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

FORM 10-Q

(Mark One)
 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: 001-32295

ADHEREX TECHNOLOGIES INC.

(Exact Name of Registrant as Specified in Its Charter)

Canada
(State or Other Jurisdiction of
Incorporation or Organization)

20-0442384
(I.R.S. Employer
Identification No.)

4620 Creekstone Drive, Suite 200
Research Triangle Park
Durham, NC 27703
(Address of Principal Executive Offices)

27703
(Zip Code)

Registrant's Telephone Number, Including Area Code: (919) 484-8484

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer in Rule 12b-2 of the Exchange Act. (Check one)

Large Accelerated Filer
Non-Accelerated Filer
(Do not check if a smaller reporting company)

Accelerated Filer
Smaller Reporting company

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

As of May 13, 2008, there were 128,226,787 shares of Adherex Technologies Inc. common stock outstanding.

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Adherex Technologies Inc.
(a development stage company)
Unaudited Condensed Consolidated Balance Sheets
(U.S. Dollars and shares in thousands, except per share amounts)

| | March 31, 2008 | December 31, 2007 |
|--------------------------------------------------------------------------------------------------------------|-------------------|----------------------|
| Assets | | |
| Current assets: | | |
| Cash and cash equivalents | \$ 13,298 | \$ 16,162 |
| Cash pledged as collateral | 55 | 55 |
| Accounts receivable | 32 | 21 |
| Investment tax credits recoverable | 170 | 164 |
| Prepaid expense | 54 | 130 |
| Other current assets | 28 | 29 |
| Total current assets | 13,637 | 16,561 |
| Property and equipment | 223 | 285 |
| Leasehold inducements | 343 | 363 |
| Total assets | \$ 14,203 | \$ 17,209 |
| Liabilities and Stockholders' Equity | | |
| Current liabilities: | | |
| Accounts payable | \$ 513 | \$ 532 |
| Accrued liabilities | 1,836 | 1,830 |
| Other current liabilities | 40 | 40 |
| Total current liabilities | 2,389 | 2,402 |
| Deferred lease inducement | 637 | 659 |
| Total liabilities | 3,026 | 3,061 |
| Commitments and contingencies | | |
| Stockholders' equity: | | |
| Common stock, no par value; unlimited shares authorized; 128,227 shares issued and outstanding, respectively | 64,929 | 64,929 |
| Additional paid-in capital | 33,688 | 32,355 |
| Deficit accumulated during development stage | (88,683) | (84,379) |
| Accumulated other comprehensive income | 1,243 | 1,243 |
| Total stockholders' equity | 11,177 | 14,148 |
| Total liabilities and stockholders' equity | \$ 14,203 | \$ 17,209 |

(The accompanying notes are an integral part of these condensed consolidated financial statements)

Adherex Technologies Inc.
(a development stage company)
Unaudited Condensed Consolidated Statements of Operations
(U.S. Dollars and shares in thousands, except per share amounts)

| | Three Months Ended | | Cumulative From September 3, 1996 to March 31, 2008 |
|-----------------------------------------------------------------------------------------------------|--------------------|-------------------|--------------------------------------------------------------------|
| | March 31, 2008 | March 31, 2007 | |
| Revenue | \$ — | \$ — | \$ — |
| Operating expenses: | | | |
| Research and development | 3,375 | 3,157 | 55,786 |
| Acquired in-process research and development | — | — | 13,094 |
| General and administrative | 1,061 | 958 | 21,037 |
| Total operating expenses | <u>4,436</u> | <u>4,115</u> | <u>(89,917)</u> |
| Loss from operations | <u>(4,436)</u> | <u>(4,115)</u> | <u>(89,917)</u> |
| Other income (expense): | | | |
| Settlement of Cadherin Biomedical Inc. litigation | — | — | (1,283) |
| Interest expense | — | — | (19) |
| Other income | — | — | 98 |
| Interest income | 132 | 147 | 2,596 |
| Total other income and expense, net | <u>132</u> | <u>147</u> | <u>1,392</u> |
| Net loss and comprehensive loss | <u>\$ (4,304)</u> | <u>\$ (3,968)</u> | <u>\$ (88,525)</u> |
| Basic and diluted net loss per common share | <u>\$ (0.03)</u> | <u>\$ (0.05)</u> | |
| Weighted-average common shares used in computing basic and diluted net loss per common share | <u>128,227</u> | <u>82,369</u> | |

(The accompanying notes are an integral part of these condensed consolidated financial statements)

Adherex Technologies Inc.
(a development stage company)
Unaudited Condensed Consolidated Statements of Cash Flows
(U.S. Dollars and shares in thousands, except per share amounts)

| | <u>Three Months Ended</u> | | <u>Cumulative</u> |
|-----------------------------------------------------------------------------|---------------------------|------------------|---------------------|
| | <u>March 31,</u> | <u>March 31,</u> | <u>From</u> |
| | <u>2008</u> | <u>2007</u> | <u>September 3,</u> |
| | | | <u>1996 to</u> |
| | | | <u>March 31,</u> |
| | | | <u>2008</u> |
| Cash flows from (used in): | | | |
| Operating activities: | | | |
| Net loss | \$ (4,304) | \$ (3,968) | \$ (88,525) |
| Adjustments to reconcile net loss to net cash used in operating activities: | | | |
| Depreciation and amortization | 77 | 17 | 1,317 |
| Non-cash Cadherin Biomedical Inc. litigation expense | — | — | 1,187 |
| Unrealized foreign exchange loss | — | — | 9 |
| Amortization of leasehold improvements | (2) | 40 | 135 |
| Non-cash severance expense | — | — | 168 |
| Stock options issued to consultants | 19 | 163 | 643 |
| Stock options issued to employees | 1,314 | — | 6,068 |
| Acquired in-process research and development | — | — | 13,094 |
| Changes in operating assets and liabilities | 47 | (2,686) | 1,662 |
| Net cash used in operating activities | <u>(2,849)</u> | <u>(6,434)</u> | <u>(64,242)</u> |
| Investing activities: | | | |
| Purchase of capital assets | (15) | — | (1,440) |
| Disposal of capital assets | — | — | 115 |
| Release of restricted cash | — | — | 190 |
| Restricted cash | — | — | (209) |
| Purchase of short-term investments | — | — | (22,148) |
| Redemption of short-term investments | — | — | 22,791 |
| Investment in Cadherin Biomedical Inc. | — | — | (166) |
| Acquired intellectual property rights | — | — | (640) |
| Net cash used in investing activities | <u>(15)</u> | <u>—</u> | <u>(1,507)</u> |
| Financing activities: | | | |
| Conversion of long-term debt to equity | — | — | 68 |
| Long-term debt repayments | — | — | (65) |
| Capital lease repayments | — | — | (8) |
| Issuance of common stock, net of issue costs | — | 23,237 | 76,687 |
| Registration expense | — | — | (465) |
| Financing expenses | — | — | (544) |
| Proceeds from convertible note | — | — | 3,017 |
| Other liability repayments | — | — | (87) |
| Security deposits received | — | — | 28 |
| Proceeds from exercise of stock options | — | — | 51 |
| Net cash provided in financing activities | <u>—</u> | <u>23,237</u> | <u>78,682</u> |
| Effect of exchange rate changes on cash and cash equivalents | <u>—</u> | <u>—</u> | <u>365</u> |
| Net change in cash and cash equivalents | <u>(2,864)</u> | <u>16,803</u> | <u>13,298</u> |
| Cash and cash equivalents - Beginning of period | <u>16,162</u> | <u>5,665</u> | <u>—</u> |
| Cash and cash equivalents - End of period | <u>\$ 13,298</u> | <u>\$ 22,468</u> | <u>\$ 13,298</u> |

(The accompanying notes are an integral part of these condensed consolidated financial statements)

Adherex Technologies Inc.
(a development stage company)
Unaudited Consolidated Statements of Stockholders' Equity
(U.S. dollars and shares in thousands, except per share information)

| | Common Stock | | Non-redeemable Preferred Stock of Subsidiary | Additional Paid-in Capital | Accumulated Other Comprehensive Income | Deficit Accumulated During Development Stage | Total Stockholders' Equity |
|----------------------------------------------------------------------|--------------|--------|----------------------------------------------|----------------------------|----------------------------------------|----------------------------------------------|----------------------------|
| | Number | Amount | | | | | |
| Balance at June 30, 1996 | — | \$ — | \$ — | \$ — | \$ — | \$ — | \$ — |
| Issuance of common stock | 1,600 | — | — | — | — | — | — |
| Net loss | — | — | — | — | — | (37) | (37) |
| Balance at June 30, 1997 | 1,600 | — | — | — | — | (37) | (37) |
| Net loss | — | — | — | — | — | (398) | (398) |
| Balance at June 30, 1998 | 1,600 | — | — | — | — | (435) | (435) |
| Exchange of Adherex Inc. shares for Adherex Technologies Inc. shares | (1,600) | — | — | — | — | — | — |
| Issuance of common stock | 4,311 | 1,615 | — | — | — | — | 1,615 |
| Cumulative translation adjustment | — | — | — | — | 20 | — | 20 |
| Net loss | — | — | — | — | — | (958) | (958) |
| Balance at June 30, 1999 | 4,311 | 1,615 | — | — | 20 | (1,393) | 242 |
| Issuance of common stock | 283 | 793 | — | — | — | — | 793 |
| Issuance of equity rights | — | — | — | 171 | — | — | 171 |
| Issuance of special warrants | — | — | — | 255 | — | — | 255 |
| Settlement of advances: | | | | | | | |
| Issuance of common stock | 280 | 175 | — | — | — | — | 175 |
| Cancellation of common stock | (120) | — | — | — | — | — | — |
| Cumulative translation adjustment | — | — | — | — | 16 | — | 16 |
| Net loss | — | — | — | — | — | (1,605) | (1,605) |
| Balance at June 30, 2000 | 4,754 | 2,583 | — | 426 | 36 | (2,998) | 47 |
| Issuance of common stock: | | | | | | | |
| Initial Public Offering ("IPO") | 1,333 | 5,727 | — | — | — | (38) | 5,689 |
| Other | 88 | 341 | — | — | — | — | 341 |
| Issuance of special warrants | — | — | — | 1,722 | — | — | 1,722 |
| Conversion of special warrants | 547 | 1,977 | — | (1,977) | — | — | — |
| Issuance of Series A special warrants | — | — | — | 4,335 | — | — | 4,335 |
| Conversion of Series A special warrants | 1,248 | 4,335 | — | (4,335) | — | — | — |
| Conversion of equity rights | 62 | 171 | — | (171) | — | — | — |
| Cumulative translation adjustment | — | — | — | — | 182 | — | 182 |
| Net loss | — | — | — | — | — | (2,524) | (2,524) |
| Balance at June 30, 2001 | 8,032 | 15,134 | — | — | 218 | (5,560) | 9,792 |
| Cumulative translation adjustment | — | — | — | — | 11 | — | 11 |
| Net loss | — | — | — | — | — | (3,732) | (3,732) |
| Balance at June 30, 2002 | 8,032 | 15,134 | — | — | 229 | (9,292) | 6,071 |

(The accompanying notes are an integral part of these consolidated financial statements)
(continued on next page)

Adherex Technologies Inc.
(a development stage company)
Unaudited Consolidated Statements of Stockholders' Equity (Continued)
(U.S. dollars and shares in thousands, except per share information)

| | <u>Common Stock</u> | | <u>Non-redeemable Preferred Stock of Subsidiary</u> | <u>Additional Paid-in Capital</u> | <u>Accumulated Other Comprehensive Income</u> | <u>Deficit Accumulated During Development Stage</u> | <u>Total Stockholders' Equity</u> |
|------------------------------------------------|---------------------|---------------|-------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------|
| | <u>Number</u> | <u>Amount</u> | | | | | |
| Balance at June 30, 2002 | 8,032 | 15,134 | — | — | 229 | (9,292) | 6,071 |
| Common stock issued for Oxiquant acquisition | 8,032 | 11,077 | — | 543 | — | — | 11,620 |
| Exercise of stock options | 5 | 4 | — | — | — | — | 4 |
| Distribution to stockholders | — | — | — | — | — | (158) | (158) |
| Stated capital reduction | — | (9,489) | — | 9,489 | — | — | — |
| Stock options issued to consultants | — | — | — | 4 | — | — | 4 |
| Equity component of June convertible notes | — | — | — | 1,058 | — | — | 1,058 |
| Financing warrants | — | — | — | 53 | — | — | 53 |
| Cumulative translation adjustment | — | — | — | — | (159) | — | (159) |
| Net loss | — | — | — | — | — | (17,795) | (17,795) |
| Balance at June 30, 2003 | 16,069 | 16,726 | — | 11,147 | 70 | (27,245) | 698 |
| Stock options issued to consultants | — | — | — | 148 | — | — | 148 |
| Repricing of warrants related to financing | — | — | — | 18 | — | — | 18 |
| Equity component of December convertible notes | — | — | — | 1,983 | — | — | 1,983 |
| Financing warrants | — | — | — | 54 | — | — | 54 |
| Conversion of June convertible notes | 1,728 | 1,216 | — | (93) | — | — | 1,123 |
| Conversion of December convertible notes | 1,085 | 569 | — | (398) | — | — | 171 |
| Non-redeemable preferred stock | — | — | 1,045 | — | — | — | 1,045 |
| December private placement | 11,522 | 8,053 | — | 5,777 | — | — | 13,830 |
| May private placement | 4,669 | 6,356 | — | 2,118 | — | — | 8,474 |
| Exercise of stock options | 18 | 23 | — | — | — | — | 23 |
| Amalgamation of 2037357 Ontario Inc. | 800 | 660 | (1,045) | 363 | — | — | (22) |
| Cumulative translation adjustment | — | — | — | — | (219) | — | (219) |
| Net loss | — | — | — | — | — | (6,872) | (6,872) |
| Balance at June 30, 2004 | 35,891 | 33,603 | — | 21,117 | (149) | (34,117) | 20,454 |
| Stock options issued to consultants | — | — | — | 39 | — | — | 39 |
| Stock options issued to employees | — | — | — | 604 | — | — | 604 |
| Cost related to SEC registration | — | (493) | — | — | — | — | (493) |
| Acquisition of Cadherin Biomedical Inc. | 644 | 1,252 | — | — | — | — | 1,252 |
| Cumulative translation adjustment | — | — | — | — | 1,392 | — | 1,392 |
| Net loss – six months ended December 31, 2004 | — | — | — | — | — | (6,594) | (6,594) |
| Balance at December 31, 2004 | 36,535 | 34,362 | — | 21,760 | 1,243 | (40,711) | 16,654 |

