

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

FORM 10-Q

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

For the quarterly period ended March 31, 2008

Or

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

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

Commission File Number: 000-21088

**VICAL INCORPORATED**

(Exact name of registrant as specified in its charter)

Delaware  
(State or other jurisdiction  
of incorporation or organization)

93-0948554  
(I.R.S. Employer Identification No.)

10390 Pacific Center Court  
San Diego, California  
(Address of principal executive offices)

92121  
(Zip code)

(858) 646-1100  
(Registrant's telephone number, including area code)

(Former name, former address and former fiscal year, if changed since last report)

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, a non-accelerated filer or a smaller reporting company. See the definitions of "large accelerated filer", "accelerated filer" and "smaller reporting company" in Rule 12b-2 of the Exchange Act.

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company

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

Indicate the number of shares outstanding of each of the issuer's classes of common stock, as of the latest practicable date.

Total shares of common stock outstanding at May 6, 2008: 39,233,247

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VICAL INCORPORATED

FORM 10-Q

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## PART I. FINANCIAL INFORMATION

**ITEM 1. FINANCIAL STATEMENTS****VICAL INCORPORATED  
BALANCE SHEETS  
(In thousands, except par value data)  
(Unaudited)**

	<u>March 31, 2008</u>	<u>December 31, 2007</u>
<b>ASSETS</b>		
Current assets:		
Cash and cash equivalents	\$ 38,531	\$ 35,347
Marketable securities, available-for-sale	10,816	33,491
Restricted marketable securities	2,651	2,651
Receivables and other	1,645	1,261
Total current assets	53,643	72,750
Marketable securities	8,228	—
Property and equipment, net	11,868	12,287
Intangible assets, net	4,749	4,855
Other assets	547	693
Total assets	<u>\$ 79,035</u>	<u>\$ 90,585</u>
<b>LIABILITIES AND STOCKHOLDERS' EQUITY</b>		
Current liabilities:		
Accounts payable and accrued expenses	\$ 4,548	\$ 5,453
Deferred revenue	980	2,100
Current portion of equipment financing obligations	442	555
Total current liabilities	5,970	8,108
Long-term liabilities:		
Equipment financing obligations, net of current portion	83	156
Deferred rent	2,430	2,409
Total long-term liabilities	2,513	2,565
Commitments and contingencies		
Stockholders' equity:		
Preferred stock, \$0.01 par value, 5,000 shares authorized, none issued and outstanding	—	—
Common stock, \$0.01 par value, 80,000 shares authorized, 39,222 and 39,196 shares issued and outstanding at March 31, 2008, and December 31, 2007, respectively	392	392
Additional paid-in capital	301,918	301,507
Accumulated deficit	(231,481)	(221,916)
Accumulated other comprehensive loss	(277)	(71)
Total stockholders' equity	70,552	79,912
Total liabilities and stockholders' equity	<u>\$ 79,035</u>	<u>\$ 90,585</u>

See accompanying notes to unaudited financial statements

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**VICAL INCORPORATED**  
**STATEMENTS OF OPERATIONS**  
**(In thousands, except per share data)**  
**(Unaudited)**

	Three Months Ended	
	March 31,	
	2008	2007
Revenues:		
Contract and grant revenue	\$ 460	\$ 850
License and royalty revenue	1,480	405
Total revenues	1,940	1,255
Operating expenses:		
Research and development	6,594	5,875
Manufacturing and production	3,106	3,947
General and administrative	2,335	2,293
Total operating expenses	12,035	12,115
Loss from operations	(10,095)	(10,860)
Other income (expense):		
Investment and other income, net	540	1,301
Interest expense	(10)	(38)
Net loss	<u>\$ (9,565)</u>	<u>\$ (9,597)</u>
Basic and diluted net loss per share	<u>\$ (0.24)</u>	<u>\$ (0.24)</u>
Weighted average shares used in computing basic and diluted net loss per share	<u>39,218</u>	<u>39,182</u>

See accompanying notes to unaudited financial statements

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**VICAL INCORPORATED**  
**STATEMENTS OF CASH FLOWS**  
**(In thousands)**  
**(Unaudited)**

	Three Months Ended	
	March 31,	
	2008	2007
Cash flows from operating activities:		
Net loss	\$ (9,565)	\$ (9,597)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	741	896
Other than temporary loss on marketable securities and other assets	158	—
Write-off of abandoned patents	102	—
Gain on sale of property and equipment	(1)	(50)
Compensation expense related to stock options and awards	467	488
Changes in operating assets and liabilities:		
Receivables and other	(383)	674
Other assets	146	278
Accounts payable, accrued expenses and other liabilities	(909)	(912)
Deferred revenue	(1,119)	—
Deferred rent	24	43
Net cash used in operating activities	<u>(10,339)</u>	<u>(8,180)</u>
Cash flows from investing activities:		
Maturities of marketable securities – including restricted	21,416	31,951
Purchases of marketable securities – including restricted	(7,333)	(24,944)
Purchases of property and equipment	(98)	(578)
Sale of property and equipment	1	50
Patent expenditures	(221)	(166)
Net cash provided by investing activities	<u>13,765</u>	<u>6,313</u>
Cash flows from financing activities:		
Proceeds from issuance of common stock	—	45
Payment of withholding taxes for net settlement of restricted stock units	(56)	(89)
Principal payments under equipment financing obligations	(186)	(724)
Net cash used in financing activities	<u>(242)</u>	<u>(768)</u>
Net increase (decrease) in cash and cash equivalents	3,184	(2,635)
Cash and cash equivalents at beginning of period	<u>35,347</u>	<u>19,363</u>
Cash and cash equivalents at end of period	<u>\$ 38,531</u>	<u>\$ 16,728</u>
Supplemental information:		
Interest paid	<u>\$ 11</u>	<u>\$ 38</u>

See accompanying notes to unaudited financial statements

**VICAL INCORPORATED**  
**NOTES TO FINANCIAL STATEMENTS**  
**March 31, 2008**  
**(Unaudited)**

**1. GENERAL**

Vical Incorporated, or the Company, a Delaware corporation, was incorporated in April 1987 and has devoted substantially all of its resources since that time to its research and development programs. The Company researches and develops biopharmaceutical products based on its patented DNA delivery technologies for the prevention and treatment of serious or life-threatening diseases.

All of the Company's potential products are in research and development phases. No revenues have been generated from the sale of any such products, nor are any such revenues expected for at least the next several years. The Company earns revenue from research and development agreements with pharmaceutical collaborators and grant and contract arrangements with government entities. Most product candidates will require significant additional research and development efforts, including extensive preclinical and clinical testing. All product candidates that advance to clinical testing will require regulatory approval prior to commercial use, and will require significant costs for commercialization. There can be no assurance that the Company's research and development efforts, or those of its collaborators, will be successful. The Company expects to continue to incur substantial losses and not generate positive cash flows from operations for at least the next several years. No assurance can be given that the Company can generate sufficient product revenue to become profitable or generate positive cash flows from operations. The Company anticipates that its available cash and existing sources of funding will be adequate to satisfy its cash needs through December 31, 2009.

The unaudited financial statements at March 31, 2008, and for the three months ended March 31, 2008 and 2007, have been prepared in accordance with the rules and regulations of the Securities and Exchange Commission, or SEC, and with accounting principles generally accepted in the U.S. applicable to interim financial statements. These unaudited financial statements have been prepared on the same basis as the audited financial statements and include all adjustments, consisting of only normal recurring accruals, which in the opinion of management are necessary to present fairly the Company's financial position as of the interim date and results of operations for the interim periods presented. Interim results are not necessarily indicative of results for a full year or future periods. The preparation of financial statements 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. Actual results could differ from those estimates. These unaudited financial statements should be read in conjunction with the Company's audited financial statements for the year ended December 31, 2007, included in its Annual Report on Form 10-K filed with the SEC.

*Cash, Cash Equivalents and Marketable Securities*

Cash and cash equivalents consist of cash and highly liquid securities with original maturities at the date of acquisition of ninety days or less. Investments with an original maturity of more than ninety days are considered marketable securities and have been classified by management as available-for-sale. Such investments are carried at fair value, with unrealized gains and losses included as a separate component of stockholders' equity.

*Restricted Marketable Securities*

The Company is required to maintain a letter of credit securing an amount equal to twelve months of the current monthly installment of base rent for the term of its primary facilities lease, which ends in August 2017. Under certain circumstances the Company may be able to eliminate the need for the letter of credit. At March 31, 2008 and December 31, 2007, restricted marketable securities of \$2.7 million were pledged as collateral for this letter of credit.

*Revenue Recognition*

The Company recognizes revenue in accordance with SEC Staff Accounting Bulletin Topic 13, "Revenue Recognition," and Emerging Issues Task Force No. 00-21, or EITF No. 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." Revenue is recognized when the four basic criteria of revenue recognition are met: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured.

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### *Contract Manufacturing Revenue*

The Company's contract manufacturing arrangements typically require the delivery of multiple lots of clinical material. In accordance with EITF No. 00-21, the Company analyzes its multiple element arrangements to determine whether the elements can be separated and accounted for individually as separate units of accounting. The evaluation is performed at the inception of the arrangement. The delivered item(s) is considered a separate unit of accounting if all of the following criteria are met: (1) the delivered item(s) has value to the customer on a standalone basis; (2) there is objective and reliable evidence of the fair value of the undelivered item(s); and (3) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probable and substantially in the Company's control. If the delivered item does not have standalone value or the Company does not have objective or reliable evidence of the fair value of the undelivered component, the amount of revenue allocable to the delivered item is deferred.

### *License and Royalty Revenue*

The Company's license and royalty revenues are generated through agreements with strategic partners. Nonrefundable, up-front license fees and milestone payments with standalone value that are not dependent on any future performance by the Company under the agreements are recognized as revenue upon the earlier of when payments are received or collection is assured, but are deferred if the Company has continuing performance obligations. If the Company has continuing involvement through contractual obligations under such agreements, such up-front fees are deferred and recognized over the period for which the Company continues to have a performance obligation, unless all of the following criteria exist: (1) the delivered item(s) have standalone value to the customer, (2) there is objective and reliable evidence of the fair value of the undelivered item(s), and (3) delivery or performance is probable and within the Company's control for any items that have a right of return.

The Company recognizes royalty revenues from licensed products when earned in accordance with the terms of the license agreements. Net sales figures used for calculating royalties include deductions for costs of returns, cash discounts, and freight and warehousing, which may vary over the course of the license agreements. Payments received related to milestones are recognized as revenue upon the achievement of the milestones as specified in the underlying agreements, which represent the culmination of the earnings process.

