
**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, 2007

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 Accelerated Filer Non-Accelerated Filer

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 10, 2007, there were 126,226,787 shares of Adherex Technologies Inc. common stock outstanding.

TABLE OF CONTENTS

	<u>Page</u>
PART I: FINANCIAL INFORMATION	
Item 1. Financial Statements (unaudited)	
Condensed Consolidated Balance Sheets - March 31, 2007 and December 31, 2006	3
Condensed Consolidated Statements of Operations - Three Months Ended March 31, 2007 and 2006	4
Condensed Consolidated Statements of Cash Flows - Three Months Ended March 31, 2007 and 2006	5
Notes to Condensed Consolidated Financial Statements	6
Item 2. Management’s Discussion and Analysis of Financial Condition and Results of Operations	14
Item 3. Quantitative and Qualitative Disclosures about Mark Risk	22
Item 4. Controls and Procedures	23
PART II: OTHER INFORMATION	23
Item 1. Legal Proceedings	23
Item 1A. Risk Factors	23
Item 6. Exhibits	32
Signatures	33

Explanatory Note:

Prior to February 21, 2007, Adherex Technologies Inc. (“Adherex”) was a “foreign private issuer” as defined under the Securities Exchange Act of 1934 (“Exchange Act”). This is the first Quarterly Report on Form 10-Q filed by Adherex since it ceased to be a “foreign private issuer” and became fully subject to the reporting requirements of the Exchange Act.

[Table of Contents](#)**PART 1: FINANCIAL INFORMATION****Item 1. Financial Statements**

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

	March 31, 2007 (unaudited)	December 31, 2006
Assets		
Current assets:		
Cash and cash equivalents	\$ 22,468	\$ 5,665
Cash pledged as collateral	53	53
Accounts receivable	53	32
Investment tax credits recoverable	71	71
Prepaid expense	61	41
Other current assets	33	33
Total current assets	<u>22,739</u>	<u>5,895</u>
Property and equipment	276	293
Leasehold inducements	421	440
Total assets	<u>\$ 23,436</u>	<u>\$ 6,628</u>
Liabilities and Shareholders' Equity		
Current liabilities:		
Accounts payable	\$ 809	\$ 2,074
Accrued liabilities	1,241	2,621
Total current liabilities	<u>2,050</u>	<u>4,695</u>
Other long-term liabilities	40	40
Deferred lease inducement	646	625
Total liabilities	<u>2,736</u>	<u>5,360</u>
Commitments and contingencies		
Shareholders' equity:		
Common stock, no par value; unlimited shares authorized; 126,141 and 50,382 shares issued and outstanding, respectively	63,258	46,524
Additional paid-in capital	31,189	24,523
Cumulative translation adjustment	1,243	1,243
Deficit accumulated during development stage	(74,990)	(71,022)
Total shareholders' equity	<u>20,700</u>	<u>1,268</u>
Total liabilities and shareholders' equity	<u>\$ 23,436</u>	<u>\$ 6,628</u>

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

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

	<u>Three Months Ended</u>	
	<u>March 31,</u> <u>2007</u>	<u>March 31,</u> <u>2006</u>
Revenue	\$ —	\$ —
Operating expenses:		
Research and development	3,157	2,560
General and administrative	958	747
Total operating expenses	<u>4,115</u>	<u>3,307</u>
Loss from operations	(4,115)	(3,307)
Other income (expense):		
Interest expense	—	(1)
Interest income	147	131
Total other income and expense, net	<u>147</u>	<u>130</u>
Net loss	<u>\$ (3,968)</u>	<u>\$ (3,177)</u>
Basic and diluted net loss per common share	<u>\$ (0.05)</u>	<u>\$ (0.07)</u>
Weighted-average common shares used in computing basic and diluted net loss per common share	<u>82,369</u>	<u>42,629</u>

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

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

	<u>Three Months Ended</u>	
	<u>March 31,</u> <u>2007</u>	<u>March 31,</u> <u>2006</u>
Cash flows from (used in) operating activities:		
Net loss	\$ (3,968)	\$ (3,177)
Adjustments to reconcile net loss to net cash used in operating activities:		
Depreciation and amortization	17	19
Amortization of leasehold improvements	40	41
Stock-Based compensation	163	143
Accounts receivable	(21)	—
Prepaid expense	(20)	9
Accounts payable	(1,265)	(300)
Accrued liabilities	(1,380)	52
Net cash used in operating activities	<u>(6,434)</u>	<u>(3,213)</u>
Cash flows from investing activities:		
Purchase of property and equipment	—	(5)
Redemption of short-term investments	—	784
Net cash provided in investing activities	<u>—</u>	<u>779</u>
Cash flow from financing activities:		
Issuance of common stock and warrants	23,237	—
Other liability repayments	—	(13)
Security deposits received	—	40
Net cash provided in financing activities	<u>23,237</u>	<u>27</u>
Net change in cash and cash equivalents	<u>16,803</u>	<u>(2,407)</u>
Cash and cash equivalents - Beginning of period	<u>5,665</u>	<u>11,916</u>
Cash and cash equivalents - End of period	<u>\$22,468</u>	<u>\$ 9,509</u>

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

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

1. Nature of Operations

Adherex Technologies Inc. (“Adherex”) incorporated under the Canada Business Corporations Act (“CBCA”), together with its wholly-owned Delaware subsidiaries Oxiquant, Inc. (“Oxiquant”) and Adherex, Inc. and a wholly-owned Canadian subsidiary, Cadherin Biomedical Inc. (“CBI”), collectively referred to herein as the “Company,” is a development stage biopharmaceutical company with a portfolio of cancer product candidates under development.

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 20-F for the year ended December 31, 2006. 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 7 in the consolidated financial statements.

Effective January 1, 2007, the Company has changed its primary basis of accounting to U.S. GAAP from Canadian GAAP. The Company made the change to U.S. GAAP to comply with U.S. securities law as a result of the Company’s loss of its foreign private issuer status with the SEC.

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 reflect all normal and recurring adjustments considered necessary to state fairly the results for the periods presented. No other adjustments were required.

Change in functional and reporting currency

Effective January 1, 2005, the Company determined that its functional currency has changed from the Canadian dollar to the U.S. dollar because the majority of its operations are denominated in U.S. dollars as a result of increasing activities undertaken in the U.S. Concurrent with this change in functional currency, the Company adopted the U.S. dollar as its reporting currency.

