

**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: **June 30, 2009**

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, North Carolina 27703

(Address of Principal Executive Offices) (Zip Code)

(919) 484-8484

Registrant's Telephone Number, Including Area Code

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

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

Large Accelerated Filer

Accelerated Filer

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

Smaller reporting company

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

As of August 13, 2009, there were 128,226,787 shares of Adherex Technologies Inc. common stock outstanding

ADHEREX TECHNOLOGIES INC.

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PART 1: FINANCIAL INFORMATION

Item 1. Financial Statements

**ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
UNAUDITED INTERIM CONSOLIDATED BALANCE SHEETS
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)**

	June 30, 2009	December 31, 2008
Assets		
Current assets:		
Cash and cash equivalents	\$ 1,540	\$ 5,349
Cash pledged as collateral	53	52
Investment tax credits recoverable	—	133
Other current assets	49	105
Assets held for sale	57	—
Total current assets	1,699	5,639
Property and equipment	—	136
Leasehold inducements	—	285
Total assets	\$ 1,699	\$ 6,060
Liabilities and Stockholders' Equity		
Current liabilities:		
Accounts payable	\$ 151	\$ 547
Accrued liabilities	594	1,883
Total current liabilities	745	2,430
Other long-term liabilities	7	7
Deferred lease inducement	545	570
Total liabilities	1,297	3,007
Commitments and contingencies		
Stockholders' equity:		
Common stock, no par value; unlimited shares authorized; 128,227 shares issued and outstanding	64,929	64,929
Additional paid-in capital	35,393	34,860
Deficit accumulated during development stage	(101,163)	(97,979)
Accumulated other comprehensive income	1,243	1,243
Total stockholders' equity	402	3,053
Total liabilities and stockholders' equity	\$ 1,699	\$ 6,060

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

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF OPERATIONS
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	Three Months Ended		Six Months Ended		Cumulative From September 3, 1996 to June 30, 2009
	June 30, 2009	June 30, 2008	June 30, 2009	June 30, 2008	
Revenue	\$ —	\$ —	—	\$ —	\$ —
Operating expenses:					
Research and development	650	2,572	1,929	5,947	64,706
Acquired in-process research and development	—	—	—	—	13,094
General and administrative	311	939	984	2,000	24,480
Total operating expenses	<u>961</u>	<u>3,511</u>	<u>2,913</u>	<u>7,947</u>	<u>102,280</u>
Loss from operations	<u>(961)</u>	<u>(3,511)</u>	<u>(2,913)</u>	<u>(7,947)</u>	<u>(102,280)</u>
Other income (expense):					
Settlement of Cadherin Biomedical Inc. litigation	—	—	—	—	(1,283)
Interest expense	—	—	—	—	(19)
Loss on impairment of assets held for sale and leasehold inducements	11	—	(329)	—	(329)
Other income	11	—	11	—	109
Interest income	1	69	47	201	2,797
Total other income (expense), net	<u>23</u>	<u>69</u>	<u>(271)</u>	<u>201</u>	<u>1,275</u>
Net loss and total comprehensive loss	<u>\$ (938)</u>	<u>\$ (3,442)</u>	<u>\$ (3,184)</u>	<u>\$ (7,746)</u>	<u>\$ (101,005)</u>
Basic and diluted net loss per common share	<u>\$ (0.01)</u>	<u>\$ (0.03)</u>	<u>\$ (0.02)</u>	<u>\$ (0.06)</u>	
Weighted-average common shares used in computing basic and diluted net loss per common share	<u>128,227</u>	<u>128,227</u>	<u>128,227</u>	<u>128,227</u>	

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

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF CASH FLOWS
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	Three Months Ended		Six Months Ended		Cumulative From September 3, 1996 to June 30, 2009
	June 30, 2009	June 30, 2008	June 30, 2009	June 30, 2008	
Cash flows from (used in):					
Operating activities:					
Net loss	\$ (938)	\$ (3,442)	(3,184)	\$ (7,746)	\$ (101,005)
Adjustments to reconcile net loss to net cash used in operating activities:					
Depreciation and amortization	—	53	—	130	1,404
Non-cash Cadherin Biomedical Inc. litigation	—	—	—	—	1,187
Unrealized foreign exchange loss	—	—	—	—	9
Amortization of leasehold improvements	—	(2)	(24)	(4)	102
Loss on impairment of assets held for sale and Leasehold inducements	(11)	—	329	—	329
Non-cash severance	—	—	—	—	168
Stock-based compensation - consultants	5	19	10	38	722
Stock-based compensation - employees	227	422	523	1,736	7,694
Acquired in-process research and development	—	—	—	—	13,094
Changes in operating assets and liabilities	(814)	30	(1,487)	77	262
Net cash used in operating activities	(1,531)	(2,920)	(3,833)	(5,769)	(76,034)
Investing activities:					
Purchase of capital assets	—	—	—	(15)	(1,440)
Disposal of capital assets	—	—	—	—	115
Release of restricted cash	—	—	—	—	190
Restricted cash	—	—	—	—	(209)
Purchase of short-term investments	—	—	—	—	(22,148)
Redemption of short-term investments	—	—	—	—	22,791
Investment in Cadherin Biomedical Inc.	—	—	—	—	(166)
Acquired intellectual property rights	—	—	—	—	(640)
Net cash used in investing activities	—	—	—	(15)	(1,507)
Financing activities:					
Conversion of long-term debt to equity	—	—	—	—	68
Long-term debt repayment	—	—	—	—	(65)
Capital lease repayments	—	—	—	—	(8)
Issuance of common stock, net of issue costs	—	—	—	—	76,687
Registration expense	—	—	—	—	(465)
Proceeds from convertible note	—	—	—	—	3,017
Other liability repayments	—	—	—	—	(87)
Financing expenses	—	—	—	—	(544)
Proceeds from sale of assets held for sale	24	—	24	—	24
Security deposits received	—	—	—	—	35
Proceeds from exercise of stock options	—	—	—	—	51
Net cash provided in financing activities	24	—	24	—	78,713
Effect of exchange rate on cash and cash equivalents	—	—	—	—	368
Increase (decrease) in cash and cash equivalents	(1,507)	(2,920)	(3,809)	(5,784)	1,540
Cash and cash equivalents - Beginning of period	3,047	13,298	5,349	16,162	—
Cash and cash equivalents - End of period	\$ 1,540	\$ 10,378	\$ 1,540	\$ 10,378	\$ 1,540

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

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

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

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

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY (CONTINUED)
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

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

(The accompanying notes are an integral part of these interim consolidated financial statements)
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ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
UNAUDITED CONDENSED CONSOLIDATED STATEMENTS OF STOCKHOLDERS EQUITY (CONTINUED)
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

	Common Stock		Non-redeemable Preferred Stock of Subsidiary	Additional Paid-in Capital	Accumulated Other Comprehensive Income	Deficit Accumulated During Development Stage	Total Shareholders' Equity
	Number	Amount					
Balance at December 31, 2004	36,535	34,362	—	21,760	1,243	(40,711)	16,654
Financing costs	—	(141)	—	—	—	—	(141)
Exercise of stock options	15	25	—	—	—	—	25
Stock options issued to consultants	—	—	—	276	—	—	276
July private placement	6,079	7,060	—	1,074	—	—	8,134
Net loss	—	—	—	—	—	(13,871)	(13,871)
Balance at December 31, 2005	42,629	41,306	—	23,110	1,243	(54,582)	11,077
Stock options issued to consultants	—	—	—	100	—	—	100
Stock options issued to employees	—	—	—	491	—	—	491
May private placement	7,753	5,218	—	822	—	—	6,040
Net loss	—	—	—	—	—	(16,440)	(16,440)
Balance at December 31, 2006	50,382	46,524	—	24,523	1,243	(71,022)	1,268
Stock options issued to consultants	—	—	—	59	—	—	59
Stock options issued to employees	—	—	—	2,263	—	—	2,263
February financing	75,759	17,842	—	5,379	—	—	23,221
Exercise of warrants	2,086	563	—	131	—	—	694
Net loss	—	—	—	—	—	(13,357)	(13,357)
Balance at December 31, 2007	128,227	64,929	—	32,355	1,243	(84,379)	14,148
Stock options issued to consultants	—	—	—	88	—	—	88
Stock options issued to employees	—	—	—	2,417	—	—	2,417
Net loss	—	—	—	—	—	(13,600)	(13,600)
Balance at December 31, 2008	128,227	64,929	—	34,860	1,243	(97,979)	3,053
Stock options issued to consultants	—	—	—	5	—	—	5
Stock options issued to employees	—	—	—	296	—	—	296
Net loss for quarter	—	—	—	—	—	(2,246)	(2,246)
Balance at March 31, 2009	128,227	64,929	—	35,161	1,243	(100,225)	1,108
Stock options issued to consultants	—	—	—	5	—	—	5
Stock options issued to employees	—	—	—	227	—	—	227
Net loss for quarter	—	—	—	—	—	(938)	(938)
Balance at June 30, 2009	<u>128,227</u>	<u>\$ 64,929</u>	<u>\$ —</u>	<u>\$ 35,393</u>	<u>\$ 1,243</u>	<u>\$ (101,163)</u>	<u>\$ 402</u>

