

ANTIGENICS INC /DE/  
Form 10-Q  
November 09, 2006  
Table of Contents

---

**UNITED STATES**  
**SECURITIES AND EXCHANGE COMMISSION**

Washington, DC 20549

---

**Form 10-Q**

---

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

For the Quarterly Period Ended September 30, 2006

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

For the transition period from to

Commission File No. 000-29089

---

**Antigenics Inc.**

*(Exact Name of Registrant as Specified in its Charter)*

---

**Delaware**  
*(State of Incorporation)*

**06-1562417**  
*(I.R.S. Employer*

*Identification Number)*

**630 Fifth Avenue, Suite 2100, New York, New York, 10111**

*(Address of Principal Executive Offices)*

**(212) 994-8200**

Edgar Filing: ANTIGENICS INC /DE/ - Form 10-Q

*(Registrant's Telephone Number, including Area Code)*

---

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 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. (Check one):

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

Number of shares outstanding of the registrant's Common Stock as of November 1, 2006: 45,844,392 shares.

---

**Table of Contents**

**Antigenics Inc.**

**Quarterly Period Ended September 30, 2006**

**Table of Contents**

	<b>Page</b>
<b><u>PART I FINANCIAL INFORMATION</u></b>	
Item 1.	
<u>Financial Statements:</u>	
<u>Condensed Consolidated Balance Sheets as of September 30, 2006 and December 31, 2005 (Unaudited)</u>	2
<u>Condensed Consolidated Statements of Operations for the Three and Nine Months ended September 30, 2006 and 2005 (Unaudited)</u>	3
<u>Condensed Consolidated Statements of Cash Flows for the Nine Months ended September 30, 2006 and 2005 (Unaudited)</u>	4
<u>Notes to Unaudited Condensed Consolidated Financial Statements</u>	5
Item 2.	
<u>Management's Discussion and Analysis of Financial Condition and Results of Operations</u>	15
Item 3.	
<u>Quantitative and Qualitative Disclosures About Market Risk</u>	29
Item 4.	
<u>Controls and Procedures</u>	29
<b><u>PART II OTHER INFORMATION</u></b>	
Item 1.	
<u>Legal Proceedings</u>	30
Item 1A.	
<u>Risk Factors</u>	31
Item 6.	
<u>Exhibits</u>	50
<u>Signatures</u>	51

**Table of Contents****PART I FINANCIAL INFORMATION****Item 1 Financial Statements****ANTIGENICS INC. AND SUBSIDIARIES****CONDENSED CONSOLIDATED BALANCE SHEETS****(Unaudited)**

	September 30,	December 31,
	2006	2005
<b>ASSETS</b>		
Cash and cash equivalents	\$ 15,514,762	\$ 33,216,876
Short-term investments	8,873,984	28,530,650
Accounts receivable	121,772	45,586
Inventories	218,002	251,053
Prepaid expenses	1,820,958	1,665,308
Restricted cash	168,946	2,961,266
Other current assets	432,433	291,127
<b>Total current assets</b>	<b>27,150,857</b>	<b>66,961,866</b>
Property and equipment, net of accumulated amortization and depreciation of \$18,020,757 and \$14,769,426 at September 30, 2006 and December 31, 2005, respectively	19,512,188	23,350,246
Goodwill	2,572,203	2,572,203
Core and developed technology, net of accumulated amortization of \$6,154,502 and \$5,324,055 at September 30, 2006 and December 31, 2005, respectively	4,918,127	5,748,574
Restricted cash		21,912
Debt issuance costs, net of accumulated amortization of \$402,303 and \$210,686 at September 30, 2006 and December 31, 2005, respectively	1,590,439	1,782,056
Other long-term assets	3,934,896	3,713,760
<b>Total assets</b>	<b>\$ 59,678,710</b>	<b>\$ 104,150,617</b>
<b>LIABILITIES AND STOCKHOLDERS (DEFICIT) EQUITY</b>		
Current portion, long-term debt	\$ 359,000	\$ 4,125,913
Accounts payable	2,209,261	2,590,016
Accrued liabilities	7,909,824	12,291,085
Other current liabilities	346,323	138,367
<b>Total current liabilities</b>	<b>10,824,408</b>	<b>19,145,381</b>
Long-term debt, less current portion		43,823
Convertible senior notes	50,000,000	50,000,000
Deferred revenue	3,075,656	173,890
Other long-term liabilities	2,753,422	2,888,502
Commitments and contingencies		
<b>STOCKHOLDERS (DEFICIT) 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 September 30, 2006 and December 31, 2005, respectively; liquidation value of \$31,817,625 at September 30, 2006 and December 31, 2005, respectively	316	316
	458,438	455,912

## Edgar Filing: ANTIGENICS INC /DE/ - Form 10-Q

Common stock, par value \$0.01 per share; 100,000,000 shares authorized; 45,843,751 and 45,591,216 shares issued and outstanding at September 30, 2006 and December 31, 2005, respectively

Additional paid-in-capital	442,901,646	441,497,317
Deferred compensation		(3,074)
Accumulated other comprehensive loss	(27,915)	(88,103)
Accumulated deficit	(450,307,261)	(409,963,347)
<b>Total stockholders (deficit) equity</b>	<b>(6,974,776)</b>	<b>31,899,021</b>
<b>Total liabilities and stockholders (deficit) equity</b>	<b>\$ 59,678,710</b>	<b>\$ 104,150,617</b>

See accompanying notes to unaudited condensed consolidated financial statements.

**Table of Contents****ANTIGENICS INC. AND SUBSIDIARIES****CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS****For the three and nine months ended September 30, 2006 and 2005****(Unaudited)**

	Three Months Ended		Nine Months Ended	
	September 30,		September 30,	
	2006	2005	2006	2005
Revenue	\$ 216,462	\$ 76,533	\$ 372,399	\$ 281,585
Operating expenses:				
Research and development	(6,251,777)	(11,994,904)	(22,627,949)	(36,391,143)
General and administrative	(4,740,556)	(5,236,304)	(16,023,075)	(19,507,382)
Restructuring costs			(1,374,293)	(606,178)
Operating loss	(10,775,871)	(17,154,675)	(39,652,918)	(56,223,118)
Other income (expense):				
Non-operating income	120,000	1,000	140,528	1,000
Interest expense	(747,435)	(790,611)	(2,222,671)	(2,193,780)
Interest income	381,865	689,361	1,391,147	2,029,684
Net loss	(11,021,441)	(17,254,925)	(40,343,914)	(56,386,214)
Dividends on series A convertible preferred stock	(197,625)	(197,625)	(592,875)	(592,875)
Net loss attributable to common stockholders	\$ (11,219,066)	\$ (17,452,550)	\$ (40,936,789)	\$ (56,979,089)
Per common share data, basic and diluted:				
Net loss attributable to common stockholders	\$ (0.24)	\$ (0.38)	\$ (0.89)	\$ (1.25)
Weighted average number of common shares outstanding, basic and diluted	45,847,666	45,590,920	45,789,401	45,572,669

See accompanying notes to unaudited condensed consolidated financial statements.

**Table of Contents****ANTIGENICS INC. AND SUBSIDIARIES****CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS****For the nine months ended September 30, 2006 and 2005****(Unaudited)**

	Nine Months Ended	
	September 30, 2006	2005
Cash flows from operating activities:		
Net loss	\$ (40,343,914)	\$ (56,386,214)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	4,252,042	4,146,592
Non-cash stock compensation	1,762,868	(42,088)
Write-off of property and equipment	645,819	
Loss on sale of assets	37,900	
Changes in operating assets and liabilities:		
Accounts receivable	(76,186)	75,631
Inventories	33,051	(33,931)
Prepaid expenses	(155,650)	(205,932)
Accounts payable	(380,755)	(1,184,675)
Accrued liabilities and other current liabilities	(4,402,669)	422,496
Other operating assets and liabilities	2,689,244	599,079
<b>Net cash used in operating activities</b>	<b>(35,938,250)</b>	<b>(52,609,042)</b>
Cash flows from investing activities:		
Proceeds from maturities of available-for-sale securities	21,050,000	118,987,815
Purchases of available-for-sale securities	(1,333,146)	(89,434,904)
Investment in AGTC	(285,000)	(225,000)
Distribution from AGTC		123,169
Proceeds from sale of property and equipment	33,257	
Purchases of property and equipment	(108,895)	(2,627,180)
Decrease in restricted cash	2,814,232	2,138,505
<b>Net cash provided by investing activities</b>	<b>22,170,448</b>	<b>28,962,405</b>
Cash flows from financing activities:		
Proceeds from employee stock purchases and exercise of stock options	469,300	327,296
Payments of series A convertible preferred stock dividend	(592,875)	(592,875)
Proceeds from long-term debt		50,000,000
Debt issuance costs		(1,992,742)
Repayments of long-term debt	(3,810,737)	(4,292,144)
<b>Net cash (used in) provided by financing activities</b>	<b>(3,934,312)</b>	<b>43,449,535</b>
<b>Net (decrease) increase in cash and cash equivalents</b>	<b>(17,702,114)</b>	<b>19,802,898</b>
<b>Cash and cash equivalents, beginning of period</b>	<b>33,216,876</b>	<b>15,979,714</b>
<b>Cash and cash equivalents, end of period</b>	<b>\$ 15,514,762</b>	<b>\$ 35,782,612</b>

Edgar Filing: ANTIGENICS INC /DE/ - Form 10-Q

Supplemental cash flow information:

Cash paid for interest	\$ 2,689,264	\$ 1,599,340
------------------------	--------------	--------------

See accompanying notes to unaudited condensed consolidated financial statements.



**Table of Contents**

**ANTIGENICS INC. AND SUBSIDIARIES**

**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS**

**September 30, 2006**

**Note A Organization and Basis of Presentation**

Antigenics Inc. (including its subsidiaries, also referred to in this Quarterly Report on Form 10-Q 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 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 has also been 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) Aroplatin chemotherapeutic, a liposomal chemotherapeutic in a Phase 1 clinical trial for the treatment of solid tumors and B-cell lymphoma, (2) AG-707, a therapeutic vaccine program in a Phase 1 clinical trial for the treatment of genital herpes, and (3) QS-21 Stimulon<sup>®</sup> adjuvant (QS-21), an investigational adjuvant used in numerous vaccines under development including, but not limited to, vaccines for 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.

On March 24, 2006, we announced top-line results from part I of our Phase 3 study of Oncophage in renal cell carcinoma patients who are at high risk of recurrence after surgery, indicating that the trial did not meet its primary endpoint. The analysis was triggered based on the number of events (defined as recurrence of disease or death of a patient prior to recurrence) reported by study investigators. However, an independent review by the trial's Clinical Events Committee revealed that a substantially smaller number of events had actually occurred. The analysis showed a trend in favor of Oncophage for recurrence-free survival (the study's primary endpoint), and a trend against Oncophage for overall survival (a secondary endpoint); both findings were not statistically significant. The analysis of the overall survival endpoint is considered an interim assessment. At this time it is unclear as to why opposing trends were observed between recurrence-free survival and overall survival. There is no readily apparent adverse safety signal associated with the vaccine that we believe is contributing to this finding.

Based on these results, in April 2006, we commenced the implementation of a restructuring plan that refocused our programs and priorities resulting in the temporary discontinuation of all late-stage clinical programs and concentration on Phase 1 and preclinical programs, including those stated above for Aroplatin and AG-707, and AU-801, a novel preclinical application of our proprietary heat shock protein technology as a treatment for autoimmune disorders. In addition, we terminated part II of the Phase 3 renal cell carcinoma trial and our Phase 2 trial of AG-858 for the treatment of chronic myelogenous leukemia. A combination study of Oncophage and ATRA-IV is also on hold. We continue to support and develop our QS-21 partnering collaborations, with the goal of generating royalties as early as 2010. To match these priorities, we eliminated 42 positions. In September 2006, we temporarily discontinued activities related to AU-801.

On June 5, 2006, we announced the updated results from our Phase 3 trial of Oncophage in metastatic melanoma and on June 7, 2006, we announced the results of an in-depth analysis of the data from part I of our Phase 3 trial of Oncophage in renal cell carcinoma. Based on these results, we decided to continue to collect survival data for our Phase 3 trial of Oncophage in renal cell carcinoma before making a decision regarding future pivotal clinical trials or seeking registration of Oncophage.