The change was effected for prior periods as follows: assets and liabilities were translated into U.S. dollars at the prevailing exchange rates at each balance sheet date; revenues and expenses were translated at the average exchange rates prevailing during each reporting period; and equity transactions were translated at the prevailing historical exchange rate at each transaction date. Adjustments resulting from the translations are included in the cumulative translation adjustments in stockholders’ equity and totaled \$1,243 at both March 31, 2007 and December 31, 2006.

Stock-Based Compensation

Effective January 1, 2006, the Company adopted the fair value recognition of Statement of Financial Accounting Standards (“SFAS”) No. 123 (revised 2004), “Share-Based Payment” (“SFAS No. 123(R)”), using the modified prospective transition method and therefore has not restated results for prior periods. The Company recognizes these compensation costs on a straight-line basis over the requisite service period of the award.

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

Research and Development

Research and development expenses include all direct costs and indirect development costs related to the development of the Company's portfolio of product candidates. These expenses include: salaries for research and development personnel, purchase of in-process research and development, drug synthesis and manufacturing to support clinical programs, consulting fees, clinical trial costs, sponsored research costs, toxicology studies, up-front license fees, milestone payments relating to research and development agreements, and other fees and costs related to the development of product candidates. These costs have been charged to operating expense as incurred. License and milestone payments to the Company's licensors are recognized when the underlying requirement is met.

Net loss per share

Basic net loss per common share is computed by dividing the net loss by the weighted average number of common shares outstanding. Diluted net loss per common share is computed by dividing the net loss by the weighted average number of common shares outstanding and other dilutive securities outstanding. Other dilutive securities consist of shares issuable upon the exercise of stock options and warrants to purchase common shares.

3. Recent Accounting Pronouncements

In February 2007, the Financial Accounting Standards Board ("FASB") issued SFAS No. 159, "The Fair Value Option for Financial Assets and Financial Liabilities—Including an amendment of FASB Statement No. 115," ("SFAS No. 159"). SFAS No. 159 permits companies to elect to measure many financial instruments and certain other assets and liabilities at fair value on an instrument-by-instrument basis. Companies electing the fair value option are required to recognize changes in fair value in earnings. The Company is currently evaluating the impact, if any, of SFAS No. 159 on its financial statements. If elected by the Company, SFAS No. 159 would be effective as of January 1, 2008.

In September 2006, the FASB issued SFAS No. 157, "Fair Value Measurements" ("SFAS No. 157"). SFAS No. 157 establishes a framework for measuring fair value, and expands disclosures about fair value measurements. The statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within that fiscal year. The Company is currently evaluating the impact of adopting this statement.

In June 2006, the FASB issued FASB Interpretation No. 48, "Accounting for Uncertainty in Income Taxes" ("FIN 48"). FIN 48 prescribes detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in an enterprise's financial statements in accordance with FASB Statement No. 109, "Accounting for Income Taxes." Tax positions must meet a more-likely-than-not recognition threshold at the effective date to be recognized upon the adoption of FIN 48 and in subsequent periods. FIN 48 is effective for fiscal years beginning after December 15, 2006. The adoption of FIN 48 did not result in any significant impact to the Company. The Company continues to carry a full valuation allowance on all of its deferred tax assets.

4. Stock-based Compensation

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. On March 23, 2007, the Board of Directors approved an increase to the options authorized for issuance under the stock option plan from 5,600 to 20,000 options. On April 27, 2007, the shareholders also approved this increase at the Company's Annual and Special Meeting of Shareholders.

A maximum of 20,000 options (not including 700 options previously issued to the Chief Executive Officer and specifically approved by the shareholders) 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.

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

During the three month periods ended March 31, 2007, and 2006 the Company recognized total compensation expense of \$163 and \$143, respectively.

Valuation Assumptions

The fair value of the stock-based payments granted during the three month periods ended March 31, 2007 and 2006 was estimated using the Black-Scholes option pricing model with the assumptions and weighted average fair values as follows:

	Three Months Ended March 31,	
	2007	2006
Expected dividend	0%	0%
Risk-free interest rate	4.60%	4.00%
Expected volatility	84%	70%
Expected life in years	7	7
Weighted average fair value of options granted	\$ 0.22	—

Stock Option Activity

The following is a summary of option activity for the three month period ended March 31, 2007 for stock options denominated in Canadian dollars:

	Number of Options	Weighted- average Price
Outstanding at December 31, 2006	3,402	CAD\$ 2.42
Granted	—	—
Exercised	—	—
Cancelled	(418)	CAD\$ 4.13
Outstanding at March 31, 2007	<u>2,984</u>	<u>CAD\$ 2.15</u>

The following is a summary of option activity for the three month period ended March 31, 2007 for stock options denominated in U.S. dollars:

	Number of Options	Weighted- average Price
Outstanding at December 31, 2006	1,878	\$ 0.99
Granted	1,005	0.28
Exercised	—	—
Cancelled	(50)	0.90
Outstanding at March 31, 2007	<u>2,833</u>	<u>\$ 0.74</u>

5. Stockholders' Equity**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 \$23,237 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

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

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.

The investor warrants, with a value of \$6,503 based on Black-Scholes options pricing model, have been allocated to additional paid-in-capital and the remaining balance of \$16,734 has been included in common stock.

Warrants to Purchase Common Stock

The Company has primarily financed its operations through the sale of equity and debt securities that have been denominated in U.S. and Canadian dollars.