(The accompanying notes are an integral part of these consolidated financial statements)
(continued on next page)

Adherex Technologies Inc.
(a development stage company)
Unaudited Consolidated Statements of Stockholders' Equity (Continued)
(U.S. dollars and shares in thousands, except per share information)

| | <u>Common Stock</u> | | <u>Non-redeemable Preferred Stock of Subsidiary</u> | <u>Additional Paid-in Capital</u> | <u>Accumulated Other Comprehensive Income</u> | <u>Deficit Accumulated During Development Stage</u> | <u>Total Stockholders' Equity</u> |
|-------------------------------------|---------------------|-----------------|-------------------------------------------------------------|-------------------------------------------|-----------------------------------------------------------|---------------------------------------------------------------------|-------------------------------------------|
| | <u>Number</u> | <u>Amount</u> | | | | | |
| Balance at December 31, 2004 | 36,535 | 34,362 | — | 21,760 | 1,243 | (40,711) | 16,654 |
| Financing costs | — | (141) | — | — | — | — | (141) |
| Exercise of stock options | 15 | 25 | — | — | — | — | 25 |
| Stock options issued to consultants | — | — | — | 276 | — | — | 276 |
| July private placement | 6,079 | 7,060 | — | 1,074 | — | — | 8,134 |
| Net loss | — | — | — | — | — | (13,871) | (13,871) |
| Balance at December 31, 2005 | 42,629 | 41,306 | - | 23,110 | 1,243 | (54,582) | 11,077 |
| Stock options issued to consultants | — | — | — | 100 | — | — | 100 |
| Stock options issued to employees | — | — | — | 491 | — | — | 491 |
| May private placement | 7,753 | 5,218 | — | 822 | — | — | 6,040 |
| Net loss | — | — | — | — | — | (16,440) | (16,440) |
| Balance at December 31, 2006 | 50,382 | 46,524 | — | 24,523 | 1,243 | (71,022) | 1,268 |
| Stock options issued to consultants | — | — | — | 59 | — | — | 59 |
| Stock options issued to employees | — | — | — | 2,263 | — | — | 2,263 |
| February financing | 75,759 | 17,842 | — | 5,379 | — | — | 23,221 |
| Exercise of warrants | 2,086 | 563 | — | 131 | — | — | 694 |
| Net loss | — | — | — | — | — | (13,357) | (13,357) |
| Balance at December 31, 2007 | 128,227 | 64,929 | — | 32,355 | 1,243 | (84,379) | 14,148 |
| Stock options issued to consultants | — | — | — | 19 | — | — | 19 |
| Stock options issued to employees | — | — | — | 1,314 | — | — | 1,314 |
| Net loss | — | — | — | — | — | (4,304) | (4,304) |
| Balance at March 31, 2008 | <u>128,227</u> | <u>\$64,929</u> | <u>\$ —</u> | <u>\$ 33,688</u> | <u>\$ 1,243</u> | <u>\$ (88,683)</u> | <u>\$ 11,177</u> |

(The accompanying notes are an integral part of these consolidated financial statements)

Adherex Technologies Inc.
(a development stage company)
Notes to Unaudited Condensed Consolidated Financial Statements
(U.S. dollars and shares in thousands, except per share information)

1. Nature of Operations

Adherex Technologies Inc. (“Adherex”), together with its wholly-owned subsidiaries Oxiquant, Inc. (“Oxiquant”) and Adherex, Inc, both Delaware corporations, and a Cadherin Biomedical Inc. (“CBI”), a Canadian corporation, collectively referred to herein as the “Company,” is a development stage biopharmaceutical company with a portfolio of product candidates under development for use in the treatment of cancer.

2. Significant Accounting Policies

Basis of presentation

The accompanying unaudited interim condensed consolidated financial statements have been prepared in accordance with generally accepted accounting principles in the United States of America (“U.S. GAAP”) and applicable Securities and Exchange Commission (“SEC”) regulations for interim financial information. These financial statements do not include all of the information and notes required by U.S. GAAP for complete financial statements. Accordingly, these unaudited interim condensed consolidated financial statements should be read in conjunction with the Company’s audited financial statements and notes filed with the Securities and Exchange Commission (“SEC”) in the Company’s Annual Report on Form 10-K for the year ended December 31, 2007. The Company’s accounting policies are consistent with those presented in the audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2007. These unaudited interim condensed consolidated financial statements have been prepared in United States (“U.S.”) dollars.

The preparation of these unaudited interim condensed consolidated financial statements also conform in all material respects with generally accepted accounting principles in Canada (“Canadian GAAP”) except as described in Note 6 in the unaudited interim condensed consolidated financial statements.

Use of estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make judgments, assumptions and estimates that affect the amounts reported in these interim condensed consolidated financial statements. Actual results could differ from these estimates. In the opinion of management, these unaudited interim condensed consolidated financial statements include all normal and recurring adjustments, considered necessary for the fair presentation of our financial position at March 31, 2008 and to state fairly the results for the periods presented.

Cash and cash equivalents

Cash and cash equivalents consist of highly liquid investments with original maturities at the date of purchase of three months or less.

The Company classifies its cash equivalents as “available for sale.” Such investments are recorded at fair value, determined based on quoted market prices, and unrealized gains and losses, which are considered to be temporary, are recorded as other comprehensive income (loss) in a separate component of stockholders’ equity until realized.

The Company places its cash and cash equivalents with financial institutions with high credit quality investments in accordance with its investment policy designed to protect the principal investment. Therefore, the Company believes that its exposure due to concentration of credit risk is minimal.

Common stock and warrants

At both March 31, 2008 and December 31, 2007, the Company had warrants to purchase common stock that were denominated in both U.S. and Canadian dollars, which results in the Company having warrants outstanding that are denominated outside our U.S. dollar functional currency.

The SEC and the Financial Accounting Standards Board (“FASB”) have issued recent interpretations for U.S. GAAP that suggest warrants with exercise prices denominated in a different currency from the entity’s functional currency cannot be classified as equity. As a result, these instruments would be treated as derivatives and recorded as liabilities which are carried at their fair value, with period to period changes in the fair value recorded as a gain or loss in the statement of operations.

Adherex Technologies Inc.
(a development stage company)
Notes to Unaudited Condensed Consolidated Financial Statements (Continued)
(U.S. dollars and shares in thousands, except per share information)

In November 2007, the FASB Emerging Issues Task Force (“EITF”) issued EITF No. 07-5, Issue Summary No.1 “Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity’s Own Stock”. In March 2008 the EITF issued a draft abstract on Issue 07-5 for comments from the public which will be discussed at a future meeting. At this future meeting the EITF is expected to provide further guidance with respect to the accounting for such items.

The Company is awaiting the results of the FASB’s project and has therefore not recorded warrants outstanding that have an exercise price in Canadian dollars as derivatives. If the Company had recorded such instruments as derivatives, it would have recorded an additional loss of approximately \$47 for the three months ended March 31, 2008 and an additional gain of \$1 for the three months ended March 31, 2007. The Company calculated these amounts using the Black-Scholes option pricing model and used the following assumptions: volatility rate of 85% and 84% for the three months ended March 31, 2008 and 2007, respectively; the actual exercise price of each instrument at March 31, 2008 and 2007; the stock price at March 31, 2008 and 2007, and the Canadian risk free interest rate for the remaining life of the related warrants; and a 0% dividend rate for both of the three month periods ended March 31, 2008 and 2007.

3. Recent Accounting Pronouncements

In June 2007, the EITF issued EITF No. 07-3, “Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities” (“EITF 07-3”), which provides guidance for up-front payments related to goods and services of research and development costs. EITF 07-3 is effective for fiscal years beginning after December 15, 2007. The adoption of this statement did not have a material effect on the Company’s reported financial position or results of operations.

In February 2007, the FASB issued SFAS No. 159, “The Fair Value Option for Financial Assets and Financial Liabilities—including an amendment of FASB Statement No. 115” (“SFAS 159”), which is effective for fiscal years beginning after November 15, 2007. SFAS 159 permits companies to choose to measure many financial instruments and certain other items at fair value on a per instrument basis, with changes in fair value recognized in earnings each reporting period. This will enable some companies to reduce volatility in reported earnings caused by measuring related assets and liabilities differently. SFAS 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. The adoption of this statement did not have a material effect on the Company’s reported financial position or results of operations.

In September 2006, FASB released SFAS No. 157, “Fair Value Measurements” (“SFAS 157”) and is effective for fiscal years beginning after November 15, 2007, which is the year ending December 31, 2008 for the Company. SFAS 157 defines fair value, establishes a framework for measuring fair value in GAAP, and expands disclosures about fair value measurements. In November 2007, FASB agreed to a one-year deferral of the effective date for nonfinancial assets and liabilities that are recognized or disclosed at fair value on a nonrecurring basis. The Company is currently assessing the deferred portion of the pronouncement. As of January 1, 2008, the Company has adopted SFAS 157 for the fair value measurement of recurring items which has not had a material effect on the Company’s reported financial position or results of operations.

In December 2007, the FASB issued SFAS No. 141(revised 2007), “Business Combinations” (“SFAS 141(R)”), which applies prospectively to business combinations for which the acquisition date is on or after the beginning of the first annual reporting period beginning on or after December 15, 2008. An entity may not apply it before that date. SFAS 141(R) establishes principles and requirements for how the acquirer: i) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree; ii) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and iii) determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The Company does not expect the adoption of SFAS 141 (R) to have an effect on its results of operations and its financial condition unless it enters into a business combination after January 1, 2009.

In March 2008, the FASB issued SFAS No. 161, “Disclosures About Derivative Instruments and Hedging Activities – an amendment of FASB Statement No. 133” (SFAS No. 161). SFAS No. 161 expands quarterly disclosure requirements in SFAS No. 133 about an entity’s derivative instruments and hedging activities. SFAS No. 161 is effective for fiscal years beginning after November 15, 2008. The Company is currently assessing the impact of SFAS No. 161 on its consolidated financial position and results of operations.

Adherex Technologies Inc.
(a development stage company)
Notes to Unaudited Condensed Consolidated Financial Statements (Continued)
(U.S. dollars and shares in thousands, except per share information)

4. Stockholders' Equity

2007 Public Offering

On February 21, 2007, the Company completed the sale of equity units at a price of \$0.33 per unit providing gross proceeds of \$25,000 and net proceeds of approximately \$23,221 after deducting broker fees and other expenses. Each unit consisted of one common share and one-half of a common share purchase warrant. The offering was comprised of an aggregate of 75,759 shares of common stock, 37,879 investor warrants and 6,618 broker warrants to acquire additional shares of Adherex common stock. Each whole investor warrant entitles the holder to acquire one additional share of Adherex common stock at an exercise price of \$0.40 per share for a period of three years. Each whole broker warrant entitles the holder to acquire one additional unit at an exercise price of \$0.33 per unit for a period of two years.

Warrants to Purchase Common Stock

At March 31, 2008, the Company had 7,567 outstanding investor warrants to purchase common stock priced in Canadian dollars with an exercise price of CAD \$2.15 that expire on December 19, 2008.

At March 31, 2008, the Company had the following warrants outstanding to purchase common stock priced in U.S. dollars with a weighted average exercise price of \$0.47 and a weighted average remaining life of 1.78 years:

| <u>Warrant Description</u> | <u>Number Outstanding at March 31, 2008</u> | <u>Exercise Price In U.S. Dollars</u> | <u>Expiration Date</u> |
|----------------------------|---------------------------------------------------------|-------------------------------------------|------------------------|
| Agent warrants | 465 | \$ 0.97 | May 7, 2008 |
| Investor warrants | 1,824 | \$ 1.75 | July 20, 2008 |
| Broker warrants | 4,818 | \$ 0.33 | February 21, 2009 |
| Investor warrants | 38,794 | \$ 0.40 | February 21, 2010 |
| Investor warrants | 2,326 | \$ 0.97 | May 7, 2010 |
| | <u>48,227</u> | | |

Stock Option Plan

The Compensation Committee of the Board of Directors administers the Company's stock option plan. The Compensation Committee designates eligible participants to be included under the plan and approves the number of options to be granted from time to time under the plan.