On October 30, 2006 we sold \$25 million of convertible senior secured notes (2006 Notes) to a group of accredited investors (Investors), the proceeds of which have been received. These 2006 Notes are convertible into our common stock at \$3.50 per share at the option of the Investors. Alternatively, the 2006 Notes can be converted into a 30% interest in one of our wholly-owned subsidiaries holding QS-21 and AG-707. The 2006 Notes bear interest at 8% payable semiannually on December 30 and June 30 in cash or in additional notes at our option and mature on August 30, 2011. For further information, refer to Note J to our Unaudited Condensed Consolidated Financial Statements included in this Quarterly Report on Form 10-Q.

**Table of Contents**

**ANTIGENICS INC. AND SUBSIDIARIES**

**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)**

The accompanying unaudited condensed consolidated financial statements have been prepared in accordance with U.S. generally accepted accounting principles for interim financial information and with the instructions to Article 10 of Regulation S-X. Accordingly, they do not include all of the information and footnotes required by U.S. generally accepted accounting principles for complete annual consolidated financial statements. In the opinion of management, the financial statements include all normal and recurring adjustments considered necessary for a fair presentation of our consolidated financial position and operating results. All significant intercompany transactions and accounts have been eliminated in consolidation. Certain amounts previously reported have been reclassified in order to conform to the current period's presentation. Operating results for the nine-month period ended September 30, 2006 are not necessarily indicative of the results that may be expected for the year ending December 31, 2006. For further information, refer to the consolidated financial statements and footnotes thereto for the year ended December 31, 2005 included in our Annual Report on Form 10-K filed with the Securities and Exchange Commission (SEC) on March 15, 2006.

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 materially from those estimates.

We have incurred annual operating losses since inception and, as a result, at September 30, 2006 we have an accumulated deficit of \$450.3 million. Our operations have been funded principally by sales of equity and convertible debt instruments. We believe that, based on our current plans and activities, our working capital resources at September 30, 2006, along with the proceeds received from our 2006 Notes and the estimated proceeds from license, supply and collaborative agreements, will be sufficient to satisfy our liquidity requirements into 2008. Satisfying our long-term liquidity needs may require the successful development and commercialization of product candidates and will require additional capital.

Our product candidates require substantial investment prior to commercialization, including investments in product development, conducting clinical trials, expanding manufacturing capacity, and obtaining approvals from regulatory agencies, as well as acceptance in the marketplace. Although we believe our patents, patent rights, and patent applications are valid, the invalidation of 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.

**Note B Net Loss Per Share**

Basic earnings or loss per common share (EPS) is calculated by dividing the net loss attributable to common stockholders by the weighted average number of common shares outstanding and common shares issuable under our directors' deferred compensation plan. Diluted EPS is calculated by dividing the net loss attributable to common stockholders by the weighted average common shares outstanding plus the dilutive effect of outstanding stock options, stock warrants, the series A convertible preferred stock, and the 5.25% Convertible Senior Notes due 2025. Because we have reported a net loss attributable to common stockholders for all periods, diluted EPS is the same as basic EPS as the effect of including the outstanding stock options, stock warrants, the convertible preferred stock, and the 5.25% Convertible Senior Notes due 2025 in the calculation would have reduced the net loss per common share. Therefore, the 6,743,000 outstanding stock options, the 8,910 outstanding stock warrants, the 31,620 outstanding shares of series A convertible preferred stock, and the 5.25% Convertible Senior Notes due 2025 are not included in the calculation of diluted net loss per common share.

**Table of Contents****ANTIGENICS INC. AND SUBSIDIARIES****NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)****Note C Inventories**

Inventories are stated at cost using the first-in, first-out method. The components of inventories are as follows (in thousands).

	September 30,	December 31,
	2006	2005
Work in process	\$ 203	\$ 251
Finished goods	15	251
	\$ 218	\$ 251

**Note D Stock-Based Compensation**

Our 1999 Equity Incentive Plan, as amended (the 1999 equity plan ), authorizes awards of incentive stock options within the meaning of Section 422 of the Internal Revenue Code, non-qualified stock options, restricted stock, and unrestricted stock for up to 10,000,000 shares of common stock (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.

Under the 1999 Employee Stock Purchase Plan (the 1999 ESPP ), 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 1999 ESPP. The 1999 ESPP 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 1999 ESPP 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. From inception through September 30, 2006, 217,000 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 September 30, 2006, 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 a quarterly 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 price for our common stock. The applicable price for our common stock is defined as the average of the closing price of our common stock for all trading days during the calendar quarter preceding the conversion date as reported by the Nasdaq National Market. Pursuant to this plan, 79,203 units, each representing a share of our common stock at an average common stock price of \$4.89, were credited to participants stock accounts as of September 30, 2006. The compensation charges for this plan were immaterial for the periods presented.

The total compensation related to these plans was a net expense of \$957,000 and \$137,000 for the three months ended September 30, 2006 and 2005, respectively. For the nine months ended September 30, 2006 and 2005, the total compensation related to these plans was a net expense of \$1.8 million and a net credit of \$42,000, respectively.

Prior to January 1, 2006, we accounted 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 was recorded on fixed stock option grants only if the fair value of the underlying stock exceeded the exercise price of the option at the date of grant and it was recognized on a straight-line basis over the vesting period. Total compensation recognized amounted to \$6,000 and \$44,000 for the three and nine months

ended September 30, 2005, respectively.

**Table of Contents**

**ANTIGENICS INC. AND SUBSIDIARIES**

**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)**

We provided pro forma disclosure amounts in accordance with the Financial Accounting Standards Board's Statement of Financial Accounting Standards (SFAS) No. 148, *Accounting for Stock-Based Compensation Transition and Disclosure* (SFAS No. 148), as if the fair value method defined by SFAS No. 123, *Accounting for Stock-Based Compensation* (SFAS No. 123) had been applied to our stock-based compensation plans.

Effective January 1, 2006, we adopted the fair value recognition provisions of SFAS No. 123R, *Share-Based Payment* (SFAS No. 123R), for options granted to employees and directors, using the modified prospective transition method, and therefore have not restated results from prior periods. Under this method, stock-based compensation expense for the three and nine months ended September 30, 2006 includes compensation expense for all stock-based options granted prior to, but not yet vested as of January 1, 2006, based on the grant date fair value estimated in accordance with the original provision of SFAS No. 123. Compensation cost for all stock-based compensation awards granted after December 31, 2005 is based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123R. Under the fair value recognition provisions of SFAS No. 123R, we recognize stock-based compensation net of an estimated forfeiture rate and only recognize compensation cost for those shares expected to vest on a straight-line prorated basis over the requisite service period of the award. In March 2005, the SEC issued Staff Accounting Bulletin (SAB) No. 107, *Share-Based Payment* (SAB No. 107), regarding the SEC's guidance on SFAS No. 123R and the valuation of share-based payments for public companies. We have applied the provisions of SAB No. 107 in the adoption of SFAS No. 123R. The effect of adoption of the new standard for the three and nine months ended September 30, 2006 related to stock options were additional non-cash expenses of \$1.0 million (\$0.02 per share, basic and diluted) and \$2.1 million (\$0.05 per share, basic and diluted), respectively.

Stock options granted to non-employees are accounted for based on the fair-value method of accounting in accordance with SFAS No. 123R 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 affects each reporting period, until the non-employee options vest, by changes in the fair value of our common stock. The effect of these options for the three months ended September 30, 2006 and 2005 were a non-cash credit of \$50,000 and a non-cash expense of \$131,000, respectively. The effect of these options for the nine months ended September 30, 2006 and 2005 were non-cash credits of \$334,000 and \$62,000, respectively.

Certain of our fully vested options granted to non-employees are outside the scope of SFAS No. 123R and are subject to EITF Issue No. 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*, which requires the stock options held by certain non-employee consultants to be accounted for as liability awards. The fair value of these vested and unexercised awards was estimated using the Black-Scholes option pricing model and \$1.7 million was reclassified from equity to a current liability as of January 1, 2006. The fair value of the award is remeasured at each financial statement date until the award is settled or expires. During the three and nine months ended September 30, 2006, we recorded non-cash credits of \$157,000 and \$1.3 million, respectively, based on the remeasurement of these options. We also reclassified an additional liability of \$64,000 during the nine months ended September 30, 2006 based on the vesting of certain of these options. Non-employees exercised stock options to acquire 64,612 shares of common stock at an exercise price of \$1.45 during the nine months ended September 30, 2006 and the total liability of \$216,000 as of the exercise dates was reclassified to equity. As of September 30, 2006, stock options to acquire approximately 876,000 shares of common stock are held by non-employee consultants and remained unexercised.

**Table of Contents****ANTIGENICS INC. AND SUBSIDIARIES****NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)**

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 sold through our employee stock purchase plan been determined consistent with the fair value method of SFAS No. 123 (in thousands, except per share data):

	<b>Three Months</b>	<b>Nine Months</b>
	<b>Ended</b>	<b>Ended</b>
	<b>September 30, 2005</b>	<b>September 30, 2005</b>
Net loss attributable to common stockholders, as reported	\$ (17,453)	\$ (56,979)
Add: stock-based employee and director compensation recognized under APB Opinion No. 25	6	44
Deduct: total stock-based employee and director compensation expense determined under the fair-value based method for all awards	(1,943)	(5,619)
Pro forma net loss attributable to common stockholders	\$ (19,390)	\$ (62,554)
<b>Net loss attributable to common stockholders per common share, basic and diluted:</b>		
As reported	\$ (0.38)	\$ (1.25)
Pro forma	\$ (0.43)	\$ (1.37)

In light of the new accounting guidance under SFAS No. 123R and SAB No. 107, we reevaluated our assumptions used in estimating the fair value of employee options granted. We also examined our historical pattern of option exercises in an effort to determine if there were any discernable activity patterns based on certain employee populations. From this analysis, we identified two employee populations. We used the Black-Scholes option pricing model to value the options for both of the employee populations as well as our options granted to members of our Board of Directors. The effects of applying SFAS No. 123R, for purposes of recognizing compensation cost under such pronouncement, may not be representative of the effects on our reported results of operations for future years.

All stock option grants are for a ten-year term and generally vest ratably over a four-year period. The fair value of each option granted during the periods is estimated on the date of grant with the following weighted average assumptions:

	<b>Three Months Ended</b>		<b>Nine Months Ended</b>	
	<b>September 30,</b>		<b>September 30,</b>	
	<b>2006</b>	<b>2005</b>	<b>2006</b>	<b>2005</b>
Expected volatility	75%	61%	67%	71%
Expected term in years	6	5	5	5
Risk-free interest rate	4.7%	4.1%	4.4%	4.2%
Dividend yield	0%	0%	0%	0%

Expected volatility is based exclusively on historical volatility data of the Company's stock. The expected term of stock options granted is based on historical data and other factors and represents the period of time that stock options are expected to be outstanding prior to exercise. The risk-free interest rate is based on U.S. Treasury strips with maturities that match the expected term on the date of grant.



**Table of Contents****ANTIGENICS INC. AND SUBSIDIARIES****NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)**

The following table summarizes activity for options granted during the first nine months of 2006:

	Options	Weighted Average Exercise Price	Weighted Average Remaining Contractual Term (in years)	Aggregate Intrinsic Value
Outstanding at December 31, 2005	5,957,084	\$ 8.75		
Granted	2,539,827	3.42		
Exercised	(185,660)	1.47		
Forfeited	(1,567,986)	6.92		
Outstanding at September 30, 2006	6,743,265	\$ 7.36	6.80	\$ 76,183
Vested or expected to vest at September 30, 2006	5,796,087	\$ 7.79	6.42	\$ 44,778
Exercisable at September 30, 2006	2,969,456	\$ 9.97	4.09	\$

The outstanding options at December 31, 2005 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. These options expired during the nine months ended September 30, 2006.

The weighted average grant-date fair value of options granted during the nine months ended September 30, 2006 and 2005 was \$2.15 and \$4.16, respectively.