At March 31, 2007, the Company had the following warrants to purchase common stock outstanding priced in Canadian dollars with a weighted average exercise price of CAD \$2.49 and a weighted average remaining life of 1.24 years:

Warrant Description	Number Outstanding at March 31, 2007	Exercise Price In Canadian Dollars	Expiration Date
Investor warrants	2,335	CAD\$ 3.50	May 20, 2007
Acquisition warrants	461	CAD\$ 3.59	May 20, 2007
Convertible notes warrants	287	CAD\$ 2.05	June 23, 2007
Convertible notes warrants	57	CAD\$ 2.75	June 23, 2007
Agent warrants	170	CAD\$ 2.05	November 20, 2007
Convertible notes warrants	271	CAD\$ 2.15	December 3, 2007
Investor warrants	7,567	CAD\$ 2.15	December 19, 2008
	<u>11,148</u>		

At March 31, 2007, the Company had the following warrants to purchase common stock outstanding priced in U.S. dollars with a weighted average exercise price of \$0.47 and a weighted average remaining life of 2.69 years:

Warrant Description	Number Outstanding at March 31, 2007	Exercise Price In U.S. Dollars	Expiration Date
Agent warrants	57	\$ 1.75	July 20, 2007
Agent warrants	465	\$ 0.97	May 7, 2008
Investor warrants	1,824	\$ 1.75	July 20, 2008
Broker warrants	6,818	\$ 0.33	February 20, 2009
Investor warrants	37,880	\$ 0.40	February 20, 2010
Investor warrants	2,326	\$ 0.97	May 7, 2010
	<u>49,370</u>		

Warrants denominated in Canadian dollars

At March 31, 2007 and December 31, 2006, 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 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 Condensed Consolidated Financial Statements (Continued)
(Unaudited)
(U.S. dollars and shares in thousands, except per share information)

The recent SEC and FASB interpretations relate to FASB Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities" and Emerging Issue Task Force ("EITF") EITF 00-19 "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in a Company's Own Stock". The FASB has initiated a project to determine the accounting treatment for certain equity instruments with elements of foreign currency risk. This project 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 reported a gain of approximately \$500 as of March 31, 2007 and a gain of \$1,700 at December 31, 2006. The Company calculated the amounts using the Black-Scholes option pricing model and used the following assumptions to value the instruments at March 31, 2007 and December 31, 2006: 0% dividend rate, 84% volatility, the actual exercise price of each instrument, the stock price at March 31, 2007 and December 31, 2006 and the Canadian risk free interest rate for the remaining life of the related warrants.

6. Eniluracil

In July 2005, we entered into a Development and License Agreement with GlaxoSmithKline ("GSK"). The agreement included the in-license of GSK's oncology product, eniluracil, by Adherex and an option for GSK to license Adherex's lead biotechnology compound, ADH-1. Under the agreement, Adherex received an exclusive license to develop eniluracil for all indications, and GSK retained options to buy back eniluracil at various points in its development. If GSK had exercised any of its options on eniluracil, Adherex would have received development and sales milestone payments of up to approximately \$120,000 in aggregate, plus up to double-digit royalties on sales, the magnitude of which was dependent upon if and when an option was exercised. Under the terms of the agreement, should GSK not exercise any options to buy-back its rights relating to eniluracil, Adherex would be free to develop eniluracil alone or with other partners and would be required to pay GSK development and sales milestones and double-digit sales royalties.

On March 1, 2007, the GSK Development and License Agreement was amended and the Company purchased all of GSK's remaining buy-back options for eniluracil 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.

7. 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 19 in the Company's annual audited consolidated financial statements included in its Annual Report on Form 20-F for the year ended December 31, 2006. There are no differences in reported cash flow for the periods presented between U.S. and Canadian GAAP.

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

Interim Consolidated Balance Sheets - Canadian GAAP:

	<u>March 31,</u> <u>2007</u> <u>(unaudited)</u>	<u>December 31,</u> <u>2006</u>
Assets:		
Current assets	\$ 22,739	\$ 5,895
Other assets	441	440
Capital assets	276	293
License fee (3)	1,349	—
Acquired intellectual property rights (2)	9,502	9,956
Total assets	<u><u>34,307</u></u>	<u><u>16,584</u></u>
Liabilities:		
Current liabilities	2,050	4,695
Other long-term liabilities	41	40
Deferred lease inducement	646	625
Future income taxes (2)	3,835	3,639
Total liabilities	<u><u>6,572</u></u>	<u><u>8,999</u></u>
Shareholders' equity:		
Common stock (4)	63,220	46,486
Contributed surplus (5)	33,434	26,751
Cumulative translation adjustment	5,850	5,850
Deficit accumulated during the development stage	(74,769)	(71,502)
Total shareholders' equity	<u><u>27,735</u></u>	<u><u>7,585</u></u>
Total liabilities and shareholders' equity	<u><u>\$ 34,307</u></u>	<u><u>\$ 16,584</u></u>

Consolidated Statement of Operations - Canadian GAAP:

	<u>Three Months Ended</u> <u>March 31,</u>	
	<u>2007</u> <u>(unaudited)</u>	<u>2006</u> <u>(unaudited)</u>
Net loss in accordance with U.S. GAAP	\$ (3,968)	\$ (3,177)
Adjustments to reconcile to Canadian GAAP:		
License fee paid (3)	1,365	—
License fee amortization	(16)	—
Acquired intellectual property rights amortization (2)	(452)	(544)
Future income taxes - license fee (3)	(361)	—
Future income taxes - intellectual property (2)	165	199
Net loss in accordance with Canadian GAAP	<u><u>\$ (3,267)</u></u>	<u><u>\$ (3,522)</u></u>
Net loss per share of common stock, basic and diluted	<u><u>\$ (0.04)</u></u>	<u><u>\$ (0.08)</u></u>
Weighted-average number of shares of common stock outstanding, basic and diluted	<u><u>82,369</u></u>	<u><u>42,629</u></u>

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

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

1. Current accounting pronouncements

In April 2005, the Accounting Standards Board of the Institute of Chartered Accountants of Canada (“CICA”) issued “CICA 3855 - Financial Instruments – Recognition and Measurement” (“CICA 3855”). CICA 3855 prescribes when a financial asset, financial liability or non-financial derivative is to be recognized on the balance sheet and the measurement of such amount. It also specifies how financial instruments gains and losses are to be presented. The adoption of CICA 3855 did not result in any significant impact to the Company which continues to use fair value to measure financial instruments on the balance sheet date and to measure gains and losses on financial instruments in the statements of operations.

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.

Under U.S. GAAP, the acquired intellectual property is considered IPRD in accordance with Statement of Financial Accounting Standards No. 2, “Accounting for Research and Development Costs” (“FAS 2”). Given the Company’s development and patent strategy surrounding the compounds, the acquired intellectual property does not meet the criteria for alternative use as outlined in FAS 2. As a result, the amounts were expensed as IPRD.