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

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
NOTES TO UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

1. GOING CONCERN

Adherex Technologies Inc. (“Adherex”), together with its wholly owned subsidiaries Oxiquant, Inc. (“Oxiquant”) and Adherex, Inc., both Delaware corporations, and Cadherin Biomedical Inc. (“CBI”), a Canadian corporation, collectively referred to herein as the “Company,” is a development stage biopharmaceutical company focused on cancer therapeutics.

These unaudited interim consolidated financial statements have been prepared using generally accepted accounting principles (“GAAP”) in the United States (“U.S.”) of America that are applicable to a going concern which contemplates that Adherex Technologies Inc. will continue in operation for the foreseeable future and will be able to realize its assets and discharge its liabilities in the normal course of business.

The Company is a development stage company and during the six months ended June 30, 2009, incurred a net loss of \$3,184. At June 30, 2009, it had an accumulated deficit of \$101,163 and had experienced negative cash flows from operations since inception in the amount of \$76,034. At June 30, 2009, the Company had cash and cash equivalents of \$1,540, which based on management’s current plans, will only fund operations into December 2009. The Company continues to pursue various strategic alternatives, including, collaborations with other pharmaceutical and biotechnology companies, however if a strategic transaction is not completed or the Company does not otherwise obtain additional financial resources in the very near term, we might cease operations sooner than December 2009. The Company has also not been successful in obtaining additional financing since February 2007. These circumstances lend substantial doubt as to the ability of the Company to meet its obligations as they come due and, accordingly, the use of accounting principles applicable to a going concern may not be appropriate.

The Company’s ability to continue as a going concern is dependent on the raising of additional financial resources in the very near term. If the Company is unable to obtain adequate financial resources, it could be forced to cease operations. The Company’s management is considering all financial alternatives and seeking to raise additional funds for operations from current stockholders, other potential investors, corporate partners or other sources. This disclosure is not an offer to sell, nor a solicitation of an offer to buy the Company’s securities. While the Company is striving to achieve these plans, there is no assurance that such funding will be obtainable on favorable terms or at all.

These financial statements do not reflect the potentially material adjustments in the carrying values of assets and liabilities, the reported expenses, and the balance sheet classifications used, that would be necessary if the going concern assumption were not appropriate.

2. SIGNIFICANT ACCOUNTING POLICIES

Basis of presentation

The accompanying unaudited interim consolidated financial statements have been prepared in accordance with U.S. GAAP and are the responsibility of the Company’s management. The Company’s independent auditor has not performed a review of these financial statements. These financial statements do not include all of the information and notes required by U.S. GAAP for complete financial statements. Accordingly, these unaudited interim condensed consolidated financial statements should be read in conjunction with the Company’s audited financial statements and notes filed with the Securities and Exchange Commission (“SEC”) in the Company’s Annual Report on Form 10-K for the year ended December 31, 2008. Except as set out below, the Company’s accounting policies are consistent with those presented in the audited financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008 . These unaudited interim consolidated financial statements have been prepared in U.S. dollars.

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
NOTES TO UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

Use of estimates

The preparation of financial statements in conformity with 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 consolidated financial statements include all normal and recurring adjustments, considered necessary for the fair presentation of the Company's financial position at June 30, 2009, and to state fairly the results for the periods presented.

Cash and cash equivalents

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

The Company places its cash and cash equivalents in investments held by financial institutions in accordance with its investment policy designed to protect the principal investment. At June 30, 2009, the Company had \$558 in money market investments, which typically have minimal risk, \$581 in guaranteed investment certificates and \$401 in cash. The financial markets have been volatile resulting in concerns regarding the recoverability of money market investments. As a result, on September 19, 2008, the U.S. Treasury announced a Temporary Guarantee Program, which insures money market investments on a temporary basis. The Company's money market investments are insured by the U.S. Treasury's Temporary Guarantee Program. This program ensures that if a participating fund's share value declines to below one dollar and the fund is liquidated, the U.S. Treasury would cover any shortfall between the liquidated share price and one dollar. On March 31, 2009, the U.S. Treasury announced the program was extended until September 18, 2009. The Company has not experienced any loss or write down of its money market investments for the six-month period ended June 30, 2009 and 2008.

New accounting pronouncements adopted in the year

In May 2009, The Financial Accounting Standards Board ("FASB") issued Statement of Financial Accounting Standards ("SFAS") No. 165, "Subsequent Events" ("SFAS 165"), defines subsequent events as events or transactions that occur after the balance sheet date, but before the financial statements are issued. SFAS 165 identifies the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in its financial statements. SFAS 165 also provides guidance on the relevant disclosures that an entity should make about events or transactions that have occurred after the balance sheet date. SFAS 165 is effective on a prospective basis for interim and annual financial statements ending after June 15, 2009. As the guidance in SFAS 165 is largely consistent with the guidance previously addressed in auditing literature, the adoption of this standard did not have a material impact on the financial statements.

In December 2007, the Emerging Issue Task Force ("EITF") issued EITF No. 07-01, "Accounting for Collaborative Arrangement Related to the Development and Commercialization of Intellectual Property ("EITF 07-01"). EITF 07-01 defines the accounting for collaborations between participants. EITF 07-01 requires certain transactions between collaborators to be recorded in the statement of operations on either a gross or net basis within expense when certain characteristics exist in the collaborative agreement. EITF 07-01 did not have a material impact on the financial statements.

In December 2007, the FASB issued SFAS No. 141(R), "Business Combinations," ("SFAS 141(R)"), requires an acquiring company to measure all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at the fair value at the acquisition date. SFAS 141(R) establishes principles and requirements for how the acquirer: i) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree; ii) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and iii) determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The adoption of SFAS 141(R) did not have a material impact on the financial statements.

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
NOTES TO UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

In April 2009, the FASB issued FASB Staff Position (“FSP”) FAS No. 157-4, “Determining Fair Value When the Volume and Level of Activity for the Asset or Liability has Significantly Decrease and Identifying Transactions That Are Not Orderly” (“FSP FAS 157-4”). FSP FAS 157-4 provides guidance for estimating fair value in accordance with SFAS 157 “Fair Value Measurements” when the volume and level of activity for the asset or liability have significantly decreased. FSP FAS 157-4 provided additional authoritative guidance in determining whether a market is active or inactive and whether a transaction is distressed. The adoption of FSP FAS 157-4 did not have a material impact on the financial statements.

In April 2009, the FASB issued FSP FAS No. 115-2 and FAS 124-2 “Recognition and Presentation of Other-Than-Temporary Impairments” (“SFAS 115-2”). SFAS 115-2 amends current authoritative guidance to improve the presentation and disclosure of other-than-temporary impairments of debt and equity securities in the financial statements. SFAS 115-2 is effective for interim and annual reporting periods ending after June 15, 2009. The adoption of SFAS 115-2 did not have a material impact on the financial statements.

In April 2009, the FASB issued FSP FAS No. 107-1 and APB 28-1 “Interim Disclosures About Fair Value Instruments” (“FSP FAS 107-1”). FSP FAS 107-1 requires additional disclosure about fair value of financial instruments for interim reporting periods and annual financial statements. The adoption of FSP FAS 107-1 did not have a material impact on the financial statements.

