, is a director of Elan and is a nominal employee of a different wholly-owned subsidiary of Elan. For the years ended December 31, 2005 and 2004, no revenues were earned under these agreements and at December 31, 2005 and 2004, we had no amounts due to us under these agreements.

In March 1995, we entered into a consulting agreement with Dr. Pramod Srivastava, our scientific founder and one of our directors. This agreement was to expire in March 2005 but was extended for an additional one-year period through March 2006. The Company expects to enter into an amended and restated consulting agreement with Dr. Srivastava prior to expiration of the existing consulting agreement. We paid Dr. Srivastava cash bonuses of \$135,000 and granted him options to purchase 120,000 shares of our common stock during each of the years ended December 31, 2005 and 2004, respectively.

In February 1998, we entered into a research agreement with the University of Connecticut Health Center (UConn) to fund research in Dr. Pramod Srivastava's laboratory at UConn. Dr. Srivastava is a member of the faculty of the University of Connecticut School of Medicine. The research agreement was amended on December 30, 2003, to extend the term to December 31, 2008 and calls for payments to UConn totaling a minimum of \$6,750,000, payable quarterly at the rate of \$337,500, contingent on the continuing employment of Dr. Srivastava by UConn. In return, we have an option to obtain an exclusive license to new inventions (as defined in the research agreement) subject to our payment to UConn of royalties at varying rates upon commercialization of a product utilizing technology discovered under the research agreement. In February 2005, we entered into a letter amendment agreement to pay UConn an additional one-time payment of \$135,000 for additional costs associated with activities to be performed under the agreement in 2005.

In September 2004, we entered into a \$60,000 one-year service agreement with Techsoft, Inc. d.b.a Medical Systems and NG Techsoft Pvt. Ltd. for data management services. Navin Gupta is the President and CEO of Techsoft, Inc. d.b.a Medical Systems, Director and Chairman of the Board of NG Techsoft Pvt Ltd. and is the spouse of Dr. Renu Gupta, our Senior Vice President of Development. This agreement was extended several times during 2005 to obtain additional data management and processing services and will expire in May 2006. As of December 31, 2005, approximately \$76,000 due under this agreement is included in current liabilities. For the year ended December 31, 2005, we expensed approximately \$132,000 under this agreement.

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On October 22, 2004, we executed a letter of intent with Symphony Capital LLC for a potential transaction to provide funding for certain of our research programs. Mr. Mark Kessel, one of our directors, is a managing director of Symphony Capital LLC. During February 2005, we determined not to pursue this potential transaction. During 2004, we made payments to Symphony Capital LLC of \$125,000 for development planning activities. At December 31, 2004, we had accrued \$159,000 due to Symphony Capital LLC. At December 31, 2005, we had no amounts due to Symphony Capital LLC. During the year ended December 31, 2005, \$37,000 was incurred related to activities up to termination in February 2005.

### **Critical Accounting Policies and Estimates**

The SEC defines “critical accounting policies” as those that require application of management’s most difficult, subjective, or complex judgments, often as a result of the need to make estimates about the effect of matters that are inherently uncertain and may change in subsequent periods.

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires us to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. We base those estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

The following listing is not intended to be a comprehensive list of all of our accounting policies. Our significant accounting policies are described in Note 2 to our consolidated financial statements. In many cases, the accounting treatment of a particular transaction is dictated by U.S. generally accepted accounting principles, with no need for our judgment in their application. There are also areas in which our judgment in selecting an available alternative would not produce a materially different result. We have identified the following as our critical accounting policies:

#### ***Research and Development***

Research and development expenses include the costs associated with our internal research and development activities, including salaries and benefits, occupancy costs, clinical manufacturing costs, related administrative costs, and research and development conducted for us by outside advisors, such as sponsored university-based research partners, and clinical study partners. We account for our clinical study costs by estimating the total cost to treat a patient in each clinical trial and recognizing this cost based on estimates of when the patient receives treatment, beginning when the patient enrolls in the trial. This estimated cost includes payments to the trial site and patient-related costs, including laboratory costs, related to the conduct of the trial. Cost per patient varies based on the type of clinical trial, the site of the clinical trial and the length of the treatment period for each patient. As we become aware of the actual costs, we adjust our accrual; such a change in estimate may be a material change in our clinical study accrual, which could also materially affect our results of operations. Research and development costs are expensed as incurred and were \$47,080,000, \$41,718,000, and \$46,264,000 for the years ended December 31, 2005, 2004, and 2003, respectively.

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### **Investments**

We classify investments in marketable securities at the time of purchase. At December 31, 2005, all marketable securities were classified as available-for-sale and as such, changes in the fair value of the available-for-sale securities are reported as a separate component of accumulated other comprehensive income (loss) until realized. If we were to classify future investments as trading securities rather than available-for-sale, our financial results would be subject to greater volatility. If declines in the fair value of available-for-sale securities are determined to be other than temporary, such losses would be recorded in the consolidated statement of operations.

Investments of less than 20% of the voting control of companies or other entities over whose operating and financial policies we do not have the power to exercise significant influence are accounted for by the cost method. We currently account for our investment in AGTC under the cost method and, as of December 31, 2005, we have included it in other long-term assets on the consolidated balance sheet, as more fully disclosed in Note 5 to our consolidated financial statements. The general partner of AGTC determines the timing of our additional contributions. Our investment represents an approximate ownership interest of 2%. We continually assess the realizability of this investment. In order to assess whether or not there has been an other than temporary decline in the value of this investment, we analyze several factors including: (1) the carrying value of the limited partnership's investments in its portfolio companies, (2) how recently the investments in the portfolio companies had been made, (3) the post-financing valuations of those investments, (4) the level of uninvested capital held by the limited partnership, and (5) the overall trend in venture capital valuations. Our investment balance aggregated \$2,021,000 at December 31, 2005.

### **Revenue Recognition**

Revenue from product sales is recognized at the time of product shipment. Revenue for services under research and development grants and contracts are recognized as the services are performed, or as clinical trial materials are provided. Non-refundable milestone payments that represent the completion of a separate earnings process are recognized as revenue when earned. License fees are recognized as they are earned.

### **Stock Option Accounting**

We account for options granted to employees and directors in accordance with Accounting Principles Board ("APB") Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations. As such, compensation cost is recorded on fixed stock option grants only if the current fair value of the underlying stock exceeds the exercise price of the option at the date of grant. In those situations, compensation expense is recognized on a straight-line basis over the vesting period. We account for stock options granted to non-employees based on the fair-value method of accounting in accordance with SFAS No. 123, *Accounting for Stock-Based Compensation* and Emerging Issues Task Force ("EITF") Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*. As a result, the non-cash charge to operations for non-employee options with vesting or other performance criteria is affected each reporting period, until the non-employee options vest, by changes in the fair value of our common stock. As required, we also provide pro forma net loss attributable to common stockholders and pro forma net loss attributable to common stockholders per common share disclosures for employee and director stock option grants as if the fair-value-based method defined in SFAS No. 123 had been applied (see Note 2 to our consolidated financial statements).

## Recently Issued Accounting Standards

In December 2004, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 123R, *Share-Based Payment*. SFAS No. 123R is a revision to SFAS No. 123 and supersedes APB Opinion No. 25. This statement requires companies to expense the cost of employee services received in exchange for an award of equity instruments. SFAS No. 123R also provides guidance on valuing and expensing these awards, as well as disclosure requirements of these equity arrangements. SFAS No. 123R is effective at the beginning of the next fiscal year beginning after June 15, 2005.

SFAS No. 123R permits public companies to choose between the following two adoption methods:

1. A “modified prospective” method in which compensation cost is recognized beginning with the effective date (a) based on the requirements of SFAS No. 123R for all share-based payments granted after the effective date and (b) based on the requirements of SFAS No. 123 for all awards granted to employees prior to the effective date of SFAS No. 123R that remain unvested on the effective date, or
2. A “modified retrospective” method which includes the requirements of the modified prospective method described above, but also permits entities to restate based on the amounts previously recognized under SFAS No. 123 for purposes of pro forma disclosures either (a) all prior periods presented or (b) prior interim periods of the year of adoption.

We will adopt SFAS No. 123R effective January 1, 2006 using the modified prospective method. We have not yet determined the full impact of adoption on our consolidated financial statements, however, we anticipate that implementation of SFAS No. 123R will result in material non-cash charges to our consolidated operating results (see Note 1(l) for pro forma results under SFAS No. 123). We do not anticipate any other impacts on our business, as a result of adopting SFAS No. 123R.

In November 2004, the FASB issued SFAS No. 151, *Inventory Costs*. This statement amends the guidance in Accounting Research Bulletin No. 43, Chapter 4, *Inventory Pricing*, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). This statement requires that those items be recognized as current-period charges. In addition, this statement requires that allocation of fixed production overheads to inventory be based on the normal capacity of the production facilities. This statement is effective for fiscal years beginning after June 15, 2005. We do not expect that the adoption of this pronouncement will have a material impact on our financial position or results of operations prior to commercializing Oncophage.

In May 2005, the FASB issued SFAS No. 154, *Accounting Changes and Error Corrections*. SFAS No. 154 requires companies to apply a retrospective application for reporting a change in accounting principle and differentiates a retrospective application from a restatement. SFAS No. 154 also carries forward the guidance from APB Opinion No. 20, *Accounting Changes*, regarding the correction of an error and changes in accounting estimates. We are required to adopt SFAS No. 154 in the first quarter of fiscal 2006, beginning January 1, 2006. We do not expect that the adoption of this pronouncement will have a material impact on our financial position or results of operations.

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

In the normal course of business, we are exposed to fluctuations in interest rates as we seek debt financing to make capital expenditures and invest excess cash and also foreign currency exchange rate fluctuation risk related to our transactions denominated in foreign currencies. We do not employ specific strategies, such as the use of derivative instruments or hedging, to manage these exposures. Our currency exposures vary, but are primarily concentrated in the Euro. During the year ended December 31, 2005, there has been no material change with respect to our interest rate and foreign currency exposures or our approach toward those exposures. Further, we do not expect our market risk exposures to change in the near term.

The information below summarizes our market risks associated with debt obligations as of December 31, 2005. Fair value included herein has been estimated taking into consideration the nature and terms of each instrument and the prevailing economic and market conditions at December 31, 2005. The table presents principal payments by year of maturity and related interest rates based on the terms of the debt.

	Estimated Fair Value (2)	Carrying Amount December 31, 2005	Year of Maturity		
			2006	2007	2012
Long-term debt (1)	\$ 32,908,000	\$ 54,170,000	\$ 4,126,000	\$ 44,000	\$ 50,000,000

- (1) Fixed interest rates from 3.92% to 7%. The above table is based on the assumption that the convertible senior debt is converted on February 1, 2012. In certain circumstances, it could be converted before then. In addition, if the debt is not converted, it matures on February 1, 2025.
- (2) The fair value of our long-term debt was derived by evaluating the nature and terms of each note and considering the prevailing economic and market conditions at the balance sheet date. In addition, the fair value of our convertible senior notes was estimated based on trader quotes.

We had cash, cash equivalents, and short-term investments at December 31, 2005 of approximately \$61.7 million, which are exposed to the impact of interest rate changes and our interest income fluctuates as interest rates change. Due to the short-term nature of our investments in money market funds, corporate debt securities, taxable auction preferreds, and government backed securities, our carrying value approximates the fair value of these investments at December 31, 2005, however, we are subject to investment risk.

We invest our cash, cash equivalents, and short-term investments in accordance with our Investment Policy. The primary objectives of our Investment Policy are to preserve principal, maintain proper liquidity to meet operating needs, and maximize yields. Although our investments are subject to credit risk, our Investment Policy specifies credit quality standards for our investments and limits the amount of credit exposure from any single issue, issuer, or type of investment. Our investments are also subject to interest rate risk and will decrease in value if market interest rates increase. However, due to the conservative nature of our investments and relatively short duration, interest rate risk is mitigated. We do not invest in derivative financial instruments. Accordingly, we do not believe that there is any material market risk exposure with respect to derivative or other financial instruments that would require disclosure under this item.

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

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**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders

Antigenics Inc.:

We have audited the accompanying consolidated balance sheets of Antigenics Inc. and subsidiaries as of December 31, 2005 and 2004, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2005. These consolidated financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these consolidated financial statements based on our audits.

We conducted our audits in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe that our audits provide a reasonable basis for our opinion.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of Antigenics Inc. and subsidiaries as of December 31, 2005 and 2004, and the results of their operations and their cash flows for each of the years in the three-year period ended December 31, 2005, in conformity with U.S. generally accepted accounting principles.

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the effectiveness of Antigenics Inc.'s internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO), and our report dated March 6, 2006, expressed an unqualified opinion on management's assessment of, and the effective operation of, internal control over financial reporting.

/s/ KPMG LLP

Boston, Massachusetts

March 6, 2006

**ANTIGENICS INC. AND SUBSIDIARIES**  
**CONSOLIDATED BALANCE SHEETS**

	<u>December 31, 2005</u>	<u>December 31, 2004</u>
<b>ASSETS</b>		
Cash and cash equivalents	\$ 33,216,876	\$ 15,979,714
Short-term investments	28,530,650	70,941,163
Accounts receivable	45,586	75,631
Inventories	251,053	169,743
Prepaid expenses	1,665,308	1,925,051
Restricted cash	2,961,266	2,865,665
Other current assets	291,127	647,299
Total current assets	<u>66,961,866</u>	<u>92,604,266</u>
Plant and equipment, net of accumulated amortization and depreciation of \$14,769,426 and \$10,559,935 at December 31, 2005 and 2004, respectively	23,350,246	24,987,730
Goodwill	2,572,203	2,572,203
Core and developed technology, net of accumulated amortization of \$5,324,055 and \$4,216,792 at December 31, 2005 and 2004, respectively	5,748,574	6,855,837
Restricted cash	21,912	2,256,018
Debt issuance costs, net of accumulated amortization of \$210,686 at December 31, 2005	1,782,056	—
Other long-term assets	3,713,760	3,781,893
Total assets	<u>\$ 104,150,617</u>	<u>\$ 133,057,947</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current portion, long-term debt	\$ 4,125,913	\$ 5,409,966
Accounts payable	2,590,016	2,923,890
Accrued liabilities	12,291,085	10,861,710
Other current liabilities	138,367	8,525
Total current liabilities	<u>19,145,381</u>	<u>19,204,091</u>
Long-term debt, less current portion	43,823	4,512,035
Convertible senior notes	50,000,000	—
Other long-term liabilities	3,062,392	2,898,487
Commitments and contingencies		
<b>STOCKHOLDERS' EQUITY</b>		
Preferred stock, par value \$0.01 per share; 25,000,000 shares authorized; Series A convertible preferred stock, par value \$0.01 per share; 31,620 shares designated, issued and outstanding at December 31, 2005 and 2004, respectively; liquidation value of \$31,817,625 at December 31, 2005	316	316
Common stock, par value \$0.01 per share; 100,000,000 shares authorized; 45,591,216 and 45,536,012 shares issued and outstanding at December 31, 2005 and 2004, respectively	455,912	455,360
Additional paid-in-capital	441,497,317	442,021,962
Deferred compensation	(3,074)	(27,134)
Accumulated other comprehensive loss	(88,103)	(147,377)
Accumulated deficit	<u>(409,963,347)</u>	<u>(335,859,793)</u>
Total stockholders' equity	<u>31,899,021</u>	<u>106,443,334</u>
Total liabilities and stockholders' equity	<u>\$ 104,150,617</u>	<u>\$ 133,057,947</u>

See accompanying notes to consolidated financial statements.

**ANTIGENICS INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF OPERATIONS**  
**For the Years Ended December 31, 2005, 2004 and 2003**

	2005	2004	2003
Revenue	\$ 629,978	\$ 707,073	\$ 984,662
Operating expenses:			
Cost of sales	—	(4,799)	—
Research and development	(47,079,493)	(41,717,626)	(46,264,220)
General and administrative	(25,868,142)	(25,784,360)	(21,681,522)
Acquired in-process research and development	—	(2,888,000)	—
Severance costs	(1,596,200)	—	—
Operating loss	(73,913,857)	(69,687,712)	(66,961,080)
Other income (expense):			
Non-operating income	1,000	7,654	—
Interest expense	(2,963,496)	(530,880)	(247,072)
Interest income	2,772,799	1,459,976	1,165,911
Loss from continuing operations	(74,103,554)	(68,750,962)	(66,042,241)
Income from discontinued operations, net of tax of \$617,145 in 2004 (including gain on disposal of \$14,132,028 in 2004)	—	12,589,237	108,661
Net loss	(74,103,554)	(56,161,725)	(65,933,580)
Dividends on series A convertible preferred stock	(790,500)	(790,500)	(224,140)
Net loss attributable to common stockholders	<u>\$ (74,894,054)</u>	<u>\$ (56,952,225)</u>	<u>\$ (66,157,720)</u>
Per common share data, basic and diluted:			
Loss from continuing operations	\$ (1.64)	\$ (1.56)	\$ (1.70)
Income from discontinued operations	\$ —	\$ 0.28	\$ —
Net loss attributable to common stockholders	<u>\$ (1.64)</u>	<u>\$ (1.27)</u>	<u>\$ (1.70)</u>
Weighted average number of common shares outstanding, basic and diluted	45,577,344	44,685,023	38,989,304

See accompanying notes to consolidated financial statements.

**ANTIGENICS INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF STOCKHOLDERS' EQUITY AND COMPREHENSIVE LOSS**  
**For the Years Ended December 31, 2005, 2004 and 2003**

	Series A Convertible Preferred Stock		Common Stock		Additional Paid-In Capital	Deferred Compensation	Accumulated Other Comprehensive Income (Loss)	Accumulated Deficit	Total
	Number of Shares	Par Value	Number of Shares	Par Value					
Balance at December 31, 2002	—	\$ —	33,113,099	\$331,131	\$291,363,259	\$ (111,017)	\$ (61,945)	\$ (213,764,488)	\$ 77,756,940
Comprehensive Loss:									
Net loss	—	—	—	—	—	—	—	(65,933,580)	(65,933,580)
Unrealized gain on marketable securities, net	—	—	—	—	—	—	224,747	—	224,747
Comprehensive Loss	—	—	—	—	—	—	—	—	<u>\$ (65,708,833)</u>
Grant and recognition of stock options	—	—	—	—	852,290	38,936	—	—	891,226
Exercise of stock options	—	—	130,667	1,307	1,113,843	—	—	—	1,115,150
Issuance of common stock in follow-on offering in January 2003 at \$9.92 per share (net of issuance costs of \$2,458,000)	—	—	6,250,000	62,500	59,475,956	—	—	—	59,538,456
Issuance of series A convertible preferred stock, net of expenses of \$13,556	31,620	316	—	—	31,606,128	—	—	—	31,606,444
Employee stock purchases	—	—	28,933	289	270,220	—	—	—	270,509
Dividend on series A convertible preferred stock (\$7.09 per share)	—	—	—	—	(224,140)	—	—	—	(224,140)
Balance at December 31, 2003	<u>31,620</u>	<u>316</u>	<u>39,522,699</u>	<u>395,227</u>	<u>384,457,556</u>	<u>(72,081)</u>	<u>162,802</u>	<u>(279,698,068)</u>	<u>105,245,752</u>
Comprehensive Loss:									
Net loss	—	—	—	—	—	—	—	(56,161,725)	(56,161,725)
Unrealized loss on marketable securities, net	—	—	—	—	—	—	(310,179)	—	(310,179)
Comprehensive Loss	—	—	—	—	—	—	—	—	<u>\$ (56,471,904)</u>
Grant and recognition of stock options	—	—	—	—	1,221,450	44,947	—	—	1,266,397
Exercise of stock options	—	—	248,706	2,487	876,426	—	—	—	878,913
Issuance of common stock in follow-on offering in February 2004 at \$10.50 per share (net of issuance costs of \$3,179,516)	—	—	5,400,000	54,000	53,466,484	—	—	—	53,520,484
Employee stock purchases	—	—	14,607	146	106,046	—	—	—	106,192
Dividend on series A convertible preferred stock (\$25 per share)	—	—	—	—	(790,500)	—	—	—	(790,500)
Issuance of stock in asset acquisition	—	—	350,000	3,500	2,684,500	—	—	—	2,688,000
Balance at December 31, 2004	<u>31,620</u>	<u>316</u>	<u>45,536,012</u>	<u>455,360</u>	<u>442,021,962</u>	<u>(27,134)</u>	<u>(147,377)</u>	<u>(335,859,793)</u>	<u>106,443,334</u>
Comprehensive Loss:									
Net loss	—	—	—	—	—	—	—	(74,103,554)	(74,103,554)
Unrealized gain on marketable securities, net	—	—	—	—	—	—	59,274	—	59,274
Comprehensive Loss	—	—	—	—	—	—	—	—	<u>\$ (74,044,280)</u>
Grant and recognition of stock options	—	—	—	—	(60,889)	24,060	—	—	(36,829)
Employee stock purchases	—	—	55,204	552	326,744	—	—	—	327,296
Dividend on series A convertible preferred stock (\$25 per share)	—	—	—	—	(790,500)	—	—	—	(790,500)
Balance at December 31, 2005	<u>31,620</u>	<u>\$ 316</u>	<u>45,591,216</u>	<u>\$455,912</u>	<u>\$441,497,317</u>	<u>\$ (3,074)</u>	<u>\$ (88,103)</u>	<u>\$(409,963,347)</u>	<u>\$ 31,899,021</u>

See accompanying notes to consolidated financial statements.