3. License fee

On March 1, 2007, the Company purchase of all of GSK’s remaining options for eniluracil 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 the costs of such license fees. The license fee is being amortized over the estimated useful life of seven years on a straight-line basis and as of March 31, 2007 the cost and accumulated amortization is as follows:

	March 31, 2007
License fee	\$ 1,365
Accumulated amortization	(16)
Net book value	<u>\$ 1,349</u>

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. The future tax liability is also reduced to reflect the change in this temporary difference between the tax and accounting values of the assets.

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

4. Stock-based compensation – Initial Public Offering

Under U.S. GAAP, the Company deferred the difference between the exercise price of options issued within a one-year period prior to the IPO and the IPO price and expensed the amount deferred over the vesting period of the options. This difference increases the additional paid in capital and accumulated deficit reported under U.S. GAAP, with no difference in the total shareholders' equity.

5. Convertible notes and warrants

Under Canadian GAAP, the proceeds from the issue of convertible notes and warrants are split into their relative component parts: debt, the option to convert the debt, and the detachable warrants. Under U.S. GAAP, these instruments are split between the debt and detachable warrant components.

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 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 7 in the interim condensed consolidated financial statements and as more fully described in Note 19 in our annual consolidated financial statements contained in our Annual Report on Form 20-F for the year ended December 31, 2006. 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 the results, performance or achievements expressed or implied by the forward-looking statements. Words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," "project," "plan," and other words of similar meaning are one way to identify such forward-looking statements. Forward-looking statements in this discussion include, but are not limited to, statements with respect to (i) our anticipated commencement dates, completion dates and results of clinical trials; (ii) our anticipated progress and costs of our clinical and preclinical research and development programs; (iii) our corporate and development strategies; (iv) our expected results of operations; (v) our anticipated levels of expenditures; (vi) our ability to protect our intellectual property; (vii) the anticipated applications and efficacy of our drug candidates; (viii) our ability to attract and retain key employees; (ix) our efforts to pursue collaborations with the government, industry groups or other companies; (x) the nature and scope of the potential markets for our drug candidates and (xi) our anticipated sources and uses of cash, cash equivalents and short-term investments. All statements, other than statements of historical fact, included in this discussion address activities, events or developments that we expect will occur in the future and are forward-looking statements. We include forward-looking statements because we believe 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 document in "Part II: Other Information-Item 1A. Risk Factors" and also included in our Annual Report on Form 20-F for the year ended December 31, 2006. 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.

Drug development timelines and the associated operating expenses are variable and difficult to predict. Our future development timelines and costs will depend upon; the results achieved in our ongoing drug development programs, availability of capital and the direction from regulatory agencies. In some cases, management may be able to control the timing of some expenses by accelerating or decelerating preclinical and clinical activities. Accordingly, we believe that period-to-period comparisons are not necessarily meaningful and should not be relied upon as a measure of future financial performance. Our actual results may differ materially from the expectations of investors and market analysts. In such an event, the prevailing market price of our common stock may be materially adversely affected.

Overview

We are a biopharmaceutical company focused on cancer therapeutics with preclinical and clinical product candidates. The following product candidates are in the clinical stage of development:

- *Eniluracil* is a dihydropyrimidine dehydrogenase ("DPD") inhibitor that we are developing to enhance the therapeutic value and effectiveness of 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 licensed eniluracil from GlaxoSmithKline ("GSK") in July 2005.
- *ADH-1* is a molecularly targeted anti-cancer drug that selectively targets N-cadherin that is present on certain tumor cells and the established blood vessels that supply tumors. ADH-1 is currently in clinical

[Table of Contents](#)

development in combination with four different chemotherapy agents and completed patient enrollment in the single-agent Phase Ib/II and Phase II clinical studies in Europe and North America at the end of 2006. We licensed ADH-1 from McGill University (“McGill”) in February 2001.

- STS is a chemoprotectant that has been shown in Phase I and Phase II clinical studies conducted by investigators at Oregon Health & Science University (“OHSU”) to reduce the disabling loss of hearing in patients, both adults and children, treated with platinum-based anti-cancer agents. In 2006, we executed 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 randomized study of STS to reduce hearing loss in children associated with platinum-based chemotherapies. Under the terms of the agreement, SIOPEL will conduct and fund the clinical activity and we will provide drug and drug distribution for the study. We also continue to work with the U.S. Children’s Oncology Group (“COG”) to initiate a randomized U.S. clinical trial with STS in children. We licensed STS from OHSU in September 2002.

Our preclinical portfolio includes: (i) novel peptides and small chemical molecule successors to ADH-1; (ii) peptides and small molecules targeting the cadherin mediated metastatic spread of some cancers; and (iii) 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 and/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 40 issued U.S. patents and more than 50 pending patents worldwide that we either own or have exclusively licensed.

We have not received any revenues to date through the sale of 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, upfront payments or other revenue. As of March 31, 2007, our deficit accumulated during development stage was approximately \$75.0 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. Research and development (“R&D”) expenses, which include expenses associated with salaries for research and development personnel, stock-based compensation, the purchase of in-process research and development, drug synthesis and manufacturing to support clinical programs, consulting fees, clinical trial costs, sponsored research costs, toxicology studies, up-front license fees, milestone payments relating to research and development agreements, and other fees and costs related to the development of product candidates, will be dependent on the results of our drug development efforts. General and administration (“G&A”) expenses include expenses associated with the compensation of employees, stock-based compensation relating to G&A activities, professional fees, insurance and other administrative matters associated with our facilities in the Research Triangle Park, N.C. (“RTP”) in support of our drug development programs.

[Table of Contents](#)

\$25.0 Million Public Offering

On February 21, 2007, we completed the sale of equity securities for gross proceeds of \$25.0 million. We issued 75.8 million units at a price of \$0.33 per unit providing net proceeds of \$23.2 million after deducting broker fees and other offering expenses. Each unit sold consisted of one common share and one-half of a common share purchase warrant. The public offering included an aggregate of 75.8 million shares of common stock, 37.9 million investor warrants and 6.8 million broker warrants to acquire additional shares of our common stock. Each whole investor warrant entitles the holder to acquire one additional share of our 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 unit (the same as the units sold to investors) at an exercise price of \$0.33 per unit for a period of two years.