A maximum of 20,000 options (not including 700 options previously issued to the Chief Executive Officer and specifically approved by the stockholders outside the plan) are authorized for issuance under the plan. The option exercise price for all options issued under the plan is based on the fair value of the underlying shares on the date of grant. The stock option plan, as amended, allows the issuance of U.S. and Canadian dollar denominated grants.

During the three month periods ended March 31, 2008, and 2007 the Company recognized total stock-based compensation expense of \$1,333 and \$163, respectively.

Adherex Technologies Inc.
(a development stage company)
Notes to Unaudited Condensed Consolidated Financial Statements (Continued)
(U.S. dollars and shares in thousands, except per share information)

Valuation Assumptions

The fair value of options granted in the three month periods ended March 31, 2008 and 2007 were estimated using the Black-Scholes option-pricing model, using the following weighted average assumptions:

| | Three Months Ended March 31, | |
|------------------------------------------------|---------------------------------|---------|
| | 2008 | 2007 |
| Expected dividend | 0% | 0% |
| Risk-free interest rate | 3.15% | 4.60% |
| Expected volatility | 85% | 84% |
| Expected life in years | 7 | 7 |
| Weighted average fair value of options granted | \$ 0.29 | \$ 0.22 |

Stock Option Activity

The following is a summary of option activity for the three month period ended March 31, 2008 for stock options denominated in Canadian dollars:

| | Number of Options | Weighted- average Exercise Price |
|----------------------------------|----------------------|-------------------------------------------|
| Outstanding at December 31, 2007 | 2,939 | CAD\$ 2.18 |
| Granted | — | — |
| Exercised | — | — |
| Cancelled | — | — |
| Outstanding at March 31, 2008 | <u>2,939</u> | <u>CAD\$ 2.18</u> |

The following is a summary of option activity for the three month period ended March 31, 2008 for stock options denominated in U.S. dollars:

| | Number of Options | Weighted- average Exercise Price |
|----------------------------------|----------------------|-------------------------------------------|
| Outstanding at December 31, 2007 | 12,724 | \$ 0.58 |
| Granted | 3,200 | 0.38 |
| Exercised | — | — |
| Cancelled | — | — |
| Outstanding at March 31, 2008 | <u>15,924</u> | <u>\$ 0.54</u> |

5. GlaxoSmithKline

On March 1, 2007, the Company amended the existing Development and License Agreement with GlaxoSmithKline (“GSK”) and purchased all of GSK’s remaining buy-back options for eniluracil under the agreement for an upfront fee of \$1,000 which is included in research and development expense on the Company’s Statement of Operations. The Company is now free to develop eniluracil alone or with other partners and is required to pay GSK development and sales milestones and double-digit royalties on net sales. Specifically, if the Company files a New Drug Application (“NDA”) with the Food and Drug Administration (“FDA”), the Company may be required to pay development milestones of \$5,000 to GSK. Depending upon whether the NDA is approved by the FDA and whether eniluracil becomes a commercial success, the Company may be required to pay up to an additional \$70,000 in development and sales milestones for the initially approved indication, plus double digit royalties based on annual net sales. If the Company pursues other indications, it may be required to pay up to an additional \$15,000 to GSK per FDA-approved indication.

Adherex Technologies Inc.
(a development stage company)
Notes to Unaudited Condensed Consolidated Financial Statements (Continued)
(U.S. dollars and shares in thousands, except per share information)

6. Canadian Generally Accepted Accounting Principles

The unaudited interim condensed consolidated financial statements have been prepared in accordance with U.S. GAAP which conforms in all material respect to Canadian GAAP, except for the differences noted below and as more fully described in Note 15 in the Company's annual audited consolidated financial statements included in its Annual Report on Form 10-K for the year ended December 31, 2007. There are no differences in reported cash flow for the periods presented between U.S. and Canadian GAAP.

Unaudited Interim Consolidated Balance Sheets - Canadian GAAP:

| | <u>March 31,</u> <u>2008</u> | <u>December 31,</u> <u>2007</u> |
|--------------------------------------------------|---------------------------------|------------------------------------|
| Assets | | |
| Current assets | \$ 13,637 | \$ 16,561 |
| Leasehold inducements | 343 | 363 |
| Property and equipment | 223 | 285 |
| Acquired intellectual property rights (2) | 8,576 | 9,028 |
| Total assets | <u>\$ 22,779</u> | <u>\$ 26,237</u> |
| Liabilities | | |
| Current liabilities | \$ 2,389 | \$ 2,402 |
| Deferred lease inducement | 637 | 659 |
| Future income taxes (2) | 2,348 | 2,474 |
| Total liabilities | <u>5,374</u> | <u>5,535</u> |
| Stockholders' equity | | |
| Common stock | 64,891 | 64,891 |
| Contributed surplus | 35,916 | 34,583 |
| Accumulated other comprehensive income | 5,850 | 5,850 |
| Deficit accumulated during the development stage | (89,252) | (84,622) |
| Total stockholders' equity | <u>17,405</u> | <u>20,702</u> |
| Total liabilities and stockholders' equity | <u>\$ 22,779</u> | <u>\$ 26,237</u> |

Unaudited Interim Consolidated Statement of Operations - Canadian GAAP:

| | <u>Three Months Ended March 31,</u> | |
|----------------------------------------------------------------------------------|-------------------------------------|-------------------|
| | <u>2008</u> | <u>2007</u> |
| Net loss in accordance with U.S. GAAP | \$ (4,304) | \$ (3,968) |
| Adjustments to reconcile to Canadian GAAP: | | |
| License fee paid (2) | — | 1,000 |
| Acquired intellectual property rights amortization (2) | (452) | (464) |
| Future income taxes – acquired intellectual property rights (2) | 126 | 165 |
| Net loss and comprehensive loss in accordance with Canadian GAAP | <u>\$ (4,630)</u> | <u>\$ (3,267)</u> |
| Net loss per share of common stock, basic and diluted | <u>\$ (0.04)</u> | <u>\$ (0.04)</u> |
| Weighted-average number of shares of common stock outstanding, basic and diluted | <u>128,227</u> | <u>82,369</u> |

Adherex Technologies Inc.
(a development stage company)
Notes to Unaudited Condensed Consolidated Financial Statements (Continued)
(U.S. dollars and shares in thousands, except per share information)

Notes to the Interim Condensed Consolidated Financial Statements - Canadian GAAP (unaudited):

1. Summary of significant accounting policies

Current accounting pronouncements

The Canadian Institute of Chartered Accountants (“CICA”) Section 1530, “Comprehensive Income”, introduces a statement of comprehensive income in the full set of interim and annual financial statements. Comprehensive income will present certain gains and losses outside net income. The adoption of these standards was on a prospective basis with no retroactive restatement of prior periods and had no material impact on the consolidated financial statements. As at March 31, 2008 and December 31, 2007, the Company’s accumulated other comprehensive income balance was \$5,850.

Adoption of accounting pronouncements

Effective January 1, 2008, the Company adopted the following CICA accounting pronouncements which did not have a material impact on the Company’s Canadian GAAP disclosure:

Financial Instruments – Disclosures, Section 3862, describes the required disclosures related to the significance of financial instruments on the entity’s financial position and performance and the nature and extent of risks arising from financial instruments to which the entity is exposed and how the entity manages those risks. This section complements the principles of recognition, measurement and presentation of financial instruments of Section 3855, Financial Instruments – Recognition and Measurement.

Financial Instruments – Presentation, Section 3863, establishes standards for presentation of financial instruments and non-financial derivatives. It complements the standards of Section 3861, Financial Instruments – Disclosure and presentation.

Capital Disclosures, Section 1535, establishes the standards for disclosing information about the entity’s capital and how it is managed to enable users of financial statements to evaluate the entity’s objectives, policies and procedures for managing capital.

General Standards on Financial Presentation, Section 1400, has been amended to assess and disclose an entity’s ability to continue as a going concern.

2. Acquired intellectual property rights

Under U.S. GAAP, the cost of acquired technology is charged to expense as in-process research and development (“IPRD”) when incurred if the feasibility of such technology has not been established and no future alternative use exists. Canadian GAAP requires the capitalization and amortization of the costs of acquired technology. This difference increases the net loss from operations under U.S. GAAP in the year the IPRD is acquired and reduces the net loss under U.S. GAAP in subsequent periods because there is no amortization expense.

Under Canadian GAAP, a future tax liability is also recorded upon acquisition of the technology to reflect the tax effect of the difference between the carrying amount of the technology in the financial statements and the tax basis of these assets which is nil. As the intellectual property is amortized, the future tax liability is also reduced to reflect the change in this temporary difference between the tax and accounting values of the assets. Under U.S. GAAP, because the technology is expensed immediately as IPRD, there is no difference between the tax basis and the financial statement carrying value of the assets and therefore no future tax liability exists.

On March 1, 2007, the Company purchased of all of GSK’s remaining options to buy back Eniluracil under the license agreement for a fee of \$1,000. Under U.S. GAAP, the cost of the license fee paid to GSK was charged to expense as IPRD since the feasibility of such technology has not been established and no future alternative use exists. Canadian GAAP requires the capitalization and amortization of this acquired intellectual property. The intellectual property is being amortized over the estimated useful life of seven years on a straight-line basis.

Adherex Technologies Inc.
(a development stage company)
Notes to Unaudited Condensed Consolidated Financial Statements (Continued)
(U.S. dollars and shares in thousands, except per share information)

3. Financial instruments and risk management

Financial instruments of the Company consist of cash, cash equivalents, cash pledged as collateral, accounts receivable, accounts payable, accrued liabilities and other current liabilities. Due to the relatively short periods to maturity of these instruments, the carrying value approximates the fair value.

Cash and cash equivalents consist of high credit quality investments and the Company believes the credit risk is minimal. In addition, due to the highly liquid nature of our cash and cash equivalents, fluctuations in market rates do not have a significant impact on the Company's results of operations.

The Company is exposed to foreign currency risks as we conduct certain clinical development activities in Canada, the United Kingdom ("UK"), Europe and the Pacific Rim. The Company has not elected to employ the use of derivative instruments. The Company does hold Canadian dollars which is used to pay certain Canadian denominated obligations. At March 31, 2008 the Company holds cash and cash equivalents totaling \$1,444 in Canadian dollars and current liabilities totaling \$497.

4. Management of capital

The Company's capital consists of stockholders' equity. The Company estimates its future capital requirements and manages its capital based on the current economic operating environment. The Company's objective is to ensure that the Company will continue as a going concern so that it can develop its product candidates and maximize the value to stockholders.

Item 2. Management's Discussion and Analysis of Financial Condition and Results of Operations

CAUTIONARY STATEMENT

The discussion below contains forward-looking statements regarding our financial condition and our results of operations that are based upon our unaudited interim condensed consolidated financial statements, which have been prepared in accordance with generally accounting principles within the United States ("U.S. GAAP"). The preparation of these financial statements also conform in all material respects with generally accepted accounting principles in Canada ("Canadian GAAP") except as described in Note 6 in the interim condensed consolidated financial statements and as more fully described in Note 15 in our annual consolidated financial statements contained in our Annual Report on Form 10-K for the year ended December 31, 2007. The preparation of these financial statements requires our management to make estimates and judgments that affect the reported amounts of assets, liabilities, income and expenses, and related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis. Our estimates are based on historical experience and on various other assumptions that we believe to be reasonable.

We operate in a highly competitive environment that involves significant risks and uncertainties, some of which are beyond our control. Our actual results, performance or achievements may be materially different from any results, performance or achievements expressed or implied by such forward-looking statements. Words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," "project," "plan," and other similar words are one way to identify such forward-looking statements. Forward-looking statements in this Quarterly Report include, but are not limited to, statements with respect to (1) our anticipated commencement dates, completion dates and results of clinical trials; (2) our anticipated progress and costs of our clinical and preclinical research and development programs; (3) our corporate and development strategies; (4) our expected results of operations; (5) our anticipated levels of expenditures; (6) our ability to protect our intellectual property; (7) the anticipated applications and efficacy of our drug candidates; (8) our ability to attract and retain key employees; (9) our efforts to pursue collaborations with the government, industry groups or other companies; (10) the nature and scope of potential markets for our drug candidates and (11) our anticipated sources and uses of cash, cash equivalents and short-term investments. All statements, other than statements of historical fact, included in this Quarterly Report that address activities, events or developments that we expect or anticipate will or may occur in the future are forward-looking statements. We include forward-looking statements because we believe that it is important to communicate our expectations to our investors. However, all forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties, including those discussed in this Quarterly Report in "Part II Other Information-Item 1A. Risk Factors". Although we believe the expectations reflected in the forward-looking statements are based upon reasonable assumptions, we can give no assurance that our expectations will be attained, and we caution you not to place undue reliance on such statements.