### *Government Research Grant Revenue*

The Company recognizes revenues from federal government research grants during the period in which the related expenditures are incurred.

### *Net Loss Per Share*

Basic and diluted net loss per share has been computed using the weighted-average number of shares of common stock outstanding during the period. The weighted average number of shares used to compute diluted loss per share excludes any assumed exercise of stock options, and the assumed issuance of common stock under restricted stock units, or RSUs, as the effect would be antidilutive. Common stock equivalents of 0.2 million and 0.4 million for the three months ended March 31, 2008 and 2007, respectively, were excluded from the calculation because of their antidilutive effect.

### *Recent Accounting Pronouncements*

Effective January 1, 2008, the Company adopted Emerging Issues Task Force, or EITF, 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services Received for Use in Future Research and Development Activities". EITF 07-3 requires that nonrefundable advance payments for goods or services that will be used or rendered for future research and development activities be deferred and capitalized and recognized as an expense as the goods are delivered or the related services are performed. The adoption did not have a material impact on the Company's consolidated results or operations or financial condition.

In February 2007, the Financial Accounting Standards Board, or FASB issued Statement of Financial Accounting Standards, or SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities—including an amendment of FASB Statement No. 115". SFAS No. 159 expands the use of fair value accounting but does not affect existing standards which require assets or liabilities to be carried at fair value. Under SFAS No. 159, a company may elect to use fair value to measure accounts and loans receivable, available-for-sale and held-to-maturity securities, equity method investments, accounts payable, guarantees and issued debt. Other eligible items include firm commitments for financial instruments that otherwise would not be recognized at inception and non-cash warranty obligations where a warrantor is permitted to pay a third party to provide the warranty goods or services. If the use

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of fair value is elected, any upfront costs and fees related to the item must be recognized in earnings and cannot be deferred, e.g., debt issue costs. The fair value election is irrevocable and generally made on an instrument-by-instrument basis, even if a company has similar instruments that it elects not to measure based on fair value. At the adoption date, unrealized gains and losses on existing items for which fair value has been elected are reported as a cumulative adjustment to beginning retained earnings. Subsequent to the adoption of SFAS No. 159, changes in fair value are recognized in earnings. SFAS No. 159 is effective for fiscal years beginning after November 15, 2007 and was adopted by the Company in the first quarter of 2008. The adoption of SFAS No. 159 did not have a material impact on its consolidated results of operations and financial condition as the fair value option was not elected for any of the Company's financial assets or financial liabilities.

In September 2006, the FASB issued SFAS No. 157, "Fair Value Measurements". SFAS No. 157 provides guidance for using fair value to measure assets and liabilities. It also responds to investors' requests for expanded information about the extent to which a company measures assets and liabilities at fair value, the information used to measure fair value, and the effect of fair value measurements on earnings. SFAS No. 157 applies whenever other standards require (or permit) assets or liabilities to be measured at fair value, and does not expand the use of fair value in any new circumstances. SFAS No. 157 is effective for financial statements issued for fiscal years beginning after November 15, 2007 and was adopted by the Company in the first quarter of 2008. The adoption of SFAS 157 did not have a material impact on its consolidated results of operations and financial condition.

## 2. STOCK-BASED COMPENSATION

Total stock-based compensation cost was allocated to research and development, manufacturing and production and general and administrative expense as follows (in thousands):

	Three Months Ended March 31,	
	2008	2007
Research and development	\$ 160	\$ 175
Manufacturing and production	56	68
General and administrative	251	245
Total stock-based compensation expense	<u>\$ 467</u>	<u>\$ 488</u>

During the three months ended March 31, 2008 and 2007, the Company granted stock-based awards with a total estimated value of \$1.1 million and \$2.1 million, respectively. At March 31, 2008, total unrecognized estimated compensation cost related to unvested stock-based awards granted prior to that date was \$2.6 million, which is expected to be recognized over a weighted-average period of 1.5 years. Stock-based awards granted during the three months ended March 31, 2008 and 2007, represented 1.2% and 1.4%, respectively, of outstanding common shares at the end of each period.

## 3. COMPREHENSIVE LOSS

Comprehensive loss consists of net loss and certain changes in equity that are excluded from net loss. Accumulated other comprehensive income (loss) represents net unrealized income (loss) on marketable securities. For the three months ended March 31, 2008 and 2007, other comprehensive loss was \$0.2 million and \$0.1 million, respectively, and total comprehensive loss was \$9.8 million and \$9.6 million, respectively.

## 4. OTHER BALANCE SHEET ACCOUNTS

Accounts payable and accrued expenses consisted of the following (in thousands):

	March 31,	December 31,
	2008	2007
Employee compensation	\$ 1,375	\$ 2,291
Accounts payable	682	555
Other accrued liabilities	2,491	2,607
Total accounts payable and accrued expenses	<u>\$ 4,548</u>	<u>\$ 5,453</u>

## 5. COMMITMENTS AND CONTINGENCIES

European Patent 1026253, covering a significant portion of the Company's core DNA delivery technology, was granted in September 2004. European Patent 0465529 was granted to the Company in 1998, and was subsequently opposed by seven companies under European patent procedures. This '529 patent was revoked on formal grounds in October 2001 under an initial ruling by the Opposition Division of the European Patent Office, or EPO. In April 2002, the Company filed an appeal seeking to overturn this initial ruling. The claims that were allowed in the newly granted '253 patent generally cover the same subject matter as those claims in the '529 patent which were under appeal. For this reason, the Company withdrew from the '529 appeal upon grant of the '253 patent in September 2004. In September 2005, the '253 patent was opposed by eight parties. The Company will defend its position in upcoming oral hearings to be held in December 2008. In addition to the '253 patent, the Company may use other issued patents and patent applications that are pending in Europe to protect its core DNA delivery technology.

A European patent was issued in 2003 covering a range of applications of the Company's core DNA delivery technology, including cationic lipid-formulated, gene-based immunotherapeutics such as the Company's clinical-stage Allovectin-7<sup>®</sup> treatment for melanoma, cationic lipid-formulated DNA vaccines such as the Company's clinical-stage influenza vaccine, and similar pharmaceutical products under development by others. This patent was opposed by two companies. The Company responded to the oppositions in a timely manner, and defended the patent at an oral hearing in March 2006 at the EPO. The patent was maintained in amended form. The Company is appealing certain rulings, and one of the opponents is appealing the decision to maintain the patent in amended form.

A European patent was issued to the Company in 2003 with broad claims related to gene-based, extra-tumoral delivery of any cytokines for the treatment of cancer. Delivery can be either free from or formulated with transfection-facilitating materials such as cationic lipids or polymers. Cytokines are proteins such as interleukins and interferons which regulate specific cell functions, and typically are used to stimulate an immune response against cancer cells. Three companies opposed this patent. The Company responded to the oppositions in a timely manner, and the Company will defend its position in upcoming oral hearings to be held in June 2008.

The Company prosecutes its intellectual property estate vigorously to obtain the broadest valid scope for its patents. Due to the uncertainty of the ultimate outcome of these matters, the impact on future operating results or the Company's financial condition is not subject to reasonable estimates.

In the ordinary course of business, the Company may become a party to lawsuits involving various matters. The Company is unaware of any such lawsuits presently pending against it which, individually or in the aggregate, are deemed to be material to the financial condition or results of operations of the Company.

## 6. FAIR VALUE MEASUREMENTS

As described in Note 1, the Company adopted SFAS 157 on January 1, 2008. SFAS 157, among other things, defines fair value, establishes a consistent framework for measuring fair value and expands disclosure for each major asset and liability category measured at fair value on either a recurring or nonrecurring basis. SFAS 157 clarifies that fair value is an exit price, representing the amount that would be received to sell an asset or paid to transfer a liability in an orderly transaction between market participants. As such, fair value is a market-based measurement that should be determined based on assumptions that market participants would use in pricing an asset or liability. As a basis for considering such assumptions, SFAS 157 establishes a three-tier fair value hierarchy, which prioritizes the inputs used in measuring fair value as follows:

- Level 1: Observable inputs such as quoted prices in active markets;
- Level 2: Inputs, other than the quoted prices in active markets, that are observable either directly or indirectly; and
- Level 3: Unobservable inputs in which there is little or no market data, which require the reporting entity to develop its own assumptions.

The Company's long-term investments at March 31, 2008 include (at par value) \$8.6 million of auction rate securities. With the liquidity issues experienced in global credit and capital markets, these auction rate securities have experienced multiple failed auctions as the amount of securities submitted for sale has exceeded the amount of purchase orders, and as a result, these affected securities are currently not liquid. However, the Company now earns a higher interest rate according to the terms of these securities. All of the Company's auction rate securities are secured by either student loans or municipal bonds. The student loans are backed by the full faith and credit of the federal government (up to approximately 98% of the value of the student loan). Additionally, all of the Company's auction rate securities maintain the highest credit rating of AAA.

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At present, in the event the Company needs to access the funds that are in an illiquid state, it may not be able to do so without the possible loss of principal, until a future auction for these investments is successful, another secondary market evolves for these securities, until they are redeemed by the issuer or they mature. At this time, the Company has not obtained sufficient evidence to conclude that these auction rate securities will not be settled in the short term, although the market for these investments is presently uncertain. If the Company is unable to sell these securities in the market or they are not redeemed, then the Company could be required to hold them to maturity. The Company does not have a need to access these funds for operational purposes in the foreseeable future. The Company will continue to monitor and evaluate these investments on an ongoing basis for impairment. Although the auction rate security investments continue to pay interest according to their stated terms, based on valuation models the Company recorded an unrealized loss of approximately \$0.3 million in accumulated other comprehensive loss as a reduction in shareholders' equity, reflecting adjustments to auction rate security holdings that the Company has concluded have a temporary decline in value due to a lack of liquidity in the global credit markets. The carrying value in long-term investments for these auction rate securities at March 31, 2008 is approximately \$8.2 million.

The valuation of the Company's auction rate security investment portfolio is subject to uncertainties that are difficult to predict. The fair values of these securities are estimated utilizing a discounted cash flow analysis or other type of valuation model as of March 31, 2008. The key driver of the valuation models is the expected term. Changes to this assumption one year in either direction did not have a material impact on our valuation. Other items these analyses consider are the collateralization underlying the security investments, the creditworthiness of the counterparty, the timing of expected future cash flows, and the expectation of the next time the security is expected to have a successful auction. These securities were also compared, when possible, to other observable market data with similar characteristics to the securities held by the Company.

Factors that may impact the Company's valuation include changes to credit ratings of the securities as well as to the underlying assets supporting those securities, rates of default of the underlying assets, underlying collateral value, discount rates, counterparty risk and ongoing strength and quality of market credit and liquidity.