3. RECENT ACCOUNTING PRONOUNCEMENTS

In June 2009, the FASB issued SFAS No. 168, “The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles, a replacement of FASB Statement No. 162” (“SFAS 168”), which establishes the FASB Accounting Standards Codification (the “Codification”) as the source of authoritative accounting principles recognized by the FASB to be applied in the preparation of financial statements in conformity with U.S. GAAP. SFAS 168 explicitly recognizes rules and interpretative release of the SEC under federal securities laws as authoritative U.S. GAAP. SFAS 168 is effective for interim and annual periods ending after September 15, 2009. Accordingly, the Company is required to adopt SFAS 168 on October 1, 2009. As the issuance of SFAS 168 and the Codification does not change U.S. GAAP, the adoption of this standard is not expected to have any impact on the Company’s consolidated financial statements.

In June 2009, the FASB issued SFAS No. 167, “Amendments to FASB Interpretation No. 46(R)” (“SFAS 167”), which amends FASB Interpretation No. 46(R), “Variable Interest Entities”, for determining whether an entity is a variable interest entity and requires an enterprise to perform an analysis to determine whether the enterprises’ variable interest or interest give it a controlling financial interest in a variable interest entity. SFAS 167 is effective for interim and annual periods beginning after November 15, 2009. Accordingly, the Company is required to adopt SFAS 167 beginning January 1, 2010. The Company is evaluating SFAS 167 and the adoption of this standard is not expected to have any material impact on the Company’s consolidated financial statements.

4. INVESTMENT TAX RECEIVABLE

The Company has written off \$133 of investment tax receivables during the first quarter ended March 31, 2009. After being notified by Canadian tax authorities that the Company’s claims relating to this tax receivable were being denied, the Company estimates that these amounts are no longer recoverable.

The \$133 was charged to research and development expense during the three month ended March 31, 2009 as the claims relate to certain research and development work being conducted in Canada.

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
NOTES TO UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

5. ASSETS HELD FOR SALE

In connection with the 75% reduction in the Company's employee headcount and limited financial resources, the Company had decided to list idle laboratory equipment, office furniture and other office equipment for sale as they are no longer required by the business. The Company determined this property met the criteria for "held for sale accounting" under SFAS No. 144 "Accounting for the Impairment or Disposal of Long-Lived Assets," ("SFAS 144") and have presented the assets separately on the face of the Unaudited Interim Consolidated Balance Sheet at June 30, 2009.

Under SFAS 144 an asset classified as held for sale shall be measured at the lower of its carrying value amount or the fair value less any cost to sell with any loss. Management judgment is required to assess the criteria required to meet the held for sale accounting requirements and the estimated fair value of the assets. At June 30, 2009, the Company determined the carrying values of the assets exceeded their fair value less cost to sell. Accordingly, the Company recorded a \$44 loss on impairment of assets for the six months ended June 30, 2009. During the second quarter ended June 30, 2009, the Company received \$24 from the sale of a portion of these assets. The Company expects the sale of these assets to be completed within a one year time period.

Management has also performed an impairment analysis under SFAS 144 and has determined that the leasehold inducements, consisting primarily of equipment and leasehold improvements, were impaired at June 30, 2009. At June 30, 2009, the Company determined the fair value of these leasehold inducements to be nil. Accordingly, the Company recorded a \$285 loss on impairment in the Unaudited Interim Consolidated Statement of Operations for the three and six months ended June 30, 2009.

6. STOCKHOLDERS' EQUITY

Warrants to purchase common stock

At June 30, 2009, the Company had the following warrants outstanding to purchase common stock priced in U.S. dollars with a weighted average exercise price of \$0.44 and a weighted average remaining life of 0.7 years:

Warrant Description	Number Outstanding at June 30, 2009	Exercise Price In U.S. Dollars	Expiration Date
Investor warrants	38,794	\$0.40	February 21, 2010
Investor warrants	2,326	\$0.97	May 7, 2010
	<u>41,120</u>		

Stock option plan

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

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

During the three-month period ended June 30, 2009 and 2008, the Company recognized total stock-based compensation expense of \$232 and \$441, respectively. During the six-month period ended June 30, 2009 and 2008, the Company recognized total stock-based compensation expense of \$533 and \$1,774, respectively.

ADHEREX TECHNOLOGIES INC.
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NOTES TO UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
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Valuation assumptions

There were no options granted in the six-month period ended June 30, 2009 and the options granted in the six-month period ended June 30, 2008 were estimated using the Black-Scholes option-pricing model, using the following weighted average assumptions: expected dividend 0%, risk-free interest rate of 3.15%, expected volatility 85% and a 7 year expected life.

Stock option activity

The following is a summary of option activity for the six-month period ended June 30, 2009 for stock options denominated in Canadian dollars:

	Number of Options	Weighted-average Exercise Price
Outstanding at December 31, 2008	2,773	CAD\$ 2.19
Granted	—	—
Exercised	—	—
Forfeited/cancelled/expired	(51)	CAD\$ 2.19
Outstanding at June 30, 2009	<u>2,722</u>	<u>CAD\$ 2.18</u>

The following is a summary of option activity for the six-month period ended June 30, 2009 for stock options denominated in U.S. dollars:

	Number of Options	Weighted-average Exercise Price
Outstanding at December 31, 2008	15,633	\$ 0.54
Granted	—	—
Exercised	—	—
Forfeited/cancelled/expired	(306)	0.37
Outstanding at June 30, 2009	<u>15,327</u>	<u>\$ 0.46</u>

7. SUBSEQUENT EVENTS

Board and Management Changes

On July 7, 2009, the Company entered into a separation agreement with Dr. William P. Peters its then Chief Executive Officer. As part of the termination agreement the Company paid Dr. Peters one month severance. In addition, on July 7, 2009, Dr. Donald W. Kufe, Mr. Michael G. Martin, Dr. Fred H. Mermelstein, Dr. Robin J. Norris, Dr. Peter Morand and Dr. William P. Peters, resigned as directors of the Company. In addition, on July 10, 2009, the Company terminated the employment of Mr. D. Scott Murray and does not expect to pay any material severance amount to Mr. Murray.

On July 7, 2009, the Board appointed Mr. Robert Butts to serve as Chairman of the Board, Mr. Rosty Raykov to serve as a director and Chief Executive Officer of the Company, Mr. Robert Andrade to serve as a director and Vice President of the Company, and Dr. Thomas Spector (“Dr. Spector”) to serve as Chief Scientific Officer of the Company. The Company has not entered into any employment contracts with Mr. Raykov, Mr. Andrade or Dr. Spector.

Mr. Butts is a Co-Founder and Portfolio Manager of Southpoint Capital Advisory LP, which owns 41,500 common shares of the Company, representing approximately 32% of the issued and outstanding common shares, and beneficially owns approximately 42% (assuming full exercise of 20,800 warrants issued to Southpoint Capital).

ADHEREX TECHNOLOGIES INC.
(A DEVELOPMENT STAGE COMPANY)
NOTES TO UNAUDITED INTERIM CONSOLIDATED FINANCIAL STATEMENTS (CONTINUED)
(U.S. DOLLARS AND SHARES IN THOUSANDS, EXCEPT PER SHARE AMOUNTS)

On September 4, 2009, Jim Klein, the Company's Chief Financial Officer, resigned from the Company. The Company appointed Robert Andrade as its new Chief Financial Officer subsequent to Jim Klein's resignation.

Change in Auditors

On September 23, 2009, the Company announced the appointment of Deloitte & Touche LLP as the Company's new auditor replacing PricewaterhouseCoopers LLP ("PWC"). The resignation of PWC was not related to any disagreements with Company management over the Company's audited financial statements.

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

CAUTIONARY STATEMENT

The discussion below contains forward-looking statements regarding our financial condition and our results of operations that are based upon our unaudited interim consolidated financial statements, which have been prepared in accordance with generally accounting principles, or GAAP in the United States ("U.S.") and have been prepared by and are the responsibility of the Company's management. The Company's independent auditor has not performed a review of these financial statements. The preparation of these financial statements requires our management to make estimates and judgments that affect the reported amounts of assets, liabilities, income and expenses, and related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis. Our estimates are based on historical experience and on various other assumptions that we believe to be reasonable.

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

Overview

On July 7, 2009, we announced that we intended to focus our remaining financial resources on the development of oral eniluracil. We have terminated our eniluracil study using our topical formulation and will focus our resources on the development of a redesigned study combining oral eniluracil and 5-fluorouracil, or 5-FU, targeting anti-cancer indications. After a careful evaluation of the data from the prior GlaxoSmithKline, or GSK, studies, data from our studies and other studies using eniluracil, we believe we can design and implement a Phase II study with eniluracil within the next six to nine months assuming we have adequate financial resources to conduct such a study. We are currently conducting an evaluation of ADH-1 and STS. Until that evaluation is complete, we will continue our Phase III studies with STS for both the International Childhood Liver Tumour Strategy Group, known as SIOPEL, and the Children's Oncology Group, or COG.