Overview

We are a biopharmaceutical company focused on cancer therapeutics with preclinical and clinical product candidates. Our clinical product portfolio includes:

- *Eniluracil*, a dihydropyrimidine dehydrogenase, or DPD, inhibitor that we are developing to enhance the therapeutic value and effectiveness of 5-fluorouracil, or 5-FU, one of the world's most widely used oncology agents. 5-FU is currently used as first or second-line therapy for a variety of cancers, including colorectal, breast, gastric, head and neck, ovarian, and basal cell cancer of the skin, among others. We have two ongoing Phase I and Phase I/II clinical trials combining eniluracil and 5-FU which are intended to establish the safety, tolerability and initial effectiveness of our proprietary combination. We have enrolled 39 patients in the Phase I trial and some dose limiting toxicity has been reached, therefore the 100 mg cohort has been expanded. We licensed eniluracil from GlaxoSmithKline, or GSK, in July 2005.
- *ADH-1*, an anti-cancer drug that selectively targets N-cadherin present on certain tumor cells and tumor blood vessels. We currently have two combination clinical studies ongoing, including a Phase I study using systemic ADH-1 in combination with three different systemic chemotherapy agents, and a Phase I/II study combining systemic ADH-1 with regionally-infused melphalan for the treatment of melanoma. This melanoma study is being expanded to include eight clinical centers and accrue up to 56 patients. Currently, we have enrolled 33 patients in this melanoma study. In April 2008, we completed patient enrollment in our Phase I ADH-1 combination study. While some clinical responses have been noted, a number of patients remain on study and we are in the process of evaluating the full dataset. We licensed ADH-1 from McGill University in February 2001.
- *STS*, a chemoprotectant that has been shown in Phase I and Phase II clinical studies conducted by investigators at Oregon Health & Science University, or OHSU, to reduce the disabling loss of hearing in patients treated with platinum-based anti-cancer agents. We licensed STS from OHSU in September 2002.

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In 2006, we entered into an agreement with the International Childhood Liver Tumour Strategy Group, known as SIOPEL, a multi-disciplinary group of specialists under the umbrella of the International Society of Pediatric Oncology, for the conduct of a Phase III clinical trial using STS. On October 30, 2007, we announced that SIOPEL had launched the Phase III clinical trial and opened the study for patient enrollment in the United Kingdom. The study will involve SIOPEL centers in up to 33 countries and is expected to enroll approximately 100 evaluable children with liver (hepatoblastoma) cancer being treated with cisplatin. Under the terms of our agreement, SIOPEL will conduct and fund the clinical activity and we will provide the drug and drug distribution for the study. On March 26, 2008, we announced the activation of a second Phase III trial with STS to prevent hearing loss in children receiving cisplatin-based chemotherapy in collaboration with the Children's Oncology Group, or COG. The goal of this Phase III study is to evaluate in a multi-centered, randomized trial whether STS is an effective and safe means of preventing hearing loss in children receiving cisplatin-based chemotherapy for newly diagnosed germ cell, liver (hepatoblastoma), brain (medulloblastoma), nerve tissue (neuroblastoma) or bone (osteosarcoma) cancers. Eligible children will be one to eighteen years of age who are to receive cisplatin according to their disease-specific regimen and, upon enrollment onto this study, will be randomized to receive STS or not. The trial is expected to enroll up to 120 patients over approximately three years in up to 230 COG centers in the United States, Canada, Australia and Europe. COG will fund the clinical activities for the study and we will be providing the drug and drug distribution for the study. We also plan to initiate an STS Phase III study in adult patients with head and neck cancer to evaluate hearing loss.

Our preclinical portfolio includes: (1) novel peptides and small chemical molecule successors to ADH-1; (2) peptides and small molecules targeting the cadherin-mediated metastatic spread of some cancers; and (3) peptides that combine both angiolytic and anti-angiogenic properties. We have synthesized small chemical molecules and peptide antagonists and agonists for a wide array of cadherin adhesion molecules, with drug candidates available to move into future clinical development, particularly in the following areas:

- *Peptide N-cadherin antagonists.* We have identified novel peptide molecules that differ in structure from ADH-1 and that have extended stability in plasma. These molecules offer the potential advantages of extended plasma half-life and enhanced potency compared to ADH-1.
- *Small molecule N-cadherin antagonists.* We have identified a series of small chemical molecules that, in our preliminary studies, have displayed potent N-cadherin antagonism activity. Unlike ADH-1 and the other peptide N-cadherin antagonists, these molecules are not peptides and are smaller and simpler in structure. Compared to peptides, small chemical molecules are often active after oral administration, more stable and have different potency and toxicity profiles.
- *OB-cadherin.* OB-cadherin is reported to be involved in the metastatic spread of certain cancers to sites distant from the original tumor. Metastatic disease is a major determinant of both a patient's survival and quality-of-life. We have developed OB-cadherin peptide and small molecule antagonists with the potential to reduce or slow down the metastatic spread of tumors, such as breast and prostate cancers.
- *VE-cadherin.* Like N-cadherin, VE-cadherin is important in the structural integrity of certain tumor blood vessels. We have developed peptide VE-cadherin antagonists that have the potential to be synergistic with our N-cadherin antagonists.

In addition to our current development efforts, we continue to pursue collaborations with other pharmaceutical companies, governmental agencies, academic or corporate collaborators with respect to these and other cadherin agonist and antagonist molecules. Our drug discovery and development efforts are supported by more than 50 issued U.S. patents and more than 50 issued and pending patents worldwide that we either own or have licensed exclusively.

We have not received any revenues to date through the sale of our products and do not expect to have significant revenues until we are either able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with licensing fees, milestone payments, royalties, up-front payments or other revenue. As of March 31, 2008, our deficit accumulated during development stage was approximately \$88.7 million.

Our operating expenses will depend on many factors, including the progress of our drug development efforts and the potential commercialization of our product candidates. Our research and development expenses, which include expenses associated with our clinical trials, drug manufacturing to support clinical programs, salaries for research and development personnel, stock-based compensation, consulting fees, sponsored research costs, toxicology studies, license fees, milestone payments, and other fees and costs related to the development of product candidates, will depend on the results of our clinical trials, the availability of financial resources and any directives from regulatory agencies, which are difficult to predict. Our general and administration expenses include expenses associated with the compensation of employees, stock-based compensation, professional fees, insurance and other administrative matters.

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associated with our facilities in the Research Triangle Park, North Carolina in support of our drug development programs.

Results of Operations

Three months ended March 31, 2008 versus three months ended March 31, 2007:

| <u>In thousands of U.S. Dollars</u> | <u>Three Months Ended</u> <u>March 31, 2008</u> | <u>%</u> | <u>Three Months Ended</u> <u>March 31, 2007</u> | <u>%</u> | <u>Increase</u> <u>(Decrease)</u> <u>\$</u> |
|----------------------------------------|----------------------------------------------------|-------------|----------------------------------------------------|-------------|---------------------------------------------------|
| Revenue | <u>\$</u> — | | <u>\$</u> — | | <u>\$</u> — |
| Operating expenses: | | | | | |
| Research and development | 3,375 | 76% | 3,157 | 77% | 218 |
| General and administration | 1,061 | 24% | 958 | 23% | 103 |
| Total operating expense | <u>4,436</u> | <u>100%</u> | <u>4,115</u> | <u>100%</u> | <u>321</u> |
| Loss from operations | <u>(4,436)</u> | | <u>(4,115)</u> | | <u>(321)</u> |
| Other income (expense): | | | | | |
| Interest income | 132 | | 147 | | (15) |
| Total other income | <u>132</u> | | <u>147</u> | | <u>(15)</u> |
| Net loss and comprehensive loss | <u>\$ (4,304)</u> | | <u>\$ (3,968)</u> | | <u>\$ (336)</u> |

- Total operating expenses increased in the three months ended March 31, 2008, as compared to the same period in 2007 primarily due to an increase in stock-based compensation expense. Stock-based compensation expense totaled \$1.3 million in the three months ended March 31, 2008, as compared to \$0.2 million for the three months ended March 31, 2007. During the first quarter of 2008, we issued 3.2 million stock options with immediate vesting. The increase in stock-based compensation expense was offset by lower cash expenses in research and development during the first quarter of 2008, as compared to same period in 2007 due to our \$1.0 million payment to purchase all of GlaxoSmithKline's, or GSK, remaining options to buy back Eniluracil under our license agreement on March 1, 2007.
- The slight decrease in interest income in the first quarter of 2008, as compared to the same period in 2007 is due to additional cash on hand at March 31, 2007 due to the completion of our equity offering on February 21, 2007 with net proceeds of \$23.2 million. In addition, interest rates were lower in the three month ended March 31, 2008 as compared to the same period in 2007.

Quarterly Information

The following table presents selected consolidated financial data for each of the last eight quarters through March 31, 2008, as prepared under U.S. GAAP (dollars in thousands, except per share information):

| <u>Period</u> | <u>Net Loss for the</u> <u>Period</u> | <u>Basic and Diluted</u> <u>Net Loss per</u> <u>Common Share</u> |
|--------------------|------------------------------------------|------------------------------------------------------------------------|
| June 30, 2006 | <u>\$ (3,854)</u> | <u>\$ (0.08)</u> |
| September 30, 2006 | <u>\$ (4,648)</u> | <u>\$ (0.09)</u> |
| December 31, 2006 | <u>\$ (4,761)</u> | <u>\$ (0.09)</u> |
| March 31, 2007 | <u>\$ (3,968)</u> | <u>\$ (0.05)</u> |
| June 30, 2007 | <u>\$ (3,179)</u> | <u>\$ (0.03)</u> |
| September 30, 2007 | <u>\$ (3,202)</u> | <u>\$ (0.02)</u> |
| December 31, 2007 | <u>\$ (3,008)</u> | <u>\$ (0.02)</u> |
| March 31, 2008 | <u>\$ (4,304)</u> | <u>\$ (0.03)</u> |

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The increase in our net loss for the quarter ended March 31, 2008, as compared to the prior quarters was due to \$1.3 million in stock-based compensation incurred during the three months ended March 31, 2008.

Liquidity and Capital Resources

| <u>In thousands, except share data</u> | <u>March 31, 2008</u> | <u>December 31, 2007</u> |
|--------------------------------------------------|---------------------------|------------------------------|
| Selected Asset and Liability Data: | | |
| Cash and cash equivalents | \$ 13,298 | \$ 16,162 |
| Working capital | 11,248 | 14,159 |
| Selected Stockholders' Equity Data: | | |
| Common stock | \$ 64,929 | \$ 64,929 |
| Deficit accumulated during the development stage | (88,683) | (84,379) |
| Total stockholders' equity | 11,177 | 14,148 |

We have financed our operations since inception on September 3, 1996 through the sale of equity and debt securities and have raised gross proceeds totaling approximately \$86.0 million through March 31, 2008. We have incurred net losses and negative cash flow from operations each year, and we had an accumulated deficit of approximately \$88.7 million as of March 31, 2008. We have not generated any revenues to date through the sale of products. We do not expect to have significant revenues or income, other than interest income, until we are able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with licensing fees, royalties, milestone payments or up-front payments.

The net cash used in operating activities totaled \$2.8 million for the three months ended March 31, 2008, as compared to \$6.4 million in the same period during 2007. The decrease is due to the \$1.0 million payment to GSK in March 2007 and increased cash payments to vendors during the first quarter of 2007 from our improved liquidity as a result of our February 2007 equity offering.

At March 31, 2008, our working capital decreased by approximately \$2.9 million as compared to December 31, 2007 due to the funding of general corporate operations.

We believe that our current cash and cash equivalents of \$13.3 million will be sufficient to satisfy our anticipated capital requirements through June 30, 2009. In February 2008, we revised our clinical development strategy and implemented a plan which has allowed us to extend our existing financial resources by delaying certain clinical trial and drug manufacturing commitments. The revisions primarily relate to planned combination studies with ADH-1 and future planned orders for the manufacturing of ADH-1. We do not anticipate these revisions to have a significant impact on our overall development plan. Our projections of further capital requirements are subject to substantial uncertainty. Our working capital requirements may fluctuate in future periods depending upon numerous factors, including: results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; our drug substance requirements to support clinical programs; our ability to enter into collaborations that provide us with funding, up-front payments, milestone or other payments; our ability to obtain additional financial resources, change in the focus, direction, or costs of our research and development programs; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; our business development activities; new regulatory requirements implemented by regulatory authorities; the timing and outcome of any regulatory review process; and commercialization activities, if any.

To finance our operations beyond June 30, 2009, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. There can be no assurance that we will be able to raise the necessary capital or that such funding will be available on favorable terms or at all.

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Financial Instruments

At March 31, 2008, we held cash and cash equivalents of \$13.3 million, which consisted primarily of highly liquid money market funds.

Our investment policy is to manage investments to achieve, in the order of importance, the financial objectives of preservation of principal, liquidity and return on investment. Investments may be made in U.S. or Canadian obligations and bank securities, commercial paper of U.S. or Canadian industrial companies, utilities, financial institutions and consumer loan companies, and securities of foreign banks provided the obligations are guaranteed or carry ratings appropriate to the policy. Securities must have a minimum Dun & Bradstreet rating of A for bonds or R1 low for commercial paper. The policy also provides for investment limits on concentrations of securities by issuer and maximum-weighted average time to maturity of twelve months. This policy applies to all of our financial resources.