Assets measured at fair value as of March 31, 2008 are classified in the table below in one of the three categories described above (in thousands):

	Fair Value Measurements at Reporting Date			
	Level 1	Level 2	Level 3	Total
Money market funds	\$ 41,268	\$ —	\$ —	\$ 41,268
U.S. Government Agencies	2,998	—	—	2,998
U.S. Corporate Debt	7,559	—	—	7,559
Auction Rate Securities (1)	—	—	8,228	8,228
Other	173	—	—	173
	<u>\$ 51,998</u>	<u>\$ —</u>	<u>\$ 8,228</u>	<u>\$ 60,226</u>

- (1) The Company estimated the fair value of these auction rate securities based on the following: (i) the underlying structure of each security; (ii) the present value of future principal and interest payments discounted at rates considered to reflect current market conditions; (iii) consideration of the probabilities of default, auction failure, or repurchase at par for each period; and (iv) its market required rate of return.

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Activity for assets measured at fair value during the three month period ended March 31, 2008 using significant unobservable inputs (Level 3) is presented in the table below (in thousands):

	<b>Three Months Ending March, 31 2008</b>
Beginning Balance	\$ —
Total gains or losses (realized/unrealized) included in other comprehensive income	(322)
Transfers in and/out of Level 3	8,550
Ending Balance	<u>\$ 8,228</u>
Amount of total gains or losses for the period included in earnings attributable to the change in unrealized gains or losses relating to assets still held at the reporting date	<u>\$ —</u>

**ITEM 2. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS**

This Quarterly Report on Form 10-Q, or Report, contains forward-looking statements within the meaning of Section 27A of the Securities Act of 1933, as amended, and Section 21E of the Securities Exchange Act of 1934, as amended, including statements regarding our business, our financial position, the research and development of biopharmaceutical products based on our patented DNA delivery technologies, the funding of our research and development efforts, and other statements describing our goals, expectations, intentions or beliefs. Such statements reflect our current views and assumptions and are subject to risks and uncertainties, particularly those inherent in the process of developing and commercializing biopharmaceutical products based on our patented DNA delivery technologies. Actual results could differ materially from those projected herein. Factors that could cause or contribute to such differences include, but are not limited to, those discussed in our Annual Report on Form 10-K for the year ended December 31, 2007, and in our other filings with the SEC, and those identified in Part II, Item 1A entitled "Risk Factors" beginning on page 20 of this Report. As a result, you are cautioned not to rely on these forward-looking statements. We disclaim any duty to update any forward-looking statement to reflect events or circumstances that occur after the date on which such statement is made.

We research and develop biopharmaceutical products based on our patented DNA delivery technologies for the prevention and treatment of serious or life-threatening diseases. We believe the following areas of research offer the greatest potential for our product development efforts:

- Vaccines for use in high-risk populations for infectious disease targets for which there are significant U.S. needs;
- Vaccines for general pediatric, adolescent and adult populations for infectious disease applications; and
- Cancer vaccines or immunotherapies which complement our existing programs and core expertise.

We currently have three active independent development programs in the areas of infectious disease and cancer including:

- A Phase 3 clinical trial using our Allovectin-7<sup>®</sup> immunotherapeutic in patients with metastatic melanoma which is being funded by AnGes MG, Inc., or AnGes, through cash payments and equity investments, under a research and development agreement;
- A Phase 2 clinical trial using our cytomegalovirus, or CMV, DNA vaccine in hematopoietic cell transplant patients; and
- A Phase 1 clinical trial using our pandemic influenza DNA vaccine formulated with our proprietary Vaxfectin<sup>®</sup> adjuvant.

We have leveraged our patented technologies through licensing and collaboration arrangements, such as our licensing arrangements with Merck & Co., Inc., or Merck, the sanofi-aventis Group, or sanofi-aventis, Aqua Health Ltd. of Canada, or Aqua Health, an affiliate of Novartis Animal Health, Merial Limited, a joint venture of Merck and sanofi-aventis and AnGes, among other biopharmaceutical companies. These partnerships have resulted in the following two approvals in veterinary applications:

- In 2005, the first product for one of our licensees utilizing our patented DNA delivery technology received approval for use in animals. Our licensee, Aqua Health, received approval from the Canadian Food Inspection Agency to sell a DNA vaccine to protect farm-raised salmon against an infectious disease.
- In 2007, our licensee, Merial Limited, received notification of conditional approval from the U.S. Department of Agriculture to market a therapeutic DNA vaccine designed to treat melanoma, a serious form of cancer, in dogs. Merial's vaccine is the first ever approved vaccine for therapeutic use.

We believe these approvals are important steps in the validation of our DNA delivery technology. Furthermore, our partner, AnGes, reported submission in March 2008 of a New Drug Application, or NDA, to the Japanese Ministry of Health, Labor and Welfare for its DNA-based delivery product encoding the hepatocyte growth factor, or HGF, for indications related to peripheral arterial disease, or PAD. If approved, this would represent the first approval of a product based on our DNA delivery technology for use in humans.

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In addition, we have licensed complementary technologies from leading research institutions and pharmaceutical companies, as well as the National Institutes of Health, or NIH, and the U.S. Centers for Disease Control and Prevention, or CDC. We also have granted non-exclusive, academic licenses to our DNA delivery technology patent estate to ten leading research institutions including Stanford, Harvard, Yale and the Massachusetts Institute of Technology. The non-exclusive academic licenses allow university researchers to use our technology free of charge for educational and internal, non-commercial research purposes. In exchange, we have the option to exclusively license from the universities potential commercial applications stemming from their use of the technology on terms to be negotiated.

### Product Development

We, together with our licensees and collaborators, are currently developing a number of DNA-based vaccines and therapeutics for the prevention or treatment of infectious diseases, cardiovascular diseases and cancer. Our current independent development programs focus on metastatic melanoma, CMV, and pandemic influenza. In addition, the NIH has transferred the Investigational New Drug application, or IND, for its severe acute respiratory syndrome, or SARS, DNA vaccine to us and we are currently evaluating our options in continuing the development of that vaccine. The table below summarizes our independent programs and corporate and government collaborations.

Product Description	Project Target/Indication(s)	Development Status <sup>1</sup>	Primary Developer
<b>Independent Programs</b>			
Cancer immunotherapeutic	Allovectin-7®, metastatic melanoma	Phase 3	Vical
Infectious disease vaccine	Cytomegalovirus	Phase 2	Vical
”	Pandemic influenza	Phase 1	Vical
”	SARS coronavirus	Phase 1	Vical
”	Herpes simplex virus type 2	Research	Vical
<b>Corporate Collaborations</b>			
Angiogenic growth factor	<i>Collatogene</i> , HGF, peripheral arterial disease	NDA filed in Japan	AnGes/Daiichi Pharma
”	HGF, ischemic heart disease	Phase 1	AnGes/Daiichi Pharma
”	FGF-1, peripheral arterial disease	Phase 3	Sanofi-aventis
Preventive infectious disease vaccine (animal health)	Apex-IHN®, infectious hematopoietic necrosis virus in salmon	Marketed in Canada	Aqua Health
”	Various undisclosed <sup>2</sup>	Research	Merial
Therapeutic cancer vaccine (animal health)	Tyrosinase, canine melanoma	Conditional approval in the United States	Merial
Tumor-associated antigen therapeutic vaccine	HER-2 and CEA, breast, colorectal, ovarian or non-small cell lung cancer	Phase 1	Merck
”	Unspecified cancer <sup>2</sup>	Research	Merck
Infectious disease vaccine	Hepatitis C virus	Research	Merck
<b>Government Collaborations</b>			
Infectious disease vaccine	HIV	Phase 2	NIH
”	Ebola	Phase 1	NIH

<sup>1</sup> “Research” indicates exploration and/or evaluation of a potential product candidate in a nonclinical laboratory setting. “Phase 1” clinical trials are typically conducted with a small number of patients or healthy subjects to evaluate safety, determine a safe dosage range, identify side effects, and, if possible, gain early evidence of effectiveness. “Phase 2” clinical trials are conducted with a larger group of patients to evaluate effectiveness of an investigational drug for a defined patient population, and to determine common short-term side effects and risks associated with the drug. “Phase 3” clinical trials involve large scale, multi-center, comparative trials that are conducted with patients afflicted with a target disease to evaluate the overall benefit-risk relationship of the investigational drug and to provide an adequate basis for product labeling.

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<sup>2</sup> Pursuant to our collaborative agreements, we are bound by confidentiality obligations to our collaborators that prevent us from publicly disclosing these targets and indications. Additionally, some project targets and indications cannot currently be disclosed because they have not yet been selected by our collaborators.

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### Recent Events

The following events have recently occurred with respect to our business:

#### *Angiogenesis Partner Advancing toward Approval*

- Our licensee, AnGes, reported submission in March 2008 of a NDA to the Japanese Ministry of Health, Labor and Welfare for its angiogenesis product candidate, *Collatogene*, for treatment of critical limb ischemia, an advanced form of PAD. The treatment uses our DNA delivery technology to deliver a gene encoding HGF, a human protein that promotes growth of new blood vessels in areas of restricted blood flow. The Japanese NDA filing positions *Collatogene* to be the first product based on our DNA delivery technology with the potential to be approved for human use.

#### *CMV License Agreement*

- We entered into a license agreement with The Wistar Institute granting us exclusive, worldwide rights to Wistar's Towne strain of CMV and related technologies. The Towne strain is an attenuated, or weakened, form of human CMV which may have the ability to elicit targeted immune responses against CMV.

#### *Grant Awarded for Herpes Simplex Virus*

- We were awarded a two-year, \$2.0 million Phase II Small Business Technology Transfer grant from the U.S. National Institute of Allergy and Infectious Diseases of the NIH. The grant will fund the ongoing development of our immunotherapeutic plasmid DNA vaccine against herpes simplex virus type 2, or HSV-2, a sexually transmitted virus which is the leading cause of genital herpes. We also plan to evaluate the HSV-2 vaccine with our novel Vaxfectin® adjuvant.