**ANTIGENICS INC. AND SUBSIDIARIES**  
**CONSOLIDATED STATEMENTS OF CASH FLOWS**  
**For the Years Ended December 31, 2005, 2004 and 2003**

	2005	2004	2003
<b>Cash flows from operating activities:</b>			
Net loss	\$ (74,103,554)	\$ (56,161,725)	\$ (65,933,580)
(Loss) income from discontinued operations	—	(925,646)	108,661
Gain on disposal of discontinued operations	—	13,514,883	—
Loss from continuing operations	(74,103,554)	(68,750,962)	(66,042,241)
Adjustments to reconcile loss from continuing operations to net cash used in continuing operations:			
Depreciation and amortization	5,593,661	4,809,663	6,485,355
Acquired in-process research and development	—	2,688,000	—
Non-cash stock compensation	(36,829)	1,266,397	891,226
Write-down of assets	243,225	67,495	325,871
Loss on disposal of equipment	22,068	78,737	27,065
Effect of accounting for asset retirement obligations	—	—	282,148
Changes in operating assets and liabilities:			
Accounts receivable	30,045	(34,007)	364,880
Inventories	(81,310)	58,154	(42,419)
Prepaid expenses	259,743	(25,493)	(201,228)
Accounts payable	(333,874)	(255,677)	1,744,477
Accrued liabilities and other current liabilities	1,559,217	(498,476)	3,142,376
Other operating assets and liabilities	521,816	322,657	1,035,837
Net cash used in continuing operations	(66,325,792)	(60,273,512)	(51,986,653)
Net cash provided by discontinued operations	—	48,599	303,349
Net cash used in operating activities	(66,325,792)	(60,224,913)	(51,683,304)
<b>Cash flows from investing activities:</b>			
Proceeds from maturities of available-for-sale securities	143,409,815	126,054,000	100,225,000
Purchases of available-for-sale securities	(100,940,028)	(133,743,995)	(126,597,236)
Investment in AGTC	(300,000)	(375,000)	(750,000)
Distribution from AGTC	123,169	—	—
Purchases of plant and equipment	(2,660,296)	(3,970,043)	(18,537,216)
Proceeds from sale of equipment	—	18,000	—
Proceeds from divestiture of assets	—	12,552,011	2,000,000
Decrease (increase) in restricted cash	2,138,505	3,399,366	(8,521,049)
Net cash provided by (used in) investing activities	41,771,165	3,934,339	(52,180,501)
<b>Cash flows from financing activities:</b>			
Net proceeds from sale of equity	—	53,631,418	91,208,562
Proceeds from exercise of stock options	—	878,913	1,115,150
Proceeds from employee stock purchases	327,296	106,192	270,509
Deferred offering costs	—	—	(110,934)
Payments of series A convertible preferred stock dividend	(790,500)	(817,015)	—
Proceeds from long-term debt	50,000,000	—	17,042,100
Debt issuance costs	(1,992,742)	—	—
Payments of long-term debt	(5,752,265)	(5,945,531)	(1,725,447)
Net cash provided by financing activities	41,791,789	47,853,977	107,799,940
Net increase (decrease) in cash and cash equivalents	17,237,162	(8,436,597)	3,936,135
Cash and cash equivalents, beginning of year	15,979,714	24,416,311	20,480,176
Cash and cash equivalents, end of year	<u>\$ 33,216,876</u>	<u>\$ 15,979,714</u>	<u>\$ 24,416,311</u>
<b>Supplemental cash flow information:</b>			
Cash paid for interest	<u>\$ 1,650,569</u>	<u>\$ 579,199</u>	<u>\$ 198,754</u>
Cash paid for income taxes	<u>\$ 96,969</u>	<u>\$ —</u>	<u>\$ —</u>
<b>Non-cash investing and financing activities:</b>			
Effect of adoption of Statement of Financial Accounting Standards No. 143:			
Plant and equipment	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 532,234</u>
Asset retirement obligation	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 814,472</u>
Issuance of equity for acquired in-process research and development	<u>\$ —</u>	<u>\$ 2,688,000</u>	<u>\$ —</u>

See accompanying notes to consolidated financial statements.

**ANTIGENICS INC. AND SUBSIDIARIES**  
**NOTES TO CONSOLIDATED FINANCIAL STATEMENTS**

**(1) Organization and Business**

The business was formed on March 31, 1994 through the creation of a Delaware corporation (Founder Holdings Inc.). In July 1995, the founders of Founder Holdings Inc. formed Antigenics Inc., formerly Antigenics LLC (“Antigenics” or the “Company”), a Delaware limited liability company, and subsequently transferred to the Company all of the assets, liabilities, properties and rights of the Delaware corporation in exchange for an initial 81.5% equity interest in the Company. The accounting for this recapitalization was recorded at Founder Holdings Inc.’s historical cost.

Since the reorganization in 1995, Founder Holdings Inc. has directly or indirectly (through Antigenics Holdings LLC) owned a significant portion of our common stock. As of December 31, 2005, Founder Holdings Inc. owns approximately 79% of Antigenics Holdings LLC that in turn owns approximately 24% of our outstanding common stock. As of December 31, 2005, Founder Holdings Inc. had no direct ownership of our common stock. Certain of our board members and executive officers own significant interests in these related parties.

We are a biotechnology company developing technologies and products to treat cancers, infectious diseases and autoimmune disorders, primarily based on immunological approaches. Our most advanced product candidate is Oncophage® (vitespen; formerly HSPPC-96), a personalized therapeutic cancer vaccine candidate that has been tested, or is currently being tested, in several cancer indications, including in Phase 3 clinical trials for the treatment of renal cell carcinoma, the most common type of kidney cancer, and for metastatic melanoma. Oncophage is also being tested in Phase 2 and Phase 1 clinical trials in a range of indications as both monotherapy and in combination with other therapeutic agents. Our product candidate portfolio also includes (1) AG-858, a personalized therapeutic cancer vaccine in a Phase 2 clinical trial for the treatment of chronic myelogenous leukemia, (2) AG-707, a therapeutic vaccine program in a Phase 1 clinical trial for the treatment of genital herpes, (3) Aroplatin™, a liposomal chemotherapeutic in a Phase 1 clinical trial for the treatment of solid tumors and non-Hodgkin’s lymphoma (“NHL”), and (4) QS-21, an adjuvant used in numerous vaccines including, but not limited to, hepatitis, Lyme disease, human immunodeficiency virus (“HIV”), influenza, cancer, and malaria. Our related business activities include research and development, regulatory and clinical affairs, clinical manufacturing, business development, marketing and administrative functions that support these activities.

We have incurred annual operating losses since inception and, as a result, at December 31, 2005 have an accumulated deficit of \$409,963,000. Our operations have been funded principally by sales of equity and convertible debt instruments. We believe that our working capital resources at December 31, 2005 are sufficient to satisfy our liquidity requirements into early 2007. Satisfying our long-term liquidity needs may require the successful commercialization of Oncophage or other product candidates and will require additional capital.

Our lead product candidates require clinical trials and approvals from regulatory agencies as well as acceptance in the marketplace. We are conducting clinical trials in various cancers and in one infectious disease indication. Although we believe our patents, patent rights and patent applications are valid, the invalidation of

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our patents or failure of certain of our pending patent applications to issue as patents could have a material adverse effect upon our business. Part of our strategy is to develop and commercialize some of our product candidates by continuing our existing collaborative arrangements with academic and corporate collaborators and licensees and by entering into new collaborations. Our success depends, in part, on the success of these parties in performing research and preclinical and clinical testing. We compete with specialized biotechnology companies, major pharmaceutical companies, universities, and research institutions. Many of these competitors have substantially greater resources than we do.

### **(2) Summary of Significant Accounting Policies**

#### ***(a) Basis of Presentation and Principles of Consolidation***

The consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles and include the accounts of Antigenics and our wholly owned subsidiaries. All intercompany transactions and accounts have been eliminated in consolidation.

#### ***(b) Segment Information***

We are managed and operated as one business. The entire business is managed by a single executive operating committee that reports to the chief executive officer. We do not operate separate lines of business with respect to any of our product candidates. Accordingly, we do not prepare discrete financial information with respect to separate product areas or by location and do not have separately reportable segments as defined by Statement of Financial Accounting Standards ("SFAS") No. 131, *Disclosures about Segments of an Enterprise and Related Information*.

#### ***(c) Use of Estimates***

The preparation of consolidated financial statements in conformity with U.S. generally accepted accounting principles requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosures of contingent assets and liabilities at the date of the financial statements and the reported amounts of revenues and expenses during the reporting period. Management bases its estimates on historical experience and on various assumptions that are believed to be reasonable under the circumstances. Actual results could differ from those estimates.

#### ***(d) Cash and Cash Equivalents***

We consider all highly liquid investments purchased with maturities at acquisition of three months or less to be cash equivalents. As of December 31, 2005 and 2004 cash equivalents consist primarily of money market funds.

#### ***(e) Investments***

We classify investments in marketable securities at the time of purchase. At December 31, 2005 and 2004, all marketable securities are classified as available-for-sale and as such, the investments are recorded at fair value

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with changes in fair value reported as a component of accumulated other comprehensive income (loss). Gains and losses on the sale of marketable securities are recognized in operations based on the specific identification method.

Investments of less than 20% of the voting control of companies or other entities over whose operating and financial policies we do not have the power to exercise significant influence are accounted for by the cost method. We record our investment at cost and recognize dividends received as income. The carrying values of investments are periodically reviewed to determine whether any decline in value is other than temporary. Other than temporary declines in the value of available-for-sale securities and other investments are charged to operations.

### ***(f) Concentrations of Credit Risk***

Financial instruments that potentially subject us to concentrations of credit risk are primarily cash and cash equivalents, marketable securities and accounts receivable. We invest our cash and cash equivalents in accordance with our Investment Policy, which specifies high credit quality standards and limits the amount of credit exposure from any single issue, issuer or type of investment. We carry balances in excess of federally insured levels, however, we have not experienced any losses to date from this practice. Credit risk on accounts receivable is minimized by the financial position of the entities with which we do business. Credit losses from our customers have been immaterial.

### ***(g) Inventories***

Inventories are stated at the lower of cost or market. Cost has been determined using standard costs that approximate the first-in, first-out method.

### ***(h) Plant and Equipment***

Plant and equipment, including software developed for internal use, are carried at cost. Depreciation is computed using the straight-line method over the estimated useful lives of the assets. Amortization of leasehold improvements is computed over the shorter of the lease term or estimated useful life of the asset. Additions and improvements are capitalized, while repairs and maintenance are charged to expense as incurred.

As of December 31, 2005, we have capitalized software costs of \$2,590,000, including \$581,000 of internal costs, in accordance with American Institute of Certified Public Accountants Statement of Position 98-1, *Accounting for the Costs of Computer Software Developed or Obtained for Internal Use*, related to the implementation of new enterprise resource planning and related software to manage certain business processes.

### ***(i) Fair Value of Financial Instruments***

The fair value of a financial instrument represents the amount at which the instrument could be exchanged in a current transaction between willing parties, other than in a forced sale or liquidation. Significant differences can arise between the fair value and carrying amounts of financial instruments that are recognized at historical cost amounts. The estimated fair values of all of our financial instruments, excluding debt, approximate their carrying amounts in the consolidated balance sheets. The fair value of our long-term debt was derived by

evaluating the nature and terms of each note and considering the prevailing economic and market conditions at the balance sheet date. In addition, the fair value of our convertible senior notes was estimated based on trader quotes. The carrying amount of debt, including current portions, is approximately \$54,170,000 and \$9,922,000 at December 31, 2005 and 2004, respectively; and the fair value is estimated to be approximately \$32,908,000 and \$9,875,000 at December 31, 2005 and 2004, respectively.

**(j) Revenue Recognition**

Revenue from product sales is recognized at the time of product shipment. Revenue for services under research and development grants and contracts are recognized as the services are performed, or as clinical trial materials are provided. Non-refundable milestone payments that represent the completion of a separate earnings process are recognized as revenue when earned. License fees are recognized as they are earned. For the year ended December 31, 2005, two research partners represented 55% and 43% of our research and development revenue, while for the year ended December 31, 2004, two research partners represented 67% and 25% of our research and development revenue, and for the year ended December 31, 2003, one research partner represented 93% of our research and development revenue.

**(k) Research and Development**

Research and development expenses include the costs associated with our internal research and development activities, including salaries and benefits, occupancy costs, clinical manufacturing costs, related administrative costs, and research and development conducted for us by outside advisors, such as sponsored university-based research partners, and clinical study partners. We account for our clinical study costs by estimating the total cost to treat a patient in each clinical trial and recognizing this cost based on estimates of when the patient receives treatment, beginning when the patient enrolls in the trial. Research and development expenses also include all expenses related to any grant revenue recognized, as well as the cost of clinical trial materials shipped to our research partners. Research and development costs are expensed as incurred.

**(l) Stock-Based Compensation**

We account for options granted to employees and directors in accordance with Accounting Principles Board (“APB”) Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations. As such, compensation expense is recorded on fixed stock option grants only if the current fair value of the underlying stock exceeds the exercise price of the option at the date of grant and it is recognized on a straight-line basis over the vesting period.

We account for stock options granted to non-employees on a fair-value basis in accordance with SFAS No. 123, *Accounting for Stock-Based Compensation* and Emerging Issues Task Force Issue No. 96-18, *Accounting for Equity Instruments That Are Issued to Other Than Employees for Acquiring, or in Conjunction with Selling, Goods or Services*. As a result, any non-cash charge to operations for non-employee options with vesting or other performance criteria is affected each reporting period by changes in the market price of our common stock.

In December 2002, the Financial Accounting Standards Board (“FASB”) issued SFAS No. 148, *Accounting for Stock-Based Compensation — Transition and Disclosure*, an amendment of SFAS No. 123. This statement amends SFAS No. 123 to provide alternative methods of transition for a voluntary change to the fair-value method of accounting for stock-based employee compensation. In addition, this statement amends the disclosure

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requirements of SFAS No. 123 to require prominent disclosures in both annual and interim financial statements, which annual disclosures are included below. Other than the disclosure modification, the adoption of SFAS No. 148 did not have a material effect on our consolidated financial statements.

The following table illustrates the effect on net loss attributable to common stockholders and net loss attributable to common stockholders per common share, basic and diluted, had compensation cost for options granted to employees and directors and rights under our employee stock purchase plan been determined consistent with the fair value method of SFAS No. 123 (in thousands except per share data):

	Year Ended December 31,		
	2005	2004	2003
Net loss attributable to common stockholders, as reported	<u>\$(74,894)</u>	<u>\$(56,952)</u>	<u>\$(66,158)</u>
Add: Stock-based employee and director compensation recognized under APB Opinion No. 25	50	463	358
Deduct: total stock-based employee and director compensation expense determined under fair-value based method for all awards	<u>(7,493)</u>	<u>(6,238)</u>	<u>(4,545)</u>
Pro forma net loss attributable to common stockholders	<u>\$(82,377)</u>	<u>\$(62,727)</u>	<u>\$(70,345)</u>
Net loss attributable to common stockholders per common share, basic and diluted:			
As reported	<u>\$ (1.64)</u>	<u>\$ (1.27)</u>	<u>\$ (1.70)</u>
Pro forma	<u>\$ (1.81)</u>	<u>\$ (1.40)</u>	<u>\$ (1.80)</u>

The effects of applying SFAS No. 123, for either recognizing or disclosing compensation cost under such pronouncement, may not be representative of the effects on reported net income or loss for future years. The fair value of each option and employee stock purchase rights granted is estimated on the date of grant using the Black-Scholes option-pricing model with the following weighted average assumptions:

	2005	2004	2003
Estimated volatility	68%	47%	62%
Expected life in years — employee and director options	5	6	6
Expected life in years — employee stock purchase rights	0.5	0.5	0.5
Risk-free interest rate	4.3%	3.3%	1.2%
Dividend yield	0%	0%	0%

The expected life used to estimate the fair value of non-employee options is equal to the contractual life of the option granted.

### **(m) Income Taxes**

Income taxes are accounted for under the asset and liability method with deferred tax assets and liabilities recognized for the future tax consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax basis and net operating loss and tax credit carryforwards. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to

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taxable income in the years in which those temporary differences are expected to be reversed or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in operations in the period that includes the enactment date. Deferred tax assets are recorded when they more likely than not are expected to be realized.

### **(n) Net Loss Per Share**

Basic earnings or loss per common share ("EPS") is calculated by dividing the applicable earnings or loss by the weighted average number of common shares outstanding. Diluted EPS is calculated by dividing the applicable earnings or loss by the weighted average common shares outstanding plus the dilutive effect of outstanding stock options, stock warrants, the series A convertible preferred stock, the 5.25% Convertible Senior Notes due 2025, and the stock issuable under our directors' deferred compensation plan. Because we have reported a loss from continuing operations for all periods, diluted loss per common share is the same as basic loss per common share as the effect of including the outstanding stock options, stock warrants, the convertible preferred stock, the 5.25% Convertible Senior Notes due 2025, and the stock issuable under our directors' deferred compensation plan in the calculation would have reduced the loss from continuing operations per common share. Therefore, the 6,004,736 outstanding stock options, the 8,910 outstanding stock warrants, the 31,620 outstanding shares of series A convertible preferred stock, the 5.25% Convertible Senior Notes due 2025, and the 41,028 common shares issuable to our directors are not included in the calculation of diluted loss per common share.

### **(o) Goodwill and Acquired Intangible Assets**

Goodwill represents the excess of cost over the fair value of net assets of businesses acquired. We adopted the provisions of SFAS No. 141, *Business Combinations*, as of July 1, 2001 and SFAS No. 142, *Goodwill and Other Intangible Assets*, as of January 1, 2002. SFAS No. 141 requires that the purchase method of accounting be used for all business combinations and specifies the criteria that intangible assets acquired in a business combination must meet to be recognized and reported separately from goodwill. In accordance with SFAS No. 142, goodwill and acquired intangible assets determined to have an indefinite useful life are not amortized, but instead tested for impairment at least annually. SFAS No. 142 also requires that intangible assets with estimable useful lives be amortized over their respective estimated useful lives to their estimated residual values, and reviewed for impairment in accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*.

SFAS No. 142 requires us to assess annually whether there is an indication that goodwill is impaired, or more frequently if events and circumstances indicate that the asset might be impaired during the year. We perform our annual impairment test on October 31 of each year. We consider ourselves a single reporting unit for purposes of the impairment test. We determine our fair value using the quoted market price of our common stock, adjusted for certain factors, and compare it to our net book value at the date of our evaluation. To the extent the carrying amount exceeds the fair value, there is an indication that the reporting unit goodwill may be impaired and a second step of the impairment test is performed to determine the amount of the impairment to be recognized, if any.

Identifiable intangible assets deemed to have an indefinite life are tested annually for impairment, or more frequently if events and circumstances indicate that the asset might be impaired during the year. An impairment loss is recognized to the extent that the carrying amount exceeds the asset's fair value as determined based on discounted cash flows associated with the asset. We have not identified any indefinite life intangible assets.

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The costs of core and developed technology are presented at estimated fair value at acquisition date. These costs are being amortized on a straight-line basis over their estimated useful lives of ten years.

### **(p) Accounting for Asset Retirement Obligations**

In June 2001, the FASB issued SFAS No. 143, *Accounting for Asset Retirement Obligations*. SFAS No. 143 requires us to record the fair value of an asset retirement obligation as a liability in the period in which we incur a legal obligation associated with the retirement of tangible long-lived assets that result from the acquisition, construction, development, and/or normal use of the assets. A legal obligation is a liability that a party is required to settle as a result of an existing or enacted law, statute, ordinance or contract. We are also required to record a corresponding asset that is depreciated over the life of the asset. Subsequent to the initial measurement of the asset retirement obligation, the obligation will be adjusted at the end of each period to reflect the passage of time (accretion) and changes in the estimated future cash flows underlying the obligation. Changes in the liability due to accretion will be charged to the consolidated statement of operations, whereas changes due to the timing or amount of cash flows will be an adjustment to the carrying amount of the related asset. We have adopted SFAS No. 143 effective January 1, 2003, the impact of which was immaterial to our consolidated financial statements. Our asset retirement obligations primarily relate to the expiration of our facility leases and anticipated costs to be incurred based on our lease terms.

### **(q) Long-lived Assets**

SFAS No. 144 requires that long-lived assets, except goodwill and intangible assets not being amortized, be reviewed for impairment whenever events or changes in circumstances indicate that the carrying amount of an asset may not be recoverable. Recoverability of assets to be held and used is measured by a comparison of the carrying amount of an asset to the undiscounted future net cash flows expected to be generated by the asset. If the carrying amount of an asset exceeds its estimated future undiscounted cash flows, an impairment charge is recognized for the amount by which the carrying amount of the asset exceeds the fair value of the asset. SFAS No. 144 requires companies to separately report discontinued operations and extends that reporting to a component of an entity that either has been disposed of (by sale, abandonment, or in a distribution to owners) or is classified as held for sale. Assets to be disposed of are reported at the lower of the carrying amount or fair value less costs to sell.

### **(r) Liquidity**

We have not generated significant revenue from product sales and have financed our operations principally by sales of equity and convertible debt instruments. Satisfying long-term liquidity needs will require us 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 will 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 most advanced product candidate, Oncophage. We also may be forced to license technologies to others under agreements that allocate to third parties substantial portions of the potential value of these technologies.