Eniluracil - Development and License Agreement

In July 2005, we entered into a Development and License Agreement with GSK. The agreement included the in-license of GSK's oncology product, eniluracil, by Adherex and an option for GSK to license Adherex's lead biotechnology compound, ADH-1. Under the agreement, Adherex received an exclusive license to develop eniluracil for all indications, and GSK retained options to buy back eniluracil at various points in its development. If GSK had exercised any of its options to buy back eniluracil, Adherex would have received development and sales milestone payments of up to approximately \$120.0 million in aggregate, plus up to double-digit royalties on sales, the magnitude of which was dependent upon if and when an option was exercised. If GSK did not exercise any of its options to buy-back eniluracil, Adherex would be free to develop eniluracil alone or with other partners and would be required to pay GSK development and sales milestones and double-digit sales royalties.

On March 1, 2007, we purchased all of GSK's remaining options to buy back eniluracil for an upfront fee of \$1.0 million, which is included in research and development expense in our Statement of Operations. As a result, we have assumed full direction and control over the future development of eniluracil and are free to partner and/or sub-license the product to third parties. We are required to pay GSK the same development and sales milestone payments and sales royalties as previously agreed, but GSK's options to buy back the product no longer remain. Specifically, if we file a New Drug Application ("NDA") with the Food and Drug Administration ("FDA"), we will be obligated to pay GSK development milestones of \$5.0 million. Depending upon the commercial success of eniluracil, we could also be required to pay GSK as much as \$70.0 million in additional development and sales milestones, plus double-digit royalties based on our annual net sales. If we pursue other indications, we may be required to pay up to an additional \$15.0 million to GSK for each indication approved by the FDA.

ADH-1 - Development and License Agreement

As part of the July 2005 Development and License Agreement, we granted GSK an option to receive a worldwide, exclusive license for ADH-1 for all indications. On October 11, 2006, we announced that GSK's option to ADH-1 had expired unexercised. As a result, we regained full control over the development of ADH-1 and are free to enter into collaborations or partnerships with other pharmaceutical or biotechnology companies for ADH-1.

Results of Operations

Net Loss and Cash Flow from Operations

Three Months Ended March 31, 2007 and 2006

The net loss for the three month period ended March 31, 2007 was \$4.0 million, as compared to \$3.2 million for the same period in 2006. This increase was primarily due to our acquisition of GSK's remaining buy-back options for eniluracil for \$1.0 million in March 2007, partially offset by reduced R&D expenditures. The \$1.0 million fee paid to GSK is included in research and development expense on our Statement of Operations.

Cash used in operating activities for the three month period ended March 31, 2007 totaled \$6.4 million or approximately \$2.1 million per month, as compared to approximately \$1.1 million per month in the same period in 2006. The significant increase was primarily due to the \$1.0 million payment to GSK and cash used to settle liabilities as a result of our improved liquidity from our \$25.0 million public offering completed in February 2007.

[Table of Contents](#)

Research and Development Expense

Three Months Ended March 31, 2007 and 2006

R&D expense for the three month period ended March 31, 2007 totaled \$3.2 million, as compared to \$2.6 million during the same period in 2006. The primary reason for the increase is due to the \$1.0 million license payment to GSK made during the quarter partially offset by reduced R&D spending on eniluracil and ADH-1. The spending on eniluracil is reduced as we prepared the ramp-up our Phase I/II trial in liver cancer in Asia and the initiation of our Phase II trial in breast cancer.

R&D expenses include all direct costs and indirect development costs related to the development of our R&D portfolio. R&D expense for the quarter includes compensation to R&D personnel, the license payment to GSK, synthesis and manufacture of drug substance, clinical trial costs, consulting fees, sponsored research costs and the up-front license fee paid to GSK. In addition, R&D expense also included non-cash stock-based compensation expense of \$0.1 million in the three month periods ended March 31, 2007 and 2006.

With the improved liquidity from our \$25.0 million public offering completed on February 21, 2007, we expect R&D expenses to increase in future periods due to the continued expansion and advancement of our clinical and preclinical programs. Our future development program will also be dependent upon the results and interpretation of the data from our on-going clinical studies.

General and Administration Expense

Three Months Ended March 31, 2007 and 2006

G&A expense for the three month period ended March 31, 2007 totaled \$1.0 million, as compared to \$0.7 million for the same period in 2006. G&A expense for the three months ended March 31, 2007 consisted primarily of employee compensation, stock-based compensation, external professional fees and other administrative activities.

G&A expense includes \$0.1 million of non-cash stock-based compensation expense in the three month periods ended March 31, 2007 and 2006.

We expect G&A expenses to increase in future periods due to the loss of our foreign private issuer status in February 2007, which will result in additional expense in order to comply with U.S. securities laws.

Interest Income

Interest income for the three months ended March 31, 2007 and 2006 totaled \$0.1 million due to higher interest rate yields in 2007 and higher cash balances in 2006.

Quarterly Information

The following table presents selected consolidated financial data for each of the last eight quarters through March 31, 2007, as prepared under U.S. GAAP (dollars in thousands, except per share information):

Period	Net Loss for the Period	Basic and Diluted Net Loss per Common Share
June 30, 2005	\$ (3,504)	\$ (0.10)
September 30, 2005	\$ (3,719)	\$ (0.09)
December 31, 2005	\$ (4,149)	\$ (0.10)
March 31, 2006	\$ (3,177)	\$ (0.07)
June 30, 2006	\$ (3,854)	\$ (0.08)
September 30, 2006	\$ (4,648)	\$ (0.09)
December 31, 2006	\$ (4,761)	\$ (0.09)
March 31, 2007	\$ (3,968)	\$ (0.05)

Quarters Ended June 30, 2005 through December 31, 2005

The increase in our quarterly net loss from June 2005 through December 2005 is primarily due to increased R&D activities relating to the clinical advancement of ADH-1 and the acquisition of eniluracil. We initiated our single agent Phase Ib/II and single agent Phase II programs during 2005 thereby increasing the R&D expenditures in the second half of fiscal 2005. We licensed eniluracil from GSK in July 2005 which increased our R&D expenditures as we commenced our clinical program for eniluracil. During the second half of 2005, we also had increased preclinical activities relating to ADH-1 which provided us with positive data on the use of ADH-1 in combination with chemotherapeutic agents in animal models. The improved liquidity from our July 2005 financing, with net proceeds of \$8.1 million, allowed these increased expenditures to occur.