In addition, on July 7, 2009, we also entered into a separation agreement with Dr. William P. Peters, our then Chief Executive Officer. As part of the termination agreement we paid Dr. Peters one month severance. In addition, on July 7, 2009, Dr. Donald W. Kufe, Mr. Michael G. Martin, Dr. Fred H. Mermelstein, Dr. Robin J. Norris, Dr. Peter Morand and Dr. William P. Peters resigned as directors of the Company. In addition, on July 10, 2009, we terminated the employment of Mr. D. Scott Murray, or Mr. Murray, and do not expect to pay any material severance amount to Mr. Murray.

On July 7, 2009, the Board of Directors appointed Mr. Robert Butts to serve as Chairman of the Board, Mr. Rosty Raykov to serve as a director and Chief Executive Officer of the Company, Mr. Robert Andrade to serve as a director and Vice President of the Company, and Dr. Thomas Spector to serve as Chief Scientific Officer of the Company. Dr. Spector is the principal inventor of eniluracil and its combination with 5-FU. Dr. Spector will be responsible for the clinical development of eniluracil.

Mr. Butts is a Co-Founder and Portfolio Manager of Southpoint Capital Advisory LP, which owns 41.5 million common shares of the Company, representing approximately 32% of the issued and outstanding common shares, and beneficially owns approximately 42% (assuming full exercise of 20.8 million warrants issued to Southpoint Capital).

On September 4, 2009, Jim Klein, the Company's Chief Financial Officer, resigned from the Company. The Company appointed Robert Andrade as its new Chief Financial Officer subsequent to Jim Klein's resignation.

As a result of our limited financial resources and the decline in the availability of further capital, we plan to focus our activities on the development of eniluracil. Accordingly, we have postponed or terminated many of our previously planned or ongoing clinical development programs as outlined below. We believe that our current cash and cash equivalents will be sufficient to satisfy our anticipated capital requirements into December 2009. The members of the Board of Directors have also agreed to continue to serve without further compensation. We continue to pursue various strategic alternatives, including collaborations with other pharmaceutical and biotechnology companies. However, if a strategic transaction or other source of further financial resources cannot be secured in the very near term, we might cease operations sooner than December 2009. As a result, the audit opinion contained in our Annual Report filed on Form 10 - K included a notation related to the uncertainty of our ability to continue as a going concern. Our projections of our capital requirements are subject to substantial uncertainty. Additional capital may be required earlier than December 2009 or more capital than we had anticipated thereafter may be required. To finance our operations beyond December 2009, or earlier if necessary, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio or from other sources. Given current economic conditions, we might not be able to raise the necessary capital or such funding may not be available on acceptable terms. If we cannot obtain adequate funding in the very near term, we might be required to further delay, scale back or eliminate certain research and development studies, consider business combinations or even shut down some, or all, of our operations.

We are a biopharmaceutical company focused on cancer therapeutics with three products in our portfolio, namely eniluracil, ADH-1 and sodium thiosulfate (STS).

Eniluracil, an oral dihydropyrimidine dehydrogenase, or DPD, inactivating inhibitor is being developed to improve the tolerability and effectiveness of 5-FU, one of the most widely used oncology drugs in the world. We believe when eniluracil is properly dosed, it might provide patients with an effective anti-cancer treatment that will have a better safety profile than current 5-FU treatments such as capecitabine, or Xeloda®. Xeloda frequently causes hand-foot syndrome, an adverse event that can severely affect a patient's hand and/or feet. As a result of hand-foot syndrome, many patients must reduce, interrupt, or discontinue the dose of Xeloda. Accordingly, the effectiveness of their anti-cancer treatment may be compromised. Because eniluracil minimizes the occurrence of hand-foot syndrome patients might be able to receive a more effective dose of 5-FU in the eniluracil regimen.

We are evaluating a study design for a Phase II study in which we will dose patients with eniluracil, 5-FU and leucovorin. Our prior eniluracil studies, have shown that the dose of eniluracil was too low and consequently provided inadequate inactivation of DPD. We plan to increase the dose of eniluracil and also include leucovorin in our planned clinical trial. Leucovorin potentiates the anticancer activity of 5-FU and is well tolerated in patients treated with both eniluracil and 5FU. Leucovorin is uniquely appropriate to eniluracil regimens because it greatly reduces the variability of 5-FU dosing. We are evaluating cancer disease targets for our planned Phase II trial and are currently considering colorectal and breast cancer, where Xeloda is indicated. The combination of eniluracil and 5-FU has been shown to be active and well tolerated against these diseases. However, the previous studies used eniluracil in a ten to one ratio to 5-FU. Because such high ratios of eniluracil to 5-FU were found to decrease the antitumor activity in laboratory animals, our planned study will use a strategy that adequately inactivates DPD and does not have high levels of eniluracil present when 5-FU is administered. We expect to design and commence these studies within the next six to nine months assuming we have adequate financial resources to conduct such a study. We will also solicit the assistance of certain key opinion leaders for the design of these studies.

ADH-1 is a small peptide molecule that that selectively targets N-cadherin, a protein present on certain tumor cells and the blood vessels of solid tumors. We have completed enrollment of patients in the Phase I/II study combining ADH-1with regionally-infused melphalan for the treatment of melanoma. Some patients in this study

continue to be followed in this study and we have no plans to commence any further studies with ADH-1 until we are able to secure adequate financial resources. We are evaluating ADH-1 and other related small molecules and once the review is complete, we will announce future plans, if any, with ADH-1. During this review, we will also consider exploring strategic transactions with ADH-1.

We continue to enroll patients in our Phase III trials of STS with the SIOPEL and the COG. We are also evaluating STS and will explore all options, including any strategic transactions.

Our current prioritization initiative focuses primarily on our clinical activities, and preclinical support will be limited only to those activities necessary to support the ongoing clinical programs. Our preclinical portfolio includes: (1) novel peptides and small chemical molecule successors to ADH-1; (2) peptides and small molecules targeting the cadherin-mediated metastatic spread of some cancers; and (3) peptides that combine both angiolytic and anti-angiogenic properties.

In addition to our current development efforts, we continue to pursue collaborations with other pharmaceutical and biotechnology companies, governmental agencies, academic or other corporate collaborators with respect to these molecules. Some of these preclinical molecules are currently being tested under agreements with third parties that may help to advance these products into future clinical development, either by us or under investigator-initiated studies.

The trading of our common stock in the U.S. must now be conducted in the over-the-counter markets, on the pink sheets. Our common stock continues to trade on the Toronto Stock Exchange, or TSX. The TSX also has continued listing standards, including minimum market capitalization and other requirements, that we might not meet in the future, particularly if the price of our common stock does not increase or we are unable to raise capital to continue our operations.

We have not received and do not expect to have significant revenues from our product candidates until we are either able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with up-front payments, licensing fees, milestone payments, royalties or other revenue. We experienced net losses of approximately \$3.2 million for the six months ended June 30, 2009, \$13.6 million for the year ended December 31, 2008, \$13.4 million for the fiscal year ended December 31, 2007, and \$16.4 million for the fiscal year ended December 31, 2006. As of June 30, 2009, our deficit accumulated during development stage was approximately \$101.2 million.

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

Results of Operations

Three months ended June 30, 2009 versus three months ended June 30, 2008:

In thousands of U.S. Dollars	Three Months Ended June 30, 2009	%	Three Months Ended June 30, 2008	%	Change
Revenue	\$ —		\$ —		\$ —
Operating expenses:					
Research and development	650	68 %	2,572	73 %	(1,922)
General and administration	311	32 %	939	27 %	(628)
Total operating expenses	<u>961</u>	<u>100 %</u>	<u>3,511</u>	<u>100 %</u>	<u>(2,550)</u>
Loss from operations	<u>(961)</u>		<u>(3,511)</u>		<u>2,550</u>
Loss on impairment of assets held for sale and leasehold inducements	11		—		11
Other income	11		—		11
Interest income	1		69		(68)
Net loss and total comprehensive loss	<u>\$ (938)</u>		<u>\$ (3,442)</u>		<u>\$ (2,504)</u>

- Total operating expense decreased significantly in the three months ended June 30, 2009, as compared to the same period in 2008 primarily due to a significant decrease in our overall clinical development studies and reduction in our employee headcount effective April 2009. Operating expense includes non-cash stock compensation expense of \$0.2 million in the three months ended June 30, 2009 and \$0.4 million for the same period in 2008. We are currently reviewing all expenditures and contracts in an effort to continue to reduce our overall cost structure and expect our operating expense to decrease in future months until we commence our planned studies with eniluracil and we obtain adequate funding.
- The decrease in interest income in the three months ended June 30, 2009, as compared to the same period in 2008, is due to less cash on hand due to funding our operations during the three months ended June 30, 2009, as compared to the same period in 2008.