With our current working capital we expect that we can fund our planned development programs, clinical trials, and other operating expenses into early 2007. We plan to attempt to raise additional funds prior to that time.

**(s) Recent Accounting Pronouncements**

In December 2004, the FASB issued SFAS No. 123R, *Share-Based Payment*. SFAS No. 123R is a revision to SFAS No. 123 and supersedes APB Opinion No. 25. This statement requires a company to expense the cost of employee services received in exchange for an award of equity instruments. SFAS No. 123R also provides guidance on valuing and expensing these awards, as well as disclosure requirements of these equity arrangements. SFAS No. 123R is effective at the beginning of the next fiscal year beginning after June 15, 2005.

SFAS No. 123R permits public companies to choose between the following two adoption methods:

1. A “modified prospective” method in which compensation cost is recognized beginning with the effective date (a) based on the requirements of SFAS No. 123R for all share-based payments granted after the effective date and (b) based on the requirements of SFAS No. 123 for all awards granted to employees prior to the effective date of SFAS No. 123R that remain unvested on the effective date, or
2. A “modified retrospective” method which includes the requirements of the modified prospective method described above, but also permits entities to restate based on the amounts previously recognized under SFAS No. 123 for purposes of pro forma disclosures, either (a) all prior periods presented or (b) prior interim periods of the year of adoption.

We will adopt SFAS No. 123R effective January 1, 2006 using the modified prospective method. We have not yet determined the full impact of adoption on our consolidated financial statements, however, we anticipate that implementation of SFAS No. 123R will result in material non-cash charges to our consolidated operating results (see Note 1(l) for pro forma results under SFAS No. 123). We do not anticipate any other impacts on our business, as a result of adopting SFAS No. 123R.

In November 2004, the FASB issued SFAS No. 151, *Inventory Costs*. This statement amends the guidance in Accounting Research Bulletin No. 43, Chapter 4, *Inventory Pricing*, to clarify the accounting for abnormal amounts of idle facility expense, freight, handling costs, and wasted material (spoilage). This statement requires that those items be recognized as current-period charges. In addition, this statement requires that allocation of fixed production overheads to inventory be based on the normal capacity of the production facilities. This statement is effective for fiscal years beginning after June 15, 2005. We do not expect that the adoption of this pronouncement will have a material impact on our financial position or results of operations prior to commercializing Oncophage.

In May 2005, the FASB issued SFAS No. 154, *Accounting Changes and Error Corrections*. SFAS No. 154 requires companies to apply a retrospective application for reporting a change in accounting principle and differentiates a retrospective application from a restatement. SFAS No. 154 also carries forward the guidance from APB Opinion No. 20, *Accounting Changes*, regarding the correction of an error and changes in accounting estimates. We are required to adopt SFAS No. 154 in the first quarter of fiscal 2006, beginning January 1, 2006. We do not expect that the adoption of this pronouncement will have a material impact on our financial position or results of operations.

**(3) Discontinued Operations**

On March 17, 2004, we sold our manufacturing rights for feline leukemia virus (FeLV) vaccine to French veterinary pharmaceutical manufacturer Virbac S.A. (Virbac). Pursuant to this arrangement, in exchange for the transfer of our manufacturing rights and related equipment for FeLV, we received \$14,552,000 in cash. In addition, we entered into a sublease agreement with PP Manufacturing, a subsidiary of Virbac, for a portion of the manufacturing facility in Framingham, MA.

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In April 2004, upon the satisfaction of a contingency of the sale, in accordance with SFAS No. 144, *Accounting for the Impairment or Disposal of Long-Lived Assets*, we recorded a gain on the divestiture of these assets. The gain recorded in 2004 was approximately \$14,132,000 before tax. The carrying value of the assets sold and liabilities assumed were approximately \$409,000 and \$15,000, respectively. In addition, we have classified the results of operations of the FeLV activity as discontinued operations in the accompanying consolidated financial statements, for the periods presented below. The income (loss) from the results of the discontinued operations consists of the following (in thousands):

	Year Ended December 31,	
	2004	2003
Revenue	\$ 338	\$3,465
Expenses:		
Cost of sales	594	1,942
Research and development	193	837
General and administrative	477	577
Net (loss) income from discontinued operations	<u>\$(926)</u>	<u>\$ 109</u>

Virbac has held exclusive perpetual worldwide marketing rights to the FeLV vaccine since 1983. The supply agreement was due for renewal in July 2002, at which point we began to supply product to Virbac through month-to-month supply agreements until the sale of our FeLV manufacturing rights to them in March 2004. Subsequent to the completion of the sale, we had no further product sales of the FeLV vaccine.

### (4) Inventories

Inventories consist solely of finished goods at December 31, 2005 and 2004. During the year ended December 31, 2003, we wrote off finished goods inventory of approximately \$109,000, representing the cost of research and development product we may not realize. The inventory write-off was charged to research and development expenses.

### (5) Investments

#### *Cash Equivalents and Short-term Investments*

Our unrealized holding gains and losses in available-for-sale securities are as follows at December 31, 2005 and 2004 (in thousands):

	2005		2004	
	Unrealized Holding		Unrealized Holding	
	Gains	Losses	Gains	Losses
Corporate debt securities	\$—	\$—	\$—	\$ 26
Auction rate securities	—	—	9	—
Government backed securities	—	88	—	130
	<u>\$—</u>	<u>\$ 88</u>	<u>\$ 9</u>	<u>\$ 156</u>

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Available-for-sale securities consisted of the following at December 31, 2005 and 2004 (in thousands):

	2005		2004	
	Cost	Estimated Fair Value	Cost	Estimated Fair Value
Institutional money market funds	\$ 20,253	\$ 20,253	\$ 4,054	\$ 4,054
Corporate debt securities	999	999	9,416	9,390
Auction rate securities	15,300	15,300	10,741	10,750
Government backed securities	24,246	24,158	43,125	42,995
Short-term municipals	—	—	9,900	9,900
	<u>\$ 60,798</u>	<u>\$ 60,710</u>	<u>\$ 77,236</u>	<u>\$ 77,089</u>

Proceeds from maturities of available-for-sale securities amounted to \$143,410,000, \$126,054,000 and \$100,225,000 for the years ended December 31, 2005, 2004, and 2003, respectively. No available-for-sale securities were sold before their maturity in 2005, 2004 and 2003. Gross realized gains and gross realized losses included in earnings as a result of those maturities were immaterial for each of the years ended December 31, 2005, 2004, and 2003, respectively. The change in net unrealized holding gains (losses) included in comprehensive income amounted to \$59,000, \$(310,000) and \$225,000 for the years ended December 31, 2005, 2004, and 2003, respectively.

Of the available-for-sale securities listed above, at December 31, 2005 and 2004, approximately \$32,179,000 and \$6,148,000, respectively, have been classified as cash and cash equivalents on our consolidated balance sheet. Approximately \$28,531,000, and \$70,941,000 have been classified as short-term investments at December 31, 2005 and 2004, respectively.

The contractual maturities of available-for-sale securities at December 31, 2005 are \$41,453,000 in 2006, \$3,957,000 in 2007, and \$15,300,000 between 2025 and 2043. Securities with contractual maturities between 2025 and 2043 are auction rate securities and similar instruments and are classified as short-term investments as the Company has the intent and ability to sell these securities as needed.

### ***Long-term Investments***

On May 18, 2000, we committed \$3,000,000 to become a limited partner in a limited partnership, called Applied Genomic Technology Capital Fund (AGTC), which invests principally in companies that apply genomic technologies and information in their offerings of products and services or that are engaged in research and development involving genomic technologies. Capital contributions to the limited partnership are made as requested by the general partner. Through December 31, 2005, we have invested \$2,550,000 in AGTC (\$2,250,000 through December 31, 2004). In addition, during the year ended December 31, 2005, we received a cash distribution from AGTC of \$123,000, which was recorded as a reduction in the carrying value of our investment. This investment is accounted for under the cost method, as our ownership interest is approximately 2%. In order to assess whether or not there has been an other than temporary decline in the value of this investment, we analyze several factors including: (1) the carrying value of the limited partnership's investments in its portfolio companies, (2) how recently the investments in the portfolio companies have been made, (3) the post-financing valuations of those investments, (4) the level of uninvested capital held by the limited partnership and (5) overall trends in venture

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capital valuations. Based on these analyses, during the year ended December 31, 2005, we concluded that an other than temporary decline had not occurred and, therefore, have not reduced the carrying value of the asset. However, during the years ended December 31, 2004 and 2003, we concluded that an other than temporary decline in the value of this investment had occurred and reduced the carrying value (the cost of our investment in this partnership) for those years by \$67,000 and \$217,000, respectively. Our investment balance aggregated \$2,021,000 and \$1,844,000 at December 31, 2005 and 2004, respectively, and is included in other long-term assets. The general partner of the limited partnership is AGTC Partners, L.P. Noubar Afeyan, Ph.D., who is one of our directors, is the Chairman and Senior Managing Director and CEO of Flagship Ventures, a partnership of funds including AGTC and, until its dissolution during 2004, NewcoGen Group Inc. Garo H. Armen, Ph.D., our chairman and chief executive officer, was a director of NewcoGen Group Inc. until its dissolution during 2004.

### (6) Plant and Equipment, Net

Plant and equipment, net at December 31, 2005 and 2004 consists of the following (in thousands):

	2005	2004	Estimated Depreciable Lives
Furniture, fixtures and other	\$ 1,746	\$ 1,523	3 to 10 years
Laboratory and manufacturing equipment	6,972	6,428	4 to 10 years
Leasehold improvements	23,120	22,324	2 to 12 years
Software and computer equipment	6,281	5,273	3 years
	<u>38,119</u>	<u>35,548</u>	
Less accumulated depreciation and amortization	<u>(14,769)</u>	<u>(10,560)</u>	
	<u>\$ 23,350</u>	<u>\$ 24,988</u>	

Plant and equipment, net retired and removed from the accounts aggregated \$22,000 and \$72,000 for the years ended December 31, 2005 and 2004, respectively.

### (7) Other Intangible Assets

The following table presents (in thousands) certain information on our intangible assets as of December 31, 2005 and 2004. Our intangible assets are being amortized over their estimated useful lives of ten years, with no estimated residual values.

	Weighted Average Amortization Period	As of December 31, 2005			As of December 31, 2004		
		Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount	Gross Carrying Amount	Accumulated Amortization	Net Carrying Amount
Amortizing intangible assets:							
Core and developed technology	10 years	\$ 11,073	\$ 5,324	\$ 5,749	\$ 11,073	\$ 4,217	\$ 6,856

Amortization expense related to core and developed technology amounted to \$1,107,000, \$1,109,000, and \$1,107,000 for 2005, 2004 and 2003, respectively. Amortization expense is estimated as \$1,107,000 for each of the years 2006 – 2009, \$1,056,000 for 2010 and \$265,000 thereafter.

**(8) Income Taxes**

As of December 31, 2005, we have available net operating loss carryforwards of approximately \$374,875,000 and \$292,920,000 for federal and state income tax purposes, respectively, which are available to offset future federal and state taxable income, if any, and expire between 2008 and 2025, and 2006 and 2025, respectively. These net operating loss carryforwards include approximately \$80,789,000 for federal income tax purposes, acquired in our mergers. Our ability to use such net operating losses is limited by change in control provisions under Internal Revenue Code Section 382 or may expire unused. In addition, we have approximately \$8,954,000 and \$3,827,000 of federal and state research and development credits, respectively, available to offset future taxable income. These federal and state research and development credits expire between 2020 and 2025, and 2015 and 2020, respectively. The potential impacts of such provisions are among the items considered and reflected in management's assessment of our valuation allowance requirements.

The tax effect of temporary differences that give rise to significant portions of the deferred tax assets and deferred tax liabilities as of December 31, 2005 and 2004, are presented below (in thousands):

	<u>2005</u>	<u>2004</u>
Net operating loss carryforwards	\$ 144,734	\$ 118,994
Start-up expenses	—	80
Research and development tax credit	11,479	8,366
Other temporary differences, net	3,043	(2,107)
Gross deferred tax assets	159,256	125,333
Less: valuation allowance	(159,256)	(125,333)
Net deferred tax asset	<u>\$ —</u>	<u>\$ —</u>

In assessing the realizability of deferred tax assets, we consider whether it is more likely than not that some portion or all of the deferred tax assets will not be realized. The ultimate realization of deferred tax assets is dependent upon the generation of future taxable income during the periods in which the net operating loss or tax credit carryforwards can be utilized or the temporary differences become deductible. We consider projected future taxable income and tax planning strategies in making this assessment. In order to fully realize the deferred tax asset, we will need to generate future taxable income sufficient to utilize net operating losses prior to their expiration. Based upon our history of not generating taxable income due to our business activities focused on product development, we believe that it is more likely than not that the deferred tax assets will not be realized due to the uncertainty of future earnings. Accordingly, a valuation allowance has been established for the full amount of the deferred tax assets. The valuation allowance on the deferred tax asset increased by \$33,923,000 during the year ended December 31, 2005 and increased by \$12,639,000 during the year ended December 31, 2004. The valuation allowance includes amounts pertaining to tax deductions relating to stock exercises for which any subsequently recognized tax benefit will be recorded as an increase to additional paid-in capital. Of the deferred tax assets related to the federal net operating loss carryforwards, approximately \$27,468,000, at December 31, 2005, relates to net operating loss carryforwards acquired in our mergers. If adjustments are made to the valuation allowance related to these net operating loss carryforwards, such adjustment will result in reductions to our goodwill and other acquired intangible assets. In 2004, due to the gain realized on our sale of the manufacturing rights to the feline leukemia virus vaccine in March 2004, and the use of acquired state net operating loss carryforwards to reduce the estimated taxable gain,

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we have reduced goodwill by \$509,500 representing the tax benefit realized as the associated deferred tax asset had a 100% valuation allowance recorded against it at acquisition.

Income tax benefit attributable to loss from continuing operations was nil for each of the years ended December 31, 2005, 2004, and 2003, and differed from the amounts computed by applying the U.S. Federal income tax rate of 34% to loss before income taxes as a result of the following (in thousands):

	2005	2004	2003
Computed "expected" federal tax benefit	\$(25,195)	\$(23,375)	\$(23,077)
(Increase) reduction in income taxes benefit resulting from:			
Change in valuation allowance	33,923	19,672	31,209
State and local income benefit net of Federal income tax benefit	(4,402)	(4,083)	(3,751)
Other, net	(4,326)	7,786	(4,381)
	<u>\$ —</u>	<u>\$ —</u>	<u>\$ —</u>

### (9) Accrued Liabilities

Accrued liabilities consist of the following at December 31, 2005 and 2004 (in thousands):

	2005	2004
Clinical trials	\$ 2,608	\$ 3,219
Professional fees	2,351	2,600
Payroll	2,886	2,138
Clinical contractors	2,141	1,334
Interest on convertible note	1,102	—
Other	1,203	1,571
	<u>\$ 12,291</u>	<u>\$ 10,862</u>

### (10) Equity

Our authorized capital stock consists of 100,000,000 shares of common stock, \$0.01 par value per share, and 25,000,000 shares of preferred stock, \$0.01 par value per share. Our Board of Directors is authorized to issue the preferred stock and to set the voting, conversion and other rights.

As part of the Aronex Pharmaceuticals, Inc. merger in 2001, we assumed warrants to purchase our common stock that are exercisable for approximately 104,000 shares of our common stock with a weighted average exercise price of \$52.94 per share of which approximately 38,000 expired during 2004, 57,000 expired in 2005, and 9,000 expire in 2007. In addition, we issued warrants to purchase approximately 26,000 shares of our common stock at a weighted average exercise price of \$13.96, which expired during 2005.

In January 2003, we sold 6,250,000 shares of our common stock, \$0.01 par value, at an average price of \$9.92 per share. We received net proceeds of approximately \$59,538,000.

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In February 2004, we sold 5,400,000 shares of our common stock, \$0.01 par value, at an average price of \$10.50 per share. We received net proceeds of approximately \$53,520,000.

In August 2004, we filed a Form S-3 universal registration statement with the Securities and Exchange Commission for the registration and potential issuance of up to \$100 million of our securities.

In a private placement in September 2003, we sold 31,620 shares of our series A convertible preferred stock, par value \$0.01 per share, for proceeds of approximately \$31,606,000, after deducting offering costs of approximately \$14,000. Under the terms and conditions of the Certificate of Designation creating the series A convertible preferred stock, this stock is convertible by the holder at any time into our common stock, is non-voting, carries a 2.5% annual dividend yield, has an initial conversion price of \$15.81 per common share, subject to adjustment, and is redeemable by us at its face amount (\$31,620,000) on or after September 24, 2013. The Certificate of Designation does not contemplate a sinking fund. The series A preferred stock ranks senior to our common stock. In a liquidation, dissolution or winding up of us, the series A preferred stock's liquidation preference must be fully satisfied before any distribution could be made to the common stock. Other than in such a liquidation, no terms of the series A preferred stock affect our ability to declare or pay dividends on our common stock as long as the series A preferred stock's dividends are accruing. The liquidation value of this series A convertible preferred stock is equal to \$1,000 per share outstanding plus any accrued unpaid dividends. Accrued and unpaid dividends of Series A convertible preferred stock aggregated \$197,625 or \$6.25 per share at December 31, 2005.

### **(11) Stock-based Compensation Plans**

Our 1999 Equity Incentive Plan, as amended, (the 1999 equity plan) authorizes the grant of incentive stock options within the meaning of Section 422 of the Internal Revenue Code and non-qualified stock options for the purchase of an aggregate of 10,000,000 shares (subject to adjustment for stock splits and similar capital changes and exclusive of options exchanged at the consummation of mergers) to employees and, in the case of non-qualified stock options, to consultants and directors as defined in the 1999 equity plan. The Board of Directors appointed the compensation committee to administer the 1999 equity plan.

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The following summarizes activity for options granted to directors and employees, including those with an exercise price equal to the fair value of the underlying shares of common stock at the date of grant (“at-the-money exercise price”), those with an exercise price greater than the fair value of the underlying share of common stock at the date of grant, and those with an exercise price less than the fair value of the underlying share of common stock at the date of grant (“in-the-money exercise price”):

	<u>Options</u>	<u>Options Exercisable at End of Year</u>	<u>Weighted Average Grant-Date Fair Value</u>	<u>Weighted Average Exercise Price</u>
Outstanding December 31, 2002	3,014,512	<u>1,492,230</u>		
Granted	1,125,000		\$ 5.30	\$ 9.23
Exercised	(129,262)		—	8.61
Forfeited	(620,017)		—	21.58
Outstanding December 31, 2003	3,390,233	<u>1,357,937</u>		
Granted	2,056,617		5.07	8.81
Exercised	(193,706)		—	4.12
Forfeited	(808,502)		—	10.56
Outstanding December 31, 2004	4,444,642	<u>1,381,037</u>		
Granted	1,321,500		3.59	6.53
Forfeited	(1,043,189)		—	9.82
Outstanding December 31, 2005	<u>4,722,953</u>	<u>2,225,641</u>		

During 2003, 2004 and 2005 all options were granted to employees and directors at exercise prices equal to the fair value of the shares of common stock on the grant date. Compensation expense recognized with respect to options granted to employees and directors totaled approximately \$24,000, \$463,000 and \$358,000 for the years ended December 31, 2005, 2004 and 2003, respectively. These charges relate to options granted prior to 2002 with exercise prices which were less than the fair value of the shares of common stock at the date of grant and modifications to outstanding options. Deferred compensation at December 31, 2005 of \$3,000 will be recognized during the year ending December 31, 2006, the remaining vesting period of the underlying options.

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The following summarizes activity for options granted to outside advisors:

	<u>Options</u>	<u>Options Exercisable at End of Year</u>	<u>Weighted Average Grant- Date Fair Value</u>	<u>Weighted Average Exercise Price</u>
Outstanding December 31, 2002	928,469	<u>846,288</u>		
Granted	63,000		\$ 5.44	\$ 7.78
Exercised	(1,405)		—	1.45
Forfeited	(1,334)		—	11.06
Outstanding December 31, 2003	988,730	<u>846,569</u>		
Granted	210,000		8.21	9.98
Exercised	(55,000)		—	1.45
Forfeited	(2,666)		—	11.06
Outstanding December 31, 2004	1,141,064	<u>947,127</u>		
Granted	120,000		5.50	6.92
Forfeited	(26,933)		—	8.34
Outstanding December 31, 2005	<u>1,234,131</u>	<u>775,631</u>		

The outstanding options exclude 47,652 options granted to outside advisors with an exercise price which was determined based on the fair value of the underlying shares of common stock beginning on the second anniversary of the grant date as the options vest; these options vested prior to December 31, 1998 with an exercise price of approximately \$11.17 per share and compensation expense was charged at such time.

The charge to operations related to options we granted to outside advisors totaled approximately \$(61,000), \$804,000, and \$533,000 for the years ended December 31, 2005, 2004, and 2003, respectively.

At December 31, 2005, unrecognized expense for options granted to outside advisors for which performance (vesting) has not yet been completed but the exercise price of the option is known, is approximately \$803,000. Such amount is subject to change each reporting period based upon changes in the fair value of our common stock, estimated volatility and the risk-free interest rate until the outside advisor completes his or her performance under the option agreement.