### Research, Development and Manufacturing Programs

To date, we have not received revenues from the sale of our independently developed pharmaceutical products and have received minimal amounts of revenue from the sale of commercially marketed products by our licensees. We earn revenue by performing services under research and development contracts, grants, manufacturing contracts, and from licensing access to our proprietary technologies. Since our inception, we estimate that we have received approximately \$140.8 million in revenue under these types of agreements. Revenues by source were as follows (in millions):

Source	Three Months Ended March 31,	
	2008	2007
Influenza grants	\$ —	\$ 0.8
RapidResponse™ DNA manufacturing grant	0.3	—
Other contracts and grants	0.1	0.1
Total contract and grant revenues	0.4	0.9
Merial license	—	0.2
AnGes license	1.1	—
Other royalties and licenses	0.4	0.2
Total royalty and license revenues	1.5	0.4
Total revenues	\$ 1.9	\$ 1.3

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Research, development, manufacturing and production costs by major program, as well as other costs were as follows (in millions):

Program	Three Months Ended March 31,	
	2008	2007
Allovecitin-7 <sup>®</sup>	\$ 4.4	\$ 1.8
Influenza	1.8	2.8
CMV	1.0	1.7
Other research, development, manufacturing and production	2.5	3.5
Total research, development, manufacturing and production	\$ 9.7	\$ 9.8

Since our inception, we estimate that we have spent approximately \$322 million on research, development, manufacturing and production. Our current independent development focus is on our cancer immunotherapeutic Allovecitin-7<sup>®</sup>, novel DNA vaccines for influenza and CMV, as well as other preclinical targets.

We have initiated a Phase 3 clinical trial using Allovecitin-7<sup>®</sup> in patients with recurrent metastatic melanoma which is being funded, up to certain limits, by AnGes through cash payments and equity investments under a research and development agreement. We are also in the early stages of clinical development of vaccine candidates for CMV and influenza and these programs will require significant additional costs to advance through development to commercialization. From inception, we have spent approximately \$82 million on our Allovecitin-7<sup>®</sup> program, \$40 million on our CMV program, and \$18 million on our influenza program.

We have other product candidates in the research stage. It can take many years to develop product candidates from the initial decision to screen product candidates, perform preclinical and safety studies, and perform clinical trials leading up to possible approval of a product by the FDA or comparable foreign agencies. The outcome of the research is unknown until each stage of the testing is completed, up through and including the registration clinical trials. Accordingly, we are unable to predict which potential product candidates we may proceed with, the time and cost to complete development, and ultimately whether we will have a product approved by the FDA or comparable foreign agencies.

As a result, we expect to incur substantial operating losses for at least the next several years, due primarily to the advancement of our research and development programs, the cost of preclinical studies and clinical trials, spending for outside services, costs related to maintaining our intellectual property portfolio, costs due to contract manufacturing activities, costs of our facilities, and possible advancement toward commercialization activities.

### Critical Accounting Policies and Estimates

The preparation of financial statements in accordance with accounting principles generally accepted in the United States requires that management make a number of assumptions and estimates that affect the reported amounts of assets, liabilities, revenues and expenses in our consolidated financial statements and accompanying notes. Management bases its estimates on historical information and assumptions believed to be reasonable. Although these estimates are based on management's best knowledge of current events and circumstances that may impact us in the future, actual results may differ from these estimates.

Our critical accounting policies are those that affect our financial statements materially and involve a significant level of judgment by management. Our critical accounting policies regarding revenue recognition are in the following areas: license and royalty agreements, manufacturing contracts, and grant revenues. Our critical accounting policies also include recognition of research and development expenses and the valuation of long-lived and intangible assets.

### Revenue Recognition

We recognize revenue in accordance with SEC Staff Accounting Bulletin Topic 13, "Revenue Recognition" and Emerging Issues Task Force No. 00-21, or EITF 00-21, "Accounting for Revenue Arrangements with Multiple Deliverables." Revenue is recognized when the four basic criteria of revenue recognition are met: (1) persuasive evidence of an arrangement exists; (2) delivery has occurred or services rendered; (3) the fee is fixed or determinable; and (4) collectability is reasonably assured.

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*Contract Manufacturing Revenue.* Our contract manufacturing arrangements typically require the delivery of multiple lots of clinical vaccines. In accordance with EITF 00-21, we analyze our multiple element arrangements to determine whether the elements can be separated and accounted for individually as separate units of accounting. The evaluation is performed at the inception of the arrangement. The delivered item(s) is considered a separate unit of accounting if all of the following criteria are met: (1) the delivered item(s) has value to the customer on a standalone basis; (2) there is objective and reliable evidence of the fair value of the undelivered item(s); and (3) if the arrangement includes a general right of return relative to the delivered item, delivery or performance of the undelivered item(s) is considered probable and substantially in our control. If the delivered item does not have standalone value or if we do not have objective or reliable evidence of the fair value of the undelivered component, the amount of revenue allocable to the delivered item is deferred.

*License and Royalty Revenue.* Our license and royalty revenues are generated through agreements with strategic partners. Nonrefundable, up-front license fees and milestone payments with standalone value that are not dependent on any future performance by us under the arrangements are recognized as revenue upon the earlier of when payments are received or collection is assured, but are deferred if we have continuing performance obligations. If we have continuing involvement through contractual obligations under such agreement, such up-front fees are deferred and recognized over the period for which we continue to have a performance obligation, unless all of the following criteria exist: (1) the delivered item(s) have standalone value to the customer, (2) there is objective and reliable evidence of the fair value of the undelivered item(s), and (3) delivery or performance is probable and within our control for any items that have a right of return.

We recognize royalty revenues from licensed products when earned in accordance with the terms of the license agreements. Net sales figures used for calculating royalties include deductions for costs of returns, cash discounts, and freight and warehousing, which may vary over the course of the license agreement. Payments received related to milestones are recognized as revenue upon the achievement of the milestones as specified in the underlying agreements, which represent the culmination of the earnings process.

*Government Research Grant Revenue.* We recognize revenues from federal government research grants during the period in which the related expenditures are incurred.

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

Research and development expenses consist of expenses incurred in performing research and development activities including salaries and benefits, facilities and other overhead expenses, clinical trials, contract services and other outside expenses. Research and development expenses are charged to operations as they are incurred.

We assess our obligations to make milestone payments that may become due for licensed or acquired technology to determine whether the payments should be expensed or capitalized. We charge milestone payments to research and development expense when:

- The technology is in the early stage of development and has no alternative uses;
- There is substantial uncertainty of the technology or product being successful;
- There will be difficulty in completing the remaining development; and
- There is substantial cost to complete the work.

### ***Capitalization and Valuation of Long-Lived and Intangible Assets***

Intangible assets with finite useful lives consist of capitalized legal costs incurred in connection with patents, patent applications pending and technology license agreements. Payments to acquire a license to use a proprietary technology are capitalized if the technology is expected to have alternative future use in multiple research and development projects. We amortize costs of approved patents, patent applications pending and license agreements over their estimated useful lives, or terms of the agreements, whichever are shorter.

For patents pending, we amortize the costs over the shorter of a period of twenty years from the date of filing the application or, if licensed, the term of the license agreement. We re-assess the useful lives of patents when they are issued, or whenever events or changes in circumstances indicate the useful lives may have changed. For patents and patent applications pending that we abandon, we charge the remaining unamortized accumulated costs to expense.

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Intangible assets and long-lived assets are evaluated for impairment whenever events or changes in circumstances indicate that their carrying value may not be recoverable. If the review indicates that intangible assets or long-lived assets are not recoverable, their carrying amount would be reduced to fair value. Factors we consider important that could trigger an impairment review include the following:

- A significant change in the manner of our use of the acquired asset or the strategy for our overall business; and/or
- A significant negative industry or economic trend.

In the event we determine that the carrying value of intangible assets or long-lived assets is not recoverable based upon the existence of one or more of the above indicators of impairment, we may be required to record impairment charges for these assets. As of March 31, 2008, our largest group of intangible assets with finite lives includes patents and patents pending for our DNA delivery technology, consisting of intangible assets with a net carrying value of approximately \$3.2 million.

### **Recent Accounting Pronouncements**

For information on the recent accounting pronouncements which may impact our business, see Note 1 of the Notes to Financial Statements included in this Report.

### **Results of Operations**

#### ***Three Months Ended March 31, 2008, Compared with Three Months Ended March 31, 2007***

**Total Revenues.** Total revenues increased \$0.7 million, or 54.6%, to \$1.9 million for the three months ended March 31, 2008, from \$1.2 million for the three months ended March 31, 2007. Revenues from our licenses and royalties were \$1.5 million for the three months ended March 31, 2008, compared with \$0.4 million for the three months ended March 31, 2007. This increase was primarily the result of the recognition of \$1.1 million in license revenue related to our agreement with AnGes to fund our Allovectin-7® Phase 3 clinical trial which was partially offset by a \$0.4 million decrease in grant revenue.

**Research and Development Expenses.** Research and development expenses increased \$0.7 million, or 12.2%, to \$6.6 million for the three months ended March 31, 2008, from \$5.9 million for the three months ended March 31, 2007. This increase was primarily attributable to increased costs associated with our Allovectin-7® Phase 3 clinical trial, our CMV Phase 2 clinical trial, and our Phase 1 influenza trial, which was partially offset by a decrease in costs associated with preclinical activities related to our influenza program.

**Manufacturing and Production Expenses.** Manufacturing and production expenses decreased \$0.8 million, or 21.3%, to \$3.1 million for the three months ended March 31, 2008, from \$3.9 million for the three months ended March 31, 2007. Included in the costs for the three months ended March 31, 2007, was the recognition of a loss related to the remanufacture of the final vaccine component under a contract manufacturing agreement.

**General and Administrative Expenses.** General and administrative expenses were substantially consistent with the prior period.

**Investment and Other Income.** Investment income decreased \$0.8 million, or 58.5%, to \$0.5 million for the three months ended March 31, 2008, from \$1.3 million for the three months ended March 31, 2007. This decrease was primarily the result of lower average cash and investment balances and lower rates of return on our investments during the three months ended March 31, 2008.

**Interest Expense.** Interest expense decreased \$28,000, or 73.7%, to \$10,000 for the three months ended March 31, 2008, from \$38,000 for the three months ended March 31, 2007. The decrease was primarily the result of lower principal amounts outstanding on our equipment financing obligations.

### **Liquidity and Capital Resources**

Since our inception, we have financed our operations primarily through private placements of preferred and common stock, public offerings of common stock, and revenues from performing services and licensing our technology. From our inception through March 31, 2008, we have received approximately \$140.8 million in revenues from performing services under research and development contracts, grants, manufacturing contracts, and from licensing access to our proprietary technologies, and we have raised net proceeds of approximately \$296.0 million from the sale of equity securities. Cash, cash equivalents and marketable securities, including restricted securities, totaled approximately \$60.2 million at March 31, 2008, compared with \$71.5 million at December 31, 2007. The decrease in our cash, cash equivalents and marketable securities for the three months ended March 31, 2008, was due primarily to the use of cash to fund our operations.