Six months ended June 30, 2009 versus six months ended June 30, 2008:

In thousands of U.S. Dollars	Six Months Ended June 30, 2009	%	Six Months Ended June 30, 2008	%	Change
Revenue	\$ —		\$ —		\$ —
Operating expenses:					
Research and development	1,929	66 %	5,947	75 %	(4,018)
General and administration	984	34 %	2,000	25 %	(1,016)
Total operating expenses	<u>2,913</u>	<u>100 %</u>	<u>7,947</u>	<u>100 %</u>	<u>(5,034)</u>
Loss from operations	<u>(2,913)</u>		<u>(7,947)</u>		<u>5,034</u>
Loss on impairment of assets held for sale and leasehold inducements	(329)		—		(329)
Other income	11		—		11
Interest income	47		201		(154)
Net loss and total comprehensive loss	<u>\$ (3,184)</u>		<u>\$ (7,746)</u>		<u>\$ (4,562)</u>

- Total operating expense decreased significantly in the six months ended June 30, 2009, as compared to the same period in 2008 primarily due to a significant decrease in our overall clinical development studies and reduction in our employee headcount effective April 2009. Operating expense includes

non-cash stock compensation expense of \$0.5 million in the six months ended June 30, 2009 and \$1.8 million for the same period in 2008.

- We recorded a loss on impairment of assets related to the write-down of certain assets value held for sale and leasehold improvements for the six months ended June 30, 2009. No such impairment was recorded in 2008.
- The decrease in interest income in the six months ended June 30, 2009, as compared to the same period in 2008, is due to less cash on hand due to funding our operations during the six months ended June 30, 2009, as compared to the same period in 2008.

Quarterly Information

The following table presents selected consolidated financial data for each of the last eight quarters through June 30, 2009, as prepared under U.S. GAAP (U.S. dollars in thousands, except per share information):

Period	Net Loss for the Period	Basic and Diluted Net Loss per Common Share
September 30, 2007	\$ (3,202)	\$ (0.02)
December 31, 2007	\$ (3,008)	\$ (0.02)
March 31, 2008	\$ (4,304)	\$ (0.03)
June 30, 2008	\$ (3,442)	\$ (0.03)
September 30, 2008	\$ (3,244)	\$ (0.03)
December 31, 2008	\$ (2,610)	\$ (0.02)
March 31, 2009	\$ (2,246)	\$ (0.02)
June 30, 2009	\$ (938)	\$ (0.01)

Liquidity and Capital Resources

In thousands of U.S. dollars	June 30, 2009	December 31, 2008
Selected Asset and Liability Data:		
Cash and cash equivalents	\$ 1,540	\$ 5,349
Working capital	954	3,209
Selected Stockholders' Equity Data:		
Common stock	\$ 64,929	\$ 64,929
Deficit accumulated during the development stage	(101,163)	(97,979)
Total stockholders' equity	402	3,053

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 June 30, 2009. We have incurred net losses and negative cash flow from operations each year, and we had an accumulated deficit of approximately \$101.2 million at June 30, 2009. We have not generated any revenues to date through the sale of products. We do not expect to have significant revenues or income, other than interest income, until we are able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with up-front payments, licensing fees, milestone payments, royalties or other payments.

The net cash flow used in operating activities for the six months ended June 30, 2009 was approximately \$3.8 million, as compared to \$5.8 million during the same period in 2008. This decrease is due to a decrease in our overall clinical activities and our reduction of headcount during the six months ended June 30, 2009, as compared to the same period in 2008. We are currently evaluating all expenditures and contracts and expect to continue to reduce our overall cost structure over the next several months.

At June 30, 2009, our working capital decreased by approximately \$2.3 million from December 31, 2008 primarily due to funding research and development activities and general corporate operations.

We believe that our current cash and cash equivalents of \$1.5 million will be sufficient to satisfy our anticipated capital requirements into December 2009, in part because of our 75% headcount reduction that was effective April 30, 2009. In July 2009, we terminated the employment of our Chief Executive Officer for one month severance and we terminated another executive officer thereby reducing our operating expense. We also terminated our topical eniluracil program thereby reducing our operating expense. We continue to pursue various strategic alternatives, including, collaborations with other pharmaceutical and biotechnology companies and we believe that our current cash and cash equivalents will be sufficient to satisfy our currently anticipated capital requirements into December 2009. However, if a strategic transaction or other source of further financial resources cannot be secured in the very near term, we might cease operations sooner than December 2009. 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: our ability to obtain additional financial resources; our ability to enter into collaborations that provide us with up-front payments, milestones or other payments; results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; unfavorable toxicology in our clinical programs, our drug substance requirements to support clinical programs; change in the focus, direction, or costs of our research and development programs; headcount expense; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; our business development activities; new regulatory requirements implemented by regulatory authorities; the timing and outcome of any regulatory review process; and commercialization activities, if any.

To finance our operations beyond December 2009, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. The recent turmoil in the worldwide financial markets has led to an overall tightening in the credit markets and a significant decline in the availability of capital, especially for small biotechnology companies which are generally viewed as higher risk investments. Given the current economic conditions, there is serious risk that we might not be able to raise the necessary capital or such funding may not be available on acceptable terms. We can therefore make no assurance that we will be able to raise the necessary capital to continue our operations.

Outstanding Share Information

The outstanding share data for our company as of June 30, 2009 (in thousands):

	June 30, 2009
Common shares	128,227
Warrants	41,120
Stock options	18,049
Total	<u>187,396</u>

Financial Instruments

At June 30, 2009, we held cash and cash equivalents of \$1.5 million, which consisted primarily of highly liquid money market funds, guaranteed investment certificates and cash.

We invest cash and cash equivalents in high credit quality investments held by financial institutions in accordance with our investment policy designed to protect the principal investment. At June 30, 2009, we had \$0.6 million in money market investments, which typically have minimal risk, \$0.6 million in guaranteed investments and \$0.3 million in cash. The financial markets have been volatile resulting in concerns regarding the recoverability of money market investments. As a result, on September 19, 2008 the U.S. Treasury announced a Temporary Guarantee Program which insures money market investments on a temporary basis. Our money market investments are insured by the U.S. Treasury's Temporary Guarantee Program. The program ensures that if a participating fund's share value declines to below one dollar and the fund is liquidated, the U.S. Treasury would cover any shortfall between the liquidated share price and one dollar. On March 31, 2009, the U.S. Treasury announced the program was extended until September 18, 2009. We have not experienced any loss or write down of our money market investments for the six-month period ended June 30, 2009 and 2008.

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

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

We classify investments with original maturities at the date of purchase greater than three months which mature at or less than twelve months as current. We carry investments at their fair value with unrealized gains and losses included in other comprehensive income (loss); however we have not held any instruments that were classified as short term investments during the periods presented.

Off-Balance Sheet Arrangements

Since our inception, we have not had any material off-balance sheet arrangements. In addition, we do not engage in trading activities involving non-exchange trade contracts. As such, we are not materially exposed to any financing, liquidity, market or credit risk that could arise if we had engaged in such activities.

Contractual Obligations and Commitments

Since our inception, inflation has not had a material impact on our operations. We had no material commitments for capital expenses as of June 30, 2009.