The policy risks are primarily the opportunity cost of the conservative nature of the allowable investments. As our main purpose is research and development, we have chosen to avoid investments of a trade or speculative nature.

We classify investments with original maturities at the date of purchase greater than three months which mature at or less than twelve months as current. We carry investments at the fair value with unrealized gains and losses included in other comprehensive income (loss).

Off-Balance Sheet Arrangements

Since our inception, we have not had any material off-balance sheet arrangements.

Contractual Obligations and Commitments

Since our inception, inflation has not had a material effect on our operations. We had no material commitments for capital expenses as of March 31, 2008.

The following table represents our contractual obligations and commitments at December 31, 2007 (in thousands of U.S. dollars):

| | Less than 1 year | 1-3 years | 4-5 years | More than 5 years | Total |
|-------------------------------|---------------------|-----------------|---------------|----------------------|-----------------|
| Englert Lease (1) | \$ 102 | \$ 185 | \$ — | \$ — | \$ 287 |
| Maplewood Lease (2) | 361 | 755 | 663 | — | 1,779 |
| Drug purchase commitments (3) | 436 | 184 | 29 | — | 649 |
| McGill License (4) | 506 | 1,332 | — | — | 1,838 |
| OHSU License (5) | — | — | — | — | — |
| GSK (6) | — | — | — | — | — |
| Total | <u>\$ 1,405</u> | <u>\$ 2,456</u> | <u>\$ 692</u> | <u>\$ —</u> | <u>\$ 4,553</u> |

- (1) In April 2004, we entered into a lease for facilities in Durham, North Carolina. Amounts shown assume the maximum amounts due under the lease.
- (2) In August 2005, we entered into a lease for new office and laboratory facilities in Durham, North Carolina. Amounts shown assume the maximum amounts due under the lease. We received lease and capital inducements to enter into the lease, including a 50 percent discount for the first 24 months of the 84-month lease term and capital inducements with a fair market value of \$0.5 million.
- (3) Commitments to our third party manufacturing vendors that supply drug substance primarily for our clinical studies.
- (4) Research obligations are shown in the table. Royalty payments, which are contingent on sales, are not included.
- (5) Under the license agreement with OHSU for STS, we are required to pay specified amounts in the event that we complete certain Adherex-initiated clinical trials. For example, upon the completion of the Phase III clinical trial with SIOPEL or COG, we may become responsible for a payment to OHSU of up to \$0.5 million. Royalty payments, which are contingent on sales, are not included.
- (6) Royalty and milestone payments that we may be required to pay, which are contingent on sales or progress of clinical trials, are not included. Under the terms of the Development and License Agreement with GSK, if we file an NDA with the FDA, we may be required to pay a development milestone of \$5.0 million to GSK. Depending

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upon whether the NDA is approved by the FDA and whether eniluracil becomes a commercial success, we may be required to pay up to an additional \$70.0 million in development and sales milestones for the initial approved indication, plus double-digit royalties based on annual net sales. We may also be required to pay up to \$15.0 million to GSK for each FDA-approved indication.

Research and Development

Our research and development efforts have been focused on the development of cancer therapeutics and our cadherin technology platform and currently include ADH-1, eniluracil, STS and various cadherin-based preclinical programs.

We have established relationships with contract research organizations, universities and other institutions, which we utilize to perform many of the day-to-day activities associated with our drug development. Where possible, we have sought to include leading scientific investigators and advisors to enhance our internal capabilities. Research and development issues are reviewed internally by our executive management and supporting scientific staff. Major development issues are presented to the members of our Scientific and Clinical Advisory Board for discussion and review.

Research and development expenses totaled \$3.4 million and \$3.2 million for the three months ended March 31, 2008 and 2007, respectively.

Eniluracil, which we licensed from GSK in July 2005, is a DPD inhibitor that was previously under development by GSK for the treatment of cancer. Eniluracil is being developed to enhance the therapeutic value and effectiveness of 5-FU, one of the world's most widely-used oncology agents. The ongoing Phase I clinical trials of eniluracil in combination with 5-FU are intended to determine the maximum tolerated dose, or MTD, of 5-FU in combination with eniluracil. An MTD has not yet been determined but we expect the U.S. Phase I trial to complete patient enrollment in the first half of 2008. We have enrolled 39 patients in the Phase I trial and some dose limiting toxicity has been reached, therefore the 100 mg cohort has been expanded. Once an MTD has been determined, we plan to commence a Phase II clinical trial in breast cancer. The ongoing Asian Phase I/II clinical trial of eniluracil in combination with 5-FU in liver (hepatocellular) cancer has been amended to permit a more rapid dose escalation based upon the results of the ongoing U.S. Phase I trial.

ADH-1 is a small peptide molecule that selectively targets N-cadherin, a protein present on certain tumor cells and tumor blood vessels. Based on encouraging data from our preclinical studies, we initiated a clinical program with ADH-1 in combination with various chemotherapeutic agents. In October 2006, we initiated a Phase I study intended to define the dose limiting toxicities and maximum tolerated dose of ADH-1 in combination with three separate chemotherapies: ADH-1 + docetaxel (Taxotere[®]), ADH-1 + carboplatin (a generically available agent), and ADH-1 + capecitabine (Xeloda[®]). In April 2008, we completed patient enrollment in this Phase I ADH-1 combination study. While some clinical responses have been noted, a number of patients remain on study and we are in the process of evaluating the full dataset. The Phase I study combining systemic ADH-1 in combination with regionally-infused melphalan for the treatment of melanoma is being expanded to include eight clinical centers and accrue up to 56 patients. Currently, we have enrolled 33 patients in this melanoma study.

STS is a chemoprotectant that has been shown in Phase I and Phase II clinical studies conducted by investigators at OHSU to reduce the loss of hearing in patients, both adults and children, treated with platinum-based chemotherapy agents. In 2007, the results of a Phase III trial in adults with head and neck cancer treated with cisplatin were reported demonstrating that STS was able to protect against cisplatin-induced hearing loss without any apparent affect on treatment efficacy two years after treatment. On October 30, 2007, we announced the launch of a Phase III trial with SIOPEL and opened the study for patient enrollment in the United Kingdom. The study is expected to enroll approximately 100 evaluable children with liver (hepatoblastoma) cancer at participating SIOPEL centers in up to 33 countries. Patients will be randomized to receive either cisplatin alone, a platinum-based drug associated with frequent hearing loss, or cisplatin plus STS. The study, which will be coordinated through the Children's Cancer and Leukaemia Group in the United Kingdom, will compare the level of hearing loss associated with cisplatin alone versus the combination of cisplatin plus STS, as well as the safety, tolerability and anti-tumor activity in both arms of the study. On March 26, 2008, we announced the activation of a Phase III trial with STS to prevent hearing loss in children receiving cisplatin-based chemotherapy in collaboration with the Children's Oncology Group, or COG. The goal of this Phase III study is to evaluate whether STS is an effective and safe means of preventing hearing loss in children receiving cisplatin-based chemotherapy for newly diagnosed germ cell, liver (hepatoblastoma), brain (medulloblastoma), nerve tissue (neuroblastoma) or bone (osteosarcoma) cancers. Eligible children will be one to eighteen years of age who are to receive cisplatin according to their disease-specific regimen and, upon enrollment onto this study, will be randomized to receive STS or not. The trial is expected to enroll up to 120 patients over approximately three years in up to 230 COG centers in the United States, Canada, Australia and Europe. Both SIOPEL and COG will fund the clinical activities for these studies and we will be responsible for providing the drug and drug distribution. We also plan to initiate an STS Phase III study in adult patients with head and neck cancer to evaluate hearing loss.

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Our product candidates are in various stages of development and still require significant, time-consuming and costly research and development, testing and regulatory clearances. In developing our product candidates, we are subject to risks of failure that are inherent in the development of products based on innovative technologies. For example, it is possible that any or all of these products will be ineffective or toxic, or will otherwise fail to receive the necessary regulatory clearances. There is a risk that our product candidates will be uneconomical to manufacture or market or will not achieve market acceptance. There is also a risk that third parties may hold proprietary rights that preclude us from marketing our product candidates or that others will market a superior or equivalent product. As a result of these factors, we are unable to accurately estimate the nature, timing and future costs necessary to complete the development of these product candidates. In addition, we are unable to reasonably estimate the period when material net cash inflows could commence from the sale, licensing or commercialization of such product candidates, if ever.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as at the date of the financial statements and the reported amounts of revenue and expense during the reporting period. These estimates are based on assumptions and judgments that may be affected by commercial, economic and other factors. Actual results could differ from these estimates.

Our accounting policies are consistent with those presented in our annual consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2007.

Common Stock and Warrants

Common stock is recorded as the net proceeds received on issuance after deducting all share issue costs and the value of investor warrants. Warrants are recorded at fair value and are deducted from the proceeds of common stock and recorded on the consolidated statements of stockholders' equity as additional paid-in capital.

At March 31, 2008, we had warrants to purchase common stock that were denominated in both U.S. and Canadian dollars, which results in our having warrants outstanding that are denominated outside its U.S. dollar functional currency.

The SEC and the Financial Accounting Standards Board, or FASB, have issued recent interpretations for U.S. GAAP that suggest warrants with exercise prices denominated in a different currency from the entity's functional currency cannot be classified as equity. As a result, these instruments would be treated as derivatives and recorded as liabilities which are carried at their fair value, with period to period changes in the fair value recorded as a gain or loss in the statement of operations.

In November 2007, the Emerging Issues Task Force or EITF issued EITF No. 07-5, Issue Summary No.1 "Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity's Own Stock". In March 2008 the EITF issued a draft abstract on Issue 07-5 for comments from the public which will be discussed at a future meeting. At this future meeting the EITF is expected to provide further guidance with respect to the accounting for such items.

If we had recorded such instruments as derivatives, we would have reported an additional loss of approximately \$47 for the three months ended March 31, 2008 and an additional gain of approximately \$1 for the three months ended March 31, 2007. The Company calculated the amounts using the Black-Scholes option pricing model and used the following assumptions: volatility rate of 85% and 84% for the three months ended March 31, 2008 and 2007, respectively; the actual exercise price of each instrument at March 31, 2008 and 2007; the stock price at March 31, 2008 and 2007, and the Canadian risk free interest rate for the remaining life of the related warrants; and a 0% dividend rate for both the three month period ended March 31, 2008 and 2007.

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Outstanding Share Information

The outstanding share data for the Company as of March 31, 2008 (in thousands):

| | March 31, 2008 |
|---------------|-------------------|
| Common shares | 128,227 |
| Warrants | 55,794 |
| Stock options | 18,863 |
| Total | <u>202,884</u> |

Recent Accounting Pronouncements

In June 2007, the Emerging Issues Task Force, or EITF, issued EITF No. 07-3, "Accounting for Nonrefundable Advance Payments for Goods or Services to Be Used in Future Research and Development Activities", or EITF 07-3, which provides guidance for up-front payments related to goods and services of research and development costs. EITF 07-3 is effective for fiscal years beginning after December 15, 2007. The adoption of this statement did not have a material effect on the Company's reported financial position or results of operations.

In February 2007, the Financial Accounting Standards Board, or FASB, issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities—including an amendment of FASB Statement No. 115", or SFAS 159, which is effective for fiscal years beginning after November 15, 2007. SFAS 159 permits companies to choose to measure many financial instruments and certain other items at fair value on a per instrument basis, with changes in fair value recognized in earnings each reporting period. This will enable some companies to reduce volatility in reported earnings caused by measuring related assets and liabilities differently. SFAS 159 also establishes presentation and disclosure requirements designed to facilitate comparisons between companies that choose different measurement attributes for similar types of assets and liabilities. The adoption of this statement did not have a material effect on the Company's reported financial position or results of operations.

In September 2006, FASB released SFAS No. 157, "Fair Value Measurements" ("SFAS 157") and is effective for fiscal years beginning after November 15, 2007, which is the year ending December 31, 2008 for the Company. SFAS 157 defines fair value, establishes a framework for measuring fair value in GAAP, and expands disclosures about fair value measurements. In November 2007, FASB agreed to a one-year deferral of the effective date for nonfinancial assets and liabilities that are recognized or disclosed at fair value on a nonrecurring basis. We are currently assessing the deferred portion of the pronouncement. As of January 1, 2008, we have adopted SFAS 157 for the fair value measurement of recurring items which has not had a material effect on our reported financial position or results of operations.

In March 2008, the FASB issued SFAS No. 161, "Disclosures About Derivative Instruments and Hedging Activities – an amendment of FASB Statement No. 133" or SFAS No. 161. SFAS No. 161 expands quarterly disclosure requirements in SFAS No. 133 about an entity's derivative instruments and hedging activities. SFAS No. 161 is effective for fiscal years beginning after November 15, 2008. We are currently assessing the impact of SFAS No. 161 on our consolidated financial position and results of operations.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Interest Rate Sensitivity

We are subject to interest rate risk on our cash, cash equivalents and investment portfolio. We maintain an investment portfolio consisting of U.S. or Canadian obligations and bank securities, commercial paper of U.S. or Canadian industrial companies, utilities, financial institutions and consumer loan companies, and securities of foreign banks provided the obligations are guaranteed or carry ratings appropriate to our investment policy. Securities must have a minimum Dun & Bradstreet rating of A for bonds or R1 low for commercial paper. The policy also provides for investment limits on concentrations of securities by issuer and maximum-weighted average time to maturity of twelve months. This policy applies to all of our financial resources.