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Net cash used in operating activities was \$10.3 million and \$8.2 million for the three months ended March 31, 2008 and 2007, respectively. The increase in net cash used in operating activities for the three months ended March 31, 2008, compared with the same period in the prior year, was primarily the result of an increase in our deferred revenue related to our Allovectin-7® research and development contract with AnGes and by the timing of collection of accounts receivable.

Net cash provided by investing activities was \$13.8 million and \$6.3 million for the three months ended March 31, 2008 and 2007, respectively. The increase in cash provided by investing activities for the three months ended March 31, 2008, compared with the same period in the prior year, was primarily the result of an increase in net maturities of investments.

Net cash used in financing activities was \$0.2 million and \$0.8 million for the three months ended March 31, 2008 and 2007, respectively. The decrease in cash used in financing activities for the three months ended March 31, 2008, compared with the same period in the prior year, was primarily the result of a reduction in the principal payments related to our equipment financing obligations.

A discussion of our exposure to auction rate securities is included in Part 1 Item 3 of this Quarterly Report on Form 10-Q under the heading “Quantitative and Qualitative Disclosures About Market Risk.”

We expect to incur substantial additional research and development expenses, manufacturing and production expenses, and general and administrative expenses, including continued increases in personnel costs, costs related to preclinical and clinical testing, outside services, facilities, intellectual property and possible commercialization costs. Our future capital requirements will depend on many factors, including continued scientific progress in our research and development programs, the scope and results of preclinical testing and clinical trials, the time and costs involved in obtaining regulatory approvals, the costs involved in filing, prosecuting, enforcing and defending patent claims, the impact of competing technological and market developments, the cost of manufacturing scale-up and validation, and possible commercialization activities and arrangements. We may seek additional funding through research and development relationships with suitable potential corporate collaborators. We may also seek additional funding through public or private financings. We have on file two effective shelf registration statements that in the aggregate allow us to raise up to an additional \$111.6 million from the sale of common or preferred stock. However, additional financing may not be available on favorable terms or at all. If additional funding is not available, we anticipate that our available cash and existing sources of funding will be adequate to satisfy our cash needs through December 31, 2009.

### ***Contractual Obligations***

In December 2004, we modified an equipment financing agreement which provided for \$5.3 million of financing, with interest rates ranging from 3.0% to 3.2%. A portion of the financing was used to repay outstanding debt of approximately \$2.2 million under another credit facility. Additional amounts were used to finance equipment purchases. The draw down period for this equipment financing arrangement ended in October 2005. The agreement requires a non-interest-bearing cash security deposit in the amount of 60.0% of the amount of each drawdown, which are included in current and long-term other assets. This financing involves restrictive financial covenants, including a requirement that we maintain unrestricted cash and marketable securities of at least \$25.0 million or obtain a letter of credit from another lender in the amount of outstanding borrowings.

Under the Merck, sanofi-aventis, AnGes, Merial and Aqua Health agreements, we are required to pay up to 10% of certain initial upfront monetary payments, and a small percentage of some royalty payments, to the Wisconsin Alumni Research Foundation. In addition, certain technology license agreements require us to make payments if we or our sublicensees advance products through clinical development. For programs developed with the support of U.S. government funding, the U.S. government may have rights to resulting products without payment of royalties to us.

In addition, we have undertaken certain commitments under license agreements with collaborators, and under indemnification agreements with our officers and directors. Under the license agreements with our collaborators, we have agreed to continue to maintain and defend the patent rights licensed to the collaborators. Under the indemnification agreements with our officers and directors, we have agreed to indemnify those individuals for any expenses and liabilities in the event of a threatened, pending or actual investigation, lawsuit, or criminal or investigative proceeding.

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As of March 31, 2008, we have employment agreements that contain severance arrangements with each of our three executive officers and five of our other executives. Under these agreements, we are obligated to pay severance if we terminate such an executive officer's or other executive's employment without "cause," or if such an executive officer or other executive resigns for "good reason," as defined in the agreements, within the periods set forth therein. The severance would consist of continued payments at the current base compensation rate, or current base compensation rate plus the prior year's cash bonus in the case of the CEO, for the period specified in each agreement, which ranges from six to twelve months. These agreements also specify that any earnings from employment or consulting during this period will offset any salary continuation payments due from us. The maximum payments due under these employment agreements would have been \$1.6 million if each such executive officer and other executive was terminated at March 31, 2008.

### **ITEM 3. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

We are subject to interest rate risk. Our investment portfolio is maintained in accordance with our investment policy which defines allowable investments, specifies credit quality standards and limits the credit exposure of any single issuer. Our investment portfolio consists of cash equivalents, both restricted and non-restricted, and marketable securities. The average maturity of our non-equity investments is approximately three months. Our investments are classified as available-for-sale securities.

To assess our interest rate risk, we performed a sensitivity analysis projecting an ending fair value of our cash equivalents and current marketable securities using the following assumptions: a 12-month time horizon, a 9-month average maturity and a 150-basis-point increase in interest rates. This pro forma fair value would have been \$0.2 million lower than the reported fair value of our non-equity investments at March 31, 2008. We expect lower investment income for the full year 2008 compared with 2007 due to lower investment balances and lower interest rates.

All of our investment securities are classified as available-for-sale and therefore reported on the balance sheet at market value. Our investment securities consist of high-grade auction rate securities, corporate debt securities and government agency securities. As of March 31, 2008, our long-term investments included \$8.6 million of high-grade (AAA rated) auction rate securities secured by municipal bonds and student loans. Our auction rate securities are debt instruments with a long-term maturity and with an interest rate that is reset in short intervals through auctions. The recent conditions in the global credit markets have prevented some investors from liquidating their holdings of auction rate securities because the amount of securities submitted for sale has exceeded the amount of purchase orders for such securities. If there is insufficient demand for the securities at the time of an auction, the auction may not be completed and the interest rates may be reset to predetermined higher rates. When auctions for these securities fail, the investments may not be readily convertible to cash until a future auction of these investments is successful or they are redeemed or mature.

Since February 2008, there has been insufficient demand at auction for all of our high-grade auction rate securities held at March 31, 2008. As a result, these affected securities are currently not liquid, and we could be required to hold them until they are redeemed by the issuer or to maturity. During the three months ended March 31, 2008, we recognized \$0.3 million of unrealized losses related to those auction rate securities by adjusting their carrying value. At this time, we have not obtained sufficient evidence to conclude that these investments are permanently impaired, although the market for these investments is presently uncertain. As a result no realized losses have been recognized on these investments. If the credit ratings of the security issuers deteriorate and any decline in market value is determined to be other than temporary, we would be required to recognize a loss.

The valuation of our auction rate security investment portfolio is subject to uncertainties that are difficult to predict. The fair values of these securities are estimated utilizing a discounted cash flow analysis or other type of valuation model as of March 31, 2008. The key driver of the valuation models is the expected term. Changes to this assumption one year in either direction did not have a material impact on our valuation. Other items these analyses consider are the collateralization underlying the security investments, the creditworthiness of the counterparty, the timing of expected future cash flows, and the expectation of the next time the security is expected to have a successful auction. These securities were also compared, when possible, to other observable market data with similar characteristics to the securities held by us.

Factors that may impact our valuation include changes to credit ratings of the securities as well as to the underlying assets supporting those securities, rates of default of the underlying assets, underlying collateral value, discount rates, counterparty risk and ongoing strength and quality of market credit and liquidity.

In the event we need to access the funds that are not currently liquid, we will not be able to do so without the possible loss of principal, until a future auction for these investments is successful or they are redeemed by the issuer or they mature. If we are unable to sell these securities in the market or they are not redeemed, then we may be required to hold them to maturity. We do not anticipate

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a need to access these funds for operational purposes for the foreseeable future. We will continue to monitor and evaluate these investments on an ongoing basis for impairment. Based on our ability to access our cash and other short-term investments, our expected operating cash flows, and our other sources of cash, we do not anticipate that the potential illiquidity of these investments will affect our ability to execute our current business plan.

### **ITEM 4. CONTROLS AND PROCEDURES**

#### **Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

Under the supervision and with the participation of our management, including our principal executive officer and principal financial officer, we conducted an evaluation 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, as of the end of the period covered by this Report. Based on this evaluation, our principal executive officer and principal financial officer concluded that our disclosure controls and procedures were effective as of March 31, 2008.

#### **Changes in Internal Controls**

There has been no change in our internal control over financial reporting during the three months ended March 31, 2008, that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

## **PART II. OTHER INFORMATION**

### **ITEM 1A. RISK FACTORS**

You should consider carefully the risks described below, together with all of the other information included in this Report, and in our other filings with the SEC, before deciding whether to invest in or continue to hold our common stock. The risks described below are all material risks currently known, expected or reasonably foreseeable by us. If any of these risks actually occurs, our business, financial condition, results of operations or cash flow could be seriously harmed. This could cause the trading price of our common stock to decline, resulting in a loss of all or part of your investment.

The risk factors set forth below with an asterisk (\*) next to the title are new risk factors or risk factors containing changes, including any material changes, from the risk factors previously disclosed in Item 1A of our Annual Report on Form 10-K for the year ended December 31, 2007, as filed with the SEC.

***(\*)None of our independently developed product candidates has been approved for sale, and we have a limited number of independently developed product candidates in clinical trials. If we do not develop commercially successful products, we may be forced to curtail or cease operations.***

All of our independently developed product candidates are either in research or development. We must conduct a substantial amount of additional research and development before any U.S. or foreign regulatory authority will approve any of our product candidates. Limited data exist regarding the efficacy of DNA vaccines or therapeutics compared with conventional vaccines or therapeutics. Results of our research and development activities may indicate that our product candidates are unsafe or ineffective. In this case, regulatory authorities will not approve them.

For example, our independently developed product candidates currently in ongoing clinical evaluation include Allovectin-7<sup>®</sup>, for which we announced the initiation of Phase 3 clinical testing in 2007, our CMV vaccine, for which we initiated Phase 2 clinical testing in 2006, and our pandemic influenza vaccine, for which we initiated Phase 1 clinical testing in 2007. We may not be able to enroll sufficient patients in a timely manner in our Allovectin-7<sup>®</sup> trial and may not meet the primary endpoint of the trial as specified in our Special Protocol Assessment. We may not conduct additional CMV vaccine trials, leading transplant centers may not participate or sufficiently enroll patients in our trials, and our CMV vaccine may not elicit sufficient immune responses in humans. We may not conduct additional pandemic influenza trials, and the influenza program may not demonstrate sufficient safety and efficacy to support further product development.

Additionally, we are in early stages of development with other product candidates. These product candidates will require significant costs to advance through the development stages. If such product candidates are advanced through clinical trials, the results of such trials may not support approval by the FDA or comparable foreign agencies. Even if approved, our products may not be commercially successful. If we fail to develop and commercialize our products, we may be forced to curtail or cease operations.