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A summary of our options outstanding and exercisable, as of December 31, 2005, follows:

Range of Exercise Prices	Options Outstanding			Options Exercisable	
	Number Outstanding	Weighted Average Remaining Life (Years)	Weighted Average Exercise Price	Number Exercisable	Weighted Average Exercise Price
\$ 1.45 – \$ 5.00	537,644	1.0	\$ 1.97	536,144	\$ 1.96
\$ 5.01 – \$10.00	2,928,859	8.0	7.15	729,785	7.78
\$10.01 – \$15.00	2,395,993	5.1	11.79	1,603,703	12.11
\$15.01 – \$20.00	141,112	3.9	16.37	130,512	16.40
	<u>6,003,608</u>		\$ 8.75	<u>3,000,144</u>	\$ 9.43

We had 5,633,358 and 4,426,615 options outstanding at December 31, 2004 and 2003 respectively with weighted average exercise prices of \$9.51 and \$9.70 respectively.

The preceding table excludes 1,128 options assumed in our merger with Aronex Pharmaceuticals, Inc. As of December 31, 2005, all of these options were outstanding and exercisable with a weighted average remaining life of 1.8 years and a weighted average exercise price of \$48.56 per share.

Since the 1995 reorganization described in Note 1, Founder Holdings Inc. has directly or indirectly owned a significant portion of our common stock. During 1996, Founder Holdings Inc. approved a stock option plan (Founder's Plan). In accordance with U.S. generally accepted accounting principles, the Founder's Plan is accounted for as if it had been adopted by us and treated as a contribution to stockholders' equity. Pursuant to the provisions of the Founder's Plan, Founder Holdings Inc. may grant options to our officers, directors, employees, and consultants to purchase common stock of Founder Holdings Inc. The terms of the options, including exercise price and vesting period, are set at the date of grant. The options have a contractual life of ten years and may not have an exercise price less than the fair value of a share of common stock of Founder Holdings Inc. at date of grant. Options to purchase a maximum of 300 shares may be granted under the Founder's Plan.

During 1996, Founder Holdings Inc. granted options to purchase approximately 160 shares to directors and employees at a weighted average exercise price of \$9,006 per share and a weighted average grant-date fair value of approximately \$4,301 per share. During 1997, Founder Holdings Inc. granted options to purchase approximately 14 shares to a director at a weighted average grant-date fair value of \$16,407 per share. All the options were immediately vested and exercisable. All of the options remain outstanding and none have been exercised.

During 1996, Founder Holdings Inc. granted options to purchase approximately 76 shares to consultants at a weighted average exercise price of \$9,006 per share and a weighted average grant-date fair value of approximately \$5,535 per share. All of the consultants' options were immediately vested and exercisable. All of the consultants' options remain outstanding and none have been exercised.

Under the 1999 Employee Stock Purchase Plan, employees may purchase shares of common stock at a discount from fair value. There are 300,000 shares of common stock reserved for issuance under the purchase

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plan. The purchase plan is intended to qualify as an employee stock purchase plan within the meaning of Section 423 of the Internal Revenue Code. Rights to purchase common stock under the purchase plan are granted at the discretion of the compensation committee, which determines the frequency and duration of individual offerings under the plan and the dates when stock may be purchased. Eligible employees participate voluntarily and may withdraw from any offering at any time before the stock is purchased. Participation terminates automatically upon termination of employment. The purchase price per share of common stock in an offering will not be less than 85% of the lesser of its fair value at the beginning of the offering period or on the applicable exercise date and may be paid through payroll deductions, periodic lump sum payments or a combination of both. The plan terminates on November 15, 2009. As of December 31, 2005, 150,224 shares of common stock have been purchased under the plan.

Effective June 11, 2003, our stockholders approved our Director's Deferred Compensation Plan permitting each outside director to defer all, or a portion of, their cash compensation until their service as a director ends or until a specified date. There are 100,000 shares of our common stock reserved for issuance under this plan. As of December 31, 2005, no shares have been issued. The plan allows eligible directors to defer all, or a portion, of their cash compensation into a cash account or a stock account. Amounts deferred to a cash account will earn interest at the rate paid on one-year Treasury bills with interest added to the account annually. Amounts deferred to a stock account will be converted on an annual basis into a number of units representing shares of our common stock equal to the amount of compensation which the participant has elected to defer to the stock account divided by the applicable stock price for our common stock. The applicable price for our common stock means the average of the closing price of our common stock for all trading days during the calendar year preceding the conversion date as reported by the Nasdaq National Market. Pursuant to this plan, 41,028 units, each representing a share of our common stock at an average common stock price of \$5.01, were credited to participants' stock accounts as of December 31, 2005. The compensation charges were immaterial for all the years presented.

### **(12) License, Research and Other Agreements**

In November 1994, we entered into a Patent License Agreement with the Mount Sinai School of Medicine, or Mount Sinai (the Mount Sinai Agreement). 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 Mount Sinai a royalty on the net sales of products covered by the licensed patent rights and also provided Mount Sinai with a 0.45% equity interest in the Company (approximately 62,000 shares valued at approximately \$90,000 at the time of issuance). The term of the Mount Sinai Agreement ends when the last of the licensed patents expires (2018) or becomes no longer valid. If we fail to pay royalties that are due under the agreement, Mount Sinai may issue written notice to us. If we continue to fail to pay royalties after 60 days of the written notice, Mount Sinai can terminate the agreement. The Mount 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 which have been achieved. If we fail to comply with the diligence provisions of the agreement, Mount Sinai could take actions to convert our exclusive license to a non-exclusive license after six months written notice. The Mount Sinai Agreement does not contain any milestone payment provisions.

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During 1995, Dr. Srivastava moved his research to Fordham University (Fordham). We entered into a sponsored research and technology license agreement with Fordham in March 1995 (the Fordham Agreement) 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 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 (2018) or when the patents become no longer valid. The agreement does not contain any milestone payment provisions or any 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. During the term of the agreement we paid approximately \$2,374,000.

We have two agreements with the University of Connecticut Health Center, or UConn: (1) a research agreement under which we pay UConn 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, (the "License Agreement"). Each agreement is discussed in more detail below.

In February 1998, we entered into a research agreement with UConn and Dr. Srivastava (the Research Agreement) 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 and again on December 31, 2003 to: (1) extend the term of the Research Agreement to December 31, 2003 and then to December 31, 2008, and (2) provide for an annual payment of \$1,200,000 payable quarterly at the rate of \$300,000 during 2003 and then an annual payment of \$1,350,000 payable quarterly at the rate of \$337,500 from 2004 thru 2008. 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 by UConn or is otherwise unable to continue his research at UConn. Research and development expense in the accompanying 2005, 2004 and 2003 consolidated statements of operations includes approximately \$1,485,000, \$1,350,000, and \$1,200,000, respectively, of costs incurred under the Research 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 (2019) or becomes no longer valid. UConn may terminate the License Agreement: (1) if, after 30 days written notice for breach, we continue to 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 License 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

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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 \$20,000 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 diligence requirements, UConn may be able to terminate the License 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. Through December 31, 2005, we have paid approximately \$135,000 to UConn under the License Agreement, as amended.

We have entered into various additional research agreements with educational and medical institutions expiring through August 2005. These agreements required initial and quarterly payments totaling approximately \$2,242,000 (of which \$45,000, \$130,000, and \$237,000 was paid during the years ended December 31, 2005, 2004 and 2003, respectively).

We have entered into various agreements with institutions and contract research organizations to conduct our clinical studies. Under these agreements, subject to the enrollment of patients and performance by the institution of certain services, we have estimated our payments to be approximately \$67,821,000 over the term of the studies. For the years ended December 31, 2005, 2004 and 2003, approximately, \$9,251,000, \$7,080,000, and \$12,180,000, respectively, have been expensed in the accompanying consolidated statements of operations related to these clinical studies. Through December 31, 2005, approximately \$35,834,000 of this estimate has been paid or accrued. The timing of our expense recognition and future payments related to these agreements is dependent on the enrollment of patients and documentation received from the institutions.

In December 2000, Aronex Pharmaceuticals Inc., a company we acquired in July 2001, entered into a license agreement with Sumitomo Pharmaceuticals Co., Ltd., (the "Sumitomo Agreement"). In September 2003, this agreement was amended and restated with Antigenics. The Sumitomo Agreement grants us the exclusive right to an allowed U.S. patent application that contains certain claims related to Aroplatin. Except for the treatment of hepatoma, the Sumitomo Agreement gives us the exclusive right to make, use, develop, import and sell Aroplatin in the United States. The term of the Sumitomo Agreement ends when the licensed patent expires in 2020. Either party may terminate the Sumitomo 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 materially defaults in its performance under the Sumitomo Agreement. Prior to our acquisition of Aronex Pharmaceuticals, Inc., Sumitomo received a \$500,000 up-front payment in 2001 from Aronex Pharmaceuticals, Inc. and will receive subsequent milestone payments from us in the aggregate of up to \$3,500,000 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.

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In June 1988, a predecessor to Aronex Pharmaceuticals, Inc. 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 the University of Texas’ patents rights 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 exclusive license agreement.

We have various comprehensive agreements with corporate partners that allow the partners to use our QS-21 adjuvant in numerous vaccines including, but not limited to, hepatitis, lyme disease, human immunodeficiency virus (“HIV”), influenza, cancer, and malaria. These agreements grant exclusive worldwide rights in some fields of use, and co-exclusive or non-exclusive rights in others. The agreements call for royalties to be paid to us by the partner on its future sales of licensed vaccines that include QS-21.

### **(13) Certain Related Party Transactions**

We currently have QS-21 license and supply agreements with Neuralab Limited, a wholly owned subsidiary of Elan Corporation, plc, for use of QS-21 with an antigen in the field of Alzheimer’s disease. Garo H. Armen, Ph.D., our Chairman and Chief Executive Officer, is a director of Elan and is a nominal employee of a different wholly-owned subsidiary of Elan. For the years ended December 31, 2005 and 2004, no revenues were earned under these agreements and at December 31, 2005 and 2004, we had no amounts due to us under these agreements.

In March 1995, we entered into a consulting agreement with Dr. Pramod Srivastava, our scientific founder and one of our directors. This agreement was to expire in March 2005 but was extended for an additional one-year period through March 2006. The Company expects to enter into an amended and restated consulting agreement with Dr. Srivastava prior to expiration of the existing consulting agreement. In 2005, 2004, and 2003, we paid Dr. Srivastava cash bonuses of \$135,000, \$135,000, and \$100,000, respectively, and granted him options to purchase 120,000, 120,000, and 50,000 shares of our common stock for services performed in each of 2004, 2003, and 2002, respectively. These options vest over 4 and 5 years and are exercisable at \$6.92, \$10.18, and \$7.45 per share, respectively.

In September 2004, we entered into a \$60,000 one-year service agreement with Techsoft, Inc. d.b.a Medical Systems and NG Techsoft Pvt. Ltd. for data management services. Navin Gupta is the President and CEO of Techsoft, Inc. d.b.a Medical Systems, Director and Chairman of the Board of NG Techsoft Pvt Ltd. and is the spouse of Renu Gupta, our Senior Vice President of Development. This agreement was extended several times

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during 2005 to obtain additional data management and processing services and will expire in May 2006. As of December 31, 2005, approximately \$76,000 due under this agreement is included in current liabilities. For the year ended December 31, 2005, we expensed approximately \$132,000 under this agreement.

On October 22, 2004, we executed a letter of intent with Symphony Capital LLC for a potential transaction to provide funding for certain of our research programs. Mr. Mark Kessel, one of our directors, is a managing director of Symphony Capital LLC. During February 2005, we determined not to pursue this potential transaction. During 2004, we made payments to Symphony Capital LLC of \$125,000 for development planning activities. At December 31, 2004, we had accrued \$159,000 due to Symphony Capital LLC. At December 31, 2005, we had no amounts due to Symphony Capital LLC. During the year ended December 31, 2005, \$37,000 was incurred related to activities up to termination in February 2005.

### **(14) Leases**

We lease manufacturing, research and development, and office facilities under various long-term lease arrangements. Rent expense (before sublease income) included in loss from continuing operations was approximately \$3,394,000, \$3,685,000, and \$4,691,000 for the years ended December 31, 2005, 2004, and 2003, respectively.

On December 6, 2002, we entered into a lease agreement, effective August 2003, to lease a 162,000 square foot facility in Lexington, Massachusetts. We currently occupy 94,000 square feet of this facility. We have transferred our Woburn operations into this facility. Our Woburn manufacturing operations were transferred during the first quarter of 2004 and accordingly, the Woburn lease was extended through March 14, 2004. The future minimum rental payments under our leases of our Framingham and Lexington facilities, which expire in 2010 and 2013, respectively, our Texas facility, which expires in 2008, and our New York City headquarters, which expires in 2006, are as follows (in thousands):

Year ending December 31,	
2006	\$ 3,723
2007	3,361
2008	2,885
2009	2,893
2010	2,700
Thereafter	5,484
Total	<u>\$ 21,046</u>

In connection with the New York City office space and the Framingham and Lexington facilities we maintain fully collateralized letters of credit of \$78,000, \$375,000 and \$1,000,000, respectively. No amounts have been drawn on the letters of credit as of December 31, 2005.

Included in accrued liabilities and other long-term liabilities on the consolidated balance sheet at December 31, 2005 and 2004 is approximately \$906,000 and \$1,378,000, respectively, representing amounts due under our non-cancelable lease (net of sublease income) of the manufacturing, research, and office facility located in The

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Woodlands, Texas assumed in the Aronex Pharmaceuticals, Inc. merger. The liability represents the estimated future amounts due (net of sublease income) at the balance sheet date through to expiry of the lease. During the year ended December 31, 2005, the liability decreased by \$472,000 primarily related to payments made for rent and expenses. During the year ended December 31, 2004, the liability decreased by \$457,000 primarily related to payments made for rent and expenses. Remaining minimum payments (before sublease income) are \$578,000 per year in 2006 through 2007 and \$48,000 in 2008.

Beginning in 2002, we subleased part of our Framingham and Texas facilities and in January 2006 we entered into a sublease for part of our New York office space with a private company under an agreement expiring in December 2006. We are currently entitled to receive rental income of approximately \$1,532,000 in 2006; \$707,000 in 2007; \$531,000 in 2008; \$515,000 in 2009; and \$386,000 in 2010. For the years ended December 31, 2005, 2004 and 2003, we earned rental income of \$1,120,000, \$1,356,000 and \$883,000, respectively, from our subleased facilities, and such income is recorded in operating expenses as an offset to rental expense.

### **(15) Debt**

As of December 31, 2005 we have approximately \$54,170,000 of debt outstanding.

On January 25, 2005, we issued \$50,000,000 of convertible senior notes in a private placement. Proceeds from the sale of the notes were approximately \$48,000,000 net of issuance costs. Issuance costs are being amortized over seven years using the effective interest method, the expected life of the notes based on the earliest date on which the holders can require redemption. The notes, which mature in 2025, bear interest semi-annually on February 1 and August 1 each year, at a rate of 5.25% per annum (an effective rate of 5.94%) and are initially convertible into common stock at any time at a conversion price (subject to adjustment) of approximately \$10.76 per share. Notes surrendered for conversion in connection with certain fundamental changes, as defined, that occur before February 1, 2012 may in certain circumstances be entitled to an increase in the conversion rate per \$1,000 principal amount of notes. On or after February 1, 2012, we may redeem the notes for cash, at a redemption price equal to 100% of the principal amount of the notes, plus any accrued and unpaid interest. On each of February 1, 2012, February 1, 2015 and February 1, 2020, holders may require us to purchase their notes for cash equal to 100% of the principal amount of the notes, plus any accrued and unpaid interest. Holders may also require us to repurchase their notes upon a fundamental change, as defined, at a repurchase price, in cash, equal to 100% of the principal amount of the notes to be repurchased, plus any accrued and unpaid interest. The notes are senior unsecured obligations of Antigenics and rank equally with all of our existing and future senior unsecured indebtedness. The notes are effectively subordinated to all of our existing and future secured indebtedness and all existing and future liabilities of our subsidiaries. The notes do not contain any financial covenants and do not limit our ability to incur additional indebtedness, including senior or secured indebtedness, issue securities, pay dividends or repurchase our securities. We are obligated to keep effective a shelf registration statement with the SEC for resale of the notes and the shares of common stock issuable upon conversion of the notes by the holders thereof. Failure to do so may result in an obligation to pay additional interest to each holder of registrable securities who is affected. The fair value of these notes is estimated to be approximately \$28,750,000 at December 31, 2005 based on trader quotes.

On July 17, 2003, we entered into a \$17,100,000 debt facility with GE Capital pursuant to which we borrowed \$17,042,000 to finance the build-out of our Lexington, Massachusetts facility. As we utilized the debt facility, separate promissory notes were executed. Each note has a term of thirty-six months with the interest rate

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based on the Federal Reserve's three year Treasury Constant Maturities Rate plus 1.875% fixed at the closing of each note, ranging from 3.92% to 4.42%. Each note is collateralized by a 50% cash security deposit (classified as restricted cash in the accompanying consolidated balance sheets) as well as our plant and equipment, accounts receivable, inventory and intangible assets excluding our intellectual property. As of December 31, 2005 we had approximately \$4,024,000 outstanding. The aggregate maturities of our outstanding debt for each of the years subsequent to December 31, 2005 are as follows: 2006 — \$3,980,000 and 2007 — \$44,000.

At December 31, 2005, approximately \$146,000 of debentures we assumed in our merger with Aquila Biopharmaceuticals are outstanding. These debentures carry interest at 7% and are callable. Accordingly they are classified as part of the current portion of long-term debt.

### **(16) Contingencies**

Antigenics, our Chairman and Chief Executive Officer Garo Armen, and two investment banking 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 for the Southern District of New York on behalf of a class of purchasers of our stock between February 3, 2000 and December 6, 2000. Similar complaints were filed against about 300 other issuers, their underwriters, and in many instances their directors and officers. These cases have been coordinated under the caption *In re Initial Public Offering Securities Litigation*, Civ. No. 21 MC 92 (SAS), by order dated August 9, 2001. The suit against Antigenics and Dr. Armen alleges that the brokerage arms of the investment banking firms 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 investment banking firms' customers based upon agreements by such customers to purchase additional shares of our stock in the secondary market. The complaint alleges that Antigenics is liable under Section 11 of the Securities Act of 1933, as amended (the Securities Act), and Dr. Armen is liable under Sections 11 and 15 of the Securities Act because our registration statement did not disclose these alleged practices. On April 19, 2002, the plaintiffs in this action filed an amended class action complaint, which contains new allegations. Again, similar amended complaints were filed with respect to the other 300 companies. In addition to the claims in the earlier complaint, the amended complaint alleges that Antigenics and Dr. Armen violated Sections 10(b) and 20 of the Securities Exchange Act and SEC Rule 10b-5 by making false and misleading statements and/or omissions in order to inflate our stock price and conceal the investment banking firms' alleged secret arrangements. The claims against Dr. Armen, in his individual capacity, have been dismissed without prejudice. On July 15, 2002, Antigenics and Dr. Armen joined the Issuer Defendants' Motion to Dismiss the Consolidated Amended Complaints. By order of the Court, this motion set forth all "common issues," i.e., all grounds for dismissal common to all or a significant number of Issuer Defendants. The hearing on the Issuer Defendants' Motion to Dismiss and the other Defendants' motions to dismiss was held on November 1, 2002. On February 19, 2003, the Court issued its opinion and order on the Issuer Defendants' Motion to Dismiss. The Court granted Antigenics' motion to dismiss the Rule 10b-5 and Section 20 claims with leave to amend and denied our motion to dismiss the Section 11 and Section 15 claims. On June 14, 2004, papers formalizing a proposed settlement among the plaintiffs, Issuer Defendants, and insurers were presented to the Federal District Court for the Southern District of New York. In an Opinion and Order dated February 15, 2005, the Court granted preliminary approval of the settlement. If the settlement becomes effective, Antigenics anticipates that it will not incur significant out-of-pocket costs, after insurance. Accordingly, an accrual has not been recorded at December 31, 2005.

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On February 19, 2004, Jonathan Lewis, M.D., our former Chief Medical Officer, filed a complaint against us in the United States District Court for the Southern District of New York. The suit alleged that we terminated Dr. Lewis without cause and have failed to pay severance benefits to which Dr. Lewis believes he is entitled. This suit was settled during October 2004. For the year ended December 31, 2004 we recorded a charge in the accompanying consolidated financial statements related to this settlement.

A third party has filed a notice of opposition to European patent EP 0750513 B1 which has claims relating to AG-702/707, to which we hold the exclusive license. We believe this patent claims valid subject matter and intend to defend the opposition. However, there is no guarantee that this patent will not be revoked or that we may not have to amend the claims.

We currently are a party to other legal proceedings as well. While we currently believe that the ultimate outcome of any of these proceedings will not have a material adverse effect on our financial position, results of operations, or liquidity, litigation is subject to inherent uncertainty. Furthermore, litigation consumes both cash and management attention.

### **(17) 401(k) Plan**

We sponsor a defined contribution 401(k) savings plan for all eligible employees, as defined. Participants may contribute up to 60% of their compensation, as defined, with a maximum of \$14,000 in 2005. Each participant is fully vested in his or her contributions and related earnings and losses. The Company matches 75% of the participant's contribution, and since January 1, 2003, the percentage of participant compensation subject to our matching contribution has been 8% of compensation. Effective January 1, 2006, the percentage of participant compensation subject to our matching contribution has been revised to 6%. Such matching contributions vest over four years. For the years ended December 31, 2005, 2004, and 2003, we charged approximately \$534,000, \$477,000 and \$448,000 to operations for the Company's contributions to the 401(k) plan.