Our investment policy is to manage investments to achieve, in the order of importance, the financial objectives of preservation of principal, liquidity and return on investment. The policy risks primarily include the opportunity cost of the conservative nature of the allowable investments. As the main purpose of the Company is research and development, we have chosen to avoid investments of a trade or speculative nature.

Our exposure to market risk for changes in interest rates relates to the increase or decrease in the amount of interest income we can earn on our investment portfolio, changes in the market value of investments due to changes in interest rates and the increase or decrease in realized gains and losses on investments. Our risk associated with fluctuating interest expense is limited to certain equipment leases which are not significant to the results of operations. We currently do not use interest rate derivative instruments to manage exposure to interest rate changes.

Foreign Currency Exposure

We are subject to foreign currency risks as we conduct certain clinical development activities in Canada, the United Kingdom (“UK”), Europe and the Pacific Rim. To date, we have not employed the use of derivative instruments; however, we do hold Canadian dollars which we use to pay certain clinical development activities conducted in Canada and research and license obligations payable to McGill. At March 31, 2008 we held approximately \$1.5 million in Canadian dollars. We monitor the commitments in Euros, British pounds, and Pacific Rim currencies and may utilize derivatives in the future to minimize our foreign currency risks.

Item 4. Controls and Procedures

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) as of March 31, 2008. Based on this evaluation, our principal executive officer and principal financial officer concluded that these disclosure controls and procedures are effective and designed to ensure that the information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the requisite time periods.

There was no change in our internal control over financial reporting (as defined in Rules 13a-15(f) and 15d-15(f) under the Exchange Act) identified in connection with the evaluation of our internal control over financial reporting that occurred during the three month period covered by this Quarterly Report that has materially affected, or is reasonably likely to materially affect, our internal control over financial reporting.

PART II: OTHER INFORMATION

Item 1. Legal Proceedings

None.

Item 1A. Risk Factors.

An investment in our common stock involves a significant risk of loss. You should carefully read this entire report and should give particular attention to the following risk factors. You should recognize that other significant risks may arise in the future, which we cannot foresee at this time. Also, the risks that we now foresee might affect us to a greater or different degree than currently expected. There are a number of important factors that could cause our actual results to differ materially from those expressed or implied by any of our forward-looking statements in this report. These factors include, without limitation, the risk factors listed below and other factors presented throughout this report and any other documents filed by us with the SEC.

Risks Related to Our Business

We will need to raise substantial additional funds in the future to continue our operations.

We believe that our current cash and cash equivalents will be sufficient to satisfy our anticipated capital requirements through June 30, 2009. Our projections of our capital requirements through June 30, 2009 and beyond, are subject to substantial uncertainty. Our current and future working capital requirements may change depending upon numerous factors, including: results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; our drug substance requirements to support clinical programs; our ability to enter into collaborations that provide us with funding, up-front payments, milestone or other payments; changes in the focus, direction, or costs of our research and development programs; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; our business development activities; new regulatory requirements implemented by regulatory authorities; the timing and outcome of any regulatory review process; and our commercialization activities, if any. Any such change could mean additional capital may be required earlier than June 2009 or more capital thereafter may be required than we had anticipated. To finance our operations beyond June 2009, or earlier if necessary, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. We might not be able to raise the necessary capital or such funding may not be available on favorable terms or at all.

We have a history of significant losses and have had no revenues to date through the sale of our products. If we do not generate significant revenues, we will not achieve profitability.

To date, we have been engaged primarily in research and development activities. We have had no revenues to date through the sale of our products, and we do not expect to have significant revenues until we are able to either sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with licensing fees, milestone payments, royalties, up-front payments or other revenue. We have incurred significant operating losses every year since our inception on September 3, 1996. We have experienced net losses of approximately \$4.3 million for the three months ended March 31, 2008, \$13.4 million for the fiscal year ended December 31, 2007, \$16.4 million for the fiscal year ended December 31, 2006 and \$13.9 million for the fiscal year ended December 31, 2005. As of March 31, 2008 we had an accumulated deficit of approximately \$88.7 million. We anticipate incurring substantial additional losses over the next several years due to the need to expend substantial amounts on our continuing clinical trials, anticipated research and development activities, and general and administrative expenses, among other factors. We have not commercially introduced any product and our product candidates are in varying stages of development and testing. Our ability to attain profitability will depend upon our ability to develop products that are safe, effective and commercially viable, to obtain regulatory approval for the manufacture and sale of our product candidates and to license or otherwise market our product candidates successfully. Any revenues generated from such products, assuming they are successfully developed, marketed and sold, may not be realized for a number of years. We may never achieve or sustain profitability on an ongoing basis.

Our product candidates are still in development. Due to the long, expensive and unpredictable drug development process, we might not ever successfully develop and commercialize any of our product candidates.

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In order to achieve profitable operations, we, alone or in collaboration with others, must successfully develop, manufacture, introduce and market our product candidates. The time necessary to achieve market success for any individual product is long and uncertain. Our product candidates and research programs are in various stages of clinical development and require significant, time-consuming and costly research, testing and regulatory clearances. In developing our product candidates, we are subject to risks of failure that are inherent in the development of therapeutic products based on innovative technologies. For example, our product candidates might not be effective, as eniluracil was shown to be in earlier clinical trials conducted by GSK, or may be overly toxic, or otherwise might fail to receive the necessary regulatory clearances. The results of preclinical and initial clinical trials are not necessarily predictive of future results. Our product candidates might not be economical to manufacture or market or might not achieve market acceptance. In addition, third parties might hold proprietary rights that preclude us from marketing our product candidates or others might market superior or equivalent products.

We must conduct human clinical trials to assess our product candidates. If these trials are delayed or are unsuccessful, our development costs will significantly increase and our business prospects may suffer.

Before obtaining regulatory approvals for the commercial sale of our product candidates, we must demonstrate, through preclinical studies with animals and clinical trials with humans, that our product candidates are safe and effective for use in each target indication. To date, we have performed only limited clinical trials, and we have only done so with some of our product candidates. Much of our testing has been conducted on animals or on human cells in the laboratory, and the benefits of treatment seen in animals may not ultimately be obtained in human clinical trials. As a result, we will need to perform significant additional research and development and extensive preclinical and clinical testing prior to any application for commercial use. We may suffer significant setbacks in clinical trials, and the trials may demonstrate our product candidates to be unsafe or ineffective. We may also encounter problems in our clinical trials that will cause us to delay, suspend or terminate those clinical trials, which would increase our development costs and harm our financial results and commercial prospects. Identifying and qualifying patients to participate in clinical trials of our potential products is critically important to our success. The timing of our clinical trials depends on the speed at which we can recruit patients to participate in testing our product candidates. We have experienced delays in some of our clinical trials, including a significant delay in the activation of our STS Phase III study with COG, and we may experience significant delays in the future. If patients are unwilling to participate in our trials because of competitive clinical trials for similar patient populations, perceived risk or any other reason, the timeline for recruiting patients, conducting trials and obtaining regulatory approval of potential products will be delayed. Other factors that may result in significant delays include obtaining regulatory or ethics review board approvals for proposed trials, reaching agreement on acceptable terms with prospective clinical trial sites, and obtaining sufficient quantities of drug for use in the clinical trials. Such delays could result in termination of the clinical trials altogether.

Regulatory approval of our product candidates is time-consuming, expensive and uncertain, and could result in unexpectedly high expenses and delay our ability to sell our products.

Development, manufacture and marketing of our products are subject to extensive regulation by governmental authorities in the United States and other countries. This regulation could require us to incur significant unexpected expenses or delay or limit our ability to sell our product candidates, including specifically eniluracil, ADH-1 and STS, our product candidates that are farthest along in development and the regulatory approval process.

Our clinical studies might be delayed or halted, or additional studies might be required, for various reasons, including:

- the drug is not shown to be effective;
- patients experience severe side effects during treatment;
- appropriate patients do not enroll in the studies at the rate expected;
- drug supplies are not sufficient to treat the patients in the studies; or
- we decide to modify the drug during testing.

If regulatory approval of any product is granted, it will be limited to those indications for which the product has been shown to be safe and effective, as demonstrated to the FDA's satisfaction through clinical studies. Furthermore, approval might entail ongoing requirements for post-marketing studies. Even if regulatory approval is obtained, labeling and promotional activities are subject to continual scrutiny by the FDA and state regulatory agencies and, in some circumstances, the Federal Trade Commission. FDA enforcement policy prohibits the marketing of approved products for unapproved, or off-label, uses. These regulations and the FDA's interpretation of them might impair our ability to effectively market our products.

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We and our third-party manufacturers are also required to comply with the applicable FDA current Good Manufacturing Practices, or GMP, regulations, which include requirements relating to quality control and quality assurance, as well as the corresponding maintenance of records and documentation. Further, manufacturing facilities must be approved by the FDA before they can be used to manufacture our products, and they are subject to additional FDA inspection. If we fail to comply with any of the FDA's continuing regulations, we could be subject to reputational harm and sanctions, including:

- delays, warning letters and fines;
- product recalls or seizures and injunctions on sales;
- refusal of the FDA to review pending applications;
- total or partial suspension of production;
- withdrawals of previously approved marketing applications; and
- civil penalties and criminal prosecutions.

In addition, identification of side effects after a drug is on the market or the occurrence of manufacturing problems could cause subsequent withdrawal of approval, reformulation of the drug, additional testing or changes in labeling of the product.

If we do not maintain current or enter into new collaborations with other companies, we might not successfully develop our product candidates or generate sufficient revenues to expand our business.

We currently rely on scientific and research collaboration arrangements with academic institutions and other collaborators, including our Development and License Agreement for eniluracil with GSK, a general collaboration agreement with McGill University for ADH-1 and other related compounds, and an exclusive worldwide license from OHSU for STS.

The agreements with McGill and OHSU are terminable by either party in the event of an uncured breach by the other party. We may also terminate our agreement with McGill and OHSU at any time upon prior written notice of specified durations to the licensor. Termination of any of our collaborative arrangements could materially adversely affect our business. In addition, our collaborators might not perform as agreed in the future.

In addition to the collaborative arrangements above, we have received approval from the DDG of the U.S. National Cancer Institute's Division of Cancer Treatment and Diagnosis for a Level III collaboration for the clinical development of our lead biotechnology compound, ADH-1. The NCI has no obligation to sponsor future clinical trials of ADH-1 or to continue to perform any preclinical work for us and may terminate the collaboration at any time, as may we. The success of our business strategy will be dependent on our ability to maintain current and enter into new collaborations with other industry participants that advance the development and clinical testing of, regulatory approval for and commercialization of our product candidates, as well as collaborations that provide us with funding, such as licensing fees, milestone payments, royalties, up-front payments or otherwise. We may not be successful in maintaining current collaborations or establishing any future collaborations and any collaborations we have or may establish may not lead to the successful development of our product candidates.

Since we conduct a significant portion of our early stage research and development through collaborations, our success may depend significantly on the performance of such collaborators, as well as any future collaborators. Collaborators might not commit sufficient resources to the research and development or commercialization of our product candidates. Economic or technological advantages of products being developed by others, or other factors could lead our collaborators to pursue other product candidates or technologies in preference to those being developed in collaboration with us. The commercial potential of, development stage of and projected resources required to develop our drug candidates will affect our ability to maintain current collaborations or establish new collaborators. There is a risk of dispute with respect to ownership of technology developed under any collaboration. Our management of any collaboration will require significant time and effort as well as an effective allocation of resources. We may not be able to simultaneously manage a large number of collaborations.

We do not presently have the financial or human resources to complete Phase III trials for our lead product candidates.

We do not presently have the financial or human resources internally to complete Phase III trials for any of our lead product candidates. We are currently developing STS in a Phase III trial in collaboration with SIOPEL and COG.

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SIOPEL and COG may not conduct or complete the clinical trials with STS as currently planned. Such collaborators might not commit sufficient resources to the development of our product candidates, which may lead to significant delays. We have already experienced significant delays in activating the COG trial. We may not be able to independently develop or conduct such trials ourselves. We intend to seek a licensing or funding partner for the further development of one or all of our products. If a partner for one or all of these technologies is not found, we may not be able to further advance these products. If a partner is found, the financial terms that they propose may not be acceptable to us.

As we expand the size of our organization, we may experience difficulties in effectively managing our growth, which could adversely impact our business.

Our planned future growth will strain our management, human, operational, financial and other resources. As of March 31, 2008, we had 19 full-time employees. We also use contractors as needed, primarily within clinical development, with approximately five (5) full time equivalents at March 31, 2008. In order to manage our future growth effectively, we will have to implement and improve operational, financial, manufacturing and management information systems and to expand, train, manage and motivate our employees. To the extent that we are unable to manage our growth effectively, we may not be able to successfully accomplish our business objectives.

We may expand our business through new acquisitions that could disrupt our business, harm our financial condition and dilute current stockholders' ownership interests in the Company.