The aggregate intrinsic value in the table above represents the difference between our closing stock price on the last trading day of the third quarter of fiscal 2006 and the exercise price, multiplied by the number of in-the-money options, that would have been received by the option holders had all option holders exercised their options on September 30, 2006. This amount changes based on the fair market value of our stock. The total intrinsic value of options exercised during the nine months ended September 30, 2006, determined on the date of exercise, was \$915,000.

During the first nine months of 2006, all options were granted with exercise prices equal to the fair market value of the shares of common stock on the grant date.

As of September 30, 2006, \$8.1 million of total unrecognized compensation cost related to stock options granted to employees and directors is expected to be recognized over a weighted-average period of three years.

At September 30, 2006, 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 \$286,000. Such amount is subject to change each reporting period based upon changes in the fair value of our common stock, expected volatility and the risk free interest rate until the outside advisor completes his or her performance under the option agreement.

During the nine months ended September 30, 2006, 75,464 nonvested shares were issued with a weighted average grant date fair value of \$4.65. No nonvested shares were outstanding as of January 1, 2006, no nonvested shares were vested, and 15,950 nonvested shares were forfeited during the nine months ended September 30, 2006. As of September 30, 2006, there was \$237,000 of unrecognized stock-based compensation expense related to these nonvested shares. That cost is expected to be recognized over a weighted-average period of 1.5 years.



## Edgar Filing: ANTIGENICS INC /DE/ - Form 10-Q

Cash received from option exercises and purchases under the 1999 ESPP for the nine months ended September 30, 2006 was \$469,000. We issue new shares upon option exercises and purchases under the 1999 ESPP.

**Table of Contents****ANTIGENICS INC. AND SUBSIDIARIES****NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)****Note E Comprehensive Loss**

The following table provides the calculation of comprehensive loss for the three and nine months ended September 30, 2006 and 2005 (in thousands):

	Three Months Ended		Nine Months Ended	
	September 30, 2006	September 30, 2005	September 30, 2006	September 30, 2005
Net loss	\$ (11,021)	\$ (17,255)	\$ (40,344)	\$ (56,386)
Other comprehensive income:				
Unrealized gain on available-for-sale securities, net	24	1	60	48
Comprehensive loss	\$ (10,997)	\$ (17,254)	\$ (40,284)	\$ (56,338)

**Note F Commitments and Contingencies**

On May 18, 2000, we committed \$3.0 million 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 September 30, 2006, we have invested approximately \$2.8 million in AGTC, including \$285,000 invested during the nine months ended September 30, 2006. 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 capital valuations. Based on these analyses, during the nine months ended September 30, 2006, we concluded that an other than temporary decline had not occurred and, therefore, have not reduced the carrying value of the asset. Our investment balance aggregated \$2.3 million and \$2.0 million at September 30, 2006 and December 31, 2005, respectively, and is included in other long-term assets. The difference between the total amount invested and the carrying value is the result of distributions and other than temporary impairment charges. The general partner of the limited partnership is AGTC Partners, L.P. The management company for AGTC is NewcoGen Group Inc., which is a wholly owned subsidiary of Flagship Ventures Management, Inc. ( Flagship ). Noubar Afeyan, Ph.D., who is one of our directors, is Managing Partner and Chief Executive Officer of Flagship. In addition, until 2004, Garo H. Armen, Ph.D., our Chairman and Chief Executive Officer, was a director of NewcoGen Group Inc.

Antigenics, 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 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 of 1934 (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

**Table of Contents****ANTIGENICS INC. AND SUBSIDIARIES****NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)**

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. On February 15, 2005, the Court granted preliminary approval of the settlement. On August 31, 2005, the Court issued an order confirming preliminary approval of the settlement. The settlement remains subject to a number of conditions, including final approval of the Court. 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 September 30, 2006.

On October 12, 2005, a third party filed a notice of opposition in the European Patent Office 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. We have filed a response to this opposition and intend to continue to defend the opposition. However, there is no guarantee that we will continue to do so, that this patent will not be revoked or that we may not have to amend the claims.

Antigenics and our Chairman and Chief Executive Officer have been named as defendants in a purported class action complaint filed on June 16, 2006 in Federal District Court in New Mexico by Steven J. Tuckfelt on behalf of himself and all others similarly situated. The complaint was served on September 7, 2006. The complaint alleges that certain of our disclosures in connection with the conduct of the Oncophage Phase 3 renal cell carcinoma trial violated Sections 10(b) and 20(a) of the Securities Exchange Act as well as includes purported claims for breach of fiduciary duty. While we believe that the complaint is without merit and plan to vigorously defend against the litigation, the outcome of litigation is uncertain. Regardless of the outcome, participation in this lawsuit diverts management's time and attention from our business and may result in our paying legal fees and damages.

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.

**Note G Restructurings**

In June 2005, we took steps to improve our operating efficiency through the prioritization of our development portfolio and a streamlining of our infrastructure, resulting in the elimination of 26 positions. We recorded severance charges of \$606,000 related to the elimination of these 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. In addition to severance charges of \$990,000 recorded in December 2005 related to the elimination of these positions, we recorded severance charges of \$112,000 during the three months ended March 31, 2006. In April 2006, we commenced the implementation of a plan to further restructure, refocusing our programs and priorities with the goal of reducing our net cash burn rate and eliminated 42 additional positions. We recorded severance charges of \$645,000 related to the elimination of these positions for the three months ended June 30, 2006.

A summary of severance and related costs is as follows (in thousands):

	Liability at December 31, 2005	Charge to Operations	Amount Paid	Liability at September 30, 2006
Severance and payroll taxes	\$ 832	\$ 649	\$ (1,481)	\$
Outplacement	89	39	(128)	
Other	33	36	(69)	

Edgar Filing: ANTIGENICS INC /DE/ - Form 10-Q

Total	\$	954	\$	724	\$ (1,678)	\$
-------	----	-----	----	-----	------------	----

**Table of Contents****ANTIGENICS INC. AND SUBSIDIARIES****NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)**

During the three months ended March 31, 2006, we wrote-off certain assets that were determined to not be required for our updated business strategy. This resulted in additional restructuring charges of \$617,000.

**Note H License and Supply Agreements**

On July 6, 2006, we entered into expanded license and supply agreements with GlaxoSmithKline Biologicals SA ( GSK ) for the use of QS-21, an investigational adjuvant used in numerous vaccines. Under the terms of the agreements, we have agreed to supply QS-21 to GSK through 2014. In addition, we agreed to transfer manufacturing technologies under the supply agreement. We will receive payments contingent upon successful milestone achievements, and royalties on net sales for a period of at least ten years after the first commercial sale under the supply agreement. In order to meet demand for QS-21 under our license and supply agreements, we intend to enter into a contract manufacturing relationship with a third party for such purpose.

**Note I Recent Accounting Pronouncements**

In July 2006, the Financial Accounting Standards Board issued Interpretation No. 48, *Accounting for Uncertainty in Income Taxes - an Interpretation of FASB Statement No. 109* ( FIN No. 48 ). FIN No. 48 clarifies the accounting for uncertainty in income taxes recognized in an entity's financial statements in accordance with SFAS No. 109, *Accounting for Income Taxes* and prescribes a recognition threshold or measurement attribute for financial statement disclosure of tax positions taken or expected to be taken on a tax return requiring that we determine whether it is more likely than not that a tax position will be sustained upon examination by the appropriate taxing authority. Additionally, FIN No. 48 provides guidance on derecognition, classification, interest and penalties, accounting in interim periods, disclosure and transition. FIN No. 48 is effective for fiscal years beginning after December 15, 2006, with early adoption permitted. We have not yet determined the impact of adoption on our consolidated financial statements, if any.

In September 2006, the SEC issued SAB No. 108, *Considering the Effects of Prior Year Misstatements when Quantifying Misstatements in Current Year Financial Statements* ( SAB No. 108 ). SAB No. 108 provides interpretive guidance on the consideration of the effects of prior year misstatements in quantifying current year misstatements for the purpose of a materiality assessment. SAB No. 108 permits adjustment for the cumulative effect of errors relating to prior years in the carrying amount of assets and liabilities as of the beginning of the current fiscal year with an offsetting adjustment to the opening balance of retained earnings in the year of adoption. SAB No. 108 further requires the adjustment of any prior quarterly financial statements within the year of adoption for the effects of such errors on the quarters when the information is next presented. Such adjustments do not require reports previously filed with the SEC to be amended. We are required to adopt SAB No. 108 for our fiscal year ended December 31, 2006. We have not yet determined the impact of adoption on our consolidated financial statements, if any.

In September 2006, the Financial Accounting Standards Board issued SFAS No. 157, *Fair Value Measurements* ( SFAS No. 157 ). SFAS No. 157 establishes a framework for reporting fair value and expands disclosures about fair value measurements. We are required to adopt SFAS No. 157 as of January 1, 2008. We have not yet determined the impact of adoption on our consolidated financial statements.

**Note J Subsequent Event**

On October 30, 2006 we sold \$25 million of convertible senior secured notes ( 2006 Notes ) to a group of accredited investors ( Investors ). The proceeds have been received. These 2006 Notes are convertible into our common stock at \$3.50 per share at the option of the Investors. Alternatively, the 2006 Notes can be converted into a 30% interest in one of our wholly-owned subsidiaries holding QS-21 and AG-707. The 2006 Notes bear interest at 8% payable semiannually on December 30 and June 30 in cash or in additional notes at our option. Notes arising from accrued interest would convert into an incremental interest in the subsidiary holding QS-21 and AG-707. At any time after October 30, 2009, we may call the 2006 Notes and accrued interest at face value for cash if our shares have a minimum average trading price during the prior 30-day period of \$7.00 or higher. Such redemption shall not be effective until the 20<sup>th</sup> business day following notice from us, during which period Investors may elect to exercise their conversion rights. If Investors elect at any time to convert the 2006 Notes into ownership of the subsidiary holding QS-21 and

**Table of Contents**

**ANTIGENICS INC. AND SUBSIDIARIES**

**NOTES TO UNAUDITED CONDENSED CONSOLIDATED FINANCIAL STATEMENTS (continued)**

AG-707, we also have the right, within 30 days, to redeem the 2006 Notes, including accrued interest, at a redemption price providing a 30-percent internal rate of return to the Investors. The 2006 Notes are secured by our equity ownership in this subsidiary.

The 2006 Notes mature on August 30, 2011, at which point we may elect to repay the outstanding balance in cash or in common stock, subject to certain limitations. If we elect to satisfy the outstanding balance with common shares at maturity, the number of shares issued will be determined by dividing the cash obligation by 90 percent of the average closing price of the common shares for the 20 trading days preceding the maturity date of the 2006 Notes. This right is subject to our market capitalization exceeding \$300 million at such time.

In no event will any Investor be obligated to accept equity that would result in an Investor owning in excess of 9.99 percent of the Company's outstanding common stock at any given time in connection with any conversion, redemption, or repayment of the 2006 Notes. The transaction documents include material restrictions on the Company's incurrence of debt and liens while the 2006 Notes are outstanding, as well as other customary covenants. The documents also include (i) a change of control put right by the holders of the 2006 Notes at 101% of the principal amount then outstanding and (ii) rights of first refusal for the holders of the 2006 Notes on any sales of equity of the subsidiary holding QS-21 and AG-707. The foregoing summary of the proposed transaction is subject to, and qualified by, the documents filed with the SEC as exhibits to the Company's Current Report of Form 8-K dated October 31, 2006.

---

**Table of Contents**

**Item 2 *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 September 30, 2006, we had an accumulated deficit of \$450.3 million. Since our inception, we have financed our operations principally by sales of equity and convertible debt instruments. We believe that, based on our current plans and activities, our working capital resources at September 30, 2006 along with the proceeds received from the October issuance of convertible senior secured notes and estimated proceeds from our license, supply and collaborative agreements will be sufficient to satisfy our liquidity requirements into 2008. In addition, we 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 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% at that time.