Quarters Ended March 31, 2006 through December 31, 2006

The decrease in our net loss for the quarter ended March 31, 2006 was due to our decreased preclinical activities during this period due to limited financial resources. In May 2006, we completed a private placement with net proceeds of \$6.0 million that allowed us to continue our clinical programs for ADH-1 and eniluracil. During 2006, we initiated our ADH-1 clinical program to include ADH-1 in combination with chemotherapeutic agents and commenced our Phase I studies with eniluracil. In the second half of 2006 we also had higher expenditures relating to the manufacture of drug to supply our clinical programs.

Quarter Ended March 31, 2007

The decrease in our net loss for the quarter ended March 31, 2007 was primarily due to our streamlining of preclinical and clinical activities. We assessed activities performed by our third party providers leading to improvements in both the efficiencies and effectiveness of our clinical programs.

We expect our R&D expenses to increase in future periods as we advance eniluracil, ADH-1 and STS in their clinical development. In addition, upon losing our foreign private issuer status in February of 2007, we expect G&A expenses to increase due to additional reporting obligations under U.S. securities laws.

Liquidity and Capital Resources

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, 2007. We have incurred net losses and negative cash flow from operations each year, and we had an accumulated deficit of approximately \$75.0 million as of March 31, 2007. 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, and/or establish collaborations that provide us with licensing fees, royalties, milestone payments or upfront payments.

The net cash flow used in operating activities for the three month period ended March 31, 2007 totaled \$6.4 million or an average of approximately \$2.1 million per month, as compared to \$3.2 million for the same period in 2006 or an average of approximately \$1.1 million per month. The increase in net cash flow used was largely due to our purchase from GSK of their remaining buy-back options for eniluracil for \$1.0 million on March 1, 2007.

On February 21, 2007, we completed the public offering of equity securities for gross proceeds of \$25.0 million, resulting in net proceeds of \$23.2 million after deducting broker fees and other offering expenses.

As of March 31, 2007, our consolidated cash and cash equivalents were \$22.5 million, as compared to \$5.7 million at December 31, 2006. This increase was due to the net proceeds from the public offering completed on February 21, 2007. Working capital was approximately \$20.7 million at March 31, 2007 and \$1.2 million at December 31, 2006.

We believe that our current cash and cash equivalents will be sufficient to satisfy our anticipated capital requirements into the fourth quarter of 2008. 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, upfront 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

[Table of Contents](#)

enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; establishment of marketing and sales capabilities; our business development activities; new regulatory requirements implemented by regulatory authorities; and the timing and outcome of any regulatory review process; and our commercialization activities, if any.

To finance our operations beyond the fourth quarter of 2008, 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 at all or on favorable terms.

Through March 31, 2007, we have received \$1.6 million of research tax credits including potential research tax credit receivables of \$0.1 million and \$0.2 million in other government grants.

Financial Instruments

At March 31, 2007 and December 31, 2006, we held cash and cash equivalents and did not hold any short-term investments or other financial instruments.

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 primarily include 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.

Investments with original maturities at date of purchase beyond three months, and which mature at or less than twelve months from the balance sheet date, are classified as current. Investments are carried at book value plus accrued interest with unrealized gains and losses recognized as investment income.

Interest income from our cash and cash equivalents during the three month periods ended March 31, 2007 and 2006 were both \$0.1 million.

Off-Balance Sheet Arrangements

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

Contractual Obligations

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, 2007.

The following table represents our contractual obligations and commitments at December 31, 2006 (in thousands of U.S. dollars) as there were no material changes during the period ended March 31, 2007:

	Less than 1 year	1-3 years	4-5 years	More than 5 years	Total
Englert Lease (1)	\$ 111	\$ 229	\$ 89	\$ —	\$ 429
Maplewood Lease (2)	223	733	778	268	2,002
McGill License (3)	311	725	493	—	1,529
OHSU License (4)	—	—	—	—	—
GSK (4)	—	—	—	—	—
Total	<u>\$ 645</u>	<u>\$1,687</u>	<u>\$1,360</u>	<u>\$ 268</u>	<u>\$3,960</u>

- (1) In April 2004, we entered into a lease for our facilities in RTP. Amounts shown assume the maximum amounts due under the lease. This facility has now been subleased to another company that is responsible for payments until March 31, 2008; however, in the event of their default Adherex would become responsible for the obligation. In addition, Adherex is contractually obligated under the lease until August 31, 2010.

Table of Contents

- (2) In August 2005, we entered into a lease for new office and laboratory facilities in RTP. 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) Research obligations shown. Royalty payments, which are contingent on sales, are not included.
- (4) Royalty and milestone payments that we may be required to pay, which are contingent on sales or progress of clinical trials, are not included.

On March 31, 2007 we purchased from GSK all of their remaining buy-back options under our Development and License agreement for \$1.0 million. Under the terms of our Development and License agreement with GSK as amended, if we file an NDA with the FDA, we will be required to pay development milestones of \$5.0 million to GSK. Depending 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 initially approved indication, plus double-digit royalties based on annual net sales. If we pursue other indications, we may be required to pay up to an additional \$15 million to GSK per FDA-approved indication.

On December 8, 2006 we notified Rutgers of our intention to terminate our license agreement for mesna and as a result, we will no longer be developing mesna or responsible for the payment of any milestones, royalties or other associated costs.

In connection with the License Agreement with OHSU, we are required to pay specified amounts in the event that we complete certain Adherex-initiated clinical trials. In the near-term a milestone payment to OHSU of up to \$0.5 million may be required if we complete a planned randomized clinical trial with STS, which has not yet commenced. There can be no assurance that we will commence or complete that clinical trial when anticipated, if at all.

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 \$3.2 million and \$2.6 million for the three month periods ended March 31, 2007 and 2006, respectively.

ADH-1 is a molecularly-targeted anti-cancer drug currently in a clinical program in combination with four different chemotherapy agents. We completed patient enrollment in our single agent Phase Ib/II and our single agent Phase II studies as of December 31, 2006. We incurred \$1.4 million of internal and external expense for this compound during the three month period ended March 31, 2007. ADH-1 is a small peptide molecule that selectively targets N-cadherin, a protein present on certain tumor cells and the established blood vessels that supply the tumors.