Our business strategy includes expanding our products and capabilities, and we may seek acquisitions to do so. Acquisitions involve numerous risks, including:

- substantial cash expenditures;
- potentially dilutive issuance of equity securities;
- incurrence of debt and contingent liabilities, some of which may be difficult or impossible to identify at the time of acquisition;
- difficulties in assimilating the operations of the acquired companies;
- diverting our management's attention away from other business concerns;
- risks of entering markets in which we have limited or no direct experience; and
- the potential loss of our key employees or key employees of the acquired companies.

We cannot assure you that any acquisition will result in short-term or long-term benefits to us. We may incorrectly judge the value or worth of an acquired company or business. In addition, our future success would depend in part on our ability to assimilate acquired companies and their personnel effectively. We might not be able to make the combination of our business with that of acquired businesses or companies work or be successful. Furthermore, the development or expansion of our business or any acquired business or companies may require a substantial capital investment by us. We may not have the necessary funds or they might not be available to us on acceptable terms or at all. We may also seek to raise the necessary funds by selling shares of our stock, which could dilute current stockholder's ownership interest in our Company.

If we lose our key personnel or are unable to attract and retain personnel, we may be unable to effectively manage our business and successfully develop our product candidates.

Our success depends upon certain key personnel, in particular Dr. William P. Peters, our Chief Executive Officer and Chairman of the Board, the loss of whose services might significantly delay or prevent the achievement of our scientific or business objectives. Although we have an employment agreement with Dr. Peters through March 2010, and with each of our other key personnel, we cannot be certain that any individual will continue in such capacity for any particular period of time. The loss of any key personnel, or the inability to hire and retain qualified employees, could negatively affect our ability to manage our business. We do not currently carry key person life insurance.

If our licenses to proprietary technology owned by others are terminated or expire, we may suffer increased development costs and delays, and we may not be able to successfully develop our product candidates.

The development of our drug candidates and the manufacture and sale of any products that we develop will involve the use of processes, products and information, some of the rights to which are owned by others. A number of our product candidates are licensed under agreements with GSK, McGill and OHSU. Although we have obtained licenses or rights with regard to the use of certain processes, products and information, the licenses or rights could be terminated or expire during critical periods and we may not be able to obtain, on favorable terms or at all, licenses or other rights that may be required. Some of these licenses provide for limited periods of exclusivity that may be extended only with the consent of the licensor, which may not be granted.

If we are unable to adequately protect our patents and licenses related to our product candidates, or we infringe upon the intellectual property rights of others, we may not be able to successfully develop and commercialize our product candidates.

The value of our technology will depend in part upon our ability, and that of our collaborators, to obtain patent protection or licenses to patents, maintain trade secret protection and operate without infringing on the rights of third parties. Although we have successfully pursued patent applications in the past, it is possible that:

- some or all of our pending patent applications, or those we have licensed, may not be allowed;
- proprietary products or processes that we develop in the future may not be patentable;
- any issued patents that we own or license may not provide us with any competitive advantages or may be successfully challenged by third parties; or
- the patents of others may have an adverse effect on our ability to do business.

It is not possible for us to be certain that we are the original and first creator of inventions encompassed by our pending patent applications or that we were the first to file patent applications for any such inventions. Further, any of our patents, once issued, may be declared by a court to be invalid or unenforceable.

ADH-1 is currently protected under issued composition of matter patents in the United States that we exclusively licensed from McGill that expire in 2017. Eniluracil is currently protected under issued composition of matter and method patents that we exclusively licensed from GSK that expire in 2014 and 2015 (in combination with 5-FU). STS is currently protected by method of use patents that we exclusively licensed from OHSU that expire in Europe in 2021 and are currently pending in the United States. None of the above expiry dates take into consideration additional pending patent applications for ADH-1 and eniluracil that, if issued, could provide additional patent protection nor possible patent term extensions or periods of data exclusivity that may be available upon marketing approval in the various countries worldwide. In addition, periods of marketing exclusivity for ADH-1 and STS may also be possible in the United States under orphan drug status. We obtained U.S. Orphan Drug Designation for the use of STS in the prevention of platinum-induced ototoxicity in pediatric patients in 2004 and for the use of ADH-1 in conjunction with melphalan for the treatment of Stage IIB/C, III, and IV malignant melanoma in 2008, and as a result, if approved, will have seven years of exclusivity in the United States from the approval date.

We may be required to obtain licenses under patents or other proprietary rights of third parties but the extent to which we may wish or need to do so is unknown. Any such licenses may not be available on terms acceptable to us or at all. If such licenses are obtained, it is likely they would be royalty bearing, which would reduce our income. If licenses cannot be obtained on an economical basis, we could suffer delays in market introduction of planned products or their introduction could be prevented, in some cases after the expenditure of substantial funds. If we do not obtain such licenses, we would have to design around patents of third parties, potentially causing increased costs and delays in product development and introduction or precluding us from developing, manufacturing or selling our planned products, or our ability to develop, manufacture or sell products requiring such licenses could be foreclosed.

Litigation may also be necessary to enforce or defend patents issued or licensed to us or our collaborators or to determine the scope and validity of a third party's proprietary rights. We could incur substantial costs if litigation is required to defend ourselves in patent suits brought by third parties, if we participate in patent suits brought against or initiated by our collaborators, or if we initiate such suits. We might not prevail in any such action. An adverse outcome in litigation or an interference to determine priority or other proceeding in a court or patent office could subject us to significant liabilities, require disputed rights to be licensed from other parties or require us or our collaborators to cease using certain technology or products. Any of these events would likely have a material adverse effect on our business, financial condition and results of operations.

Much of our technological know-how that is not patentable may constitute trade secrets. Our confidentiality agreements might not provide for meaningful protection of our trade secrets, know-how or other proprietary information in the event of any unauthorized use or disclosure of information. In addition, others may independently develop or obtain similar technology and may be able to market competing products and obtain regulatory approval through a showing of equivalency to our product that has obtained regulatory approvals, without being required to undertake the same lengthy and expensive clinical studies that we would have already completed.

The vulnerability to off-label use or sale of our product candidates that are covered only by “method of use” patents may cause downward pricing pressure on these product candidates if they are ever commercialized and may make it more difficult for us to enter into collaboration or partnering arrangements for the development of these product candidates.

Some of our product candidates, including STS, are currently only covered by “method of use” patents, which cover the use of certain compounds to treat specific conditions, and not by “composition of matter” patents, which would cover the chemical composition of the compound. Method of use patents provide less protection than composition of matter patents because of the possibility of off-label competition if other companies develop or market the compound for other uses. If another company markets a drug that we expect to market under the protection of a method of use patent, physicians may prescribe the other company’s drug for use in the indication for which we obtain approval and have a patent, even if the other company’s drug is not approved for such an indication. Off-label use and sales could limit our sales and exert pricing pressure on any products we develop covered only by method of use patents. Also, it may be more difficult to find a collaborator to license or support the development of our product candidates that are only covered by method of use patents.

If our third party manufacturers breach or terminate their agreements with us, or if we are unable to secure arrangements with third party manufacturers on acceptable terms as needed in the future, we may suffer significant delays and additional costs.

We have no experience manufacturing products and do not currently have the resources to manufacture any products that we may develop. We currently have agreements with contract manufacturers for clinical supplies of ADH-1, STS, eniluracil and 5-FU, including drug substance providers and drug product suppliers, but they might not perform as agreed in the future or may terminate our agreement with them before the end of the required term. Significant additional time and expense would be required to effect a transition to a new contract manufacturer.

We plan to continue to rely on contract manufacturers for the foreseeable future to produce quantities of products and substances necessary for research and development, preclinical trials, human clinical trials and product commercialization, and to perform their obligations in a timely manner and in accordance with applicable government regulations. If we develop any products with commercial potential, we will need to develop the facilities to independently manufacture such products or secure arrangements with third parties to manufacture them. We may not be able to independently develop manufacturing capabilities or obtain favorable terms for the manufacture of our products. While we intend to contract for the commercial manufacture of our product candidates, we may not be able to identify and qualify contractors or obtain favorable contracting terms. We or our contract manufacturers may also fail to meet required manufacturing standards, which could result in delays or failures in product delivery, increased costs, injury or death to patients, product recalls or withdrawals and other problems that could significantly hurt our business. We intend to maintain a second source for back-up commercial manufacturing, wherever feasible. However, if a replacement to our future internal or contract manufacturers were required, the ability to establish second-sourcing or find a replacement manufacturer may be difficult due to the lead times generally required to manufacture drugs and the need for FDA compliance inspections and approvals of any replacement manufacturer, all of which factors could result in production delays and additional commercialization costs. Such lead times would vary based on the situation, but might be twelve months or longer.

We lack the resources necessary to effectively market our product candidates, and we may need to rely on third parties over whom we have little or no control and who may not perform as expected.

We do not have the necessary resources to market our product candidates. If we develop any products with commercial potential, we will either have to develop a marketing capability, including a sales force, which is difficult and expensive to implement successfully, or attempt to enter into a collaboration, merger, joint venture, license or other arrangement with third parties to provide a substantial portion of the financial and other resources needed to market such products. We may not be able to do so on acceptable terms, if at all. If we rely extensively on third parties to market our products, the commercial success of such products may be largely outside of our control.

We conduct our business internationally and are subject to laws and regulations of several countries which may affect our ability to access regulatory agencies and may affect the enforceability and value of our licenses.

We have conducted clinical trials in the United States, Canada, Europe and the Pacific Rim and intend to, or may, conduct future clinical trials in these and other jurisdictions. There can be no assurance that any sovereign government will not establish laws or regulations that will be deleterious to our interests. There is no assurance that we, as a Canadian corporation, will continue to have access to the regulatory agencies in any jurisdiction where we might want to conduct clinical trials or obtain regulatory approval, and we might not be able to enforce our license or patent rights in foreign jurisdictions. Foreign exchange controls may have a material adverse effect on our business and financial condition, since such controls may limit our ability to flow funds into or out of a particular country to meet obligations under licenses, clinical trial agreements or other collaborations.

Risks Related to Our Industry

If we are unable to obtain applicable U.S. and/or foreign regulatory approvals, we will be unable to develop and commercialize our drug candidates.

The preclinical studies and clinical trials of our product candidates, as well as the manufacturing, labeling, sale and distribution, export or import, marketing, advertising and promotion of our product candidates are subject to various regulatory frameworks in the United States, Canada and other countries. Any products that we develop must receive all relevant regulatory approvals and clearances before any marketing, sale or distribution. The regulatory process, which includes extensive preclinical studies and clinical testing to establish product safety and efficacy, can take many years and cost substantial amounts of money. As a result of the length of time, many challenges and costs associated with the drug development process, the historical rate of failures for drug candidates is extremely high. For example, prior development of our compound eniluracil by GSK was not successful. Varying interpretations of the data obtained from studies and tests could delay, limit or prevent regulatory approval or clearance. Changes in regulatory policy could also cause delays or affect regulatory approval. Any regulatory delays may increase our development costs and negatively impact our competitiveness and prospects. It is possible that we may not be able to obtain regulatory approval of any of our drug candidates or approvals may take longer and cost more to obtain than expected.

Regulatory approvals, if granted, may entail limitations on the uses for which any products we develop may be marketed, limiting the potential sales for any such products. The granting of product approvals can be withdrawn at any time, and manufacturers of approved products are subject to regular reviews, including for compliance with GMP. Failure to comply with any applicable regulatory requirement, which may change from time to time, can result in warning letters, fines, sanctions, penalties, recalling or seizing products, suspension of production, or even criminal prosecution.

Future sales of our product candidates may suffer if they fail to achieve market acceptance.

Even if our product candidates are successfully developed and achieve appropriate regulatory approval, they may not enjoy commercial acceptance or success. Product candidates may compete with a number of new and traditional drugs and therapies developed by major pharmaceutical and biotechnology companies. Market acceptance is dependent on product candidates demonstrating clinical efficacy and safety, as well as demonstrating advantages over alternative treatment methods. In addition, market acceptance is influenced by government reimbursement policies and the ability of third parties to pay for such products. Physicians, patients, the medical community or patients may not accept or utilize any products we may develop.

We face a strong competitive environment. Other companies may develop or commercialize more effective or cheaper products, which may reduce or eliminate the demand for our product candidates.

The biotechnology and pharmaceutical industry, and in particular the field of cancer therapeutics where we focus, is very competitive. Many companies and research organizations are engaged in the research, development and testing of new cancer therapies or means of increasing the effectiveness of existing therapies, including, among many others, Abbott Laboratories, Amgen, Antisoma, Adventrix, AstraZeneca, Bayer, Bristol-Myers Squibb, Entremed, Genentech, Johnson & Johnson, Merck & Co., NeoPharm, Novartis, Onyx, OSI Pharmaceuticals, OXiGENE, Peregrine Pharmaceuticals, Pfizer, Roche, Taiho and Sanofi-Aventis. Many of these companies have marketed drugs or are developing targeted cancer therapeutics which, depending upon the mechanism of action of such agents, could thus be competitors.

Many of our existing or potential competitors have substantially greater financial, technical and human resources than we do and may be better equipped to develop, manufacture and market products. In addition, many of these competitors have extensive experience with preclinical testing and human clinical trials and in obtaining regulatory approvals. Also, some of the smaller companies that compete with us have formed collaborative relationships with large, established companies to support the research, development, clinical trials and commercialization of any products that they may develop. Academic institutions, government agencies and other public and private research organizations may also conduct research, seek patent protection and establish collaborative arrangements for research, clinical development and marketing of products similar to those we seek to develop. These companies and institutions compete with us in recruiting and retaining qualified scientific and management personnel as well as in acquiring technologies complementary to our projects.