On March 24, 2006, we announced top-line results from part I of our Phase 3 study of Oncophage in renal cell carcinoma patients who are at high risk of recurrence after surgery, indicating that the trial did not meet its primary endpoint. The analysis was triggered based on the number of events (defined as recurrence of disease or death of a patient prior to recurrence) reported by study investigators. However, an independent review by the trial's Clinical Events Committee (CEC) revealed that a substantially smaller number of events had actually occurred. The analysis showed a trend in favor of Oncophage for recurrence-free survival (the study's primary endpoint), and a trend against Oncophage for overall survival (a secondary endpoint); both findings were not statistically significant. The analysis of the overall survival endpoint is considered an interim assessment. At this time it is unclear as to why opposing trends were observed between recurrence-free survival and overall survival. There is no readily apparent adverse safety signal associated with the vaccine that we believe is contributing to this finding.

Based on these results, in April 2006, we implemented a restructuring plan that further refocused our programs and priorities resulting in the temporary discontinuation of all late-stage clinical programs and concentration on Phase 1 and preclinical programs, including Aroplatin for the treatment of solid tumors and B-cell lymphoma, AG-707 for the treatment of genital herpes, and AU-801 for autoimmune disorders. In addition, we terminated part II of the Phase 3 renal cell carcinoma trial and our Phase 2 trial of AG-858 for the treatment of chronic myelogenous leukemia (CML). A combination study of Oncophage and ATRA-IV is also on hold. We continue to support and develop our QS-21 Stimulon adjuvant (QS-21) partnering collaborations, with the goal of generating royalties as early as 2010. To match these priorities, we eliminated an additional 42 positions in April 2006. In September 2006, we temporarily discontinued activities related to AU-801.

We conducted an in-depth analysis of data from part I of our Phase 3 study of Oncophage in renal cell carcinoma during April and May 2006 and discussed the results with the U.S. Food and Drug Administration (the FDA) and a panel of experts in this medical field. On June 7, 2006, we announced the findings of the analysis. With regard to the primary endpoint, recurrence-free survival, this analysis revealed that in a subgroup of better-prognosis patients in the trial, there was a clinically significant improvement. The subgroup consisted of 361 patients, or 60% of the 604 patients in the full analysis set (FAS) population. As defined by FDA-issued guidance, the FAS is the set of subjects that is as close as possible to the ideal implied by the intention-to-treat principle. It is derived from the set of all randomized subjects by minimal and justified elimination of subjects. In this case, patients with baseline disease were excluded from the FAS population. In this 361-patient subgroup, patients receiving Oncophage had a 43% decreased risk of recurrence compared with patients in the observation arm.



---

## **Table of Contents**

Overall survival, the secondary endpoint, was also assessed in the 604 patients in the FAS patient population. The analysis, which is interim for the overall survival endpoint, indicated a trend against Oncophage. We believe that the data are also likely to have been influenced by missing information from patients who were lost to follow-up or withdrew consent.

Based on this analysis, additional data collection will be required to evaluate overall survival and the availability of such data is uncertain. The absence of such data could delay the initiation of future clinical studies. Moreover, even if such data is collected, it may continue to adversely affect our results, or the acceptability of the results, even if clinically meaningful, may not meet the requirements of regulatory authorities for submission and approval of a biologics application for product approval. Because the evidence of clinically significant improvement has been observed in a subgroup analysis and was not demonstrated in the pre-specified analysis of the primary and secondary endpoints of the Phase 3 study of Oncophage in renal cell carcinoma, this study alone would not generally be expected to be sufficient to support a marketing application for product approval. Further clinical studies must be conducted to demonstrate the safety and efficacy of Oncophage. We may not be able to secure additional financing to continue our clinical trials. If we cannot secure additional financing, we may become insolvent.

On July 6, 2006, we entered into expanded license and supply agreements with GlaxoSmithKline Biologicals SA ( GSK ) for the use of QS-21, an investigational adjuvant used in numerous vaccines under development. QS-21 is a key component included in several proprietary adjuvant systems. A number of vaccine candidates currently under development are formulated with adjuvant systems containing QS-21. Under the terms of the agreements, we have agreed to supply QS-21 to GSK through 2014. In addition, we agreed to transfer manufacturing technologies under the supply agreement. We will receive payments contingent upon successful milestone achievements, and royalties on net sales for a period of at least ten years after the first commercial sale under the supply agreement.

We have the right to elect to manufacture some of our product candidates in our own manufacturing facilities. This would require the investment of substantial funds and the recruitment of qualified personnel in order to build or lease and operate any new manufacturing facilities. We are only beginning to plan and develop clinical or commercial-scale manufacturing capabilities for our product candidates. In order to continue to develop our other product candidates, apply for regulatory approvals and commercialize these product candidates, 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 third parties, potentially including our collaborators, to produce materials required for preclinical studies and clinical trials and for these product candidates. In order to meet demand for QS-21 under our license and supply agreements, we intend to enter into a contract manufacturing relationship with a third party for such purpose. A number of factors could cause production interruptions at our manufacturing facility or our contract manufacturers, including equipment malfunctions, labor or employment retention problems, natural disasters, power outages, terrorist activities, or disruptions in the operations of our suppliers. Alternatively, there is the possibility we may have excess manufacturing capacity if programs do not progress as planned.

## **Forward-Looking Statements**

This Quarterly Report on Form 10-Q 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 generating royalty revenue from QS-21 as early as 2010, our timelines for performing and completing research, preclinical studies and 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 and melanoma, or subgroup analyses of data from these trials, to support a biologics license application for product approval, possible receipt of future regulatory approvals, the performance of collaborative partners in, and revenue expectations from, our strategic license and partnering collaborations,

**Table of Contents**

expected liquidity and cash needs, plans for restructuring and reduction of our net cash burn rate (cash used in operating activities plus cash from investing activities and debt repayments), 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 the subgroup analyses of our Oncophage clinical trials do not predict survival or efficacy of the product in future studies or use of Oncophage; 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 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 strategic licenses and partnering collaborations may not meet expectations; manufacturing problems may cause product development and launch delays and unanticipated costs; our ability to raise additional capital; our ability to attract and retain key employees; 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 Part II-Item 1A. Risk Factors of this Quarterly Report on Form 10-Q. 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® and Stimulon® are registered trademarks of Antigenics and Aroplatin is a trademark of Antigenics. Gleeev® is a registered trademark of Novartis AG. All rights reserved.

**Historical Results of Operations*****Three Months Ended September 30, 2006 Compared to the Three Months Ended September 30, 2005***

**Revenue:** We generated \$216,000 and \$77,000 of research and development revenue during the three months ended September 30, 2006 and 2005, respectively. Revenues from research and development activities include revenues earned on shipments of QS-21 to our QS-21 licensees and license fees earned.

**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. Research and development expense decreased 48% to \$6.3 million for the three months ended September 30, 2006 from \$12.0 million for the three months ended September 30, 2005. The decrease was partially due to a \$2.5 million reduction in payroll related expenses attributable to the workforce reductions in June and December 2005 and in April 2006. Clinical trial related expenses decreased \$2.5 million due to our restructuring plan and temporary discontinuance of late stage clinical programs during April 2006. Other expenses decreased approximately \$700,000 due to fewer ongoing projects and cost containment efforts.

**General and Administrative:** General and administrative expenses consist primarily of personnel costs, facility expenses, and professional fees. General and administrative expenses decreased 9% to \$4.7 million for the three months ended September 30, 2006 from \$5.2 million for the three months ended September 30, 2005. This decrease is a reflection of our cost-cutting efforts. Specific cost reductions included a \$935,000 reduction in payroll and personnel related expenses due mainly to the workforce reductions in June and December 2005 and in April 2006, as well as decreased professional fees of \$327,000. These reductions were partially offset by an increase in non-cash stock-based compensation expense of \$670,000.

---

**Table of Contents**

*Non-operating Income:* Non-operating income of \$120,000 represents a lease termination fee received from one of our sublessees.

*Interest Expense:* Interest expense decreased 5% to \$747,000 for the three months ended September 30, 2006 from \$791,000 for the three months ended September 30, 2005. This decrease results from the decrease in the average outstanding balance of our long-term debt.

*Interest Income:* Interest income decreased 45% to \$382,000 for the three months ended September 30, 2006 from \$689,000 for the same period in 2005. This decrease is primarily attributable to a decrease in cash, cash equivalents, and short-term investments, partially offset by a rise in interest rates earned on our cash, cash equivalents, and short-term investments. Our average interest rate increased from 3.1% for the three months ended September 30, 2005 to 5.2% for the three months ended September 30, 2006.

***Nine Months Ended September 30, 2006 Compared to the Nine Months Ended September 30, 2005***

*Revenue:* We generated \$372,000 and \$282,000 of research and development revenue during the nine months ended September 30, 2006 and 2005, respectively. Revenues from research and development activities include revenues earned on shipments of QS-21 to our QS-21 licensees and license fees earned.

*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. Research and development expense decreased 38% to \$22.6 million for the nine months ended September 30, 2006 from \$36.4 million for the nine months ended September 30, 2005. The decrease was partially due to a \$7.0 million reduction in payroll and personnel related expenses attributable to the workforce reductions in June and December 2005 and in April 2006. There was an additional decrease of \$4.3 million in our clinical trial related expenses due to our restructuring plan and temporary discontinuance of late stage clinical programs. In addition, there was an increase in non-cash stock option credits of \$321,000. Other expenses decreased \$2.8 million due to fewer ongoing projects and cost containment efforts.

*General and Administrative:* General and administrative expenses consist primarily of personnel costs, facility expenses, and professional fees. General and administrative expenses decreased 18% to \$16.0 million for the nine months ended September 30, 2006 from \$19.5 million for the nine months ended September 30, 2005. This decrease is a reflection of our cost-cutting efforts. Specific cost reductions included a \$2.5 million reduction in payroll and personnel related expenses due mainly to the workforce reductions in June and December 2005 and in April 2006, as well as decreased professional fees of \$2.6 million. In addition, other expenses decreased approximately \$500,000. These reductions were offset by an increase in non-cash stock-based compensation expense of \$2.1 million.

*Restructuring 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, resulting in the elimination of 26 positions. We recorded severance charges of \$606,000 related to the elimination of these 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. In addition to severance charges of \$990,000 recorded in December 2005 related to the elimination of these positions, we recorded severance charges of \$112,000 during the three months ended March 31, 2006. In April 2006, we commenced the implementation of a plan to further restructure, refocusing our programs and priorities with the goal of reducing our net cash burn rate and eliminated 42 additional positions. We recorded severance charges of \$645,000 related to the elimination of these positions for the three months ended June 30, 2006 resulting in total severance charges of \$757,000 for the nine months ended September 30, 2006. In addition, during the three months ended March 31, 2006, we wrote-off certain assets that were determined to not be required for our updated business strategy. This resulted in impairment charges of \$617,000 for the nine months ended September 30, 2006.

**Table of Contents**

*Non-operating Income:* Non-operating income of \$141,000 represents a lease termination fee received from one of our sublessees and proceeds from the sale of certain assets.

*Interest Expense:* Interest expense of \$2.2 million for the nine months ended September 30, 2006 increased slightly over interest expense for the nine months ended September 30, 2005. Interest expense relates to interest on our 5.25% convertible senior notes due 2025, which were issued on January 25, 2005, along with interest on the outstanding balance of our long-term debt.

*Interest Income:* Interest income decreased 31% to \$1.4 million for the nine months ended September 30, 2006 from \$2.0 million for the same period in 2005. This decrease is primarily attributable to a decrease in cash, cash equivalents, and short-term investments, partially offset by a rise in interest rates earned on our cash, cash equivalents, and short-term investments. Our average interest rate increased from 2.6% for the nine months ended September 30, 2005 to 4.7% for the nine months ended September 30, 2006.

**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 our largest research and development programs. During the first nine months of 2006, these research and development programs consisted largely of five product candidates, Oncophage, AG-858, AG-707, Aroplatin, and QS-21, as indicated in the following table (in thousands).