The following table represents our contractual obligations and commitments at June 30, 2009 (in thousands of U.S. dollars):

	Less than 1 year	1-3 years	4-5 years	More than 5 years	Total
Englert Lease (1)	\$ 104	\$ 80	\$ —	\$ —	\$ 184
Maplewood Lease (2)	372	1,046	—	—	1,418
Clinical trial and drug related commitments (3)	50	25	—	—	75
McGill License (4)	805	935	—	—	1,740
OHSU License (5)	—	—	—	—	—
GSK License (6)	—	—	—	—	—
Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital License (7)	—	—	—	—	—
Total	<u>\$ 1,331</u>	<u>\$ 2,086</u>	<u>\$ —</u>	<u>\$ —</u>	<u>\$ 3,417</u>

- (1) In April 2004, we entered into a lease for facilities in Durham, North Carolina. Amounts shown assume the maximum amounts due under the lease. In July 2008, we entered into an agreement with another company to sublease this facility.
- (2) In August 2005, we entered into a lease for new office and laboratory facilities in Durham, North Carolina. Amounts shown assume the maximum amounts due under the lease.
- (3) Commitments to our third party vendors relating to clinical studies, drug substance and stability studies. If we terminate these studies early, we might not pay the amounts presented in the table above.
- (4) Amounts shown in the table represent the maximum amounts for additional mutually agreed upon research support. Under our agreement, payments may be deferred in certain circumstances. Due to our limited financial resources it is unlikely that we will be able to support further research under this agreement in the amounts and timeframes presented in the table above. Royalty payments, which are contingent on sales, are

not included. If we are unable to pay McMill amounts due under this agreement, McGill could terminate our license agreement for ADH-1.

- (5) Under the license agreement with OHSU for STS, we are required to pay specified amounts in the event that we complete certain Adherex-initiated clinical trials. For example, upon the successful completion of a Phase III clinical trial, we may become responsible for a payment to OHSU of up to \$0.5 million. In addition, under the license agreement upon the first commercial sale of STS we may become responsible for another payment to OHSU of up to \$0.3 million. Royalty payments, which are contingent on sales, are not included.
- (6) Under the terms of the Development and License Agreement with GSK, if we file a New Drug Application, or NDA, with the Food and Drug Administration, or the FDA, we may be required to pay a development milestone 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 initial approved indication, plus double-digit royalties based on annual net sales. We may also be required to pay up to \$15.0 million to GSK for each FDA-approved indication. Royalty and milestone payments that we may be required to pay, which are contingent on sales or progress of clinical trials, are not included.
- (7) In May 2008, we completed a license agreement with the Netherlands Cancer Institute - Antoni van Leeuwenhoek Hospital for an option to the exclusive use of data from a completed Phase III trial with STS to prevent hearing loss in adults with head and neck cancer. We have elected not to pursue this agreement and will not pay any future amounts under this agreement.

Research and Development

Our research and development efforts have been focused on the development of cancer 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 and major development issues are presented to the members of our Scientific and Clinical Advisory Board for discussion and review.

Research and development expenses totaled \$1.9 million and \$5.9 million for the six months ended June 30, 2009 and 2008, respectively.

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

Critical Accounting Policies and Estimates

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as of 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.

Except as set out below our accounting policies are consistent with those presented in our annual consolidated financial statements included in our Annual Report on Form 10-K for the year ended December 31, 2008.

New accounting pronouncements adopted in the year

In May 2009, The Financial Accounting Standards Board (“FASB”) issued Statement of Financial Accounting Standards (“SFAS”) No. 165, “Subsequent Events” (“SFAS 165”), defines subsequent events as events or transactions that occur after the balance sheet date, but before the financial statements are issued. SFAS 165 identifies the circumstances under which an entity should recognize events or transactions occurring after the balance sheet date in our financial statements. SFAS 165 also provides guidance on the relevant disclosures that an entity should make about events or transactions that have occurred after the balance sheet date. SFAS 165 is effective on a prospective basis for interim and annual financial statements ending after June 15, 2009. As the guidance in SFAS 165 is largely consistent with the guidance previously addressed in auditing literature, the adoption of this standard did not have a material impact on our financial statements.

In December 2007, the Emerging Issue Task Force, or EITF, issued EITF No. 07-01, “Accounting for Collaborative Arrangement Related to the Development and Commercialization of Intellectual Property”, or EITF 07-01. EITF 07-01 defines the accounting for collaborations between participants. EITF 07-01 requires certain transactions between collaborators to be recorded in the statement of operations on either a gross or net basis within expense when certain characteristics exist in the collaborative agreement. EITF 07-01 did not have a material impact on our financial statements.

In December 2007, the FASB issued SFAS No. 141(R), “Business Combinations,” or SFAS 141(R), requires an acquiring company to measure all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at the fair value at the acquisition date. SFAS 141(R) establishes principles and requirements for how the acquirer: i) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree; ii) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and iii) determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The adoption of SFAS 141 (R) did not have a material impact on our financial statements.

In April 2009, the FASB issued FASB Staff Position, or FSP, FAS No. 157-4, “Determining Fair Value When the Volume and Level of Activity for the Asset or Liability has Significantly Decrease and Identifying Transactions That Are Not Orderly,” or FSP FAS 157-4. FSP FAS 157-4 provides guidance for estimating fair value in accordance with SFAS 157 “Fair Value Measurements” when the volume and level of activity for the asset or liability have significantly decreased. FSP FAS 157-4 provided additional authoritative guidance in determining whether a market is active or inactive and whether a transaction is distressed. The adoption of FSP FAS 157-4 did not have a material impact on our financial statements.

In April 2009, the FASB issued SFAS No. 115-2 and FAS 124-2 “Recognition and Presentation of Other-Than-Temporary Impairments,” or SFAS 115-2. SFAS 115-2 amends current authoritative guidance to improve the presentation and disclosure of other-than-temporary impairments of debt and equity securities in the financial statements. The adoption of SFAS 115-2 did not have a material impact on our financial statements.

In April 2009, the FASB issued FSP FAS No. 107-1 and APB 28-1 “Interim Disclosures About Fair Value Instruments,” or FSP FAS 107-1. FSP FAS 107-1 requires additional disclosure about fair value of financial instruments for interim reporting periods and annual financial statements. The adoption of FSP FAS 107-1 did not have a material impact on the financial statements.

Recent Accounting Pronouncements

In June 2009, the FASB issued SFAS No. 168, “The FASB Accounting Standards Codification and the Hierarchy of Generally Accepted Accounting Principles, a replacement of FASB Statement No. 162” (“SFAS 168”), which establishes the FASB Accounting Standards Codification (the “Codification”) as the source of authoritative accounting principles recognized by the FASB to be applied in the preparation of financial statements in conformity with U.S. GAAP. SFAS 168 explicitly recognizes rules and interpretative release of the SEC under federal securities laws as authoritative U.S. GAAP. SFAS 168 is effective for interim and annual periods ending after September 15, 2009. Accordingly, we are required to adopt SFAS 168 on October 1, 2009. As the issuance of SFAS 168 and the Codification does not change U.S. GAAP, the adoption of this standard is not expected to have any impact on our financial statements.

In June 2009, the FASB issued SFAS No. 167, "Amendments to FASB Interpretation No. 46(R)" ("SFAS 167"), which amends FASB Interpretation No. 46(R), "Variable Interest Entities", for determining whether an entity is a variable interest entity and requires an enterprise to perform an analysis to determine whether the enterprises' variable interest or interest give it a controlling financial interest in a variable interest entity. SFAS 167 is effective for interim and annual periods beginning after November 15, 2009. Accordingly, we are required to adopt SFAS 167 beginning January 1, 2010. We are evaluating SFAS 167 and the adoption of this standard is not expected to have any material impact on our consolidated financial statements.

Item 3. Quantitative and Qualitative Disclosures about Market Risk

Money Market Investments

We are subject to increased risk associated with our cash and cash equivalents due to the recent bank and financial institution failures in the U.S. We maintain an investment portfolio consisting of U.S. or Canadian obligations and bank securities and money market investments in compliance with our investment policy. We do not hold any mortgaged-backed investments in our investment portfolio. 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.

At June 30, 2009, we had \$0.6 million in money market investments which typically have minimal risk. The financial markets have been volatile resulting in concerns regarding the recoverability of money market investments. As a result, on September 19, 2008 the U.S. Treasury announced a Temporary Guarantee Program which insures money market investments on a temporary basis. Our money market investments are insured by the U.S. Treasury's Temporary Guarantee Program. The program ensures that if a participating fund's share value declines to below one dollar and the fund is liquidated, the U.S. Treasury would cover any shortfall between the liquidated share price and one dollar. On March 31, 2009, the U.S. Treasury announced the program was extended until September 18, 2009. We have not experienced any loss or write down of our money market investments for the six-month period ended June 30, 2009 and 2008.