We are likely to face competition in the areas of product efficacy and safety, ease of use and adaptability, as well as pricing, product acceptance, regulatory approvals and intellectual property. Competitors could develop more effective, safer and more affordable products than we do, and they may obtain patent protection or product commercialization before we do or even render our product candidates obsolete. The existence of competitive

products, including products or treatments of which we are not aware, or products or treatments that may be developed in the future, may adversely affect the marketability of any products that we develop.

We may face product liability claims that could require us to defend costly lawsuits or incur substantial liabilities that could adversely impact our financial condition, receipt of regulatory approvals for our product candidates and our results of operation.

The use of our product candidates in clinical trials and for commercial applications, if any, may expose us to liability claims in the event that such product candidates cause injury or death or result in other adverse effects. These claims could be made by health care institutions, contract laboratories, subjects participating in our clinical studies, patients or others using our product candidates. In addition to liability claims, certain serious adverse events could require interruption, delay and/or discontinuation of a clinical trial and potentially prevent further development of the product candidate. We carry clinical trial insurance with a policy limit of \$5.0 million, but the coverage may not be sufficient to protect us from legal expenses and liabilities we might incur. Litigation is very expensive, even if we are successful. In addition, our existing coverage may not be adequate if we further develop products, and future coverage may not be available in sufficient amounts or at reasonable cost. Adverse liability claims may also harm our ability to obtain or maintain regulatory approvals.

We use hazardous material and chemicals in our research and development, and our failure to comply with laws related to hazardous materials could materially harm us.

Our research and development processes involve the controlled use of hazardous materials, such as flammable organic solvents, corrosive acids and corrosive bases. Accordingly, we are subject to federal, state, local and foreign laws and regulations governing the use, manufacture, storage, handling and disposal of such materials and certain waste products. While we believe that our safety procedures for handling and disposing of such materials will comply with the standards prescribed by applicable federal, state, local or foreign regulations, the risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result and any such liability could exceed our resources and may not be covered by our general liability insurance. We currently do not carry insurance specifically for hazardous materials claims. We may be required to incur significant costs to comply with environmental laws and regulations, which may change from time to time.

Efforts to reduce product pricing and health care reimbursement and changes to government policies could negatively affect the commercialization of our product candidates.

If any of our product candidates achieve regulatory approval, we may be materially adversely affected by the continuing efforts of governmental and third-party payors to contain or reduce health care costs. For example, if we succeed in bringing one or more products to market, such products may not be considered cost-effective and the availability of consumer reimbursement may not exist or be sufficient to allow the sale of such products on a competitive basis. The constraints on pricing and availability of competitive products may further limit our pricing and reimbursement policies as well as adversely impact market acceptance and commercialization for the products.

In some foreign markets, the pricing or profitability of healthcare products is subject to government control. In recent years, federal, state, provincial and local officials and legislators have proposed or are proposing a variety of price-based reforms to the healthcare systems in the United States and Canada. Some proposals include measures that would limit or eliminate payments from third-party payors to the consumer for certain medical procedures and treatments or allow government control of pharmaceutical pricing. The adoption of any such proposals or reforms could adversely affect the commercial viability of our product candidates.

Any significant changes in the healthcare system in the United States, Canada or abroad would likely have a substantial impact on the manner in which we conduct business and could have a material adverse effect on our ability to raise capital and the viability of product commercialization.

New accounting or regulatory pronouncements may impact our future financial position and results of operations.

There may be new accounting or regulatory pronouncements or rulings, which could have an impact on our future financial position and results of operations. Changing laws, regulations and standards relating to corporate governance and public disclosures can create uncertainty and such uncertainty may lead to increased expenses and exposure to liabilities.

Risks Related to Owning Our Common Shares

We are a passive foreign investment company under U.S. tax law, which has adverse tax consequences for our U.S. stockholders.

As further described in Item 5. “Market for the Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities” – “Material United States Federal and Canadian Income Tax Consequences” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2007, we have determined that we are currently a Passive Foreign Investment Company, or PFIC, under U.S. tax law and likely will continue to be a PFIC at least until we develop a source of significant operating revenues. As a result, there may be adverse tax consequences to U.S. holders of our common shares. A U.S. holder whose holding period for our shares includes a period during which we are classified as a PFIC generally may be required to treat certain excess distributions with respect to our shares and gains realized on the disposition of our shares as ordinary income earned ratably over the holder’s holding period and may be subject to a special tax and interest charge on amounts treated as earned in the periods in which we are a PFIC. In addition, the holder’s shares may not receive a “stepped-up” basis upon a transfer at death. These PFIC tax rules may not apply if a U.S. holder makes an election for the first taxable year of the holder’s holding period to be taxed currently on the holder’s pro rata share of our ordinary earnings and net capital gain for any year we are a PFIC. Alternatively, a U.S. holder may avoid the special tax and interest charge on excess distributions and gains by making an election to mark the shares to market annually during any period in which we are a PFIC and our shares are treated as marketable shares. If a mark-to-market election is made, amounts included in or deducted from income pursuant to the election and actual gains and losses realized upon disposition generally may be treated as ordinary gains or losses. Whether or not an applicable election is made, if we are classified as a PFIC for the taxable year in which a dividend is paid, or for the preceding taxable year, a dividend paid to a non-corporate U.S. holder may not qualify for the reduced long-term capital gains rates. These tax issues could make our stock less attractive to U.S. investors and therefore negatively affect our stock price and the ability to sell our shares.

The market price of our common shares is highly volatile and could cause the value of your investment to significantly decline.

Historically, the market price of our common shares has been highly volatile and the market for our common shares has from time to time experienced significant price and volume fluctuations, some of which are unrelated to our operating performance. From November 12, 2004 to May 13, 2008, the trading price of our stock fluctuated from a high closing price of CAD\$2.09 per share to a low closing price of CAD\$0.23 per share on the TSX, and from a high closing price of \$1.71 per share to a low closing price of \$0.20 per share on the AMEX. Historically, our common shares have had a low trading volume, and may continue to have a low trading volume in the future. This low volume may contribute to the volatility of the market price of our common shares. It is likely that the market price of our common shares will continue to fluctuate significantly in the future.

The market price of our stock may be significantly affected by many factors, including without limitation:

- innovations related to our or our competitors’ products;
- actual or potential clinical trial results related to our or our competitors’ products;
- our financial results or those of our competitors;
- reports of securities analysts regarding us or our competitors;
- announcements of licensing agreements, joint ventures, collaborations or other strategic alliances that involve our products or those of our competitors;
- developments or disputes concerning our licensed or owned patents or those of our competitors;
- economic and other external factors generally or stock market trends in the pharmaceutical or biotechnology industries specifically;
- developments with respect to the efficacy or safety of our products or those of our competitors; and
- health care reforms and reimbursement policy changes nationally and internationally.

There are a large number of our common shares underlying outstanding warrants and options, and reserved for issuance under our stock option plan, that may be sold in the market, which could depress the market price of our stock and result in substantial dilution to the holders of our common shares.

Sale or issuance of a substantial number of our common shares in the future could cause the market price of our common stock to decline. It may also impair our ability to obtain additional financing. As of March 31, 2008, we had outstanding warrants to purchase approximately 7.6 million of our common shares at an exercise price of CAD\$2.15

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per share, and outstanding warrants to purchase approximately 48.2 million of our common shares at exercise prices ranging from \$0.33 to \$1.75. In addition, as of March 31, 2008, there were approximately 18.9 million common shares issuable upon the exercise of stock options granted by us of which approximately 2.9 million were denominated in Canadian dollars and had a weighted average exercise price of CAD\$2.18 per common share and approximately 15.9 million denominated in U.S. dollars and had a weighted average exercise price of \$0.54 per common share. We may also issue further warrants as part of any future financings as well as the additional 1.8 million options to acquire our common shares currently remaining available for issuance under our stock option plan.

We are no longer a foreign private issuer and may incur additional expenses associated with compliance with the U.S. securities laws applicable to U.S. domestic issuers.

We must now comply with the provisions of U.S. securities laws applicable to U.S. domestic issuers including, without limitation, the U.S. proxy solicitation rules, Regulation FD and the Section 16 short swing profit rules. As a result, we must now report on the forms required of U.S. companies, such as Forms 10-K, 10-Q and 8-K, rather than the forms we have filed with the SEC in the past as a foreign private issuer, such as Forms 20-F and 6-K. Compliance with these additional securities laws may result in increased expenses. In addition, we will now be subject to additional restrictions on offers and sales of securities outside of the United States, including in Canada. To the extent that we were to offer or sell our securities outside of the United States in the future, we will have to comply with the generally more restrictive Regulation S requirements that apply to U.S. companies.

We have not paid any dividends since incorporation and do not anticipate declaring any dividends in the foreseeable future. As a result, you will not be able to recoup your investment through the payment of dividends on your common shares and the lack of a dividend payable on our common shares might depress the value of your investment.

We will use all available funds to finance the development of our product candidates and operation of our business. Our directors will determine if and when dividends should be declared and paid in the future based on our financial position at the relevant time, but since we have no present plans to pay dividends, you should not expect receipt of dividends either for your cash needs or to enhance the value of your common shares.

There is no public market for our outstanding warrants.

We have not and do not intend to list any of our outstanding warrants on any securities exchange or to arrange for any quotation system to quote them. We cannot assure you that there will be a liquid trading market for our warrants or that a trading market for our warrants will develop.

Our existing principal stockholders hold a substantial number of our common shares and may be able to exercise influence in matters requiring approval of stockholders.

As of March 31, 2008, our current 5% stockholders beneficially own approximately 60% of our common shares. In particular, Southpoint Capital Advisors LP owns or exercises control over 41.5 million common shares, representing approximately 32% of the issued and outstanding common shares and 42% beneficially owned (assuming full exercise of the 20.8 million warrants issued to Southpoint Capital but no other outstanding warrants or options). In addition, Mr. Robert Butts, Co-Founder and Portfolio Manager of Southpoint Capital Advisors LP, serves as a member of our Board of Directors. Southpoint Capital, our other 5% stockholders, and other insiders, acting alone or together, might be able to influence the outcomes of matters that require the approval of our stockholders, including but not limited to the election and removal of directors, an acquisition or merger with another company, certain equity transactions, a sale of substantially all of our assets, or amendments to our incorporating documents. These stockholders might make decisions that are adverse to your interests. The concentration of ownership could have the effect of delaying, preventing or deterring a change of control of our company, which could adversely affect the market price of our common shares or deprive our other stockholders of an opportunity to receive a premium for their common shares as part of a sale of our company.

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Item 6. Exhibits

| <u>Exhibit No.</u> | <u>Description of Exhibit</u> |
|--------------------|------------------------------------------------------------------------------------------------------------------------------------------------------|
| 31.1 | Certification of Chief Executive Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002 |
| 31.2 | Certification of Chief Financial Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002 |
| 32.1 | Certification of Chief Executive Officer and Chief Financial Officer of the Company in accordance with Section 906 of the Sarbanes-Oxley Act of 2002 |

SIGNATURES

Pursuant to 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.

Adherex Technologies Inc.

Date: May 13, 2008

By: /s/ William P. Peters
William P. Peters
Chairman & Chief Executive Officer
(principal executive officer)

Date: May 13, 2008

By: /s/ James A. Klein, Jr.
James A. Klein, Jr.
Chief Financial Officer
(principal financial and chief accounting officer)

**ADHEREX TECHNOLOGIES INC
CERTIFICATION**

I, William P. Peters, Chairman and Chief Executive Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q (the "Report") of Adherex Technologies Inc. (the "Company");
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 Company as of, and for, the periods presented in this Report;
4. The Company'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)) for the Company 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 Company, 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) Evaluated the effectiveness of the Company'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
 - (c) Disclosed in this Report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 Company'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 Company's internal control over financial reporting.

Date: May 13, 2008

By: /s/ William P. Peters
William P. Peters
Chairman and Chief Executive Officer

**ADHEREX TECHNOLOGIES INC.
CERTIFICATION**

I, James A. Klein, Jr., Chief Financial Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q (the "Report") of Adherex Technologies Inc. (the "Company");
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 Company as of, and for, the periods presented in this Report;
4. The Company'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 the financial reporting (as defined in Exchange Act Rules 13a-15(f) and 15(d)-15(f) for the Company 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 Company, 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. Evaluated the effectiveness of the Company'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 Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an Annual Report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company'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 Company'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 Company's internal control over financial reporting.

Date: May 13, 2008

By: /s/ James A. Klein, Jr.
James A. Klein, Jr.
Chief Financial Officer

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

In connection with the Quarterly Report of Adherex Technologies Inc. (the "Company") on Form 10-Q for the period ended March 31, 2008 (the "Report"), each of the undersigned, William P. Peters, Chairman and Chief Executive Officer of the Company, and James A. Klein, Jr., Chief Financial Officer of the Company, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: May 13, 2008

By: /s/ William P. Peters
William P. Peters
Chairman and Chief Executive Officer

Date: May 13, 2008

By: /s/ James A. Klein, Jr.
James A. Klein, Jr.
Chief Financial Officer