Research and Development Program	Product	Nine Months Ended		Year Ended December 31,					Total
		September 30, 2006	September 30, 2005	2004	2003	2002	Prior to 2002		
Heat Shock Proteins for Cancer	Oncophage & AG-858	\$ 16,884	\$ 37,836	\$ 35,462	\$ 40,052	\$ 31,046	\$ 60,075	\$ 221,355	
Heat Shock Proteins for Infectious Diseases	AG-702/707	1,415	3,001	2,682	2,376	1,248	2,820	13,542	
Liposomal Cancer Treatments*	Aroplatin	1,739	3,214	1,112	1,263	2,061	1,442	10,831	
Vaccine Adjuvant	QS-21	958	310	264	301	1,403	2,553	5,789	
Other Research and Development Programs		1,632	2,719	2,198	2,272	1,720	5,830	16,371	
Total Research and Development Expenses		\$ 22,628	\$ 47,080	\$ 41,718	\$ 46,264	\$ 37,478	\$ 72,720	\$ 267,888	

\* 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 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 development of our most advanced product candidate, Oncophage, is subject to further evaluation and uncertain, and because 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. Our collaborations involving QS-21 depend on our collaborative partners or licensees successfully completing clinical trials, our entering into a successful contract manufacturing relationship to meet collaborative partner or licensee demand, and our collaborative partners or licensees obtaining regulatory approvals.

**Table of Contents****Product Development Portfolio**

Below is a table showing the status of our clinical trials.

<b>Product</b>	<b>Phase 3</b>	<b>Phase 2</b>	<b>Phase 1/2</b>
<b><i>Trials Currently Enrolling Patients:</i></b>			
AG-707			Genital herpes
Aroplatin			Solid tumors/NHL (c)
<b><i>Phase 3 Trials Undergoing Analysis:</i></b>			
Oncophage	Renal cell carcinoma Part I (a)(b)		
<b><i>Trials Closed to Enrollment:</i></b>			
Oncophage	Renal cell carcinoma Part II (a)(d) Metastatic melanoma (a)	Colorectal cancer Non-Hodgkin's lymphoma (NHL) Gastric cancer Metastatic renal cell carcinoma Lung cancer Metastatic melanoma	Pancreatic cancer
Oncophage and ATRA-IV			Renal cell carcinoma (e)
AG-858		CML (a)(d)	
Aroplatin		Colorectal cancer	Solid tumors

- (a) These are multicenter trials conducted in the U.S. as well as internationally.  
 (b) This trial is closed to enrollment.  
 (c) Utilizing a new formulation.  
 (d) Trial has been terminated.  
 (e) Initiation of this study is on hold.

***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 Part II-Item 1A. Risk Factors of this Quarterly Report on Form 10-Q.

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 results 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

## **Table of Contents**

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 included 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.

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 CEC comprised of expert radiologists and an expert oncologist.

On March 24, 2006, we announced top-line results from part I of our Phase 3 study of Oncophage in renal cell carcinoma patients who are at high risk of recurrence after surgery, indicating that the trial did not meet its primary endpoint. The analysis was triggered based on the number of events (defined as recurrence of disease or death of a patient prior to recurrence) reported by study investigators. However, an independent review by the trial's CEC revealed that a substantially smaller number of events had actually occurred. The analysis showed a trend in favor of Oncophage for recurrence-free survival (the study's primary endpoint), and a trend against Oncophage for overall survival (a secondary endpoint); both findings were not statistically significant. The analysis of the overall survival endpoint is considered an interim assessment. At this time it is unclear as to why opposing trends were observed between recurrence-free survival and overall survival. There is no readily apparent adverse safety signal associated with the vaccine that we believe is contributing to this finding.

We conducted an in-depth analysis of data from part I of our Phase 3 study of Oncophage in renal cell carcinoma in April and May 2006 and discussed the results with the FDA and a panel of experts in this medical field. On June 7, 2006, we announced the findings of the analysis. With regard to the primary endpoint, recurrence-free survival, this analysis revealed that in a subgroup of better-prognosis patients in the trial, there was a clinically significant improvement. The subgroup consisted of 361 patients, or 60% of the 604 patients in the FAS population. In this 361-patient subgroup, patients receiving Oncophage had a 43% decreased risk of recurrence compared with patients in the observation arm.

Overall survival, the secondary endpoint, was also assessed in the 604 patients in the FAS patient population. The analysis, which is interim for the overall survival endpoint, indicated a trend against Oncophage. We believe that the data are also likely to have been influenced by missing information from patients who were lost to follow-up or withdrew consent.

Because the evidence of clinically significant improvement has been observed in a subgroup analysis and was not demonstrated in the pre-specified analysis of the primary and secondary endpoints of the Phase 3 study of Oncophage in renal cell carcinoma, this study alone is not expected to be sufficient to support a biologics application for product approval.

Based on this analysis, additional data collection will be required to evaluate overall survival and the availability of such data is uncertain. The absence of such data could delay the initiation of future clinical studies. Moreover, even if such data is collected, it may continue to adversely affect our results, or the acceptability of the results, even if clinically meaningful, may not meet the requirements of regulatory authorities for submission and approval of a

**Table of Contents**

biologics application for product approval. Further clinical studies must be conducted to demonstrate the safety and efficacy of Oncophage. We may not be able to secure additional financing to continue our clinical trials. If we cannot secure additional financing, we may become insolvent.

During the quarter ended September 30, 2004, we completed enrollment of 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 and updated findings were presented on June 5, 2006 at the meeting of the American Society of Clinical Oncology. Overall, patients in the intent-to-treat Oncophage arm (M1a, b and c combined categories as defined by the American Joint Committee on Cancer) fared similarly to those in the physician's choice arm in terms of survival, the primary endpoint. In a subgroup of patients who received at least ten injections of Oncophage, overall median survival increased by approximately 29% in the Oncophage treated arm as compared with those in the physician's choice treatment arm (16.5 months versus 12.8 months). These findings also noted that in a subgroup of randomized stage IV M1a and M1b combined patients, who received at least ten doses of Oncophage vaccine, median survival increased by approximately 143% in the Oncophage-treated arm compared with those in the physician's choice treatment arm (31.2 months versus 12.8 months). This analysis was not pre-specified. The physician's choice treatment arm included the current array of therapies such as chemotherapeutics, biological agents and/or surgery. This overall survival analysis of the primary endpoint on an intent-to-treat basis was not statistically significant.

*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 HSPPC-70, 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. Effective April 7, 2006, the study was terminated due to a change in our corporate priorities.

*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 has a potential to benefit a larger number of patients with genital herpes.

*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.

**Table of Contents**

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. This study is currently enrolling patients.

*QS-21*

On July 6, 2006, we entered into expanded license and supply agreements with GSK for the use of QS-21, an investigational adjuvant used in numerous vaccines. QS-21 is a key component included in several proprietary adjuvant systems. A number of vaccine candidates currently under development are formulated with adjuvant systems containing QS-21. Under the terms of the agreements, we have agreed to supply QS-21 to GSK through 2014. In addition, we agreed to transfer manufacturing technologies under the supply agreement. We will receive payments contingent upon successful milestone achievements, and royalties on net sales for a period of at least ten years after the first commercial sale under the supply agreement. In order to meet demand for QS-21 under our license and supply agreements, we intend to enter into a contract manufacturing relationship with a third party for such purpose.

**Liquidity and Capital Resources**

We have incurred annual operating losses since inception, and, as of September 30, 2006, we had an accumulated deficit of \$450.3 million. We expect to incur 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. Since our inception, we have financed our operations primarily through the sale of equity and 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 September 30, 2006, we have raised aggregate net proceeds of \$399.7 million 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 \$20.5 million under two credit facilities. At September 30, 2006, we had debt outstanding of approximately \$50.4 million. In addition, on October 30, 2006 we sold \$25 million of convertible senior secured notes maturing on August 30, 2011.

We believe that, based on our current plans and activities, our working capital resources at September 30, 2006 along with the funds received from our recent sale of convertible senior secured notes and estimated proceeds from license, supply and collaborative agreements will be sufficient to satisfy our liquidity requirements into 2008. In June 2005, we took steps to improve our operating efficiency through the prioritization of our development portfolio and a streamlining of our infrastructure, resulting in the elimination of 26 positions. During December 2005, we implemented a series of actions to reduce our net cash burn rate (cash used in operating activities plus cash from investing activities and debt repayments), and preserve our cash. These actions included eliminating 65 positions, additional cost saving activities, and a focusing and streamlining of our research and development activities. In April 2006, we expanded our restructuring plan to further conserve funds. This additional restructuring involves temporarily discontinuing all late-stage clinical programs and concentrating on Phase 1 and preclinical programs, including Aroplatin, AG-707, and AU-801 (in September 2006, we temporarily discontinued activities related to AU-801). In addition, we continue to support and develop our QS-21 partnering collaborations, with the goal of generating royalties as early as 2010. These actions also included further reducing our headcount to approximately 130 at the time. As a result of these actions and based on our current plans and activities, we anticipate that our net cash burn rate will be between \$30 million and \$35 million, on an annualized basis, from July 2006 onwards. In order to fund our operations through 2008 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 collaborative partners, (2) renegotiating license agreements with current collaborative 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 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



---

**Table of Contents**

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 product candidates, and at this time, we cannot reliably estimate if or when that will occur, or if we will require additional capital as discussed above. Please see the **Forward-Looking Statements** section and the risks highlighted under Part II-Item 1A. **Risk Factors** of this Quarterly Report on Form 10-Q.

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 \$45.9 million over the term of the studies. Through September 30, 2006, approximately \$44.1 million has been expensed as research and development expenses in the accompanying condensed consolidated statements of operations and \$42.1 million has been paid related to these clinical studies. The timing of 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 \$9.1 million, of which \$5.4 million has been paid through September 30, 2006. 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 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. We plan to enter into additional agreements, and we anticipate significant additional expenditures will be required to complete our clinical trials, apply for regulatory approvals, continue development of our technologies, 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 collaborative 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 collaborative partners and/or licensees 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. These agreements generally provide us with rights to manufacture and supply QS-21 to the collaborative partner or licensee and also call for royalties to be paid to us on future sales of licensed vaccines that include QS-21, which may or may not be achieved. Significant investment in manufacturing capacity will be required to exercise our manufacturing and supply rights.

Our cash, cash equivalents, and short-term investments at September 30, 2006 were \$24.4 million, a decrease of \$37.4 million from December 31, 2005. In conjunction with our expanded license and supply agreements with GSK, we received a \$3 million up-front non-refundable payment in July 2006. During the nine months ended September 30, 2006, we used cash primarily to finance our operations. Net cash used in operating activities for the nine months ended September 30, 2006 and 2005 was \$35.9 million and \$52.6 million, respectively. The decrease resulted primarily from steps taken in June 2005 to improve our operating efficiency through the prioritization of our development portfolio and a streamlining of our infrastructure and, in December 2005, to further update our business strategy and refocus our programs and priorities, including the postponement and deceleration of a number of our projects. These combined steps resulted in the elimination of 91 positions. In addition, in April 2006, we implemented a restructuring plan that further refocused our programs and priorities resulting in the temporary discontinuation of all late-stage clinical programs and concentration on Phase 1 and preclinical programs, including Aroplatin for the treatment of solid tumors and B-cell lymphoma, AG-707 for the treatment of genital herpes, and AU-801 for autoimmune disorders (in September 2006, we temporarily discontinued activities related to AU-801). We also terminated part II of the Phase 3 renal cell carcinoma trial and our Phase 2 trial of AG-858 for the treatment of CML. A combination study of Oncophage and ATRA-IV is also on hold. We continue to support and develop our QS-21 partnering collaborations, with the goal of generating royalties as early as 2010. To match these priorities, we eliminated an additional 42 positions. 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 Part II-Item 1A. **Risk Factors** of this Quarterly Report on Form 10-Q.

---

**Table of Contents**

Net cash provided by investing activities for the nine months ended September 30, 2006 was \$22.2 million as compared to \$29.0 million provided by investing activities for the nine months ended September 30, 2005. During the nine months ended September 30, 2006, we had net maturities of \$19.7 million of short-term investments compared with net maturities of \$29.6 million during the nine months ended September 30, 2005. Additionally, our expenditures on equipment and furniture and fixtures decreased approximately \$2.5 million to \$109,000 for the nine months ended September 30, 2006. We do not anticipate significant additional capital expenditures during the remainder of 2006. We also received \$2.8 million during the nine months ended September 30, 2006 from the release of restrictions on our restricted cash balance compared to \$2.1 million during the nine months ended September 30, 2005. We made contributions of \$285,000 and \$225,000 to Applied Genomic Technology Capital Fund ( AGTC ), a limited partnership, during the nine month periods ended September 30, 2006 and 2005, respectively. In addition, during the nine months ended September 30, 2005, we received a cash distribution from AGTC of \$123,000. Our remaining commitment to AGTC as of September 30, 2006 is \$165,000, with contributions made as requested by the general partner.