### **(18) Acquired In-process Research and Development**

On July 30, 2004 we issued 350,000 shares of our common stock and paid \$200,000 in cash to Mojave Therapeutics Inc. as consideration to purchase all of its intellectual property and certain scientific assets relating to its heat shock protein based antigen delivery system and other technologies. The total purchase price of the assets was allocated to incomplete acquired technologies under development but not yet technologically feasible or commercialized and which had no alternative future uses. At the date these assets were acquired, none of the purchased technologies under development had achieved technological feasibility and none were being sold on the market. There still remains substantial risk and uncertainty concerning the remaining course of technical development. Because of the great uncertainty associated with these issues and the remaining effort associated with development of these technologies, technological feasibility had not been established at the acquisition date. Accordingly, the value of these purchased assets, \$2,888,000, has been charged to acquired in-process research and development during 2004 in the accompanying consolidated statements of operations.

### **(19) Severance Costs**

In June 2005, we took steps to improve our operating efficiency through the prioritization of our development portfolio and a streamlining of our infrastructure. Consequently, we eliminated 26 positions. In

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December 2005, we further updated our business strategy and refocused our programs and priorities, including the postponement and deceleration of a number of our projects. To match these priorities, we eliminated 65 positions. We recorded charges of \$1,596,000 during the year ended December 31, 2005 related to the elimination of these positions. As of December 31, 2005, we have paid \$642,000 of these expenses. Our remaining cash payment obligation of approximately \$954,000, which is included in accrued liabilities in our consolidated balance sheet, is to be paid through July 2006.

A summary of severance and related costs is as follows:

	<u>Charge to Operations</u>	<u>Amount Paid</u>	<u>Liability at December 31, 2005</u>
Severance and payroll taxes	\$1,375,000	\$543,000	\$ 832,000
Outplacement	167,000	78,000	89,000
Other	54,000	21,000	33,000
Total	<u>\$1,596,000</u>	<u>\$642,000</u>	<u>\$ 954,000</u>

### (20) Quarterly Financial Data (Unaudited)

The following tables reflect reclassifications of the results of operations of the FeLV activity as a discontinued operation for 2004.

	<u>Three Months Ended,</u>			<u>December 31,</u>
	<u>March 31,</u>	<u>June 30,</u>	<u>September 30,</u>	
	(In thousands, except per share data)			
<b>2005</b>				
Revenue	\$ 120	\$ 85	\$ 77	\$ 348
Net loss	(18,003)	(21,128)	(17,255)	(17,718)
Net loss attributable to common stockholders	(18,201)	(21,326)	(17,452)	(17,915)
Per common share, basic and diluted:				
Net loss attributable to common stockholders	\$ (0.40)	\$ (0.47)	\$ (0.38)	\$ (0.39)
	<u>Three Months Ended,</u>			<u>December 31,</u>
	<u>March 31,</u>	<u>June 30,</u>	<u>September 30,</u>	
	(In thousands, except per share data)			
<b>2004</b>				
Revenue	\$ 109	\$ 187	\$ 282	\$ 129
Loss from continuing operations	(16,229)	(17,044)	(18,474)	(17,004)
Income (loss) from discontinued operations	(926)	13,960	—	(445)
Net loss attributable to common stockholders	(17,353)	(3,281)	(18,672)	(17,646)
Per common share, basic and diluted:				
Loss from continuing operations	\$ (0.38)	\$ (0.38)	\$ (0.41)	\$ (0.38)
Income (loss) from discontinued operations	\$ (0.02)	\$ 0.31	\$ —	\$ (0.01)
Net loss attributable to common stockholders	\$ (0.41)	\$ (0.07)	\$ (0.41)	\$ (0.39)

**Item 9. Changes in and Disagreements With Accountants on Accounting and Financial Disclosure**

Not Applicable.

**Item 9A. Controls and Procedures**

Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures

Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our disclosure controls and procedures, as such term is defined under Rule 13a-15(e) promulgated under the Securities Exchange Act of 1934, as amended (the Exchange Act). Based on this evaluation, our chief executive officer and our chief financial officer concluded that our disclosure controls and procedures were functioning effectively as of the end of the period covered by this annual report to provide reasonable assurance that the Company can meet its disclosure obligations.

Management's Report on Internal Control Over Financial Reporting

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 13a-15(f). Under the supervision and with the participation of our management, including our chief executive officer and chief financial officer, we conducted an evaluation of the effectiveness of our internal control over financial reporting based on the framework in *Internal Control-Integrated Framework* issued by the Committee of Sponsoring Organizations of the Treadway Commission. Based on our evaluation under the framework in *Internal Control — Integrated Framework*, issued by the Committee of Sponsoring Organizations of the Treadway Commission, our management concluded that our internal control over financial reporting was effective as of December 31, 2005.

KPMG LLP, an independent registered public accounting firm, has audited the consolidated financial statements included in this Annual Report on Form 10-K and, as part of their audit, has issued their report, included herein, (1) on our management's assessment of the effectiveness of our internal control over financial reporting and, (2) on the effectiveness of our internal control over financial reporting.

**REPORT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

The Board of Directors and Stockholders  
Antigenics Inc.:

We have audited management's assessment, included in the accompanying Management's Report on Internal Control Over Financial Reporting, that Antigenics Inc. maintained effective internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Antigenics Inc.'s management is responsible for maintaining effective internal control over financial reporting and for its assessment of the effectiveness of internal control over financial reporting. Our responsibility is to express an opinion on management's assessment and an opinion on the effectiveness of the Company's internal control over financial reporting based on our audit.

We conducted our audit in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform the audit to obtain reasonable assurance about whether effective internal control over financial reporting was maintained in all material respects. Our audit included obtaining an understanding of internal control over financial reporting, evaluating management's assessment, testing and evaluating the design and operating effectiveness of internal control, and performing such other procedures as we considered necessary in the circumstances. We believe that our audit provides a reasonable basis for our opinion.

A company's internal control over financial reporting is a process designed to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles. A company's internal control over financial reporting includes those policies and procedures that (1) pertain to the maintenance of records that, in reasonable detail, accurately and fairly reflect the transactions and dispositions of the assets of the company; (2) provide reasonable assurance that transactions are recorded as necessary to permit preparation of financial statements in accordance with generally accepted accounting principles, and that receipts and expenditures of the company are being made only in accordance with authorizations of management and directors of the company; and (3) provide reasonable assurance regarding prevention or timely detection of unauthorized acquisition, use, or disposition of the company's assets that could have a material effect on the financial statements.

Because of its inherent limitations, internal control over financial reporting may not prevent or detect misstatements. Also, projections of any evaluation of effectiveness to future periods are subject to the risk that controls may become inadequate because of changes in conditions, or that the degree of compliance with the policies or procedures may deteriorate.

In our opinion, management's assessment that Antigenics Inc. maintained effective internal control over financial reporting as of December 31, 2005, is fairly stated, in all material respects, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO). Also, in our opinion, Antigenics Inc. maintained, in all material respects, effective internal control over financial reporting as of December 31, 2005, based on criteria established in Internal Control — Integrated Framework issued by the Committee of Sponsoring Organizations of the Treadway Commission (COSO).

We also have audited, in accordance with the standards of the Public Company Accounting Oversight Board (United States), the consolidated balance sheets of Antigenics Inc. and subsidiaries as of December 31, 2005 and 2004, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2005, and our report dated March 6, 2006 expressed an unqualified opinion on those consolidated financial statements.

/s/ KPMG LLP

Boston, Massachusetts  
March 6, 2006

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Changes in Internal Controls Over Financial Reporting

There were no changes in our internal control over financial reporting that occurred during the fourth quarter of 2005 that have materially affected, or are reasonably likely to materially affect, our internal control over financial reporting.

**Item 9B. Other Information**

None.

**PART III**

**Item 10. *Directors and Executive Officers of the Registrant***

We have adopted a written code of business conduct and ethics that applies to our principal executive officer, principal financial officer, principal accounting officer or controller, or persons performing similar functions. A copy of this code is available, free of charge, upon written request to our legal department at 630 Fifth Avenue, Suite 2100, New York, NY 10111. We intend to disclose on our website ([www.antigenics.com](http://www.antigenics.com)) any amendments to, or waivers from, our code of business conduct and ethics that apply to those officers. The contents of our website are not part of, or incorporated into, this document.

The remainder of the response to this item is incorporated from “Executive Officers of the Registrant” found in Part I, following Item 4 and the discussion responsive thereto under the caption “Election of Directors” in our Proxy Statement relating to our 2006 Annual Meeting of Stockholders scheduled for June 14, 2006.

**Item 11. *Executive Compensation***

The response to this item is incorporated by reference into this Annual Report on Form 10-K from the discussion responsive thereto under the caption “Executive Compensation” in our Proxy Statement relating to our 2006 Annual Meeting of Stockholders scheduled for June 14, 2006.

**Item 12. *Security Ownership of Certain Beneficial Owners and Management and Related Stockholder Matters***

The response to this item is incorporated by reference into this Annual Report on Form 10-K from the discussion responsive thereto under the caption “Principal Stockholders” in our Proxy Statement relating to our 2006 Annual Meeting of Stockholders scheduled for June 14, 2006.

**Item 13. *Certain Relationships and Related Transactions***

The response to this item is incorporated by reference into this Annual Report on Form 10-K from the discussion responsive thereto under the captions “Compensation Committee Interlocks and Insider Participation” and “Certain Relationships and Related Transactions” in our Proxy Statement relating to our 2006 Annual Meeting of Stockholders scheduled for June 14, 2006.

**Item 14. *Principal Accountant Fees and Services***

The response to this item is incorporated by reference into this Annual Report on Form 10-K from the discussion responsive thereto under the caption “Information Concerning Auditors” in our Proxy Statement relating to our Annual Meeting of Stockholders scheduled for June 14, 2006.

**PART IV**

**Item 15. Exhibits, Financial Statement Schedules**

(a) 1. *Consolidated Financial Statements*

The consolidated financial statements are listed under Item 8 of this report.

2. *Consolidated Financial Statement Schedules*

The consolidated financial statement schedules required under this Item and Item 8 are omitted because they are not applicable or the required information is shown in the consolidated financial statements or the footnotes thereto.

3. *Exhibits*

The exhibits are listed below under Part IV Item 15(b).

(b) Exhibits

**Exhibit Index**

<u>Exhibit No.</u>	<u>Description</u>
3.1	Amended and Restated Certificate of Incorporation of Antigenics. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) dated June 10, 2002 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 (File No. 0-29089) dated June 10, 2002 and incorporated herein by reference.
3.3	Certificate of Designation, Preferences and Rights of the Series A Convertible Preferred Stock of Antigenics Inc. filed with the Secretary of State of the State of Delaware on September 24, 2003. Filed as Exhibit 3.1 to our Current Report on Form 8-K (File No. 0-29089) dated September 25, 2003 and incorporated herein by reference.
4.1	Form of Common Stock Certificate. Filed as Exhibit 4.1 to our registration statement on Form S-1 (File No. 333-91747) 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.
4.3	Right of First Refusal Agreements dated as of May 21, 2004 between Antigenics Inc. and Brad M. Kelly. Filed as Exhibit 4.1 to our Current Report on Form 8-K (File No. 0-29089) dated May 27, 2004 and incorporated herein by reference.
4.4	Form of Debenture. Filed as exhibit 4.1 to the Current Report on Form 8-K dated April 13, 1998 of Aquila Biopharmaceuticals, Inc. (File No. 0-12081) and incorporated herein by reference.

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<u>Exhibit No.</u>	<u>Description</u>
4.5	Form of Common Stock Purchase Warrant. Filed as Exhibit 4.2 to the Current Report on Form 8-K (File No. 0-20111) of Aronex Pharmaceuticals, Inc. dated May 25, 2000 and incorporated herein by reference.
4.6	Form of Common Stock Purchase Warrant to Paramount Capital Inc. Filed as Exhibit 4.3 to the Current Report on Form 8-K (File No. 0-20111) of Aronex Pharmaceuticals, Inc. dated May 25, 2000 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 10.1 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 10.2 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 10.3 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 10.4 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 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	Indenture, dated January 25, 2005, between the Registrant and HSBC Bank USA, National Association. Filed as Exhibit 4.1 to Current Report on Form 8-K dated January 25, 2005 and incorporated herein by reference.
4.13	Registration Rights Agreement, dated January 25, 2005, between the Registrant and the initial purchasers. Filed as Exhibit 4.2 to Current Report on Form 8-K dated January 25, 2005 and incorporated herein by reference.
10.1*	1999 Equity Incentive Plan. Filed as Exhibit 10.1 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.1.1*	Amendment No. 1 to Antigenics Inc. 1999 Equity Incentive Plan. Filed as Exhibit 4.1 to our Current Report on Form 8-K (File No. 0-29089) dated June 11, 2003 and incorporated herein by reference.
10.1.2*	Amendment No. 2 to Antigenics Inc. 1999 Equity Incentive Plan. Filed as Exhibit 4.1 to our Current Report on Form 8-K (File No. 0-29089) dated May 27, 2004 and incorporated herein by reference.

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<u>Exhibit No.</u>	<u>Description</u>
10.1.3	Form of Non-Statutory Stock Option. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) dated December 15, 2004 and incorporated herein by reference.
10.2*	1999 Employee Stock Purchase Plan. Filed as Exhibit 10.2 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.3	Founding Scientist's Agreement between Antigenics and Pramod K. Srivastava, Ph.D. dated March 28, 1995. Filed as Exhibit 10.3 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.4	Form of Indemnification Agreement between Antigenics and its directors and executive officers. These agreements are materially different only as to the signatories and the dates of execution. Filed as Exhibit 10.4 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference. Current schedule identifying the directors and executive officers filed herewith.
10.5	Sublease of Premises at 630 Fifth Avenue, New York, New York dated as of February 6, 2006 from Antigenics to Omrix Biopharmaceuticals Inc. filed herewith.
10.6(1)	Patent License Agreement between Antigenics and Mount Sinai School of Medicine dated November 1, 1994, as amended on June 5, 1995. Filed as Exhibit 10.8 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.7(1)	Sponsored Research and Technology License Agreement between Antigenics and Fordham University dated March 28, 1995, as amended on March 22, 1996. Filed as Exhibit 10.9 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.8(1)	Research Agreement between Antigenics and The University of Connecticut Health Center dated February 18, 1998. Filed as Exhibit 10.8(1) to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2004 and incorporated herein by reference.
10.9(1)	License Agreement between Antigenics and Duke University dated March 4, 1999. Filed as Exhibit 10.11 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.10(1)	License Agreement between Antigenics and University of Miami dated April 12, 1999. Filed as Exhibit 10.12 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.11*	Antigenics 401(k) Plan. Filed as Exhibit 10.17 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.12*	Antigenics L.L.C. Incentive Equity Plan. Filed as Exhibit 10.18 to our registration statement on Form S-1 (File No. 333-91747) and incorporated herein by reference.
10.13	Subscription Agreement dated May 18, 2000 between Antigenics and Applied Genomic Technology Capital Fund L.P. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2000 and incorporated herein by reference.
10.14	Assignment Agreement among RCPI Trust, GHA Management Corporation and Antigenics dated August 24, 2000. Filed as Exhibit 10.20 to our registration statement on Form S-4 (File No. 333-46168) and incorporated herein by reference.

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<u>Exhibit No.</u>	<u>Description</u>
10.15	Lease Agreement by and between Aquila Biopharmaceuticals, Inc. and NDNE 9/90 Corporate Center LLC effective September 9, 1998. Filed as Exhibit 10.2 to Amendment No. 1 to registration statement on Form S-3 of Aquila Biopharmaceuticals, Inc. (File No. 333-46641) and incorporated herein by reference.
10.16(1)	Exclusive License Agreement, dated October 15, 1986, between Aronex Pharmaceuticals, Inc., The University of Texas System Board of Regents and The University of Texas M.D. Anderson Cancer Center. Filed as Exhibit 10.8 to the registration statement on Form S-1 (File No. 333-47418) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
10.17(1)	Exclusive License Agreement, dated July 1, 1988, between Aronex Pharmaceuticals, The University of Texas System Board of Regents and The University of Texas M.D. Anderson Cancer Center, together with amendments and extensions thereto. Filed as Exhibit 10.10 to the registration statement on Form S-1 (File No. 333-47418) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
10.18(1)	Amendment No. 2 to Exclusive License Agreement, dated July 9, 1993, among Aronex Pharmaceuticals, The University of Texas System Board of Regents and The University of Texas M.D. Anderson Cancer Center. Filed as Exhibit 10.20 to the registration statement on Form S-1 (File No. 333-71166) of Aronex Pharmaceuticals, Inc. and incorporated herein by reference.
10.19(1)	License Agreement, dated December 12, 2000 between Aronex Pharmaceuticals and Sumitomo Pharmaceuticals Co., Ltd. Filed as Exhibit 10.1 to the Current Report on Form 8-K (File No. 0-20111) of Aronex Pharmaceuticals, Inc. dated December 12, 2000 and incorporated herein by reference.
10.20	Sublease Agreement between Antigenics Inc., a Massachusetts corporation (formerly Aquila Biopharmaceuticals, Inc.) and wholly owned subsidiary of Antigenics, and GTC Biotherapeutics, Inc. dated July 16, 2002. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2002 and incorporated herein by reference.
10.21	Lease of Premises at 3 Forbes Road, Lexington, Massachusetts dated as of December 6, 2002 from BHX, LLC, as Trustee of 3 Forbes Realty Trust, to Antigenics. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) dated January 8, 2003 and incorporated herein by reference.
10.21.1	First Amendment of Lease dated as of August 15, 2003 from BHX, LLC as trustee of 3 Forbes Road Realty, to Antigenics Inc. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2004 and incorporated herein by reference.
10.22	Master Security Agreement dated July 17, 2003, between General Electric Capital Corporation and Antigenics Inc. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2003 and incorporated herein by reference.
10.24*	Antigenics Inc. Directors' Deferred Compensation Plan. Filed as Exhibit 4.2 to our Current Report on Form 8-K (File No. 0-29089) dated June 11, 2003 and incorporated herein by reference.
10.25(1)	Amendment to Founding Scientist's Agreement dated January 1, 2003. Filed as Exhibit 10.29 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2002 and incorporated herein by reference.

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<u>Exhibit No.</u>	<u>Description</u>
10.26	Amendment No. 1 of Research Agreement between Antigenics and the University of Connecticut Health Center dated April 10, 2002. Filed as Exhibit 10.26 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2004 and incorporated herein by reference.
10.27(1)	Amendment No. 2 of Research Agreement between Antigenics and the University of Connecticut Health Center dated December 31, 2003. Filed as Exhibit 10.27(1) to our Annual Report on Form 10-K (file number 0-29089) for the year ended December 31, 2003 and incorporated herein by reference.
10.28	Letter agreement, Additional Costs Approved Under Research Agreement between Antigenics and the University of Connecticut Health Center dated February 10, 2005. Filed as Exhibit 10.28 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2004 and incorporated herein by reference.
10.29*	Employment Agreement Dated June 21, 2004 between Antigenics Inc. and Peter Thornton. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended June 30, 2004 and incorporated herein by reference.
10.29.1*	First Amendment to Employment Agreement Dated June 21, 2004 between Antigenics Inc. and Peter Thornton. Filed as Exhibit 10.2 to our Current Report on Form 8-K (File No. 0-29089) dated December 7, 2005 and incorporated herein by reference.
10.30*	Employment Agreement Dated July 26, 2004 between Antigenics Inc. and Roman Chicz. Filed as Exhibit 10.1 to our Quarterly Report on Form 10-Q (File No. 0-29089) for the quarter ended March 31, 2005 and incorporated herein by reference.
10.30.1*	First Amendment to Employment Agreement Dated July 26, 2004 between Antigenics Inc. and Roman Chicz. Filed as Exhibit 10.3 to our Current Report on Form 8-K (File No. 0-29089) dated December 7, 2005 and incorporated herein by reference.
10.31*	Employment Agreement Dated December 1, 2005 between Antigenics Inc. and Garo Armen. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) dated December 7, 2005 and incorporated herein by reference.
10.32*	Employment Agreement Dated November 28, 2005 between Antigenics Inc. and Bruce Leicher. Filed as Exhibit 10.1 to our Current Report on Form 8-K (File No. 0-29089) dated December 2, 2005 and incorporated herein by reference.
10.33*	Executive Change of Control Plan. Filed herewith.
10.34*	2003 Executive Incentive Plan. Filed herewith.
21	Subsidiaries of Antigenics. Filed as Exhibit 21 to our Annual Report on Form 10-K (File No. 0-29089) for the year ended December 31, 2004 and incorporated herein by reference.
23	Consent of KPMG LLP, independent registered public accounting firm. Filed herewith.
31.1	Certification of Chief Executive Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended. Filed herewith.

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<u>Exhibit No.</u>	<u>Description</u>
31.2	Certification of Chief Financial Officer pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended. Filed herewith.
32.1(2)	Certification of Chief Executive Officer and Chief Financial Officer pursuant to 18 U.S.C. Section 1350 as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002. Submitted herewith.

\* Indicates a management contract or compensatory plan.

- (1) Certain confidential material contained in the document has been omitted and filed separately with the Securities and Exchange Commission pursuant to Rule 406 of the Securities Act of 1933, as amended or Rule 24b-2 of the Securities Exchange Act of 1934, as amended.
- (2) This certification accompanies the Annual Report on Form 10-K and is not filed as part of it.