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. Our risk associated with fluctuating interest rates on our investments is minimal and not significant to the results of operations. We currently do not use interest rate derivative instruments to manage exposure to interest rate changes. As the main purpose is research and development, we have chosen to avoid investments of a trade or speculative nature.

Foreign Currency Exposure

We are subject to foreign currency risks as we conduct certain clinical development activities in Canada, the United Kingdom, 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 other corporate obligations. At June 30, 2009 we held approximately \$0.6 million in Canadian dollars. We monitor our 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 or the Exchange Act) as of June 30, 2009. 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 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 reasonably foresee at this time. Also, the risks that we now foresee might affect us to a greater or different degree than currently expected. There are a number of important factors that could cause our actual results to differ materially from those expressed or implied by any of our forward-looking statements in this report. These factors include, without limitation, the risk factors listed below and other factors presented throughout this report and any other documents previously filed by us with the SEC and documents filed on SEDAR in Canada.

Risks Related to Our Business

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

We believe that our current cash and cash equivalents will only be sufficient to satisfy our anticipated capital requirements into December 2009. The audit opinion contained our Annual Report filed on Form 10-K for the fiscal year ended December 31, 2008 included a notation related to the uncertainty of our ability to continue as a going concern. The current conditions in worldwide financial markets make fund-raising for small biotechnology companies like us very difficult. We continue to pursue various strategic alternatives, including collaborations with other pharmaceutical and biotechnology companies however, if a strategic transaction or other source of further financial resources cannot be secured in the very near term, we might cease operations sooner than December 2009. Our projections of our capital requirements into December 2009 and beyond are subject to substantial uncertainty. Our current and future working capital requirements may change depending upon numerous factors, including: our ability to obtain additional financial resources; our ability to enter into collaborations that provide us with funding, up-front payments, milestones or other payments; results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; unfavorable toxicology in our clinical programs; our drug substance requirements to support clinical programs; changes in the focus, direction, or costs of our research and development programs; employee related expense; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; our business development activities; new regulatory requirements implemented by regulatory authorities; the timing and outcome of any regulatory review process; and our commercialization activities, if any. Any such change could mean additional capital may be required earlier than December 2009 or more capital than we had anticipated thereafter may be required. To finance our operations beyond December 2009, or earlier if necessary, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. Given current market conditions, there is a serious risk that we might not be able to raise the necessary capital or such funding may not be available on favorable terms or at all. If we cannot obtain adequate funding in the very near term, we might be required to delay, scale back or eliminate certain research and development studies, consider business combinations or shut down some, or all of our operations.

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

To date, we have been engaged primarily in research and development activities. We have had no revenues through the sale of our products, and we do not expect to have significant revenues until we are able to either sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with up-front payments, licensing fees, milestone payments, royalties or other revenue. We have incurred significant operating losses every year since our inception on September 3, 1996. We experienced net losses of approximately \$3.2 million for the six months ended June 30, 2009, \$13.6 million for the year ended December 31, 2008, \$13.4 million for the fiscal year ended December 31, 2007, and \$16.4 million for the fiscal year ended December 31, 2006. At June 30, 2009, we had an accumulated deficit of approximately \$101.2 million. We anticipate incurring substantial additional losses due to the need to spend substantial amounts on our current clinical trials, anticipated research and development activities, and general and administrative expenses, among other factors. We have not commercially introduced any product and our product candidates are in varying stages of development and testing.

Our ability to attain profitability will depend upon our ability to fund and 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.

We have experienced significant management turnover and might not be able to recruit and retain the experienced personnel we need to compete in the drug discovery and development industry.

Our future success depends on the personal efforts and abilities of the principal members of our senior management and scientific staff to provide strategic direction, develop business, manage our operations, and maintain a cohesive and stable work environment. Our Chief Executive Officer and General Counsel both left the Company in July 2009, as did a number of our directors. Also, our Chief Financial Officer left the Company in September 2009. We retained three new executives at that time, so their integration into our company has been and will continue to be critical to our success. Our executives and key personnel might not stay with the Company in light of our cash position and recent turnover in personnel, and the recent and any further departures could have a material adverse on our business."

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 and development collaboration arrangements with academic institutions and other third party collaborators, including our agreement for eniluracil with GSK, a general collaboration agreement with McGill for ADH-1 and other related compounds, and an exclusive worldwide license from OHSU for STS.

The agreements with McGill and OHSU are terminable by either party in the event of an uncured breach by the other party. We may also terminate our agreement with McGill and OHSU at any time upon prior written notice of specified durations to the licensor. Termination of any of our collaborative arrangements could materially adversely affect our business. For example, if we are unable to make the appropriate payments under these agreements, the licensor might terminate the agreement which might have a material adverse impact. 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 of the U.S. National Cancer Institute's Division of Cancer Treatment and Diagnosis, or NCI, for Level III collaboration for the clinical development of our lead biotechnology compound, ADH-1. In addition, we have a limited supply of drug substance of ADH-1 thereby limiting the number of potential studies the NCI can conduct. The NCI has no obligation to sponsor future clinical trials of ADH-1 or perform any preclinical work for us and may terminate the collaboration at any time, as may we. To date, the NCI has not commenced any clinical studies using ADH-1. 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 up-front payments, licensing fees, milestone payments, royalties or otherwise. We may not be successful in maintaining current collaborations or establishing any future collaborations and any collaborations we have or may establish may not lead to the successful development of our product candidates.

Since we conduct a significant portion of our 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.

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

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

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

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

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

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

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

- lack of funding;
- the drug is not effective;
- patients experience severe side effects during treatment;
- appropriate patients do not enroll in the studies at the rate expected;
- drug supplies are not sufficient to treat the patients in the studies; or

- we decide to modify the drug during testing.

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

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

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

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

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

We do not presently have the financial or human resources internally to complete Phase III trials for any of our lead product candidates. We are currently developing STS in Phase III trials in collaboration with SIOPEL and COG. SIOPEL and COG may not conduct or complete the clinical trials with STS as currently planned. Such collaborators might not commit sufficient resources to the development of our product candidates, which may lead to significant delays. We have already experienced significant delays in the activation of the COG trial and subsequent accrual of patients into the COG and SIOPEL clinical trials. We may not be able to independently develop or conduct such trials ourselves. We continue to seek a licensing or funding partner for the further development of one or all of our product candidates. If a partner for one or all of these technologies is not found, we may not be able to further advance these products. If a partner is found, the financial terms that they propose may not be acceptable to us.

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

We may expand our products and capabilities, and therefore may seek mergers, acquisitions or other business arrangements to do so. Mergers and 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 merged or acquired companies;
- diverting our management's attention away from other business concerns;

- the additional expense of the transaction;
- the generation of shareholder lawsuits;
- 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 merger or 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 the companies and their personnel effectively. We might not be able to make the combination of our business with that of acquired businesses or companies work or be successful. Furthermore, the development or expansion of our business or any acquired business or companies may require a substantial capital investment by us. We may not have the necessary funds or they might not be available to us on acceptable terms or at all. We may also seek to raise the necessary funds by selling shares of our stock, which could dilute current stockholder's ownership interest in our company.

If 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 or maintain 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 those of our collaborators, to obtain patent protection or licenses to patents, maintain trade secret protection and operate without infringing on the rights of third parties. Although we have successfully pursued patent applications in the past, it is possible that:

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

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

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

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

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

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

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

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

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

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

We plan to continue to rely on contract manufacturers for the foreseeable future to produce quantities of products and substances necessary for research and development, preclinical trials, human clinical trials and product commercialization, and to perform their obligations in a timely manner and in accordance with applicable government regulations. If we develop any products with commercial potential, we will need to develop the facilities to independently manufacture such products or secure arrangements with third parties to manufacture them. We may not be able to independently develop manufacturing capabilities or obtain favorable terms for the manufacture of our products. While we intend to contract for the commercial manufacture of our product candidates,

we may not be able to identify and qualify contractors or obtain favorable contracting terms. We or our contract manufacturers may also fail to meet required manufacturing standards, which could result in delays or failures in product delivery, increased costs, injury or death to patients, product recalls or withdrawals and other problems that could significantly hurt our business. We intend to maintain a second source for back-up commercial manufacturing, wherever feasible. However, if a replacement to our future internal or contract manufacturers were required, the ability to establish second-sourcing or find a replacement manufacturer may be difficult due to the lead times generally required to manufacture drugs and the need for FDA compliance inspections and approvals of any replacement manufacturer, all of which factors could result in production delays and additional commercialization costs. Such lead times would vary based on the situation, but might be twelve months or longer.