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***Our revenues partially depend on the development and commercialization of products in collaboration with others to whom we have licensed our technologies or on whom we rely to support our development and commercialization efforts. If our collaborators or licensees are not successful or cease to support our development and commercialization efforts, or if we are unable to find collaborators or licensees in the future, we may not be able to derive revenues from these arrangements or may be forced to curtail our development and commercialization of certain products.***

We have licensed, and may continue to license, our technologies to corporate collaborators and licensees for the research, development and commercialization of specified product candidates. Our revenues partially depend upon the performance by these collaborators and licensees of their responsibilities under these arrangements. In addition, we have entered into a research and development agreement with AnGes, pursuant to which we rely on AnGes to fund the Phase 3 clinical trial of our cancer immunotherapeutic, Allovectin-7<sup>®</sup>, through cash payments and equity investments.

Some collaborators or licensees may not succeed in their product development efforts, such as our former licensee, Corautus Genetics Inc., who discontinued development efforts of a product for which they had licensed our core DNA delivery technology for specific cardiovascular applications. Other collaborators or licensees may not devote sufficient time or resources to the programs covered by these arrangements, causing us to derive little or no revenue from these arrangements, or may cease to support our development and commercialization efforts.

Our collaborators and licensees may breach or terminate their agreements with us, including some that may terminate their agreements without cause at any time subject to certain prior written notice requirements, and we may be unsuccessful in entering into and maintaining other collaborative arrangements for the development and commercialization of products using our technologies.

***Some of our independent product candidates and some of those under development by our sublicensees incorporate technologies we have licensed from others. If we are unable to retain rights to use these technologies, we or our sublicensees may not be able to market products incorporating these technologies on a commercially feasible basis, if at all.***

We have licensed certain technologies from corporate collaborators and research institutions, and sublicensed certain of such technologies to others, for use in the research, development and commercialization of product candidates. Our product development efforts and those of our sublicensees partially depend upon continued access to these technologies. For example, we or our licensors may breach or terminate our agreements, or disagree on interpretations of those agreements, which could prevent continued access to these technologies. If we were unable to resolve such matters on satisfactory terms, or at all, we or our sublicensees may be unable to develop and commercialize our products, and we may be forced to curtail or cease operations.

***A significant portion of our revenue is derived from agreements with government agencies, which are subject to termination and uncertain future funding.***

We have entered into agreements with government agencies, such as the NIH, and we intend to continue entering into these agreements in the future. For example, we receive grants from governmental agencies and have in the past entered into agreements to manufacture vaccines for such agencies. Our business is partially dependent on the continued performance by these government agencies of their responsibilities under these agreements, including adequate continued funding of the agencies and their programs. We have no control over the resources and funding that government agencies may devote to these agreements, which may be subject to annual renewal and which generally may be terminated by the government agencies at any time. For example, our 2003 subcontract agreement to manufacture bulk DNA vaccines for the VRC expired in July 2007. We do not expect to receive future material orders for the manufacture of bulk DNA from the subcontractor as the subcontractor has built its own DNA vaccine manufacturing facility to meet the future manufacturing needs of the VRC.

Government agencies may fail to perform their responsibilities under these agreements, which may cause them to be terminated by the government agencies. In addition, we may fail to perform our responsibilities under these agreements. Many of our government agreements are subject to audits which may occur several years after the period to which the audit relates. If an audit identifies significant unallowable costs, we could incur a material charge to our earnings or reduction in our cash position. As a result, we may be unsuccessful entering or ineligible to enter into future government agreements.

We apply for and have received funding from various government agencies. Eligibility of public companies to receive grants, such as Small Business Technology Transfer and Small Business Innovation Research grants, may be based on size and ownership criteria which are under review by the Small Business Administration, or SBA. As a result, our eligibility may change in the future, and additional funding from these sources may not be available.

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*(\*We have a history of net losses. We expect to continue to incur net losses and we may not achieve or maintain profitability.*

To date, we have not sold, or received approval to sell, any pharmaceutical products. We do not expect to sell any pharmaceutical products for at least the next several years. Our net losses were approximately \$35.9 million, \$23.1 million and \$24.4 million for the years ended December 31, 2007, 2006 and 2005, respectively. As of March 31, 2008, we had incurred cumulative net losses totaling approximately \$231.5 million. Moreover, we expect that our net losses will continue and may increase for the foreseeable future. We may not be able to achieve projected results if we generate lower revenues or receive lower investment income than expected, or we incur greater expenses than expected, or all of the above. We may never generate sufficient product revenue to become profitable. We also expect to have quarter-to-quarter fluctuations in revenues, expenses, and losses, some of which could be significant.

*We may need additional capital in the future. If additional capital is not available, we may have to curtail or cease operations.*

We may need to raise more money to continue the research and development necessary to bring our products to market and to establish marketing and additional manufacturing capabilities. We may seek additional funds through public and private stock offerings, government contracts and grants, arrangements with corporate collaborators, borrowings under lease lines of credit or other sources. We have on file two effective shelf registration statements that in the aggregate allow us to raise up to an additional \$111.6 million from the sale of common or preferred stock. However, we may not be able to raise additional funds on favorable terms, or at all.

If we are unable to obtain additional funds, we may have to scale back our development of new products, reduce our workforce or license to others products or technologies that we otherwise would seek to commercialize ourselves. The amount of money we may need would depend on many factors, including:

- The progress of our research and development programs;
- The scope and results of our preclinical studies and clinical trials; and
- The time and costs involved in: obtaining necessary regulatory approvals; filing, prosecuting and enforcing patent claims; scaling up our manufacturing capabilities; and the commercial arrangements we may establish.

*The regulatory approval process is expensive, time consuming and uncertain, which may prevent us from obtaining required approvals for the commercialization of our products.*

Our product candidates under development and those of our collaborators and licensees are subject to extensive and rigorous regulations by numerous governmental authorities in the United States and other countries. The regulations are evolving and uncertain. The regulatory process can take many years and require us to expend substantial resources. For example:

- The FDA has provided only limited guidelines concerning the scope of clinical trials required for gene-based therapeutic and vaccine products;
- The FDA has provided only limited guidance on how many subjects it will require to be enrolled in clinical trials to establish the safety and efficacy of gene-based products; and
- Current regulations and guidelines are subject to substantial review by various governmental agencies.

Therefore, U.S. or foreign regulations could prevent or delay regulatory approval of our products or limit our ability to develop and commercialize our products. Delays could:

- Impose costly procedures on our activities;
- Diminish any competitive advantages that we attain; or
- Negatively affect our results of operations and cash flows.

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We have no experience in filing a Biologics License Application, or BLA, with the FDA. Because a BLA must be filed with and approved by the FDA before a biologic product may be commercialized, our lack of experience may impede our ability to obtain FDA approval in a timely manner, if at all, for our products, which in turn would delay or prevent us from commercializing those products. Similarly, our lack of experience with respect to obtaining regulatory approvals in countries other than the United States may impede our ability to commercialize our products in those countries.

We believe that the FDA and comparable foreign regulatory bodies will regulate separately each product containing a particular gene depending on its intended use. Presently, to commercialize any product we must sponsor and file a regulatory application for each proposed use. We must conduct clinical studies to demonstrate the safety and efficacy of the product necessary to obtain FDA approval. The results obtained so far in our clinical trials may not be replicated in our ongoing or future trials. This may prevent any of our potential products from receiving FDA approval.

We use recombinant DNA molecules in our product candidates, and therefore we also must comply with guidelines instituted by the NIH and its Office of Biotechnology Activities. The NIH could restrict or delay the development of our product candidates.

In March 2004, the NIH Office of Biotechnology Activities and the FDA Center for Biologics Evaluation and Research launched the jointly developed Genetic Modification Clinical Research Information System, or GeMCRIS, an Internet-based database of human gene transfer trials. GeMCRIS enables individuals to easily view information on particular characteristics of clinical gene transfer trials. Although GeMCRIS includes special security features designed to protect patient privacy and confidential commercial information, these security features may be inadequately designed or enforced, potentially resulting in disclosure of confidential commercial information. In addition, the NIH, in collaboration with the FDA, has developed an Internet site, ClinicalTrials.gov, which provides public access to information on clinical trials for a wide range of diseases and conditions. The FDA and the NIH recently implemented rules and regulations that require public disclosure of additional commercial development data that previously was confidential. Future disclosures of such confidential commercial information may result in loss of advantage of competitive secrets.

***(\*)Adverse events or the perception of adverse events in the field of gene therapy, or with respect to our product candidates, may negatively impact regulatory approval or public perception of our products.***

The commercial success of some of our product candidates will depend in part on public acceptance of the use of gene therapy for preventing or treating human diseases. Serious adverse events, including patient deaths, have occurred in clinical trials utilizing viral delivery systems to deliver therapeutic genes to the patient's targeted cells. Although none of our current products or studies utilize viral delivery systems, these adverse events, as well as any other adverse events in the field of gene therapy that may occur in the future, may negatively influence public perception of gene therapy in general. If public perception is influenced by claims that gene therapy is unsafe, our product candidates may not be accepted by the general public or the medical community.

Future adverse events in gene therapy or the biotechnology industry could also result in greater governmental regulation, stricter labeling requirements and potential regulatory delays in the testing or approval of our potential products. Any increased scrutiny could delay or increase the costs of our product development efforts or clinical trials. In addition, any adverse events that may occur in our clinical trials and any resulting publicity may cause regulatory delays or otherwise affect our product development efforts or clinical trials. FDA rules require that unexpected serious adverse events that cannot be definitely excluded as related to the product be reported in an expedited manner. Expedited reporting of serious adverse events for gene therapy products are also required to be reported to the NIH. The NIH releases this information to the public, which may negatively influence public perception of gene therapy products.

Some of our potential products may be administered to patients who are suffering from, or are vulnerable to, serious diseases or other conditions which can themselves be life-threatening and often result in the death of the patient. For example, one patient in our Allovectin-7<sup>®</sup> Phase 2 trial conducted in 2000, died from progressive disease more than two months after receiving Allovectin-7<sup>®</sup> and other cancer therapies. The death was originally reported as unrelated to the treatment. Following an autopsy, the death was reclassified as "probably related" to the treatment because the possibility could not be ruled out. We do not believe Allovectin-7<sup>®</sup> was a significant factor in the patient's death. Patient deaths in our clinical trials, even if caused by pre-existing diseases or conditions, could negatively affect the perception of our product candidates. In addition, in our CMV Phase 2 trial, we are administering our investigational CMV vaccine to patients who are at risk of CMV reactivation. Although we do not believe our vaccine candidates could cause the diseases they are designed to protect against, a temporal relationship between vaccination and disease onset could be perceived as causal. Some of our products are designed to stimulate immune responses, and those responses, if particularly strong or uncontrolled, could result in local or systemic adverse events.