Eniluracil, which we licensed as part of the Development and License Agreement with GSK, is a DPD inhibitor that was previously under development by GSK for the treatment of cancer. During the three month period ended March 31, 2007, we incurred \$0.5 million of internal and external expenditures for eniluracil, primarily related to the commencement a Phase I clinical program. Eniluracil is being developed to enhance the therapeutic value and effectiveness of 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.

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

[Table of Contents](#)

agents. In 2006, we entered into an agreement with SIOPEL, a multi-disciplinary group of specialists under the umbrella of the International Society of Pediatric Oncology, for the conduct of a randomized trial of STS. The trial is currently projected to begin in the first half of 2007. We also continue to work with the U.S. Children's Oncology Group to initiate a randomized U.S. trial of STS in children.

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. GAAP and Canadian 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.

Effective January 1, 2007, we changed our primary basis of accounting to U.S. GAAP from Canadian GAAP. We made the change to U.S. GAAP to comply with U.S. securities law as a result of our loss of foreign private issuer status with the Securities and Exchange Commission ("SEC").

An accounting policy is considered to be critical if it requires an accounting estimate to be made based on assumptions about matters that are highly uncertain at the time the estimate is made, and if different estimates reasonably could have been used, or changes in the accounting estimates that are reasonably likely to occur periodically, could materially impact the financial statements. We believe that the assumptions, judgments and estimates involved in our accounting for acquired intellectual property rights could potentially have a material impact on our consolidated financial statements. The following description of critical accounting policies, judgments and estimates should be read in conjunction with our December 31, 2006 consolidated financial statements.

Functional and Reporting Currency

Effective January 1, 2005, we determined our functional currency had changed from the Canadian dollar to the U.S. dollar because the majority of our transactions are denominated in U.S. dollars as a result of increasing activities undertaken in the United States. Concurrent with this change in functional currency, we adopted the U.S. dollar as our reporting currency.

The change was effected for prior periods as follows: assets and liabilities were translated into U.S. dollars at the prevailing exchange rates at each balance sheet date; revenues and expenses were translated at the average exchange rates prevailing during each reporting period; and equity transactions were translated at the prevailing historical exchange rates at each transaction date. Adjustments resulting from the translations are included in the cumulative translation adjustments in shareholders' equity and totaled \$1.2 million at March 31, 2007 and December 31, 2006.

Stock-Based Compensation

Effective January 1, 2006, the Company adopted the fair value recognition of Statement of Financial Accounting Standards ("SFAS") No. 123 (revised 2004), "Share-Based Payment" ("SFAS 123(R)"), using the modified prospective transition method and therefore has not restated results for prior periods. We use the Black-Scholes option-pricing model and will recognize compensation expense on a straight-line basis over the vesting periods of our awards. The estimation of stock awards that will ultimately vest requires judgment, and to the extent actual results or updated estimates differ from our current estimates, such amounts will be recorded as a cumulative adjustment in the period estimates are revised. We consider many factors when estimating expected forfeitures, including types of awards and historical experience. We estimate volatility based on peer group companies with similar operations and our own historical volatility. Significant management judgment is required in determining estimates of future stock price volatility, forfeitures and expected life to be used in the valuation of the options. Actual results, and future changes in estimates, may differ substantially from our current estimates. For stock options granted to non-employees, we have recognized compensation expense in accordance with the requirements of SFAS No. 123 "Accounting for Stock-Based Compensation," or SFAS 123. SFAS 123 required that companies recognize compensation expense based on the estimated fair value of options granted to non-employees over their vesting period, which is generally the period during which services are rendered by such non-employees.

[Table of Contents](#)

Outstanding Share Information

The outstanding share data for the Company as of March 31, 2007 is as follows (in thousands):

	March 31, 2007
Common shares	126,141
Warrants	60,518
Stock options	5,817
Total	<u>192,476</u>

Canadian Accounting Principles

We present our consolidated financial results in accordance with U.S. GAAP. Significant differences exist between U.S. and Canadian GAAP and are presented in Note 7 in the unaudited interim condensed consolidated financial statements.

Recent Accounting Pronouncements

In February 2007, the Financial Accounting Standards Board (“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”). SFAS 159 permits companies to elect to measure many financial instruments and certain other assets and liabilities at fair value on an instrument-by-instrument basis. Companies electing the fair value option would be required to recognize changes in fair value in earnings. We are currently evaluating the impact, if any, of SFAS 159 on our financial statements. If we elect SFAS 159, it would be effective as of January 1, 2008.

In September 2006, the FASB issued SFAS No. 157, “Fair Value Measurements,” (“SFAS 157”). SFAS 157 establishes a framework for measuring fair value, and expands disclosures about fair value measurements. The statement is effective for financial statements issued for fiscal years beginning after November 15, 2007, and interim periods within that fiscal year. We are currently evaluating the impact of adopting this statement.

In June 2006, the FASB issued FASB Interpretation No. 48, “Accounting for Uncertainty in Income Taxes,” (“FIN 48”). FIN 48 prescribes detailed guidance for the financial statement recognition, measurement and disclosure of uncertain tax positions recognized in an enterprise’s financial statements in accordance with FASB Statement No. 109, “Accounting for Income Taxes.” Tax positions must meet a more-likely-than-not recognition threshold at the effective date to be recognized upon the adoption of FIN 48 and in subsequent periods. FIN 48 will be effective for fiscal years beginning after December 15, 2006. The adoption of FIN 48 did not result in any significant impact and we continue to carry a full valuation allowance on all of our deferred tax assets.

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.

Table of Contents

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, the increase or decrease in realized gains and losses on investments and the amount of interest expense we must pay with respect to various outstanding debt instruments. Our risk associated with fluctuating interest expense is limited to certain equipment leases. 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 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, 2007 we held approximately \$1.8 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, 2007. 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 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 into the fourth quarter of 2008. Our projections of our capital requirements through 2008 and beyond, however, 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, upfront 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; the establishment of

[Table of Contents](#)

marketing and sales capabilities; 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 the fourth quarter of 2008 or more capital thereafter may be required than we had anticipated. To finance our operations beyond the fourth quarter of 2008, 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 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 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, upfront 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 \$4.0 million for the three month period ended March 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, 2007, we had an accumulated deficit of approximately \$75.0 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 early 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 at an early stage of development. Due to the long, expensive and unpredictable drug development process, we might not ever successfully develop and commercialize any of our product candidates.