Net cash used in financing activities was \$3.9 million for the nine months ended September 30, 2006 as compared to net cash provided by financing activities of \$43.4 million for the nine months ended September 30, 2005. During the nine months ended September 30, 2006 and 2005, exercises of stock options and proceeds from our employee stock purchase plan totaled \$469,000 and \$327,000, respectively. Repayments of long-term debt totaled \$3.8 million during the nine months ended September 30, 2006, compared to \$4.3 million during the nine months ended September 30, 2005.

In January 2005, we received net proceeds of approximately \$48.0 million from the issuance of our convertible senior notes. In July 2003, we entered into a \$17.1 million debt facility to finance the first phase of the build-out of our Lexington facility. Through September 30, 2006, we have borrowed \$17.0 million under this facility. Specific assets, including certain leasehold improvements and a cash security deposit (restricted cash) of \$169,000, secure the loans drawn on the credit facility. At September 30, 2006, we owed \$213,000 under this credit facility.

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 that 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 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 under these agreements of \$358,000 during the three months ending December 31, 2006; \$1.0 million in 2007; \$1.0 million in 2008; \$1.0 million in 2009; and \$750,000 in 2010. The collection of this income, however, is subject to uncertainty.

We are currently involved in certain legal proceedings as detailed in Note F of the notes to our unaudited condensed consolidated financial statements. 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.

**Table of Contents****Related Parties**

As of September 30, 2006, we had invested approximately \$2.8 million in a limited partnership, AGTC, and during the nine months ended September 30, 2005, we received \$123,000 as a distribution from this partnership. Our total capital commitment to AGTC is \$3.0 million. The general partner of AGTC is AGTC Partners, L.P. The management company for AGTC is NewcoGen Group Inc., which is a wholly owned subsidiary of Flagship Venture Management, Inc. ( Flagship ). Noubar Afeyan, Ph.D., who is one of our directors, is the Managing Partner and Chief Executive Officer of Flagship. For additional details, refer to Note F of the notes to our unaudited condensed consolidated financial statements. Garo H. Armen, Ph.D., our Chairman and Chief Executive Officer, was a director of NewcoGen Group Inc. until 2004.

We currently have QS-21 license and supply agreements with Neuralab Limited, a wholly owned subsidiary of Elan Corporation, plc ( Elan ), 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, was a director of Elan until May 2006. For the nine months ended September 30, 2006 and 2005, no revenues were earned under these agreements and, at September 30, 2006 and December 31, 2005, 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, and upon its expiration in March 2006, we entered into a new Consulting Agreement (the Agreement ), effective March 28, 2006, with Dr. Srivastava. The Agreement with Dr. Srivastava has an initial term of five years and is automatically extended for successive terms of one year unless either party notifies the other at least 90 days prior to the expiration of the original or any extension term that the Agreement is not to be extended. The Agreement may be terminated without cause by us during its term, subject to the payment of compensation for twelve months at the then current rate provided for under the Agreement. In exchange for the timely performance of services, as defined in the Agreement, Dr. Srivastava is entitled to receive compensation to be established by the Compensation Committee of the Antigenics Board of Directors. For the twelve-month period ending March 31, 2007, Dr. Srivastava will receive \$175,000. Dr. Srivastava is also eligible to receive an annual bonus and stock options at the discretion of the Compensation Committee of our Board of Directors.

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 approximately \$6.8 million, payable quarterly at the rate of \$337,500, contingent on the continued 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 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 former Senior Vice President of Development. This agreement was extended several times during 2005 to obtain additional data management and processing services and expired in May 2006. For the nine months ended September 30, 2006, we expensed \$125,000 under this agreement. At September 30, 2006, we had no amounts due 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 former 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. During the year ended December 31, 2005, we paid \$196,000 to Symphony Capital LLC for activities up to termination in February 2005. Dr. Alastair Wood, another former director of ours, is a consultant to, and has a financial interest in Symphony Capital LLC.

---

## **Table of Contents**

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

The Securities and Exchange Commission ( 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 included in our Form 10-K for the year ended December 31, 2005 filed with the SEC on March 15, 2006. 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 \$6.3 million and \$12.0 million for the three months ended September 30, 2006 and 2005, respectively. Research and development costs were \$22.6 million and \$36.4 million for the nine months ended September 30, 2006 and 2005, respectively.

#### *Investments*

We classify investments in marketable securities at the time of purchase. At September 30, 2006, all marketable securities were classified as available-for-sale and as such, changes in the fair value of the 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 September 30, 2006, we have included it in other long-term assets on the condensed consolidated balance sheet, as more fully disclosed in Note F of the notes to our unaudited condensed consolidated financial statements included in this report. 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

**Table of Contents**

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 \$2.3 million and \$2.0 million at September 30, 2006 and December 31, 2005, respectively.

*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*

Effective January 1, 2006, we adopted the fair value recognition provisions of Statement of Financial Accounting Standards ( SFAS ) No. 123R, *Share-Based Payment* ( SFAS No. 123R ), using the modified prospective transition method, and therefore have not restated prior periods' results. Our results of operations for the three and nine months ended September 30, 2006 were impacted by the recognition of non-cash expense related to the fair value of our stock-based compensation awards. During the quarter ended September 30, 2006, we recorded a net charge of \$957,000 related to stock-based compensation, of which a charge of \$277,000 is included in research and development expense and a charge of \$680,000 is included in general and administrative expense. For the nine months ended September 30, 2006, we recorded a net charge of \$1.8 million related to stock-based compensation, of which a credit of \$386,000 is included in research and development expense and a charge of \$2.1 million is included in general and administrative expense. Stock-based compensation expense for the three and nine months ended September 30, 2006 includes compensation expense for all stock-based options granted prior to, but not yet vested as of January 1, 2006, based on the grant date value estimated in accordance with the original provision of SFAS No. 123, *Accounting for Stock-Based Compensation* ( SFAS No. 123 ). In addition, stock-based compensation expense for the three and nine months ended September 30, 2006 includes compensation expense for all stock-based options granted after January 1, 2006, based on the grant date fair value estimated in accordance with the provisions of SFAS No. 123R. Under the fair value recognition provisions of SFAS No. 123R, we recognize stock-based compensation net of an estimated forfeiture rate and only recognize compensation cost for those shares expected to vest on a straight-line prorated basis over the requisite service period of the award. In March 2005, the SEC issued Staff Accounting Bulletin ( SAB ) No. 107, *Share-Based Payment* ( SAB No. 107 ), regarding the SEC's guidance on SFAS No. 123R and the valuation of share-based payments for public companies. We have applied the provisions of SAB No. 107 in the adoption of SFAS No. 123R. See Note D of the notes to our unaudited condensed consolidated financial statements for a further discussion on stock-based compensation.

Prior to the adoption of SFAS No. 123R, we accounted for options granted to employees and directors in accordance with Accounting Principles Board Opinion No. 25, *Accounting for Stock Issued to Employees*, and related interpretations. As such, compensation cost was recorded on fixed stock option grants only if the current fair value of the underlying stock exceeded the exercise price of the option at the date of grant. In those situations, compensation expense was recognized on a straight-line basis over the vesting period.

Stock options granted to certain non-employees have been accounted for based on the fair-value method of accounting in accordance with SFAS No. 123R 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 affect each reporting period, until the non-employee options vest, by changes in the fair value of our common stock. Effective January 1, 2006, under the provisions of EITF Issue No. 00-19, *Accounting for Derivative Financial Instruments Indexed to, and Potentially Settled in, a Company's Own Stock*, the change in fair value of vested options issued to non-employees will also affect each reporting period, until the options are exercised or expire.

Determining the appropriate fair value model and calculating the fair value of share-based payment awards require the input of highly subjective assumptions, including the expected life of the share-based payment awards

---

**Table of Contents**

and stock price volatility. The assumptions used in calculating the fair value of share-based payment awards represent management's best estimates, but these estimates involve inherent uncertainties and the application of management judgment. As a result, if factors change and we use different assumptions, our stock-based compensation expense could be materially different in the future. In addition, we are required to estimate the expected forfeiture rate and only recognize expense for those shares expected to vest. If our actual forfeiture rate is materially different from our estimate, the stock-based compensation expense could be significantly different from what we have recorded in the current period. See Note D of the notes to our unaudited condensed consolidated financial statements for a further discussion on stock-based compensation.

**Item 3 *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 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. Since the fiscal 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.

We had cash, cash equivalents, and short-term investments at September 30, 2006 of approximately \$24.4 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 September 30, 2006, 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.

**Item 4 *Controls and Procedures*****Evaluation 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 "Securities 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 quarterly report to provide reasonable assurance that the Company can meet its disclosure obligations.

**Changes in internal control over financial reporting**

During the quarter ended September 30, 2006, there was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Securities Exchange Act) that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

**Table of Contents****PART II OTHER INFORMATION****Item 1 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 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. On February 15, 2005, the Court granted preliminary approval of the settlement. On August 31, 2005, the Court issued an order confirming preliminary approval of the settlement. The settlement remains subject to a number of conditions, including final approval of the Court. 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 September 30, 2006.

On October 12, 2005, a third party filed a notice of opposition in the European Patent Office 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. We have filed a response to this opposition and intend to continue to defend the opposition. However, there is no guarantee that we will continue to do so, that this patent will not be revoked or that we may not have to amend the claims.

Antigenics and our Chairman and Chief Executive Officer have been named as defendants in a purported class action complaint filed on June 16, 2006 in Federal District Court in New Mexico by Steven J. Tuckfelt on behalf of himself and all others similarly situated. The complaint was served on September 7, 2006. The complaint alleges that certain of our disclosures in connection with the conduct of the Oncophage Phase 3 renal cell carcinoma trial violated Sections 10(b) and 20(a) of the Securities Exchange Act as well as includes purported claims for breach of fiduciary duty. While we believe that the complaint is without merit and plan to vigorously defend against the litigation, the outcome of litigation is uncertain. Regardless of the outcome, participation in this lawsuit diverts management's time and attention from our business and may result in our paying legal fees and damages.

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.

---

## **Table of Contents**

### **Item 1A. Risk Factors**

Our future operating results could differ materially from the results described in this Quarterly Report on Form 10-Q 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 Forward-Looking Statements on page 15 of this Quarterly Report on Form 10-Q. 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 or we are not able to raise additional capital resources, we may become insolvent and be unable to continue our operations***

From our inception through September 30, 2006, we have generated net losses totaling approximately \$450.3 million. Our net losses for the nine months ended September 30, 2006 and for the year ended December 31, 2005 were approximately \$40.3 million and \$74.1 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. Furthermore, our ability to generate cash from operations is dependent on if and when we will be able to enter into strategic licensing and partnering relationships and/or commercialize our product candidates. Although we are seeking additional financing, implemented cost-cutting measures late in 2005 and further cost-cutting measures in April 2006, the anticipated savings may not be at the levels estimated. If we are unable to raise additional capital or incur operating losses for longer than we expect, we may become insolvent and 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 September 30, 2006, we had approximately \$24.4 million in cash, cash equivalents, and short-term investments. We believe that, based on our current plans and activities, our current working capital along with the proceeds received from the sale of our convertible senior secured notes in October 2006 and estimated revenue from collaborative agreements will be sufficient to fund our planned development programs, clinical trials, and other operating activities into 2008. We plan to attempt to raise additional funds prior to that time. For the nine months ended September 30, 2006, the sum of our average monthly cash used in operating activities plus our average monthly capital expenditures was approximately \$4.0 million. Total capital expenditures for the nine months ended September 30, 2006 were \$109,000. We do not anticipate significant additional capital expenditures during the remainder of 2006. Since our inception, we have financed our operations principally by sales of equity and convertible debt instruments. In order to finance these expenditures as well as future operations, we will be required to raise additional funds in the capital markets, through arrangements with collaborative 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 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 September 30, 2006, our total long-term debt, excluding the current portion, was \$50.0 million. Our 5.25% convertible senior notes due 2025 do not restrict our ability or the ability of our subsidiaries 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.