## SCHEDULE TO INDEMNIFICATION AGREEMENT

The following is a list of the current directors and executive officers of Antigenics who are party to an Indemnification Agreement, the form of which was filed as Exhibit 10.4 to our registration statement on Form S-1 (File No. 333-91747):

Garo H. Armen, Ph.D.  
Pramod K. Srivastava, Ph.D.  
Bruce Leicher  
Renu Gupta  
Noubar Afeyan, Ph.D.  
Frank V. AtLee III  
Gamil G. de Chadarevian  
Tom Dechaene  
Margaret Eisen  
Wadih Jordan  
Mark Kessel  
Alastair Wood

SUBLEASE

This SUBLEASE is made as of February 2<sup>nd</sup>, 2006, by and between Antigenics, Inc., a Delaware corporation having an address at 630 Fifth Avenue, New York, New York 10111 ("Sublessor") and Omrix Biopharmaceuticals Inc., a Delaware corporation having an address at 708 Third Avenue, New York, New York 10017 ("Sublessee").

WITNESSETH:

WHEREAS, pursuant to that Lease dated as of December 6, 1995, as amended by a First Amendment to Lease dated as of October 23, 1996, a Second Amendment to Lease dated as of February 25, 2000 and a Third Amendment to Lease dated as of March 23, 2001 by and between RCPI Trust (as successor in interest to Rockefeller Center Properties), as landlord ("Prime Lessor") and Sublessor (as successor in interest to GHA Management Corporation as assigned by GHA Management Corporation to Sublessor pursuant to that certain Assignment of Lease dated as of January 3, 2000), as tenant (such lease, as so amended, and all renewals, modifications and extensions thereof are hereinafter collectively referred to as the "Prime Lease"), a true and complete copy (less certain redacted information) of which is attached hereto as Exhibit A, whereby Sublessor leases space on floor(s) 21 and 22 located in the building known as and numbered 630 Fifth Avenue, New York, New York (the "Building") (all as more particularly described in the Prime Lease the "Premises"); and

WHEREAS, Sublessee desires to sublease a portion of the Premises from Sublessor and Sublessor is willing to sublease the same, all on the terms and conditions hereinafter set forth;

NOW, THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties covenant and agree as follows:

1. Sublease of Subleased Premises. For the rent and upon the terms and conditions herein, Sublessor hereby subleases to Sublessee, and Sublessee hereby subleases from Sublessor approximately 2,658 square feet of rentable space located on the 22nd floor as shown on Exhibit B attached hereto (the "Subleased Premises"). During the term hereof, Sublessee shall have access to the Subleased Premises twenty-four (24) hours a day, 7 days a week, subject to the terms of this Sublease. Sublessor also grants Sublessee the right to use, without additional charge during the term of this Sublease, those items of personal property located in the Subleased Premises on the date hereof (the "Furniture"), together with the existing network wiring/equipment (including handsets), voicemail systems, internet access, security system (including door cards) (the "Systems") and fixtures in the Subleased Premises as of the Commencement Date. Sublessor hereby represents and warrants that the Systems are in good working order. Sublessor agrees to maintain the Systems in working order during the Term of the Sublease. Sublessor will provide Sublessee with the direct contact information of a technician or equivalent person who is available during regular business hours to service the Systems and a contact for after-hours Systems services. Sublessee's sole remedy in

the event of a violation of such representation and warranty is for Sublessee to receive from Sublessor the same level of service to Sublessee as Sublessor provides itself. Notwithstanding the foregoing, Sublessee shall in no event be responsible for maintaining or repairing the Systems. Other than as set forth herein, Sublessee accepts possession of the Furniture, the Systems and fixtures "as is, where is" and in their current condition, Sublessor having made no representation or warranty of any kind, express or implied (including, but not limited to, any warranty of fitness for any particular use or purpose or security with respect to the voicemail or internet access connections) with respect to any of the same. Sublessor shall provide Sublessee with open connections for internet service and computer connections and the use of the existing security system and telephone system in the Subleased Premises. Sublessee acknowledges and agrees that it is responsible for securing the telephone and internet connections and for the security of the Subleased Premises and any persons therein or thereon. For the avoidance of doubt it is clarified that Sublessee emails and internet activity will not be recorded or otherwise accessible by Sublessor. Sublessee releases and indemnifies Sublessor and its directors, officers, agents and employees from any liability with respect to the use/security of the telephone and internet connections and the security of the Subleased Premises and any persons therein or thereon. Sublessor agrees to allow Sublessee to use, without additional charge, Sublessor's receptionist services on the 21st floor of the Building. Upon the date on which this Sublease has been fully executed by Sublessor and Sublessee and the Prime Lessor has delivered the "Consent" as hereinafter defined, Sublessee shall have the right to enter the Subleased Premises for the purposes of inspecting the Subleased Premises, taking measurements and preparing for the move into the Subleased Premises. Sublessor shall have the right to have a representative present any time such early entry right is exercised. If Sublessee enters the Subleased Premises prior to the Commencement Date, Sublessee shall be responsible for complying with all of the terms of this Sublease and the Prime Lease to the extent incorporated herein by reference, other than the payment of Rent.

2. Term. The Term of this Sublease shall commence upon the later of: (i) February 15, 2006 and (ii) the date on which this Sublease has been fully executed by Sublessor and Sublessee and the Prime Lessor has delivered the "Consent" as hereinafter defined and (iii) the date the "Rent" as hereinafter defined, is received by Sublessor (the "Commencement Date"), and shall expire at 11:59 p.m. on December 27, 2006 (the "Expiration Date") or such earlier date upon which said term may expire, be canceled or be terminated pursuant to any of the terms or provisions of the Prime Lease, this Sublease or applicable law. Following the Commencement Date, Sublessor will prepare and execute a written confirmation indicating the exact date of the Commencement Date. In the event that the "Consent" is not delivered to the Sublessor by March 1<sup>st</sup>, 2006 this agreement may be terminated by either party with no liability to the Sublease or the Sublessor.

3. Appurtenant Rights. Sublessee shall have, as appurtenant to the Subleased Premises, rights to use in common with Sublessor and others entitled thereto Sublessor's rights in driveways, walkways, hallways, stairways and passenger elevators convenient for access to the Subleased Premises and the lavatories nearest thereto as shown on **Exhibit B** attached hereto.

4. Rent. Upon receipt of Prime Lessor's consent to the Sublease, and prior to Sublessee taking possession of the Subleased Premises, provided that Prime Lessor's consent will be received by Sublessor by February 15<sup>th</sup>, 2006, Sublessee shall pay to Sublessor \$160,363.64 as rent (the "Rent") for this Sublease. In the event that Prime Lessor's consent is received after Feb 15<sup>th</sup> 2006, the Rent will be reduced by \$763.64 per business day from February 15<sup>th</sup> 2006 until the Prime Lessor's consent is received by Sublessor. Sublessor shall forward such Rent to the Prime Lessor together with any additional rental amounts owed solely by Sublessor for the Subleased Premises under the Prime Lease. Sublessor shall provide Sublessee with a copy of the monthly statement from Prime Lessor in respect of the Subleased Premises. Such statement shall confirm receipt of such payment in respect of the Subleased Premises. Rent is intended to be gross rent and includes taxes, operating expenses, ordinary cleaning services, utilities, and heating and air conditioning (during normal business hours as set forth in the Prime Lease) due under the Prime Lease. At all other times, Sublessee may request of Sublessor, and Sublessor shall request of Prime Lessor, that Sublessee be furnished heat, ventilation and air conditioning to the Subleased Premises. Sublessee shall pay any charges that Prime Lessor charges to Sublessor in connection with such service but Sublessor will not charge any mark-up or fee above any amounts charged by Prime Lessor pursuant to the Prime Lease for the foregoing after-hours services.

5. (Intentionally omitted)

6. Permitted Uses. Sublessee shall use the Subleased Premises only for general office uses and the uses permitted under the Prime Lease. Sublessee shall not do, suffer or permit anything to be done in or upon the Subleased Premises except in accordance with and as permitted by the Prime Lease and applicable law. Sublessee shall comply with the certificate of occupancy relating to the Subleased Premises and with all laws, statutes, ordinances, orders, rules, regulations and requirements of all federal, state and municipal governments and the appropriate agencies, officers, departments, boards and commissions thereof, and the board of fire underwriters and/or the fire insurance rating organization or similar organization performing the same or similar functions, whether now or hereafter in force, applicable to the Subleased Premises.

7. Condition of Subleased Premises. Sublessee represents that it has made or caused to be made a thorough examination and inspection of the Subleased Premises and is familiar with the condition of every part thereof. Sublessee agrees that, except as expressly provided herein, (i) it enters into this Sublease without relying upon any representations, warranties or promises by Sublessor, its agents, representatives, employees, servants or any other person in respect of the Building or the Subleased Premises, (ii) no rights, easements or licenses are acquired by Sublessee by implication or otherwise except as expressly set forth herein, (iii) Sublessor shall have no obligation to do any work in order to make the Subleased Premises suitable and ready for occupancy and use by Sublessee and (iv) the Subleased Premises are in satisfactory condition.

Sublessee shall make no alterations, installations, removals, additions or improvements in or to the Subleased Premises or any other portion of the Building.

Sublessee shall keep and maintain the Subleased Premises, the Furniture, the Systems and the fixtures and equipment therein clean and in good order, repair and condition, except for reasonable wear and tear and damage by fire or other casualty or condemnation.

Sublessee acknowledges and agrees that Sublessor shall have the right to repair and restore the direct access between the 21<sup>st</sup> and 22<sup>nd</sup> floors of the Premises upon reasonable notice to the Sublessee and at commercially reasonable times following the Commencement Date.

8. **Insurance.** Sublessee shall maintain throughout the term of this Sublease such insurance in respect of the Subleased Premises and the conduct and operation of business therein, with Sublessor and Prime Lessor listed as additional insureds as is required of "Tenant" pursuant to the terms of the Prime Lease (including, without limitation, Section 6.1(k) as hereinafter incorporated by reference) with no penalty to Sublessor or Prime Lessor resulting from deductibles or self-insured retentions effected in Sublessee's insurance coverage, and with such other endorsements and provisions as Sublessor or Prime Lessor may reasonably request. If Sublessee fails to procure or maintain such insurance and to pay all premiums and charges therefor within ten (10) days after notice from Sublessor, Sublessor may (but shall not be obligated to) do so, whereupon Sublessee shall reimburse Sublessor upon demand. All such insurance policies shall, to the extent obtainable, contain endorsements providing that (i) such policies may not be canceled except upon thirty (30) days' prior notice to Sublessor and Prime Lessor, (ii) no act or omission of Sublessee shall affect or limit the obligations of the insurer with respect to any other named or additional insured and (iii) Sublessee shall be solely responsible for the payment of all premiums under such policies and Sublessor, notwithstanding that it is or may be a named insured, shall have no obligation for the payment thereof. Such insurance shall otherwise be reasonably acceptable to Sublessor in both form and substance. On or before the Commencement Date, Sublessee shall deliver to Sublessor and Prime Lessor a certificate evidencing the foregoing coverages. Any endorsements to such certificates shall also be delivered to Sublessor and Prime Lessor upon issuance thereof. Sublessee shall procure and pay for renewals of such insurance from time to time before the expiration thereof, and Sublessee shall deliver to Sublessor and Prime Lessor such renewal certificates at least thirty (30) days before the expiration of any existing policy. In the event Sublessee fails so to deliver any such renewal certificate at least thirty (30) days before the expiration of any existing policy, Sublessor shall have the right, but not the obligation, to obtain the same if Sublessee does not provide evidence of the same within fifteen (15) days of request by Sublessor, where upon Sublessee shall reimburse Sublessor upon demand. Notwithstanding anything to the contrary contained herein, Sublessee shall be permitted to maintain insurance with respect to the Subleased Premises pursuant to an umbrella insurance policy, provided that such umbrella insurance policy meets the insurance requirements of the Prime Lease.

Sublessee shall include in all such insurance policies any clauses or endorsements in favor of Prime Lessor including, but not limited to, waivers of the right of subrogation, which Sublessor is required to provide pursuant to the provisions of the Prime Lease. Sublessee releases and waives all claims against Sublessor for loss or damage to Sublessee's personal property and its alterations in the Subleased Premises, except to the extent arising from any negligence or willful misconduct of Sublessor or any of Sublessor's employees, agents contractors or invitees.

9. Indemnification. Sublessee agrees to protect, defend (with counsel reasonably approved by Sublessor), indemnify and hold Sublessor and Prime Lessor and their respective directors, officers, agents and employees harmless from and against any and all liability, claims, suits, demands, judgments, costs, losses, interest and expenses (except to the extent arising from any negligence or willful misconduct of Prime Lessor or Sublessor or their contractors, invitees, agents or employees), arising: (i) from the conduct or management of or from any work or thing whatsoever done in the Subleased Premises during the term hereof; (ii) from any condition arising, and any injury to or death of persons, damage to property or other event occurring or resulting from an occurrence in the Subleased Premises during the term hereof; and (iii) from any breach or default on the part of Sublessee in the performance of any covenant or agreement on the part of Sublessee to be performed pursuant to the terms of this Sublease or from any willful misconduct or negligence on the part of Sublessee or any of its agents, employees, licensees, invitees or assignees or any person claiming through or under Sublessee. Sublessee further agrees to indemnify Sublessor and Prime Lessor and their respective officers, agents and employees from and against any and all liability, claims, suits, demands, judgments, costs, losses, interest and expenses (including, without being limited to, reasonable attorneys' fees and expenses), incurred in connection with any such indemnified claim or any action or proceeding brought in connection therewith. The provisions of this Paragraph are intended to supplement any other indemnification provisions contained in this Sublease and in the Prime Lease to the extent incorporated by reference herein. Any non-liability, indemnity or hold harmless provisions in the Prime Lease for the benefit of Prime Lessor that are incorporated herein by reference shall be deemed to inure to the benefit of Sublessor and Prime Lessor. The indemnity shall survive the expiration or earlier termination of this Sublease.

10. No Assignment or Subletting. Sublessee shall not assign, sell, mortgage, pledge or in any manner transfer this Sublease or any interest herein, or the term or estate granted hereby or the rentals hereunder, or sublet the Subleased Premises or any part thereof, or grant any concession or license or otherwise permit occupancy of all or any part of the Subleased Premises by any person, without the prior written consent of Sublessor and Prime Lessor. Neither the consent of Sublessor or Prime Lessor to an assignment, subletting, concession, or license, nor the references in this Sublease to assignees, subtenants, concessionaires or licensees, shall in any way be construed to relieve Sublessee of the requirement of obtaining the consent of Sublessor and Prime Lessor to any further assignment or subletting or to the making of any assignment, subletting, concession or license for all or any part of the Subleased Premises. Notwithstanding any assignment or subletting, including, without limitation, any assignment or subletting permitted or consented to, the original Sublessee named herein

and any other person(s) who at any time was or were Sublessee shall remain fully liable under this Sublease. If this Sublease is assigned, or if the Subleased Premises or any part thereof is underlet or occupied by any person or entity other than Sublessee, Sublessor may, after default by Sublessee, following notice and the expiration of any cure period, collect rent from the assignee, undertenant or occupant, and apply the net amount collected to the rents payable by Sublessee hereunder, but no assignment, underletting, occupancy or collection shall be deemed a waiver of the provisions hereof, the acceptance of the assignee, undertenant or occupant as tenant, or a release of Sublessee from the further performance by Sublessee of the covenants hereunder to be performed on the part of Sublessee. Any attempted assignment or subletting without the prior written consent of the Sublessor and the Prime Lessor shall be void.

11. Primacy and Incorporation of Prime Lease.

(a) This Sublease is and shall be subject and subordinate to the Prime Lease and to all matters to which the Prime Lease is or shall be subject and subordinate, and to all amendments, modifications, renewals and extensions of or to the Prime Lease and Sublessor purports hereby to convey, and Sublessee takes hereby, no greater rights than those accorded to or taken by Sublessor as "Tenant" under the terms of the Prime Lease. To the extent incorporated herein, Sublessee covenants and agrees that it will perform and observe all of the provisions contained in the Prime Lease to be performed and observed by the "Tenant" thereunder as applicable to the Premises, other than the payment of rent. Notwithstanding the foregoing, Sublessee shall have no obligation to (i) cure any default of Sublessor under the Prime Lease unless directly and actually caused by Sublessee's default under this Sublease, (ii) perform any obligation of Sublessor under the Prime Lease which arose prior to the Commencement Date and Sublessor failed to perform, (iii) repair any damage to the Premises caused by Sublessor, (iv) remove any alterations or additions installed within the Premises prior to the Commencement Date, (v) indemnify Sublessor or Prime Lessor with respect to any negligence or willful misconduct of Sublessor, its agents, employees or contractors, or (vi) discharge any liens on the Premises or the Building which arise out of any work performed, or claimed to be performed, by or at the direction of Sublessor. Except to the extent inconsistent with the context hereof, capitalized terms used and not otherwise defined herein shall have the meanings ascribed to them in the Prime Lease. Further, except as set forth below, the terms, covenants and conditions of the following specified provisions of the Prime Lease are incorporated herein by reference as if such terms, covenants and conditions were stated herein to be the terms, covenants and conditions of this Sublease, so that except to the extent that they are inconsistent with or modified by the provisions of this Sublease, for the purpose of incorporation by reference each and every referenced term, covenant and condition of the Prime Lease binding upon or inuring to the benefit of the "Landlord" thereunder shall, in respect of this Sublease and the Subleased Premises, be binding upon or inure to the benefit of Sublessor, and each and every referenced term, covenant and condition of the Prime Lease binding upon or inuring to the benefit of the "Tenant" thereunder shall, in respect of this Sublease, be binding upon or inure to the benefit of Sublessee, with the same force and effect as if such terms, covenants and conditions were completely set forth in this Sublease: Articles/Sections: 1.3, 1.6 (excluding the last sentence), 1.7 (wherever "Tenant" is

referenced replace with “Sublessor”), 3, 4, 6, 8, 11, 12, 14, 15, 16, 17, 18, 19, 21, 23, 25 (excluding 25.7 and 25.13), 29, 30 (excluding 30.5), and Exhibit A; Paragraph 3 of the First Amendment to Lease; Paragraph 3 and Exhibit B of the Second Amendment to Lease; and the second grammatical paragraph of Paragraph 3(a), Paragraph 3(b) and Exhibit A of the Third Amendment to Lease. Notwithstanding the foregoing, for purposes of this Sublease, as to such incorporated terms, covenants and conditions:

- (i) references in the Prime Lease to the “Premises” shall be deemed to refer to the “Subleased Premises” hereunder;
- (ii) references in the Prime Lease to “Landlord” and to “Tenant” shall be deemed to refer to “Sublessor” and “Sublessee” hereunder, respectively, except that where the terms “Landlord” is used in the context of ownership or management of the entire Building, such term shall be deemed to mean “Prime Lessor”;
- (iii) references in the Prime Lease to “this Lease” shall be deemed to refer to “this Sublease” (except when such reference in the Prime Lease is, by its terms (unless modified by this Sublease), a reference to any other section of the Prime Lease, in which event such reference shall be deemed to refer to the particular section of the Prime Lease);
- (iv) references in the Prime Lease to the “term commencement date” shall be deemed to refer to the “Commencement Date” hereunder;
- (v) references in the Prime Lease to the “fixed rent”, “additional rent” and “Rent” shall be deemed to refer to the “Rent” as defined hereunder
- (vi) references in the Prime Lease to the “term” shall be deemed to refer to the “Term” of this Sublease.

Notwithstanding the foregoing, the following provisions of the Prime Lease, Exhibits and Schedules annexed thereto are not incorporated herein by reference and shall not, except as to definitions set forth therein, have any applicability to this Sublease: Articles/Sections: 1.1, 1.2, 1.4, 1.5, the last sentence of 1.6, 2, 5, 7, 9, 10, 13, 20, 22, 24, 25.7, 25.13, 26, 27, 28, 30.5, 31, 32; the First Amendment to Lease (excluding Paragraph 3); the Second Amendment to Lease (excluding Paragraph 3 and Exhibit B); and the Third Amendment to Lease (excluding the second grammatical paragraph of Paragraph 3(a), Paragraph 3(b) and Exhibit A).

Where reference is made in the following Sections to “Landlord”, the same shall be deemed to refer only to “Prime Lessor”: Articles/Sections: 5, 8.2, 9, 10, 12 and 20.

Where reference is made in the following Sections to “Landlord”, the same shall be deemed to refer to “Prime Lessor” and “Sublessor”: Articles/Sections: 6.1(b), 6.1(c), 6.1(e), 6.1(g), 6.1(j), 8.1, 19, 23 and 25.2.

(b) Notwithstanding such incorporation by reference, Sublessee acknowledges that pursuant to the Prime Lease, certain services, repairs, restorations, equipment and access to and for the Premises and insurance coverage of the Building are in fact to be provided by Prime Lessor and Sublessor shall have no obligation during the Term of this Sublease to provide any such services, repairs, restorations, equipment, access or insurance coverage. Sublessee agrees to look solely to Prime Lessor for the furnishing of such services, repairs, restorations, equipment, access and insurance coverage. Sublessor shall cooperate reasonably with Sublessee in obtaining for Sublessee’s benefit the performance by Prime Lessor of its obligations under the Prime Lease, but Sublessor shall in no event be liable to Sublessee, nor, except as otherwise expressly set forth in the casualty or condemnation provisions of the Prime Lease, shall the obligations of Sublessee hereunder be impaired or the performance thereof excused because of any failure or delay on Prime Lessor’s part in furnishing such services, repairs, restorations, equipment, access or insurance coverage.