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***(\*)Our patents and proprietary rights may not provide us with any benefit and the patents of others may prevent us from commercializing our products.***

We are the assignee or co-assignee of 61 issued U.S. and foreign patents. We maintain our issued patents by paying maintenance fees to the patent office in each country when due. Where appropriate, we participate in legal proceedings to vigorously defend against the revocation or withdrawal of our patents. The scope and nature of these proceedings generally differ depending on the country in which they are initiated. Among these issued patents, a Japanese patent related to our core DNA delivery technology was the subject of four Trials for Invalidation, or TFIs, in which the patent was maintained in amended form without further appeal; a recently granted patent in Europe related to our core DNA delivery technology has been opposed by eight parties; a patent granted in Europe covering a range of applications of our core DNA delivery technology using cationic lipid formulations was opposed, maintained in amended form, and was subject to an appeal which was recently withdrawn; and a patent granted in Europe covering gene-based, extra-tumoral delivery of any cytokine for the treatment of cancer has also been opposed, and has since been withdrawn by us in favor of filing three new divisional applications. If we are not successful in defending our patents, we may lose all or part of our proprietary rights related to those patents in these geographic regions.

We are also prosecuting 120 pending patent applications in the United States and in foreign countries that cover various aspects of our proprietary technologies, not including patent applications for which we are a co-assignee and that are being prosecuted by our partners. Four of the pending foreign patent applications are international patent applications under the Patent Cooperation Treaty, each of which preserves our right to pursue national-phase patent applications in a large number of foreign countries. In addition, we are co-assignee, together with Merck, of U.S. and foreign patent applications related to DNA-based vaccines against influenza that are being prosecuted by Merck.

We may not receive any patents from our current patent applications. Issued patents provide exclusivity for only a limited time period, after which they no longer serve to protect proprietary technologies or to provide any commercial advantage. Moreover, if patents are issued to us, governmental authorities may not allow claims sufficient to protect our technologies and products. Finally, others may challenge or seek to circumvent or invalidate our patents. In that event, the rights granted under our patents may be inadequate to protect our proprietary technologies or to provide any commercial advantage.

Some components of our gene-based product candidates are, or may become, patented by others. As a result, we may be required to obtain licenses to conduct research, to manufacture, or to market such products. Licenses may not be available on commercially reasonable terms, or at all, which may impede our ability to commercialize our products.

***The legal proceedings to obtain and defend patents, and litigation of third-party claims of intellectual property infringement, could require us to spend money and could impair our operations.***

Our success will depend in part on our ability to obtain patent protection for our products and processes, both in the United States and in other countries. The patent positions of biotechnology and pharmaceutical companies, however, can be highly uncertain and involve complex legal and factual questions. Therefore, it is difficult to predict the breadth of claims allowed in the biotechnology and pharmaceutical fields.

We also rely on confidentiality agreements with our corporate collaborators, employees, consultants and certain contractors to protect our proprietary technologies. However, these agreements may be breached and we may not have adequate remedies for such breaches. In addition, our trade secrets may otherwise become known or independently discovered by our competitors.

Protecting intellectual property rights can be very expensive. Litigation may be necessary to enforce patents issued to us or to determine the scope and validity of third-party proprietary rights. Moreover, if a competitor were to file a patent application claiming technology also invented by us, we would have to participate in an interference proceeding before the U.S. Patent and Trademark Office to determine the priority of the invention. We may be drawn into interferences with third parties or may have to provoke interferences ourselves to unblock third-party patent rights to allow us or our licensees to commercialize products based on our technologies. Litigation could result in substantial costs and the diversion of management's efforts regardless of the results of the litigation. An unfavorable result in litigation could subject us to significant liabilities to third parties, require disputed rights to be licensed or require us to cease using some technologies.

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Our products and processes may infringe, or be found to infringe, patents not owned or controlled by us. Patents held by others may require us to alter our products or processes, obtain licenses, or stop activities. If relevant claims of third-party patents are upheld as valid and enforceable, we could be prevented from practicing the subject matter claimed in the patents, or may be required to obtain licenses or redesign our products or processes to avoid infringement. In addition, we could be required to pay money damages. A number of genetic sequences or proteins encoded by genetic sequences that we are investigating are, or may become, patented by others. As a result, we may have to obtain licenses to test, use or market these products. Our business will suffer if we are not able to obtain licenses at all or on terms commercially reasonable to us and we are not able to redesign our products or processes to avoid infringement.

We have incurred costs in several legal proceedings involving our intellectual property rights in Europe, Japan and Canada. We may continue to incur costs to defend and prosecute patents and patent applications in these and other regions.

***Competition and technological change may make our product candidates and technologies less attractive or obsolete.***

We compete with companies, including major pharmaceutical and biotechnology firms, that are pursuing other forms of treatment or prevention for diseases that we target. We also may experience competition from companies that have acquired or may acquire technologies from universities and other research institutions. As these companies develop their technologies, they may develop proprietary positions which may prevent us from successfully commercializing products.

Some of our competitors are established companies with greater financial and other resources than we have. Other companies may succeed in developing products and obtaining regulatory approval from the FDA or comparable foreign agencies faster than we do, or in developing products that are more effective than ours. Research and development by others may seek to render our technologies or products obsolete or noncompetitive or result in treatments or cures superior to any therapeutics developed by us. Furthermore, our products may not gain market acceptance among physicians, patients, healthcare payers and the medical communities. If any of our products do not achieve market acceptance, we may lose our investment in that product, which could have a material adverse impact on our operations.

***If we lose our key personnel or are unable to attract and retain additional personnel, we may not be able to achieve our business objectives.***

We are highly dependent on our principal scientific, manufacturing, clinical, regulatory and management personnel, including Vijay B. Samant, our President and Chief Executive Officer. The loss of the services of these individuals might significantly delay or prevent the achievement of our objectives. We do not maintain "key person" life insurance on any of our personnel. We depend on our continued ability to attract, retain and motivate highly qualified management and scientific personnel. We face competition for qualified individuals from other companies, academic institutions, government entities and other organizations in attracting and retaining personnel. To pursue our product development plans, we may need to hire additional management personnel and additional scientific personnel to perform research and development, as well as additional personnel with expertise in clinical trials, government regulation and manufacturing. However, due to the reasons noted above, we may not be successful in hiring or retaining qualified personnel and therefore we may not be able to achieve our business objectives.

***We have limited experience in manufacturing our product candidates in commercial quantities. We may not be able to comply with applicable manufacturing regulations or produce sufficient product for contract or commercial purposes.***

The commercial manufacturing of vaccines and other biological products is a time-consuming and complex process, which must be performed in compliance with the FDA's current Good Manufacturing Practices, or cGMP, regulations. We may not be able to comply with the cGMP regulations, and our manufacturing process may be subject to delays, disruptions or quality control problems. In addition, we may need to complete the installation and validation of additional large-scale fermentation and related purification equipment to produce the quantities of product expected to be required for commercial purposes. We have limited experience in manufacturing at this scale. Noncompliance with the cGMP regulations, the inability to complete the installation or validation of additional large-scale equipment, or other problems with our manufacturing process may limit or delay the development or commercialization of our product candidates, and cause us to breach our contract manufacturing service arrangements.

***We may initially depend on third parties to manufacture our product candidates commercially.***

We may initially depend on collaborators, licensees or other third parties to manufacture our product candidates in commercial quantities. There are a limited number of third parties that could manufacture our product candidates. We may be unable to enter into any arrangement for the commercial manufacture of our product candidates, and any arrangement we secure may not meet our requirements for manufacturing quality or quantity. Our dependence on third parties for the commercial manufacture of our product candidates may also reduce our profit margins and our ability to develop and deliver products in a timely manner.

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*We have no marketing or sales experience, and if we are unable to develop our own sales and marketing capability, we may not be successful in commercializing our products.*

Our current strategy is to market our proprietary products directly in the United States, but we currently do not possess pharmaceutical marketing or sales capabilities. To market and sell our proprietary products, we will need to develop a sales force and a marketing group with relevant pharmaceutical experience, or make appropriate arrangements with strategic partners to market and sell these products. Developing a marketing and sales force is expensive and time-consuming and could delay any product launch. If we are unable to successfully employ qualified marketing and sales personnel or develop other sales and marketing capabilities, we may not be able to generate sufficient product revenue to become profitable.

*Healthcare reform and restrictions on reimbursement may limit our returns on potential products.*

Our ability to earn sufficient returns on our products will depend in part on how much, if any, reimbursement for our products and related treatments will be available from:

- Government health administration authorities;
- Government agencies procuring biodefense products for military or public use, including some for which we may become a sole-source vendor;
- Private health coverage insurers;
- Managed care organizations; and
- Other organizations.

If we fail to obtain appropriate reimbursement, we could be prevented from successfully commercializing our potential products. There are efforts by governmental and third-party payers to contain or reduce the costs of healthcare through various means, including the Medicare Prescription Drug, Improvement, and Modernization Act of 2003, which provides Medicare prescription drug benefits and mandates other reforms. We expect that there will continue to be a number of legislative proposals to implement government controls. The adoption of such proposals or reforms could impair our business.

Additionally, third-party payers are increasingly challenging the price of medical products and services. If purchasers or users of our products are not able to obtain adequate reimbursement for the cost of using our products, they may forego or reduce their use. Significant uncertainty exists as to the reimbursement status of newly approved healthcare products, and whether adequate third-party coverage will be available.

*We use hazardous materials in our business. Any claims relating to improper handling, storage or disposal of these materials could be time consuming and costly.*

Our research and development processes involve the controlled storage, use and disposal of hazardous materials, biological hazardous materials and minor amounts of low-level radioactive compounds. Our hazardous materials include certain compressed gases, flammable liquids, acids and bases, and other toxic compounds. We are subject to federal, state and local regulations governing the use, manufacture, storage, handling and disposal of materials and waste products. Although we believe that our safety procedures for handling and disposing of these hazardous materials comply with the standards prescribed by law and regulation, the risk of accidental contamination or injury from hazardous materials cannot be completely eliminated. In the event of an accident, we could be held liable for any damages that result. We have insurance that covers our use of hazardous materials with the following coverage limits: up to \$25,000 per occurrence for losses related to the release of bio-contaminants, \$1 million per occurrence for losses from refrigerant contamination and \$25,000 per occurrence for losses from radioactive contamination. Any liability could exceed the limits or fall outside the coverage of our insurance. We could incur significant costs to comply with current or future environmental laws and regulations.