---

**Table of Contents**

On October 30, 2006 we sold \$25 million of convertible senior secured notes ( 2006 Notes ) to a group of accredited investors ( Investors ). The proceeds have been received. These 2006 Notes are convertible into our common stock at \$3.50 per share at the option of the Investors. Alternatively, the 2006 Notes can be converted into a 30% interest in one of our wholly-owned subsidiaries holding QS-21 and AG-707. The 2006 Notes bear interest at 8% payable semi-annually on December 30 and June 30 in cash or in additional notes at our option. Notes arising from accrued interest would convert into an incremental interest in the subsidiary holding QS-21 and AG-707. At any time after October 30, 2009, we may call the 2006 Notes and accrued interest at face value for cash if our shares have a minimum average trading price during the prior 30-day period of \$7.00 or higher. Such redemption shall not be effective until the 20<sup>th</sup> business day following notice from us, during which period Investors may elect to exercise their conversion rights. If Investors elect at any time to convert the 2006 Notes into ownership of the subsidiary holding QS-21 and AG-707, we also have the right, within 30 days, to redeem the 2006 Notes, including accrued interest, at a redemption price providing a 30-percent internal rate of return to the Investors. The 2006 Notes are secured by our equity ownership in this subsidiary.

The 2006 Notes mature on August 30, 2011, at which point we may elect to repay the outstanding balance in cash or in common stock, subject to certain limitations. If we elect to satisfy the outstanding balance with common shares at maturity, the number of shares issued will be determined by dividing the cash obligation by 90 percent of the average closing price of the common shares for the 20 trading days preceding the maturity date of the 2006 Notes. This right is subject to our market capitalization of exceeding \$300 million at such time.

In no event will any Investor be obligated to accept equity that would result in an Investor owning in excess of 9.99 percent of the Company s outstanding common stock at any given time in connection with any conversion, redemption or repayment of the 2006 Notes. The transaction documents include material restrictions on the Company s incurrence of debt and liens while the 2006 Notes are outstanding, as well as other customary covenants. The documents also include (i) a change of control put right by the holders of the 2006 Notes at 101% of the principal amount then outstanding and (ii) rights of first refusal for the holders of the 2006 Notes on any sales of equity of the subsidiary holding QS-21 and AG-707. The foregoing summary of the proposed transaction is subject to, and qualified by, the documents filed with the Securities and Exchange Commission as exhibits to the Company s Current Report of Form 8-K dated October 31, 2006.

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;

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 nine months ended September 30, 2006 and for the year ended December 31, 2005, net cash used in operating activities was approximately \$35.9 million and \$66.3 million, respectively. Including our 2006 Notes and assuming no additional interest-bearing debt is incurred and none of the notes are converted, redeemed, repurchased, or exchanged, our debt service requirements (payments of principal and interest) will be approximately \$1.0 million during the three months ended December 31, 2006, \$4.6 million during 2007 and annually thereafter until the notes are no longer outstanding. Interest of \$500,000 due during the 3 months ended December 31, 2006 and \$2.0 million annually thereafter may be paid in additional notes in accordance with the terms of our 2006 Notes.

**Table of Contents**

***Because part I of our Phase 3 trial in renal cell carcinoma did not achieve its primary endpoint, this trial would not be sufficient to support a biologics license application for product approval, and we would not expect to generate product revenue from sales of Oncophage until after the completion of additional clinical studies that demonstrate the safety and efficacy of Oncophage and the achievement of regulatory approval.***

On March 24, 2006, we announced top-line results from part I of our Phase 3 study of Oncophage in renal cell carcinoma patients who are at high risk of recurrence after surgery, indicating that the trial did not meet its primary endpoint. The analysis was triggered based on the number of events (defined as recurrence of disease or death of a patient prior to recurrence) reported by study investigators. However, an independent review by the trial's CEC revealed that a substantially smaller number of events had actually occurred. The analysis showed a trend in favor of Oncophage for recurrence-free survival (the study's primary endpoint), and a trend against Oncophage for overall survival (a secondary endpoint); both findings were not statistically significant. The analysis of the overall survival endpoint is considered an interim assessment. At this time it is unclear as to why opposing trends were observed between recurrence-free survival and overall survival. There is no readily apparent adverse safety signal associated with the vaccine that we believe is contributing to this finding.

We conducted an in-depth analysis of data from part I of our Phase 3 study of Oncophage in renal cell carcinoma in April and May 2006 and discussed the results with the FDA and a panel of experts in this medical field. On June 7, 2006, we announced the findings of the analysis. With regard to the primary endpoint, recurrence-free survival, this analysis revealed that in a subgroup of better-prognosis patients in the trial, there was a clinically significant improvement. The subgroup consisted of 361 patients, or 60% of the 604 patients in the full analysis set ( FAS ) population. As defined by FDA-issued guidance, the FAS is the set of subjects that is as close as possible to the ideal implied by the intention-to-treat principle. It is derived from the set of all randomized subjects by minimal and justified elimination of subjects. In this case, patients with baseline disease were excluded from the FAS population. In this 361-patient subgroup, patients receiving Oncophage had a 43% decreased risk of recurrence compared with patients in the observation arm.

Overall survival, the secondary endpoint, was also assessed in the 604 patients in the FAS patient population. The analysis, which is interim for the overall survival endpoint, indicated a trend against Oncophage. We believe that the data are also likely to have been influenced by missing information from patients who were lost to follow-up or withdrew consent.

Based on this analysis, additional data collection will be required to evaluate overall survival and the availability of such data is uncertain. The absence of such data could delay the initiation of future clinical studies. Moreover, even if such data is collected, it may continue to adversely affect our results, or the acceptability of the results, even if clinically meaningful, may not meet the requirements of regulatory authorities for submission and approval of a biologics application for product approval. Further clinical studies must be conducted to demonstrate the safety and efficacy of Oncophage. We may not be able to secure additional financing to continue our clinical trials. If we cannot secure additional financing, we may become insolvent.

Because the evidence of clinically significant improvement has been observed in a subgroup analysis and was not demonstrated in the pre-specified analysis of the primary and secondary endpoints of the Phase 3 study of Oncophage in renal cell carcinoma, this study alone is not expected to be sufficient to support a biologics application for product approval.

***Because the FDA has previously told us that part I of our 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, and because of the results from part I, we do not expect the results of part I alone will provide substantial evidence in support of a future biologics license application that we ultimately may file with the FDA.***

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

---

**Table of Contents**

23, 2003, the FDA lifted the partial clinical hold. Even though the FDA lifted the partial clinical hold, the FDA 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 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. 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 indicated that, by itself, part I of our Phase 3 clinical trial in renal cell carcinoma was not sufficient to support a BLA filing, we expanded our clinical development plan by initiating a part II to this Phase 3 trial in a similar patient population. The FDA agreed with this registration plan, which was comprised of two components – part I and part II.

On March 24, 2006, we announced top-line results from part I of our Phase 3 renal cell carcinoma trial. The analysis was triggered based on the number of events reported by study investigators. However, an independent review by the trial's CEC revealed that a substantially smaller number of events had actually occurred. The analysis showed a trend in favor of Oncophage for recurrence-free survival (the study's primary endpoint), and a trend against Oncophage for overall survival (a secondary endpoint); both findings were not statistically significant. The analysis of the overall survival endpoint is considered an interim assessment. At this time it is unclear as to why opposing trends were observed between recurrence-free survival and overall survival. There is no readily apparent adverse safety signal associated with the vaccine that we believe is contributing to this finding.

Based on these results, we discontinued part II of our Phase 3 renal cell carcinoma trial and initiated an in-depth analysis of the data from part I of the Phase 3 renal cell carcinoma trial. This in-depth analysis found what we believe to be clinically meaningful improvement in recurrence-free survival in a subgroup of better-prognosis patients. However, the data relating to overall survival, which is an interim assessment, indicated a trend against Oncophage.

Based on this analysis, additional data collection will be required to evaluate overall survival, and the availability of such data is uncertain. The absence of such data could delay the initiation of future clinical studies. Moreover, even if such data is collected, it may continue to adversely affect our results, or the acceptability of the results, even if clinically meaningful, may not meet the requirements of regulatory authorities for submission and approval of a biologics application for product approval. Further clinical studies must be conducted to demonstrate the safety and efficacy of Oncophage. We may not be able to secure additional financing to continue our clinical trials. If we cannot secure additional financing, we may become insolvent.

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

During the quarter ended September 30, 2004, we completed enrollment of 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 and updated findings were presented on June 5, 2006 at the meeting of the American Society of

---

**Table of Contents**

Clinical Oncology. Overall, patients in the intent-to-treat Oncophage arm (M1a, b and c combined categories as defined by the American Joint Committee on Cancer) fared similarly to those in the physician's choice arm in terms of survival, the primary endpoint. In a subgroup of patients who received at least ten injections of Oncophage, overall median survival increased by approximately 29% in the Oncophage treated arm as compared with those in the physician's choice treatment arm (16.5 months versus 12.8 months). These findings also noted that in a subgroup of randomized stage IV M1a and M1b combined patients, who received at least ten doses of Oncophage vaccine, median survival increased by approximately 143% in the Oncophage-treated arm compared with those in the physician's choice treatment arm (31.2 months versus 12.8 months). This analysis was not pre-specified. The physician's choice treatment arm included the current array of therapies such as chemotherapeutics, biological agents and/or surgery. This overall survival analysis of the primary endpoint on an intent-to-treat basis was not statistically significant.

Due to a relatively high failure rate in vaccine manufacturing, this study would not, by itself, be expected to 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.

***Analysis of subgroups in clinical trials is generally hypothesis-generating, supportive of future clinical trials, and not generally supportive, alone, of registration or approval of a product.***

The signals and trends observed in the Phase 3 renal cell carcinoma and melanoma trials of Oncophage are based on data analysis of subgroups that were not pre-specified endpoints in these studies. While the data might be suggestive of treatment effect, the results cannot be expected, alone, to support registration or approval of Oncophage. While the data provide important evidence that is useful for physicians in designing and conducting future clinical trials, additional evidence may be required to recruit physicians for future clinical research.

***We expect our commercial launch of Oncophage to be delayed, and it may be prevented, which would diminish our business prospects.***

On March 24, 2006, we announced top-line results from part I of our Phase 3 renal cell carcinoma trial. The analysis was triggered based on the number of events reported by study investigators. However, an independent review by the trial's CEC revealed that a substantially smaller number of events had actually occurred. The analysis showed a trend in favor of Oncophage for recurrence-free survival (the study's primary endpoint), and a trend against Oncophage for overall survival (a secondary endpoint); both findings were not statistically significant. The analysis of the overall survival endpoint is considered an interim assessment. At this time it is unclear as to why opposing trends were observed between recurrence-free survival and overall survival. There is no readily apparent adverse safety signal associated with the vaccine that we believe is contributing to this finding.

Based on these results, we discontinued part II of our Phase 3 renal cell carcinoma trial and initiated an in-depth analysis of the data from part I of the Phase 3 renal cell carcinoma trial. This in-depth analysis found what we believe to be clinically meaningful improvement in recurrence-free survival in a subgroup of better prognosis patients. However, the data relating to overall survival, which is an interim assessment, indicated a trend against Oncophage.

Based on this analysis, additional data collection will be required to evaluate overall survival and the availability of such data is uncertain. The absence of such data could delay the initiation of future clinical studies. Moreover, even if such data is collected, it may continue to adversely affect our results, or the acceptability of the results, even if clinically meaningful, may not meet the requirements of regulatory authorities for submission and approval of a biologics application for product approval. Further clinical studies must be conducted to demonstrate the safety and efficacy of Oncophage. We may not be able to secure additional financing to continue our clinical trials. If we cannot secure additional financing, we may become insolvent.