(c) Notwithstanding anything to the contrary contained in the Prime Lease, the time limits (the “Notice Periods”) contained in the Prime Lease for the giving of notices, making of demands or performing of any act, condition or covenant on the part of the “Tenant” (including any grace periods set forth in Article 15 of the Prime Lease), thereunder, or for the exercise by the “Tenant”, thereunder of any right, remedy or option, are changed for the purposes of incorporation herein by reference by shortening the same in each instance by five (5) days (or by three (3) days if the notice period is ten (10) days or less), so that in each instance Sublessee shall have five (5) (or three (3), as applicable) fewer days to observe or perform hereunder than Sublessor has as the “Tenant” under the Prime Lease; provided, however, that if the Prime Lease allows a Notice Period of five (5) days or less, then Sublessee shall nevertheless be allowed the number of days equal to one-half of the number of days in each Notice Period to give any such notices, make any such demands, perform any such acts, conditions or covenants or exercise any such rights, remedies or options; provided, further, that if one-half of the number of days in the Notice Period is not a whole number, Sublessee shall be allowed the number of days equal to one-half of the number of days in the Notice Period rounded up to the next whole number.

(d) Notwithstanding anything to the contrary contained in this Sublease (including, without limitation, the provisions of the Prime Lease incorporated herein by reference), Sublessor makes no representations or warranties whatsoever with respect to the Subleased Premises, this Sublease, the Prime Lease or any other matter, either express or implied, except as expressly set forth herein, and except that Sublessor represents and warrants, as of the date of execution hereof, (i) that it is the holder of the interest of the “Tenant” under the Prime Lease and said interest is not the subject of any

lien, assignment, conflicting sublease, or other hypothecation or pledge; (ii) that the Prime Lease is in full force and effect, unmodified and constitutes the entire agreement between the Prime Lessor and Sublessor in respect of the Subleased Premises; (iii) that no notices of default have been served on Sublessor under the Prime Lease which have not been cured; and (iv) to the best of Sublessor's knowledge, neither Sublessor nor Prime Lessor is in default under the Prime Lease.

12. Certain Services and Rights. Except to the extent otherwise expressly provided herein, the only services or rights to which the Sublessee is entitled hereunder, including without limitation rights relating to the repair, maintenance and restoration of the Subleased Premises, are those services and rights to which Sublessor is entitled under the Prime Lease. Sublessee acknowledges and agrees that Sublessor shall have no obligation to furnish any services whatsoever to Sublessee, any such obligation being that of the Prime Lessor under the Prime Lease, and that, as set forth in Paragraph 11(b) hereof, the sole obligation of Sublessor hereunder with respect to such services is to cooperate reasonably with Sublessee to obtain Prime Lessor's performance.

13. Compliance with Prime Lease. Sublessee acknowledges that it has been furnished with a copy of and has reviewed the Prime Lease. Sublessee shall neither do nor knowingly permit anything to be done which would cause the Prime Lease to be terminated or forfeited by reason of any right of termination or forfeiture reserved or vested in Prime Lessor under the Prime Lease, and Sublessee shall defend, indemnify and hold Sublessor harmless from and against any and all liability, claims, suits, demands, judgments, costs, losses, interest and expenses (including, without being limited to, reasonable attorneys' fees and expenses) of any kind whatsoever by reason of any breach or default on the part of Sublessee by reason of which the Prime Lease may be terminated or forfeited. Sublessee covenants and agrees that Sublessee will not do anything which would constitute a default under the provisions of the Prime Lease or omit to do anything which Sublessee is obligated to do under the terms of this Sublease, that would constitute a default under the Prime Lease.

14. Default. In the event that Sublessee shall default in any of its obligations hereunder beyond applicable cure periods, including any default of the nature described in the Prime Lease beyond applicable cure periods, Sublessor shall have available to it all of the rights and remedies available to Prime Lessor under the Prime Lease, including without limitation Article 15 thereof as and to the extent incorporated herein by reference, as though Sublessor were the "Landlord" thereunder and Sublessee the "Tenant" thereunder. Sublessee further agrees to reimburse Sublessor for all costs and expenses, including reasonable attorneys' fees, incurred by Sublessor in asserting or enforcing its rights hereunder against Sublessee or any other party.

15. Brokerage. Sublessee and Sublessor represent that they have not dealt with any broker in connection with this Sublease. Each party agrees to indemnify and hold harmless the other from and against any and liability, claims, suits, demands, judgments, costs, losses, interest and expenses (including, without being limited to, reasonable attorneys' fees and expenses) which the indemnified party may be subject to or suffer by reason of any claim made by any person, firm or corporation for any

commission, expense or other compensation as a result of the execution and delivery of this Sublease, which is based on alleged conversations or negotiations by said person, firm or corporation with the indemnifying party.

16. (Intentionally omitted)

17. Notices. All notices, consents, approvals, demands, bills, statements and requests which are required or desired to be given by either party to the other hereunder shall be in writing and shall be governed by Article 14 of the Prime Lease as incorporated herein by reference, except that the mailing addresses for Sublessor and Sublessee shall initially be those first set forth above, and after the Commencement Date, to Sublessee at the Subleased Premises, with a copy of all default and termination notices to Skadden, Arps, Slate, Meagher & Flom LLP, 4 Times Square, New York, New York 10036, Attention: Marco Caffuzzi. Sublessee shall mail a copy of all notices to Sublessor at 3 Forbes Road, Lexington, MA 02421, attention: general counsel. Communications and payments to the Prime Lessor shall be given in accordance with, and subject to, Article 14 of the Prime Lease.

18. Interpretation. This Sublease shall be construed without regard to any presumption or other rule requiring construction against the party causing this Sublease to be drafted. Each covenant, agreement, obligation or other provision of this Sublease shall be deemed and construed as a separate and independent covenant of the party bound by, undertaking or making the same, which covenant, agreement, obligation or other provision shall be construed and interpreted in the context of the Sublease as a whole. All terms and words used in this Sublease, regardless of the number or gender in which they are used, shall be deemed to include any other number and any other gender as the context may require. The word "person" as used in this Sublease shall mean a natural person or persons, a partnership, a corporation or any other form of business or legal association or entity. Terms used herein and not defined shall have the meaning set forth in the Prime Lease.

19. Fire or Casualty; Eminent Domain. In the event the Subleased Premises (or access thereto or systems serving the same) are subjected to a fire or other casualty or to a taking by eminent domain that interferes with the use and enjoyment by Sublessee of a material portion of the Subleased Premises, Sublessee shall be entitled to an equitable adjustment of Rent until tenantable occupancy is restored. At any time that such interference has not been remedied and tenantable occupancy restored after ninety (90) days from the date such interference was first experienced, Sublessee may, by notice to Sublessor, terminate this Sublease. In the event of any taking of the Subleased Premises, Sublessee assigns to Prime Lessor any right Sublessee may have to any damages or award. Sublessee shall not make claims against Sublessor, Prime Lessor or the condemning authority for damages.

20. Signage. Subject to the consent of Prime Lessor as required under the Prime Lease, if any, Sublessee has the right, at its sole cost and expense, to install signage consistent with Sublessor's signage and that of any other subtenants on the Building lobby directory and on the entrance to the Subleased Premises.

21. Right to Cure Sublessee's Defaults. If Sublessee shall at any time fail to make any payment or perform any other obligation of Sublessee hereunder, then Sublessor shall have the right, but not the obligation, after notice to Sublessee, or without notice to Sublessee in the case of any emergency, and without waiving or releasing Sublessee from any obligations of Sublessee hereunder, to make such payment or perform such other obligation of Sublessee in such manner and to such extent as Sublessor shall deem necessary, and in exercising any such right, to pay any incidental costs and expenses, employ attorneys, and incur and pay reasonable attorneys' fees. Sublessee shall pay to Sublessor upon demand as additional rent all sums so paid by Sublessor and all incidental costs and expenses of Sublessor in connection therewith, together with interest thereon at an annual rate equal to the rate two percent (2%) above the base rate or prime rate then announced as such by the *Wall Street Journal*, or the maximum rate permitted by law. Such interest shall be payable with respect to the period commencing on the date such expenditures are made by Sublessor and ending on the date such amounts are repaid by Sublessee. The provisions of this Paragraph shall survive the Expiration Date or the sooner termination of this Sublease.

22. Termination of Prime Lease. If for any reason the term of the Prime Lease shall terminate prior to the Expiration Date, this Sublease shall thereupon automatically terminate as to the premises demised under the Prime Lease and Sublessor shall not be liable to Sublessee by reason thereof; provided, however, that Sublessor agrees that so long as Sublessee is not in default hereunder, Sublessor shall not voluntarily surrender the Prime Lease, except in accordance with rights expressly reserved to Sublessor as "Tenant" under the Prime Lease, including, without limitation, such rights as are available under Articles 9 and 10 of the Prime Lease in the event of a taking or casualty. Notwithstanding the foregoing, if the Prime Lease gives Sublessor any right to terminate the Prime Lease in the event of the partial or total damage, destruction, or condemnation of the Subleased Premises or the Building, the exercise of such right by Sublessor shall not constitute a default or breach hereunder. Nothing herein shall prevent an assignment of the Prime Lease or the subleasing of additional space covered by the Prime Lease to any third parties and in no event shall Sublessor have any liability to Sublessee for any defaults or termination of the Prime Lease by such other subtenants or defaults under such other subleases.

Upon the expiration or termination of this Sublease, whether by forfeiture, lapse of time or otherwise, or upon the termination of Sublessee's right of possession, Sublessee shall (i) remove and restore any and all signage it may have installed and such alterations, installations, additions and improvements as Sublessor may have specified at the time Sublessor consented to the same and (ii) at once surrender and deliver the Subleased Premises, the Furniture and the Systems in the condition and repair required by, and in accordance with the provisions of, this Sublease and the Prime Lease, including without limitation Section 6.1(h) of the Prime Lease as incorporated herein by reference, including the Furniture and the Systems which shall be in the same condition as at the date hereof, reasonable wear and tear excepted. If Sublessee shall fail to remove any of Sublessee's property from the Subleased Premises, such property shall be deemed abandoned, and Sublessor is hereby authorized, without liability to Sublessee for loss or damage thereto, at the sole risk of Sublessee, to (a) remove and store such property at

Sublessee's expense; (b) retain such property, in which case all right, title and interest therein shall accrue to Sublessor; or, (c) sell such property and retain the proceeds from such sale, or otherwise dispose or destroy such property.

23. Consents and Approvals. All references in this Sublease to the consent or approval of Prime Lessor and/or Sublessor shall be deemed to mean the written consent or approval of Prime Lessor and/or Sublessor, as the case may be, and no such consent or approval of Prime Lessor and/or Sublessor, as the case may be, shall be effective for any purpose unless such consent or approval is set forth in a written instrument executed by Prime Lessor and/or Sublessor, as the case may be. In all provisions requiring the approval or consent of Sublessor (whether pursuant to the express terms of this Sublease or the terms of the Prime Lease incorporated herein), Sublessee shall be required to obtain the approval or consent of Prime Lessor and then to obtain like approval or consent of Sublessor. If Sublessor is required or has determined to give its consent or approval to a matter as to which consent or approval has been requested by Sublessee, Sublessor shall cooperate reasonably with Sublessee in endeavoring to obtain any required Prime Lessor's consent or approval upon and subject to the following terms and conditions: (i) Sublessee shall reimburse Sublessor for any reasonable out-of-pocket costs incurred by Sublessor in connection with seeking such consent or approval, (ii) Sublessor shall not be required to make any payments to Prime Lessor or to enter into any agreements or to modify the Prime Lease, or this Sublease in order to obtain any such consent or approval, (iii) if Sublessee agrees or is otherwise obligated to make any payments to Sublessor, or Prime Lessor in connection with such request for such consent or approval, Sublessee shall have made arrangements satisfactory to Sublessor for such payments and (iv) Sublessee shall indemnify and hold Sublessor harmless from and against all liability, claims, suits, demands, judgments, costs, losses, interest and expenses (including, without being limited to, reasonable attorneys' fees and expenses) Sublessor shall suffer or incur in connection with seeking such consent or approval. Nothing contained in this Article shall be deemed to require Sublessor to give any consent or approval simply because Prime Lessor has given such consent or approval and, unless provision to the contrary is expressly made herein, Sublessor's consent may be withheld at its sole election. Notwithstanding anything to the contrary contained in this Sublease, Sublessee shall not be required to reimburse Sublessor or Prime Lessor for any costs incurred by either of them in connection with seeking the Consent.

24. No Privity of Estate. Nothing contained in this Sublease shall be construed to create privity of estate or of contract between Sublessee and Prime Lessor and Prime Lessor is not obligated to recognize or to provide for the non-disturbance of the rights of Sublessee hereunder.

25. No Waiver. The failure of Sublessor to insist in any one or more cases upon the strict performance or observance of any obligation of Sublessee hereunder or to exercise any right or option contained herein shall not be construed as a waiver or relinquishment for the future of any such obligation of Sublessee or any right or option of Sublessor. Sublessor's receipt and acceptance of Rent or Sublessor's acceptance of performance of any other obligation by Sublessee, with knowledge of Sublessee's

breach of any provision of this Sublease, shall not be deemed a waiver of such breach. No waiver by Sublessor of any term, covenant or condition of this Sublease shall be deemed to have been made unless expressed in writing and signed by Sublessor.

26. Complete Agreement. This Sublease constitutes the entire agreement between the parties and there are no representations, agreements, arrangements or understandings, oral or written, between the parties relating to the subject matter of this Sublease which are not fully expressed in this Sublease. This Sublease cannot be changed or terminated orally or in any manner other than by a written agreement executed by both parties. This Sublease shall not be binding upon either party unless and until it is signed and delivered by and to both parties. This Sublease may be executed in several counterparts, each of which shall be deemed an original, and all of such counterparts together shall constitute one and the same instrument.

27. Successors and Assigns. The provisions of this Sublease, except as herein otherwise specifically provided, shall extend to bind and inure to the benefit of the parties hereto and their respective personal representatives, heirs, successors and permitted assigns.

28. Waiver of Jury Trial and Right to Counterclaim. The parties hereto hereby waive any rights which they may have to trial by jury in any summary action or other action, proceeding or counterclaim arising out of or in any way connected with this Sublease, the relationship of Sublessor and Sublessee, the Subleased Premises and the use and occupancy thereof, and any claim for injury or damages. Sublessee also hereby waives all right to assert or interpose a counterclaim in any summary proceeding or other action or proceeding to recover or obtain possession of the Subleased Premises. The parties hereto hereby waive any rights which they may have to trial by jury in any summary action or other action, proceeding or counterclaim arising out of or in any way connected with this Sublease, the relationship of Sublessor and Sublessee, the Subleased Premises and the use and occupancy thereof, and any claim for injury or damages. Sublessee also hereby waives all right to assert or interpose a counterclaim (other than mandatory or compulsory counterclaims) in any summary proceeding or other action or proceeding to recover or obtain possession of the Subleased Premises.

29. Estoppel Certificates. Sublessee shall, within ten (10) days after each and every request by Sublessor (but in no event shall Sublessor make such request more than once per month), execute, acknowledge and deliver to Sublessor or any party reasonably designated by Sublessor, without cost or expense to Sublessor, a statement in writing (a) certifying that this Sublease is unmodified and, to the best knowledge of Sublessee, is in full force and effect (or if there have been modifications, that the same is in full force and effect as modified, and stating such modifications); (b) specifying the dates to which Rent has been paid; (c) stating whether or not, to the best knowledge of Sublessee, Sublessor is in default in the performance or observance of its obligations under this Sublease and, if so, specifying each such default; (d) stating whether or not, to the best knowledge of Sublessee, any event has occurred which, with the giving of notice or passage of time, or both, would constitute a default by Sublessor under this Sublease, and, if so, specifying each such default; (e) stating whether or not, to the best

knowledge of Sublessee, any event has occurred which, with the giving of notice or passage of time, or both, would constitute a default by Prime Lessor under the Prime Lease with respect to the Subleased Premises, and, if so, specifying such event; (f) describing all notices of default submitted by Sublessee to Sublessor and Prime Lessor with respect to this Sublease, or the Prime Lease from and after the date hereof; and (g) containing such other information with respect to the Subleased Premises or this Sublease as Sublessor shall reasonably request. Sublessee hereby acknowledges and agrees that any such statement delivered pursuant to this Paragraph may be relied upon by any prospective assignee, transferee or mortgagee of the leasehold estate of Sublessor under the Prime Lease. Notwithstanding the foregoing, Sublessee acknowledges and agrees to deliver the aforementioned statement whenever requested by Prime Lessor.

30. Consent of Prime Lessor. This Sublease is subject to the approval and consent of Prime Lessor, which Sublessor agrees to use diligent efforts to obtain. This Sublease shall not become effective unless and until a written approval and consent (the "Consent") is executed and delivered by the Prime Lessor, which Consent shall consent to this Sublease. After the Sublessor receives the Consent from the Prime Lessor, Sublessor agrees to promptly deliver a fully-executed original of the Consent to Sublessee. The effectiveness of this Sublease is subject to and conditional upon the receipt by Sublessor and Sublessee of the Consent. To the extent that Sublessor has not already done so, upon execution of this Sublease by Sublessee, Sublessor will promptly apply to the Prime Lessor for the Consent and Sublessor will promptly inform Sublessee as to receipt of the Consent (if and when it is received) and deliver to Sublessee a copy of the same.

31. Limitation of Liability. No director, officer, shareholder, employee, adviser or agent of Sublessor shall be personally liable in any manner or to any extent under or in connection with this Sublease. In no event shall Sublessor or any of its directors, officers, shareholders, employees, advisers or agents be responsible for any consequential, indirect or special damages or interruption or loss of business, income or profits, or claims for constructive eviction, nor shall Sublessor be liable for loss of or damage to artwork, securities or other valuables, or for other property not in the nature of ordinary fixtures, furnishings and equipment used in general administrative office activities.

32. Holdover. If Sublessee shall fail to surrender and deliver the Subleased Premises as and when required hereunder, Sublessee shall become a tenant at sufferance only, subject to all of the terms, covenants and conditions herein specified, including but not limited to the hold-over rental set forth in the Prime Lease. Sublessee agrees to protect, defend (with counsel reasonably approved by Sublessor), indemnify and hold harmless Sublessor and its officers, directors, agents and employees from and against any and all liability, claims, suits, demands, judgments, costs, losses, interest and expenses (including, without being limited to, reasonable attorneys' fees and expenses) that Sublessor may suffer by reason of any holdover by Sublessee hereunder. The terms and provisions of this Paragraph 32 shall survive the expiration or earlier termination of this Sublease.

33. Recording. Sublessor and Sublessee agree that neither party may record this Sublease.

34. Attorney's Fees. If either Sublessor or Sublessee shall bring any action or legal proceeding for an alleged breach of any provision of this Sublease, to recover Rent, to terminate this Sublease or otherwise to enforce, protect or establish any term or covenant of this Sublease, the prevailing party shall be entitled to recover as a part of such action or proceeding, or in a separate action brought for that purpose, reasonable, actual and documented attorneys' fees, court costs, and expert fees as may be fixed by the court.

35. Confidentiality. Each party hereto agrees that this Sublease, including all terms and provisions hereof, is confidential, provided each party may disclose terms on a confidential basis (i) to its agents, attorneys, and consultants; (ii) to Prime Lessor; (iii) to the extent required by law; and (iv) in connection with any legal action to enforce the terms of this Sublease.

36. Governing Law. This Sublease is made under, and shall be construed in accordance with, the laws of the State of New York.

[SIGNATURE PAGE FOLLOWS]

IN WITNESS WHEREOF, Sublessor and Sublessee have executed this Sublease as a sealed instrument as of the date first written above.

Antigenics, Inc.,  
(Sublessor)

By: /s/ P. Thornton

Name: P. Thornton  
Title: SVP and CFO

Omrix Biopharmaceuticals Inc.,  
(Sublessee)

By: /s/ Michael Burshtine

Name: Michael Burshtine  
Title: SVP and CFO

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EXHIBIT A

PRIME LEASE

[SEE ATTACHED]

[Filed as Exhibit 10.20 to our registration statement on Form S-4 (File No. 333-46168) and incorporated herein by reference.]

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EXHIBIT B

PLAN SHOWING SUBLEASED PREMISES

[SEE ATTACHED]

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[Floor plan graphic omitted as not material to investors.]

**ANTIGENICS INC.**  
**EXECUTIVE CHANGE OF CONTROL PLAN**

Subject to the terms and conditions hereinafter set forth, Antigenics, Inc., a Delaware corporation, has established this Executive Change of Control Plan (the "Plan") to offer certain compensation and benefits to certain Executives (as defined herein) in the event of a Change of Control (as defined herein), subject to the terms and conditions set forth in this Plan and the Participation Agreement to be executed by each Executive wishing to participate in this Plan, a form of which is attached hereto as Exhibit A (the "Participation Agreement").

1. Definitions. For purposes of this Plan, the following definitions apply:

(a) "Affiliates" means all persons and entities directly or indirectly controlling, controlled by or under common control with the Company, where control may be by either management authority or equity interest.