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### *(\*)We may have significant product liability exposure.*

We face an inherent business risk of exposure to product liability and other claims in the event that our technologies or products are alleged to have caused harm. We also have potential liability for products manufactured by us on a contract basis for third parties. Although we currently maintain product liability insurance in the amount of \$10 million in the aggregate plus additional coverage specific to the foreign countries where our clinical trials are being conducted, this insurance coverage may not be sufficient, and we may not be able to obtain sufficient coverage in the future at a reasonable cost. Our inability to obtain product liability insurance at an acceptable cost or to otherwise protect against potential product liability claims could prevent or inhibit the commercialization of any products developed by us or our collaborators, or our ability to manufacture products for third parties. If we are sued for any injury caused by our technologies or products, or by third-party products that we manufacture, our liability could exceed our insurance coverage and total assets.

### *(\*)Negative conditions in the global credit markets may impair the liquidity of a portion of our investment portfolio.*

Our investment securities consist of high-grade auction rate securities, corporate debt securities and government agency securities. As of March 31, 2008, our long-term investments included \$8.6 million of high-grade (AAA rated) auction rate securities secured by municipal bonds and student loans. Our auction rate securities are debt instruments with a long-term maturity and with an interest rate that is reset in short intervals through auctions. The recent conditions in the global credit markets have prevented some investors from liquidating their holdings of auction rate securities because the amount of securities submitted for sale has exceeded the amount of purchase orders for such securities. If there is insufficient demand for the securities at the time of an auction, the auction may not be completed and the interest rates may be reset to predetermined higher rates. When auctions for these securities fail, the investments may not be readily convertible to cash until a future auction of these investments is successful or they are redeemed or mature.

Since February 2008, there has been insufficient demand at auction for all of our high-grade auction rate securities held at March 31, 2008. As a result, these affected securities are currently not liquid, and we could be required to hold them until they are redeemed by the issuer or to maturity. During the three months ended March 31, 2008, we recognized \$0.3 million of unrealized losses related to those auction rate securities by adjusting their carrying value. At this time, we have not obtained sufficient evidence to conclude that these investments are permanently impaired, although if the credit ratings of the security issuers deteriorate and any decline in market value is determined to be other-than-temporary, we would be required to recognize a loss.

In the event we need to access the funds that are in an illiquid state, we will not be able to do so without the possible loss of principal, until a future auction for these investments is successful or they are redeemed by the issuer or they mature. If we are unable to sell these securities in the market or they are not redeemed, then we may be required to hold them to maturity.

### *(\*)Our stock price could continue to be highly volatile and you may not be able to resell your shares at or above the price you pay for them.*

The market price of our common stock, like that of many other life sciences companies, has been and is likely to continue to be highly volatile. From January 1, 2005, to March 31, 2008, our stock price has ranged from \$3.12 to \$7.58. The following factors, among others, could have a significant impact on the market price of our common stock:

- The results of our preclinical studies and clinical trials or announcements regarding our plans for future studies or trials, or those of our collaborators, licensees or competitors;
- Evidence or lack of evidence of the safety or efficacy of our potential products or those of our collaborators, licensees or competitors;
- The announcement by us or our collaborators, licensees or competitors of technological innovations or new products;
- Developments concerning our patent or other proprietary rights or those of our collaborators, licensees or competitors, including litigation and challenges to our proprietary rights;
- Other developments with our collaborators or licensees, including our entry into new collaborative or licensing arrangements;
- Geopolitical developments, natural or man-made disease threats, or other events beyond our control;

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- U.S. and foreign governmental regulatory actions;
- Changes or announcements in reimbursement policies;
- Period-to-period fluctuations in our operating results;
- Market conditions for life science stocks in general;
- Changes in the collective short interest in our stock;
- Changes in estimates of our performance by securities analysts; and
- Our cash balances, need for additional capital, and access to capital.

***We are at risk of securities class action litigation due to our expected stock price volatility.***

In the past, stockholders have brought securities class action litigation against a company following a decline in the market price of its securities. This risk is especially acute for us because life science companies have experienced greater than average stock price volatility in recent years and, as a result, have been subject to, on average, a greater number of securities class action claims than companies in other industries. To date, we have not been subject to class action litigation. However, we may in the future be the target of this litigation. Securities litigation could result in substantial costs and divert our management's attention and resources, and could seriously harm our business.

***Anti-takeover provisions in our charter documents and under Delaware law could make an acquisition of us, which may be beneficial to our stockholders, more difficult and may prevent attempts by our stockholders to replace or remove our current management.***

Our certificate of incorporation and bylaws include anti-takeover provisions, such as a classified board of directors, a prohibition on stockholder actions by written consent, the authority of our board of directors to issue preferred stock without stockholder approval, and supermajority voting requirements for specified actions. In addition, because we are incorporated in Delaware, we are governed by the provisions of Section 203 of the Delaware General Corporation Law, which prohibits stockholders owning in excess of 15% of our outstanding voting stock from merging or combining with us. These provisions may delay or prevent an acquisition of us, even if the acquisition may be considered beneficial by some stockholders. In addition, they may discourage or prevent any attempts by our stockholders to replace or remove our current management by making it more difficult for stockholders to replace members of our board of directors, which is responsible for appointing the members of our management.

***The issuance of preferred stock could adversely affect our common stockholders.***

We have on file two effective shelf registration statements that in the aggregate allow us to raise up to an additional \$111.6 million from the sale of common or preferred stock. The issuance of preferred stock could adversely affect the voting power of holders of our common stock, and reduce the likelihood that our common stockholders will receive dividend payments and payments upon liquidation. The issuance of preferred stock could also decrease the market price of our common stock, or have terms and conditions that could discourage a takeover or other transaction that might involve a premium price for our shares or that our stockholders might believe to be in their best interests.

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**ITEM 6.**      **EXHIBITS**

<b><u>Exhibit Number</u></b>	<b><u>Description of Document</u></b>
3.1(i)(1)	Restated Certificate of Incorporation.
3.1(ii)(1)	Amended and Restated Bylaws.
3.2(i)(2)	Certificate of Amendment to Restated Certificate of Incorporation.
4.1(1)	Specimen Common Stock Certificate.
31.1	Certification of Vijay B. Samant, Chief Executive Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
31.2	Certification of Jill M. Church, Chief Financial Officer, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002.
32.1	Certification of Vijay B. Samant, Chief Executive Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
32.2	Certification of Jill M. Church, Chief Financial Officer, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002.
(1)	Incorporated by reference to the exhibit of the same number filed with the Company's Registration Statement on Form S-3 (No. 33-95812) filed on August 15, 1995.
(2)	Incorporated by reference to exhibit 4.2 filed with the Company's Registration Statement on Form S-8 (No. 333-135398) filed on June 28, 2006.

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**SIGNATURE**

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.

Date: May 11, 2008

Vical Incorporated

By: /s/ JILL M. CHURCH

Jill M. Church  
Vice President, Chief Financial Officer and Secretary  
(on behalf of the registrant and as the registrant's Principal Financial and Accounting Officer)

## CERTIFICATION

I, Vijay B. Samant, certify that:

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

Date: May 11, 2008

By: /s/ VIJAY B. SAMANT  
Vijay B. Samant  
Chief Executive Officer

## CERTIFICATION

I, Jill M. Church, certify that:

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

Date: May 11, 2008

By: /s/ JILL M. CHURCH

Jill M. Church  
Chief Financial Officer

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350, as adopted), Vijay B. Samant, the Chief Executive Officer of Vical Incorporated (the "Company"), hereby certifies that, to the best of his knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2008, to which this Certification is attached as Exhibit 32.1 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Dated: May 11, 2008

/s/ VIJAY B. SAMANT

Vijay B. Samant  
Chief Executive Officer

THIS CERTIFICATION "ACCOMPANIES" THE FORM 10-Q TO WHICH IT RELATES, IS NOT DEEMED FILED WITH THE SEC AND IS NOT TO BE INCORPORATED BY REFERENCE INTO ANY FILING OF THE COMPANY UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED (WHETHER MADE BEFORE OR AFTER THE DATE OF THE FORM 10-Q), IRRESPECTIVE OF ANY GENERAL INCORPORATION LANGUAGE CONTAINED IN SUCH FILING. A SIGNED ORIGINAL OF THIS CERTIFICATION HAS BEEN PROVIDED TO THE COMPANY AND WILL BE RETAINED BY THE COMPANY AND FURNISHED TO THE SECURITIES AND EXCHANGE COMMISSION OR ITS STAFF UPON REQUEST.

**CERTIFICATION PURSUANT TO  
18 U.S.C. SECTION 1350,  
AS ADOPTED PURSUANT TO  
SECTION 906 OF THE SARBANES-OXLEY ACT OF 2002**

Pursuant to Section 906 of the Sarbanes-Oxley Act of 2002 (18 U.S.C. § 1350, as adopted), Jill M. Church, the Chief Financial Officer of Vical Incorporated (the "Company"), hereby certifies that, to the best of her knowledge:

1. The Company's Quarterly Report on Form 10-Q for the period ended March 31, 2008, to which this Certification is attached as Exhibit 32.2 (the "Periodic Report"), fully complies with the requirements of Section 13(a) or Section 15(d) of the Securities Exchange Act of 1934, as amended; and
2. The information contained in the Periodic Report fairly presents, in all material respects, the financial condition of the Company at the end of the period covered by the Periodic Report and results of operations of the Company for the period covered by the Periodic Report.

Dated: May 11, 2008

/s/ JILL M. CHURCH

Jill M. Church

Chief Financial Officer

THIS CERTIFICATION "ACCOMPANIES" THE FORM 10-Q TO WHICH IT RELATES, IS NOT DEEMED FILED WITH THE SEC AND IS NOT TO BE INCORPORATED BY REFERENCE INTO ANY FILING OF THE COMPANY UNDER THE SECURITIES ACT OF 1933, AS AMENDED, OR THE SECURITIES EXCHANGE ACT OF 1934, AS AMENDED (WHETHER MADE BEFORE OR AFTER THE DATE OF THE FORM 10-Q), IRRESPECTIVE OF ANY GENERAL INCORPORATION LANGUAGE CONTAINED IN SUCH FILING. A SIGNED ORIGINAL OF THIS CERTIFICATION HAS BEEN PROVIDED TO THE COMPANY AND WILL BE RETAINED BY THE COMPANY AND FURNISHED TO THE SECURITIES AND EXCHANGE COMMISSION OR ITS STAFF UPON REQUEST.