---

**Table of Contents**

During the quarter ended September 30, 2004, we completed enrollment of 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 and updated findings were presented on June 5, 2006 at the meeting of the American Society of Clinical Oncology. Overall, patients in the intent-to-treat Oncophage arm (M1a, b and c combined categories as defined by the American Joint Committee on Cancer) fared similarly to those in the physician's choice arm in terms of survival, the primary endpoint. In a subgroup of patients who received at least ten injections of Oncophage, overall median survival increased by approximately 29% in the Oncophage treated arm as compared with those in the physician's choice treatment arm (16.5 months versus 12.8 months). These findings also noted that in a subgroup of randomized stage IV M1a and M1b combined patients, who received at least ten doses of Oncophage vaccine, median survival increased by approximately 143% in the Oncophage-treated arm compared with those in the physician's choice treatment arm (31.2 months versus 12.8 months). This analysis was not pre-specified. The physician's choice treatment arm included the current array of therapies such as chemotherapeutics, biological agents and/or surgery. This overall survival analysis of the primary endpoint on an intent-to-treat basis was not statistically significant. As we have previously stated, we believe 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 product candidates are safe and effective before they can be approved for commercial sale. Clinical development, including preclinical testing, is also 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 require a preclinical study or clinical trial to be repeated or cause a program to be terminated, even if other studies or trials relating to the program are successful.

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 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 September 30, 2006, we have spent approximately 12 years and \$221.4 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 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

**Table of Contents**

failure to commercialize our product candidates. 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 clinical 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 clinical trials yield inconclusive or negative results, we will be required to modify or expand the scope of our clinical studies or conduct additional studies to support BLA filings. 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;

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

## Edgar Filing: ANTIGENICS INC /DE/ - Form 10-Q

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.

---

## **Table of Contents**

***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 may 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 our product candidates such as 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.

***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.

We may need to successfully address a number of technological challenges in order to complete development of our product candidates. Moreover, these product candidates 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 develop and commercialize our product candidates and will increase our need to rely on sales of securities to fund our operations.***

We have been engaged in efforts to enter into collaborative agreements with a pharmaceutical or larger biotechnology company to assist us with development and/or commercialization of our product candidates.

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. Following the announcement in March 2006 that the results of part I of our Phase 3 trial in renal cell carcinoma did not achieve its primary endpoint,



---

**Table of Contents**

many larger companies may be unwilling to commit to a substantial agreement prior to receipt of additional clinical data. In the absence of such data, potential collaborative partners may demand economic terms that are unfavorable to us. Even if Oncophage generates favorable clinical data over the next several years, we may not be able to negotiate a transaction that provides us with favorable economic terms.

We have also been pursuing business development efforts to partner Aroplatin. Aroplatin is at an early stage of clinical development, and collaborative partners or licensees may defer such discussions until results from early clinical trials become available.

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 or an early stage product like Aroplatin. If we fail to enter into such collaboration agreements, our efforts to develop and/or commercialize Oncophage or Aroplatin 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 royalty, milestone or manufacturing revenue payments from collaborators or licensees due to unsuccessful results in existing collaborations and licenses, failure to enter into future collaborations or license agreements or our inability to manufacture product supply requirements for our collaborators and licensees.***

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 collaborative partners or licensees successfully completing clinical trials, our entering into a successful contract manufacturing relationship to meet collaborative partner or licensee demand, and our collaborative partners or licensees obtaining regulatory approvals.

These development activities frequently fail to produce marketable products. For example, in March 2002, Elan Corporation, plc 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 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 and could limit financial resources available for investment in manufacturing capacity expansion.

***If we are unable to purify heat shock proteins from some cancer types, we may have difficulty successfully initiating clinical trials in new indications or 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 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, 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

---

**Table of Contents**

success rate for part I of our Phase 3 trial in renal cell carcinoma was 92%; for our Phase 3 trial in metastatic melanoma, it was 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 undermined 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, a success rate of approximately 69%. 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%, ten of ten, 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 clinical trials to date, we have been able to manufacture Oncophage from 87% of the tumors delivered to our manufacturing facility; for renal cell carcinoma, 92%; for melanoma (including our Phase 3 trial), 70%; 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 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 one of our product candidates or our licensees' product candidates for which we hold manufacturing rights nears marketing approval or is approved for sale, we expect we would be required to manufacture substantially more than we have been required to manufacture for preclinical studies and clinical trials. We have no experience manufacturing products 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 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.

We have the right to elect to manufacture some of our product candidates other than Oncophage and AG-707 in our own manufacturing facilities (e.g., QS-21 and Aroplatin). This would require the investment of substantial funds and the recruitment of qualified personnel in order to build or lease and operate any new manufacturing facilities. We are only beginning to plan and develop clinical or commercial-scale manufacturing capabilities for our product candidates other than Oncophage and AG-707. In order to continue to develop our other product candidates, apply for regulatory approvals and commercialize these product candidates, 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 third parties, potentially including our collaborators, to produce materials required for preclinical studies and clinical trials and for these product candidates. A number of factors could cause production interruptions at our manufacturing facility or our contract manufacturers, including equipment malfunctions, labor or employment retention problems, natural disasters, power outages, terrorist activities, or disruptions in the operations of our suppliers. Alternatively, there is the possibility we may have excess manufacturing capacity if programs do not progress as planned.

---

## **Table of Contents**

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

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.

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 116 foreign patents. We also have rights to at least 43 pending U.S. patent applications and 154 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 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

**Table of Contents**

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 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 should 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 should 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. We have filed a response to this opposition and intend to continue to defend the opposition. However, there is no guarantee that we will continue to do so, 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.

---

## **Table of Contents**

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 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. The consulting agreement terminates in March 2011. In addition, this agreement does not restrict Dr. Srivastava's ability to compete against us after his association with Antigenics is terminated. 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.

---

**Table of Contents**

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 may 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 this lawsuit diverts our management's time and attention from our business and may result in our paying damages.

Antigenics and our Chairman and Chief Executive Officer have been named as defendants in a purported class action complaint filed on June 16, 2006 in Federal District Court in New Mexico by Steven J. Tuckfelt on behalf of himself and all others similarly situated. The complaint was served on September 7, 2006. The complaint alleges that certain of our disclosures in connection with the conduct of the Oncophage Phase 3 renal cell carcinoma trial violated Sections 10(b) and 20(a) of the Securities Exchange Act as well as includes purported claims for breach of fiduciary duty. While we believe that the complaint is without merit and plan to vigorously defend against the litigation, the outcome of litigation is uncertain. Regardless of the outcome, participation in this lawsuit diverts management's time and attention from our business and may result in our paying legal fees and 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

---

**Table of Contents**

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.

***Our sales, marketing and commercial operations experience is limited and needs to be developed or acquired.***

We have very limited experience in marketing and selling pharmaceutical products or in running commercial operations. In addition, for our personalized heat shock protein product candidates, we will need to develop specialized commercial operations to manage patient specific ordering, tracking, and control. There are few companies that have developed this expertise. We must either develop commercial operations and marketing capabilities and a sales force or enter into arrangements with third parties to perform such operations and/or market and sell any of our product candidates that are approved by regulatory authorities. We do not know whether we will be able to enter into commercial operations or marketing and sales agreements with others on acceptable terms, if at all. We may not be able to successfully develop our own commercial operations capabilities or sales and marketing force for drug candidates for which we have retained or elect to retain marketing or co-promotion rights. As we develop our own commercial operations or marketing and sales capability, we may be competing with other companies that currently have experienced and well-funded operations. Where we have licensed our products to third party collaborators or licensees, we will be dependent on their commercial operations, sales and marketing expertise and resources, and any revenues we receive from those products will depend primarily on the sales and marketing efforts of others.

***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.

We manufacture Oncophage from a patient's cancer cells, and a medical professional must inject Oncophage 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. 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 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, 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.





**Table of Contents*****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, Nventa's (formerly Stressgen) 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 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, which 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 cancer (Phase 3), AML (Phase 1), pancreatic cancer (Phase 2), lung cancer (Phase 2), and myeloma (Phase 1). Patents have been issued in both the U.S. and Europe related to Nventa's heat shock protein technology.

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, sorafenib tablets and sunitinib for the treatment of patients with advanced renal cell carcinoma, or kidney cancer, were recently approved by the FDA. Other product candidates, such as Aroplatin, may compete with existing approved chemotherapies or other chemotherapies that are in development. Several other platinum therapies are in development for a variety of diseases. The most advanced candidate is GPC Biotech's satraplatin for second-line hormone-refractory prostate cancer, for which the company is in the final stages of filing a rolling new drug application based on the completed Phase 3 trial. Additionally, Poniard Pharmaceuticals' picoplatin is in Phase 2 clinical trials. 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

## **Table of Contents**

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.

Several other vaccine adjuvants are in development and could compete with QS-21 for inclusion in vaccines in development. These adjuvants include, but are not limited to, oligonucleotides, under development by Coley, Idera, Juvaris and Dynavax, anti-CTLA-4 antibody, under development by Medarex, MF59 and SAF, under development by Novartis, and MPL, under development by GlaxoSmithKline. In addition, several companies, such as CSL Limited and Galenica, are developing saponin adjuvants, including synthetic formulations.

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 and capture our potential market share;

establish superior intellectual property positions;

discover technologies that may result in medical insights or breakthroughs, which render our drugs or vaccines obsolete, possibly before they generate any revenue; or

adversely affect our ability to recruit patients 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 September 30, 2006, 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.

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 5% of our outstanding common stock.

*A single, otherwise unaffiliated, stockholder holds, and another single, unaffiliated holder of our convertible senior secured notes issued in October 2006 has the right to convert such notes into, 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 September 30, 2006, 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.

**Table of Contents**

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 36% of our outstanding common stock as of September 30, 2006, 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).

On October 30, 2006 we sold \$25 million of convertible senior secured notes ( 2006 Notes ) to a group of accredited investors ( Investors ). These 2006 Notes are convertible into our common stock at \$3.50 per share at the option of the Investors. The 2006 Notes do not carry any voting rights, the common stock issuable upon conversion of the 2006 Notes do carry the same voting rights as other shares of common stock. On November 1, 2006, one holder of the 2006 Notes currently has the right to convert such holdings into 5,714, 285 shares of our common stock. If such holder had exercised such conversion right on November 1, 2006, such holder would own approximately 12% of our outstanding common stock. Such ownership position following any such conversion along with any open market purchases by such holder could provide the holder with the ability to substantially influence the outcome of matters submitted to our stockholders for approval.

***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 September 30, 2006 and for the twelve months ended September 30, 2006, the sale price of our common stock has fluctuated between \$1.38 and \$52.63 per share and \$1.38 and \$7.22 per share, respectively, with an average daily trading volume for the twelve months ended September 30, 2006 of approximately 412,000 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;

---

**Table of Contents**

developments concerning proprietary rights, including patent and litigation matters;

publicity regarding actual or potential results with respect to product candidates 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 September 30, 2006, we had approximately 45,844,000 shares of common stock outstanding. All of these shares are eligible for sale on the NASDAQ Global 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 September 30, 2006, options to purchase approximately 6,743,000 shares of our common stock with a weighted average exercise price per share of \$7.36 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 September 30, 2006, 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, 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 Securities Exchange Act) 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

**Table of Contents**

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 6 *Exhibits***

The Exhibits listed in the Exhibit Index are included in this Report.

**Table of Contents**

**ANTIGENICS INC.**

**SIGNATURES**

Pursuant to the requirements of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned thereunto duly authorized.

ANTIGENICS INC.

/s/ GARO H. ARMEN, PH.D.  
Garo H. Armen, Ph.D.  
*Chairman and Chief Executive Officer*

/s/ SHALINI SHARP  
Shalini Sharp  
*Chief Financial Officer*

Date: November 9, 2006

**Table of Contents**

**EXHIBIT INDEX**

<b>Exhibit No.</b>	<b>Description</b>
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.
10.1	Standard Form of Loft Lease effective October 24, 2006 between 162 Fifth Avenue Associates LLC and Antigenics Inc. 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.
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(1)	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.

---

(1) This certification accompanies the Quarterly Report on Form 10-Q and is not filed as part of it.