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 the early stage of clinical development and 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 therapeutic products and procedures based on innovative technologies. For example, our product candidates might be ineffective, as eniluracil was in earlier clinical trials conducted by GSK, or toxic, or otherwise might fail to receive 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 will 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 significant delays with the trial planned with U.S. COG for sodium thiosulfate (“STS”) as discussed in more detail below under the heading “The Children’s Oncology Group and the International Childhood Liver Tumour Strategy Group may not conduct clinical trials with STS as planned,” and we

[Table of Contents](#)

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.

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 and NAC.

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 Drug Development Group (“DDG”) of the U.S. National Cancer Institute’s (“NCI”) Division of Cancer Treatment and Diagnosis for a Level III collaboration for the clinical development of the Company’s lead biotechnology compound, ADH-1. The NCI has no obligation to sponsor 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. In the event that we or the NCI terminate the collaboration, we may seek another third party to conduct similar work for us, which may result in increased costs for us.

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, upfront payments or otherwise. We may not be successful in maintaining current collaborations or establishing any further collaborations, and any collaborations we have or 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.

The Children’s Oncology Group and the International Childhood Liver Tumour Strategy Group may not conduct clinical trials with STS as planned.

We intend to continue the development of STS as a hearing loss protectant for children undergoing platinum-based chemotherapy by collaborating with the International Childhood Liver Tumour Strategy Group (“SIOPEL”) in the conduct of a randomized study in approximately 100 children with liver cancer from participating centers in up to 30 countries and the U.S. COG in the conduct of a randomized clinical trial in the U.S. We have experienced significant delays in getting the COG trial fully approved and started. Such delays may prove to be costly for us, both in terms of additional clinical and drug product expenses as well as any effect such delays may have on the market price of our stock. We might not be able to commence or complete these planned clinical trials on schedule, or at all.

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 either of our lead product candidates, ADH-1 and eniluracil. We therefore intend to seek a licensing or funding partner for the further development of these products. If a partner for these technologies is not found, we may not be able to advance these products. If a partner is found, the financial terms that they propose may not be acceptable to the Company.

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, 2007, we had 22 full-time employees. 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 these 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 key personnel, we cannot be certain that any individual will continue in such capacity for any particular period of time. For example, our former Chief Scientific Officer and Chief Medical Officer have both left the Company and while this does not currently affect our ability to conduct business, it has increased our reliance on our remaining employees. The loss of further 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.

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 and NAC, 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-fluorouracil (“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 the Food and Drug Administration (“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 12 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

[Table of Contents](#)

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 good manufacturing practices (“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, Merck & Co., NeoPharm, Novartis, Johnson & Johnson, OXiGENE, Peregrine Pharmaceuticals, Pfizer, Roche, Onyx, OSI Pharmaceuticals, 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 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, patients or others using our product candidates. 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 safety procedures for handling and disposing of such materials will comply with the standards prescribed by federal, state, local and/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 effect 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 and Canada and 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. In particular, there have been a number of rule changes and proposed legislative initiatives following recent corporate bankruptcies and accounting scandals. 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. shareholders.

As further described in Item 10.E “Taxation” in our Annual Report on Form 20-F, 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 are 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 will 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 will 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 will not receive a “stepped-up” basis upon a transfer at death. These PFIC tax rules will 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

[Table of Contents](#)

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 will 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 will 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 10, 2007, 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\$0.255 per share on the TSX, and from a high closing price of US\$1.71 per share to a low closing price of US\$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 May 10, 2007, we had outstanding warrants to purchase approximately 11.1 million of our common shares at exercise prices ranging from CAD\$2.05 to CAD\$3.59 per share, and outstanding warrants to purchase approximately 49.3 million of our common shares at exercise prices ranging from \$0.33 to \$1.75. In addition, as of May 10, 2007, there were approximately 12.7 million common shares issuable upon exercise of stock options granted by us of which approximately 3.0 million were denominated in Canadian dollars and had a weighted average exercise price of CAD\$2.18 per common share and approximately 9.7 million denominated in U.S. dollars and had a weighted average exercise price of \$0.66 per common share. We may also issue further warrants as part of any future financings as well as the additional 8.0 million common shares currently remaining available for issuance under our stock option plan. On March 23, 2007, the Board of Directors approved an increase to the options authorized for issuance under the stock option plan from 5.6 million to 20.0 million options (excluding 0.7 million previously approved by Shareholders). On April 27, 2007, the shareholders also approved this increase at the Company's Annual and Special Meeting of Shareholders

[Table of Contents](#)

Following the \$25.0 million public offering completed on February 21, 2007 we are no longer a foreign private issuer and will 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 will 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 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 can not assure you that there will be a liquid trading market for our warrants or that a trading market for our warrants will develop.

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 14, 2007

By: /s/ William P. Peters

William P. Peters
Chairman & Chief Executive Officer
(principal executive officer)

Date: May 14, 2007

By: /s/ James A. Klein, Jr.

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

CERTIFICATION

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

1. I have reviewed this quarterly report on Form 10-Q of Adherex Technologies Inc. (the "Company");
2. Based on my knowledge, this quarterly 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 quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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 quarterly report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and
 - (d) Disclosed in this quarterly report any change in the Company's internal control over financial reporting that occurred during the

period covered by the quarterly 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 14, 2007

By: /s/ William P. Peters

William P. Peters

Chairman and Chief Executive Officer

CERTIFICATION

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

1. I have reviewed this quarterly report on Form 10-Q of Adherex Technologies Inc. (the "Company");
2. Based on my knowledge, this quarterly 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 quarterly report;
3. Based on my knowledge, the financial statements, and other financial information included in this quarterly 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 quarterly 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 quarterly report is being prepared;
 - (b) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
 - (c) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this quarterly report based on such evaluation; and
 - (d) Disclosed in this quarterly report any change in the Company's internal control over financial reporting that occurred during the

period covered by the quarterly 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 14, 2007

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 (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 14, 2007

By: /s/ William P. Peters

William P. Peters
Chairman and Chief Executive Officer

Date: May 14, 2007

By: /s/ James A. Klein, Jr.

James A. Klein, Jr.
Chief Financial Officer