(b) "Cause", as determined by the Company, means: (i) Executive's willful failure to perform (other than by reason of disability), or material negligence in the performance of, his/her duties and responsibilities to the Company or any of its Affiliates; or (ii) material breach by Executive of any provision of this Plan or the Participation Agreement; or (iii) other conduct by Executive that is materially harmful to the business, interests or reputation of the Company or any of its Affiliates.

(c) "Change in Control" shall mean: (A) the acquisition by any Organization of beneficial ownership (within the meaning of Rule 13d-3 promulgated under the Exchange Act) of 50% or more of the common stock of the Company; provided, however, that for purposes of this subsection (A), an acquisition shall not constitute a Change in Control if it is: (i) by a Benefit Plan sponsored or maintained by the Company or an entity controlled by the Company or (ii) by an entity pursuant to a transaction that complies with clauses (i), (ii) and (iii) of subsection (C) of this Section 2(d); or (B) individuals who, as of June 2, 2005, constitute the Board (the "Incumbent Board") cease for any reason to constitute at least a majority of the Board; provided, however, that any individual becoming a director subsequent to June 2, 2005 whose election, or nomination for election by the Company's stockholders, was approved by a vote of at least a majority of the directors then comprising the Incumbent Board (or a majority of the members of a nominating committee who are members of the Incumbent Board) shall be treated as a member of the Incumbent Board unless he/she assumed office as a result of an actual or threatened election contest with respect to the election or removal of directors or other actual or threatened solicitation of proxies or consents by or on behalf of an Organization other than the Board; or (C) consummation of a merger or consolidation involving the Company, or a sale or other disposition of all or substantially all of the assets of the Company, (a "transaction") in each case unless, immediately following such transaction, (i) the beneficial owners of the common stock of

the Company outstanding immediately prior to such transaction beneficially own, directly or indirectly, more than 50% of the combined voting power of the outstanding voting securities of the entity resulting from such transaction (including, without limitation, an entity which as a result of such transaction owns the Company or all or substantially all of the Company's assets either directly or through one or more subsidiaries), (ii) no Organization (excluding any entity resulting from such transaction or any Benefit Plan of the Company or such entity resulting from such transaction) beneficially owns, directly or indirectly, 50% or more of the combined voting power of the then outstanding voting securities of such entity and (iii) at least a majority of the members of the board of directors or similar board of the entity resulting from such transaction were members of the Incumbent Board at the time of the execution of the initial agreement, or of the action of the Board, providing for such transaction; or (D) approval by the stockholders of the Company of a complete liquidation or dissolution of the Company. For purposes of the foregoing: "Benefit Plan" means any employee benefit plan, including any related trust; "Board" means the Board of Directors of the Company; "Exchange Act" means the Securities Exchange Act of 1934, as amended; and "Organization" means any individual, entity or group (within the meaning of Section 13(d)(3) or Section 14(d)(2) of the Exchange Act).

(d) "Company" means Antigenics, Inc., a Delaware corporation, and any successor in interest to the Company.

(e) "Executive" means each employee of the Company specifically designated by the Compensation Committee (or an individual specifically appointed by the Compensation Committee to make such determination) as eligible to participate in this Plan, provided such individual holds the position of Vice President or above in the Company, or is otherwise identified as an essential employee by the Compensation Committee.

(f) "Good Reason" means (i) material reduction in Executive's base salary, benefits, duties or responsibilities; or (ii) relocation of Executive's principal office, without his/her consent, to a location more than thirty (30) miles from its location on the day prior to the Change in Control.

(g) "Person" means an individual, a corporation, an association, a partnership, an estate, a trust and any other entity or organization, other than the Company or any of its Affiliates.

(h) "Products" mean all products planned, researched, developed, under development, tested, manufactured, sold, licensed, leased or otherwise distributed or put into use by the Company or any of its Affiliates, together with all services provided or planned by the Company or any of its Affiliates, during Executive's employment.

## 2. Change of Control.

(a) If a Change of Control occurs, on the date of such Change in Control, fifty-percent (50%) of any outstanding stock options previously granted to Executive that are

outstanding and unvested as of the date of the Change of Control shall become vested and exercisable, provided that Executive is employed by the Company on the date of such Change in Control.

(b) If a Change of Control occurs and, within eighteen (18) months following such Change of Control, the Company terminates Executive's employment other than for Cause, or such Executive terminates his/her employment for Good Reason, then the Company shall pay to the Executive in one lump sum an amount equal to (A) twelve (12) months base salary at the rate in effect on the date of termination, plus (B) the higher of (x) Executive's target incentive bonus for the year in which Executive's employment is terminated or (y) the actual incentive bonus paid to Executive, if any, under the Company's Executive incentive plan for the last full fiscal year preceding the year in which Executive's employment is terminated; and shall also, until the conclusion of a period of twelve (12) months following the date of termination, continue to contribute to the premium cost of Executive's participation in the Company's group medical and dental insurance plans at the same rate that it contributes for active employees, provided that Executive is entitled to continue such participation under applicable law and plan terms, and provided further that Executive pays his/her portion of the premium cost. In addition, in the event the Company terminates Executive's employment other than for Cause, or Executive terminates his/her employment for Good Reason within eighteen (18) months following a Change of Control, then any options previously granted to Executive that are outstanding and unvested as of the date of the Change in Control shall become vested and shall be exercisable for ninety (90) days following termination of Executive's employment, and the Company will provide Executive with an outplacement assistance benefit in the form of a lump-sum payment of \$10,000 plus an additional lump-sum payment in an amount sufficient, after giving effect to all federal, state and other taxes with respect to such additional payment, to make Executive whole for all taxes (including withholding taxes) on such outplacement assistance benefit.

(c) All payments required to be made by the Company hereunder to Executive or his/her dependents, beneficiaries, or estate will be reduced by any tax, payroll deductions or other amounts required to be withheld by the Company under applicable law.

(d) Payment(s) by the Company and contributions to the cost of Executive's continued participation in the Company's group health and dental plans that may be due Executive under Section 2(b) shall constitute the entire obligation of the Company to Executive. In order to receive any payments or other benefits under Section 2(b), Executive must execute a General Release of Claims in a form acceptable to the Company.

(e) Except for medical and dental insurance coverage continued pursuant to Section 2(b), benefits shall terminate pursuant to the terms of the applicable benefit plans based on the date of termination of Executive's employment without regard to any continuation of base salary or other payment to Executive following such date of termination.

(f) The obligation of the Company to make payments to or on behalf of Executive under Section 2(b) is expressly conditioned upon Executive's continued full

performance of obligations under the Plan and Executive's Participation Agreement. Executive recognizes that, except as expressly provided in Section 2(b), no compensation is earned by, or in any way owing to, Executive after termination of employment.

(g) Any lump-sum payments to be made to the Executive hereunder shall be made as soon as administratively practicable and in any event no later than 2 1/2 months after the end of the year in which the Executive becomes entitled to such payment.

(h) To the extent any payment hereunder shall be required to be delayed until six months following separation from service to comply with the "specified employee" rules of Section 409A of the Internal Revenue Code, it shall be delayed (but not more than is required) to comply with such rules, and shall promptly after such delay be paid with interest at a reasonable market rate as determined by the Company.

3. Amendment. This Plan may be amended, modified or terminated by the Compensation Committee of the Board of Directors in sole discretion, provided that any such amendment, modification or termination shall not be effective with respect to any Executive that has executed a Participation Agreement, except to the extent such Executive has agreed in writing to be bound by such amendment, modification or termination.

4. Governing Law. This Plan shall be construed and enforced under and be governed in all respects by the laws of the Commonwealth of Massachusetts, without regard to the conflict of laws principles thereof.

*Adopted by Compensation Committee –November 30, 2005*

## CHANGE OF CONTROL PLAN

### Participation Agreement

Executive signing below, hereby wishes to participate in the Executive Change of Control Plan of the Company, as amended and restated effective November 30, 2005 (the "Plan"). In order for Executive to participate in the Plan, Executive must agree to the restrictions on his/her activities during and after his/her employment as provided in this Participation Agreement. Any capitalized terms used in this Participation Agreement and not defined shall have the meaning set forth in the Plan. By signing below, the Company and Executive agree as follows:

1. Participation in the Plan. Executive shall be entitled to participate in the Plan on the terms and condition provided for in the Plan and this Participation Agreement, as the same may be amended from time to time.
2. Non-competition. While Executive is employed by the Company and for the greater of (i) twelve (12) months after his/her employment terminates or (ii) the period during which Executive is receiving payments under the Plan (the "Non-Competition Period"), Executive shall not, directly or indirectly, whether as owner, partner, investor, consultant, agent, employee, co-venturer or otherwise, compete with the Company or any of its Affiliates or undertake any planning for any business competitive with the Company or any of its Affiliates. Specifically, but without limiting the foregoing, Executive agrees not to engage in any manner in any activity that is directly or indirectly competitive with the business of the Company or any of its Affiliates as conducted or under consideration at any time during Executive's employment. Restricted activity includes without limitation accepting employment or a consulting position with any Person who is, or at any time within twelve (12) months prior to termination of Executive's employment has been, a competitor or a customer of the Company or any of its Affiliates. For the purposes of this Section 2, the business of the Company and its Affiliates shall include all Products and Executive's undertaking shall encompass all items, products and services that may be used in substitution for Products. The foregoing shall not prohibit Executive's passive ownership of two percent (2%) or less of the equity securities of any publicly traded company. Executive agrees that, during his/her employment with the Company or any Affiliate of the Company, he/she will not undertake any outside activity, whether or not competitive with the business of the Company or its Affiliates, that could reasonably give rise to a conflict of interest or otherwise interfere with his/her duties and obligations to the Company or any of its Affiliates.
3. Non-solicitation. Executive further agrees that while he/she is employed by the Company or any Affiliate of the Company and thereafter during the Non-Competition Period, Executive will not hire or attempt to hire any employee of the Company or any of its Affiliates, assist in such hiring by any Person, encourage any such employee to terminate his or her relationship with the Company or any of its Affiliates, or solicit or encourage any customer or vendor of the Company or any of its Affiliates to terminate its relationship with them, or, in the case of a customer, to conduct with any Person any business or activity which such customer conducts or could conduct with the Company or any of its Affiliates.

4. Conflicting Agreements. Executive hereby represents and warrants that the execution of this Participation Agreement, participation in the Plan and the performance of his/her obligations hereunder will not breach or be in conflict with any other agreement to which Executive is a party or is bound. In addition, except where specifically provided in the Plan or this Participation Agreement, nothing in the Plan or this Participation Agreement is intended to replace, amend or modify any other agreement between the Company and Executive, and to the extent such other agreements contain similar provisions to those provided for in this Participation Agreement, such provisions shall be in addition to the provisions provided herein and shall remain in effect.

5. Notification Requirement. Until the conclusion of the Non-Competition Period Executive shall give notice to the Company of each new business activity he/she plans to undertake, at least twenty-one (21) days prior to beginning any such activity. Such notice shall state the name and address of the Person for whom such activity is undertaken and the nature of Executive's business relationship(s) and position(s) with such Person. Executive shall provide the Company with such other pertinent information concerning such business activity as the Company may reasonably request in order to determine Executive's continued compliance with this Participation Agreement and the Plan.

6. Enforcement of Covenants. Executive acknowledges that he/she has carefully read and considered all the terms and conditions of this Agreement, including the restraints imposed upon his/her pursuant to the Plan and this Participation Agreement. Executive agrees that said restraints are necessary for the reasonable and proper protection of the Company and its Affiliates and that each and every one of the restraints is reasonable in respect to subject matter, length of time and geographic area. Executive further acknowledges that, were he/she to breach any of his/her covenants contained in the Plan or Participation Agreement, the damage to the Company would be irreparable. Executive therefore agrees that the Company, in addition to any other remedies available to it, shall be entitled to preliminary and permanent injunctive relief against any breach or threatened breach by Executive of any of said covenants, without having to post bond. The parties further agree that, in the event that any provision of Sections 4 hereof shall be determined by any court of competent jurisdiction to be unenforceable by reason of its being extended over too great a time, too large a geographic area or too great a range of activities, such provision shall be deemed to be modified to permit its enforcement to the maximum extent permitted by law.

7. General. This Participation Agreement may be amended or modified by execution of an amendment signed by Executive and the Company. This is Participation Agreement and the Plan shall be construed and enforced under and be governed in all respects by the laws of the Commonwealth of Massachusetts, without regard to the conflict of laws principles thereof.

IN WITNESS WHEREOF, this Participation Agreement has been executed as a sealed instrument by the Company, by its duly authorized representative, and by Executive, as of \_\_\_\_\_, 2005.

EXECUTIVE:

ANTIGENICS, INC., a Delaware corporation

\_\_\_\_\_  
**{Executive Name}**

By: \_\_\_\_\_  
Name: \_\_\_\_\_  
Title: \_\_\_\_\_

ANTIGENICS, INC2003 EXECUTIVE INCENTIVE PLANPURPOSE OF PLAN

To provide additional incentive for key executives to contribute to the success of the Company. The Plan provides significant and competitive incentive awards which relate directly to the achievement of corporate objectives and individual performance goals. This, in turn, promotes and protects the interests of stockholders and enhances the Company's ability to attract, retain, motivate and compensate our employees.

Senior Management shall interpret and administer the Plan and its rules and regulations as outlined below.

AWARD FUND

The total bonus award fund for the plan year will be approved by the Compensation Committee of the Board of Directors on the recommendation of the Chief Executive Officer.

The recommendations will reflect an assessment of the company's performance against key milestones/objectives agreed to for the plan year.

ELIGIBILITY FOR PARTICIPATION

Executives in good standing who are not eligible to participate in any other annual incentive plan.

Eligibility and the criteria for eligibility for participation in the Plan are not automatic from one year to the next, but are subject to an annual review by senior management. Exclusion of an otherwise eligible employee must have the approval of the Chief Executive Officer.

INDIVIDUAL PERFORMANCE OBJECTIVES

Incentive awards will be based upon the achievement of corporate objectives and individual performance goals. It is the responsibility of each functional head to set and communicate strategic goals, develop budgets, and formulate action plans in concurrence with their senior management. Based on plans, managers and employees are responsible for documenting agreed upon goals, targets and priorities using the performance management system, forms and timetables.

All performance objectives are pre-approved by senior management.

TARGETED INCENTIVE AWARD OPPORTUNITY

A significant and competitive targeted incentive award opportunity is assigned to each position. Target awards will typically range from 20% to 50%. The targeted award is expressed as a percentage of a participant's base salary. Actual awards will equal, exceed or fall below targeted incentive levels based on the extent to which performance objectives are achieved.

Targeted incentive award levels are subject to review each year by the Compensation Committee of the Board of Directors to ensure they remain competitive and consistent with Plan objectives.

#### DETERMINATION OF ACTUAL INCENTIVE EARNINGS

Awards will be funded from 0% to 150% based on the extent to which Antigenics' corporate objectives/milestones are achieved. At the recommendation of the President and with the approval of the Chief Executive Officer, awards may be adjusted plus or minus 25% to recognize individual goal attainment and performance that contributed to the achievement of corporate objectives/milestones.

#### TIMING OF INCENTIVE AWARD PAYMENTS

All incentive award payments will be paid on or about February 15th.

#### TAX TREATMENT OF AWARDS

Appropriate Federal, State and Local taxes will be deducted from all incentive award payments.

#### EFFECTIVE DATE OF SALARY

Incentive award payments will be calculated based on salary in effect on January 1st.

#### HIRES, PROMOTIONS, DEATHS & LAST WORKDAY PRECEDING RETIREMENT

Incentive awards for the above actions may be pro-rated throughout the Plan year based upon the number of months that the action is effective, including partial months at the discretion of senior management.

For example:

Hire - An employee hired on 7/15 will receive 5 months of incentive.

Death - An incentive award based on four months of earnings will be paid to the estate of an employee who dies on 4/20.

#### TERMINATIONS

Employees who are terminated by the Company (other than for reasons of death, disability, or retirement) or who voluntarily resign from the Company must be active on February 15th to receive the award payment.

#### LEAVES OF ABSENCE

The Company may, in its sole discretion, and consistent with applicable law, reduce awards in the event that an employee is on a leave of absence in excess of 30 working days.

Individuals who are receiving long-term disability benefits are no longer active employees, and therefore, are not eligible to participate in the incentive plan.

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## WITHHOLDING PAYMENTS

Participants do not have any enforceable right to receive any award made with respect to a fiscal year or to retain any payment made with respect thereto if for any reason during such entire fiscal year they have not performed their duties to the satisfaction of the Company. In cases where management deems it appropriate to withhold all or a part of a payment for performance related reasons, the performance issues must be documented and the affected employee must receive explicit notice that his/her payment under the Plan will be withheld if the performance issues are not addressed.

## MISCELLANEOUS

Senior management shall review the operation of the Plan. If at any time continuation of the Plan or any of its provisions becomes inappropriate or inadvisable, the Plan or its provisions shall be revised, modified, suspended or withdrawn. The Company reserves the right to interpret this Plan in its sole discretion.

Participants do not have any right or interest, whether vested or otherwise, in the Plan or in any award unless and until all of the terms, conditions and provisions of the Plan and the conditions have been complied with. Nothing contained in the Plan or in the guidelines shall require the Company to segregate or earmark any cash, shares of stock or other property. Neither the adoption of the Plan nor its operation shall in any way affect the rights and power of the Company or of any Subsidiary to dismiss and/or discharge any employee at any time.

These guidelines are a summary intended to assist in the administration of the Plan. In cases where the summary conflicts with the actual Plan or the rules and regulations adopted by the Board and its designated Committee, those shall be followed.

Consent of Independent Registered Public Accounting Firm

The Board of Directors  
Antigenics Inc.:

We consent to the incorporation by reference in the registration statements on Form S-8 (Nos. 333-40440, 333-40442, 333-50434, 333-69580, 333-106072, and 333-115984) and on Form S-3 (Nos. 333-118171, 333-69582, and 333-125197) of Antigenics Inc. of our reports dated March 6, 2006, with respect to the consolidated balance sheets of Antigenics Inc. and subsidiaries as of December 31, 2005 and 2004, and the related consolidated statements of operations, stockholders' equity and comprehensive loss, and cash flows for each of the years in the three-year period ended December 31, 2005, management's assessment of the effectiveness of internal control over financial reporting as of December 31, 2005 and the effectiveness of internal control over financial reporting as of December 31, 2005, which reports appear in the December 31, 2005 Annual Report on Form 10-K of Antigenics Inc.

/s/ KPMG LLP

Boston, Massachusetts  
March 13, 2006

Certification Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended

I, Garo H. Armen, certify that:

1. I have reviewed this annual report on Form 10-K of Antigenics Inc.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this annual report;
4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
  - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles;
  - c. evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
  - d. disclosed in this annual report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors:
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: March 15, 2006

/s/ Garo H. Armen, Ph.D.

Garo H. Armen Ph.D.  
Chief Executive Officer

Certification Pursuant to Rules 13a-14(a) and 15d-14(a) under the Securities Exchange Act of 1934, as amended

I, Peter Thornton, certify that:

1. I have reviewed this annual report on Form 10-K of Antigenics Inc.;
2. Based on my knowledge, this annual report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this annual report;
3. Based on my knowledge, the financial statements, and other financial information included in this annual report, fairly present in all material respects the financial condition, results of operations and cash flows of the Registrant as of, and for, the periods presented in this annual report;
4. The Registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and internal control over financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15d-15(f)) for the Registrant and have:
  - a. designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this annual report is being prepared;
  - b. designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with U.S. generally accepted accounting principles;
  - c. evaluated the effectiveness of the Registrant's disclosure controls and procedures and presented in this annual report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this annual report based on such evaluation; and
  - d. disclosed in this annual report any change in the Registrant's internal control over financial reporting that occurred during the Registrant's most recent fiscal quarter (the Registrant's fourth fiscal quarter in case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Registrant's internal control over financial reporting; and
5. The Registrant's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Registrant's auditors and the audit committee of the Registrant's board of directors:
  - a. All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Registrant's ability to record, process, summarize and report financial information; and
  - b. Any fraud, whether or not material, that involves management or other employees who have a significant role in the Registrant's internal control over financial reporting.

Date: March 15, 2006

/s/ Peter Thornton

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Peter Thornton  
Chief Financial Officer

Certification  
Pursuant to 18 U.S.C. Section 1350,  
As Adopted Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

In connection with the Annual Report on Form 10-K of Antigenics Inc. (the "Company") for the annual period ended December 31, 2005 as filed with the Securities and Exchange Commission on the date hereof (the "Report"), each of the undersigned to his knowledge hereby certifies, pursuant to 18 U.S.C. Section 1350, that:

- (i) The Report fully complies with the requirements of Section 13 (a) or 15 (d) of the Securities Exchange Act of 1934; and
- (ii) The information contained in the Report fairly presents, in all material respects, the financial condition and results of operations of the Company.

/s/ Garo H. Armen, Ph.D.

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Garo H. Armen, Ph.D.  
Chief Executive Officer

/s/ Peter Thornton

\_\_\_\_\_  
Peter Thornton  
Chief Financial Officer

March 15, 2006

A signed original of this written statement required by Section 906 has been provided to Antigenics Inc. and will be retained by Antigenics Inc. and furnished to the Securities and Exchange Commission or its staff upon request.

The foregoing certification is being furnished to the Securities and Exchange Commission as an exhibit to the Form 10-K and should not be considered filed as part of the Form 10-K.