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

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

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

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

Our cash invested in money market fund might be subject to loss.

There has been significant deterioration and instability in the financial markets. Even though we believe we take a conservative approach to investing our funds, the volatility of the current financial markets exposes us to increased investment risk, including the risks that the value and liquidity of our money market investments could deteriorate significantly and the issuers of the investments we hold could be subject to credit rating downgrades. This might result in significant losses in our money market investments that could adversely impact our financial condition, which could be an immediate problem given our extremely limited financial resources. On September 19, 2008, the U.S. Treasury announced a Temporary Guarantee Program which insures money market investments on a temporary basis, including our money market funds. The program ensures that if a participating fund's share value declines to below one dollar and the fund is liquidated, the U.S. Treasury would cover any shortfall between the liquidated share price and one dollar. On March 31, 2009, the U.S. Treasury announced the program was extended until September 18, 2009. While we have not experienced any loss or write down of our money market investments in the past, we cannot guarantee that such losses will not occur in future periods.

We terminated a former executive and did not obtain a release and might be required to pay severance to this former executive in the future.

We terminated an executive and did not pay any severance or obtain a release from the executive and we might be required to pay severance in the future. While we believe we terminated the executive in accordance with the terms in his contract, we could be required to pay him severance in the future. While we do not anticipate having to pay him any material severance, if a lawsuit is brought, a court may disagree with our interpretation of the terms of his employment contract.

Risks Related to Our Industry

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

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

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

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

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

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

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

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

We are likely to face competition in the areas of product efficacy and safety, ease of use and adaptability, as well as pricing, product acceptance, regulatory approvals and intellectual property. Competitors could develop more effective, safer and more affordable products than we do, and they may obtain patent protection or product commercialization before we do or even render our product candidates obsolete. The existence of competitive products, including products or treatments of which we are not aware, or products or treatments that may be developed in the future, may adversely affect the marketability of any products that we develop.

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

The use of our product candidates in clinical trials and for commercial applications, if any, may expose us to liability claims in the event that such product candidates cause injury or death or result in other adverse effects. These claims could be made by health care institutions, contract laboratories, and subjects participating in our clinical studies, patients or others using our product candidates. In addition to liability claims, certain serious adverse events could require interruption, delay and/or discontinuation of a clinical trial and potentially prevent further development of the product candidate. We carry clinical trial insurance 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. In addition, we might reduce the amount of this coverage due to our limited financial resources. 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. The risk of accidental contamination or injury from these materials cannot be completely eliminated. In the event of such an accident, we could be held liable for any damages that result and any such liability could exceed our resources and may not be covered by our general liability insurance. We currently do not carry insurance specifically for hazardous materials claims. We may be required to incur significant costs to comply with environmental laws and regulations, which may change from time to time.

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

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

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

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

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

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

Risks Related to Owning Our Common Shares

Our common shares have been delisted from NYSE Alternext US LLC (formerly the American Stock Exchange and we have ceased filing reports with the SEC), which may make it more difficult to dispose of your shares.

In December 2008, we received notice from the NYSE Alternext US, LLC (formerly the American Stock Exchange), or AMEX, that we were not in compliance with Section 1003(a)(ii) of its Company Guide, because our stockholders' equity was below \$6 million and we had incurred losses from continued operations and net losses in the five most recent fiscal years. On January 20, 2009, we voluntarily filed to delist our common stock from the AMEX and effective January 30, 2009, our common stock no longer traded on the AMEX. As a result, any trading of our common stock in the U.S. will need to be conducted in the over-the-counter market, or on the pink sheets. In addition, our common stock is also subject to the SEC's penny stock rules, which impose additional requirements on broker-dealers who effect trades. As a result, shareholders might have difficulty selling our common stock, particularly in the U.S.

We may be unable to maintain the listing of our common stock on the Toronto Stock Exchange and that would make it more difficult for stockholders to dispose of their common stock.

Our common stock is currently listed on the Toronto Stock Exchange, or TSX. The TSX has rules for continued listing, including minimum market capitalization and other requirements, that we might not meet in the future, particularly if the price of our common stock does not increase or we are unable to raise additional capital to continue operations. In January 2009, our common stock was delisted from the AMEX as the Company did not meet the continued listing requirements of that exchange.

Delisting from the TSX would make it more difficult for stockholders to dispose of their common stock and more difficult to obtain accurate quotations on our common stock. This could have an adverse effect on the price of our common stock. There can be no assurances that a market maker will make a market in our common stock on the pink sheets or any other stock quotation system after delisting. Furthermore, securities quoted on the pink sheets generally have significantly less liquidity than securities traded on a national securities exchange, not only in the number of shares that can be bought and sold, but also through delays in the timing of transactions and lower market prices than might otherwise be obtained. As a result, stockholders might find it difficult to resell shares at prices quoted in the market or at all. Furthermore, because of the limited market and generally low volume of trading in our common stock, our common stock is more likely to be affected by broad market fluctuations, general market conditions, fluctuations in our operating results, changes in the market's perception of our business, and announcements made by us, our competitors or parties with whom we have business relationships. Our ability to issue additional securities for financing or other purposes, or to otherwise arrange for any financing we may need in the future, may also be materially and adversely affected by the fact that our securities are not traded on a national securities exchange.

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 August 12, 2009, 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\$0.02 per share on the TSX. From November 12, 2004 until our delisting on January 30, 2009, the trading price of our stock fluctuated from a high closing price of \$1.71 per share to a low closing price of \$0.01 per share on the NYSE Alternext US, LLC (formerly, the American Stock Exchange). 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:

- our immediate need to raise additional capital and the terms of any transaction we are able to enter into;
- the economic crisis or other external factors generally or stock market trends in the pharmaceutical or biotechnology industries specifically;
- announcements of licensing agreements, joint ventures, collaborations or other strategic alliances that involve our products or those of our competitors;
- 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;
- developments or disputes concerning our licensed or owned patents or those of our competitors;
- 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.

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

At June 30, 2009, our current 5% stockholders beneficially own approximately 60% of our common shares. In particular, Southpoint Capital Advisors LP owns or exercises control over 41.5 million common shares, representing approximately 32% of the issued and outstanding common shares and 42% beneficially owned (assuming full exercise of the 20.8 million warrants issued to Southpoint Capital but no other outstanding warrants or options). In addition, Mr. Robert Butts, Co-Founder and Portfolio Manager of Southpoint Capital Advisors LP, serves as our Chairman of the our Board of Directors. Southpoint Capital, our other 5% stockholders, and other insiders, acting alone or together, might be able to influence the outcomes of matters that require the approval of our stockholders, including but not limited to certain equity transactions (such as a financing), an acquisition or merger with another company, a sale of substantially all of our assets, the election and removal of directors, or amendments to our incorporating documents. These stockholders might make decisions that are adverse to your interests. The concentration of ownership could have the effect of delaying, preventing or deterring a change of control of our company, which could adversely affect the market price of our common shares or deprive our other stockholders of an opportunity to receive a premium for their common shares as part of a sale of our company.

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. At June 30, 2009, we had outstanding warrants to purchase approximately 41.1 million of our common shares and had a weighted average exercise price of \$0.44. In addition, at June 30, 2009, there were approximately 18.0 million common shares issuable upon the exercise of stock options granted by us of which approximately 2.7 million were denominated in Canadian dollars and had a weighted average exercise price of CAD\$2.18 per common share and approximately 15.3 million were denominated in U.S. dollars and had a weighted average exercise price of \$0.46 per common share. We may also issue further warrants as part of any future financings as well as the additional 2.3 million options to acquire our common shares currently remaining available for issuance under our stock option plan.

There is no public market for our outstanding warrants.

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

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

As further described in Item 5. “Market for the Registrant’s Common Equity, Related Stockholder Matters and Issuer Purchases of Equity Securities” – “Material United States Federal and Canadian Income Tax Consequences” in our Annual Report on Form 10-K for the fiscal year ended December 31, 2008, we have determined that we are currently a Passive Foreign Investment Company, or PFIC, under U.S. tax law and likely will continue to be a PFIC at least until we develop a source of significant operating revenues. As a result, there may be adverse tax consequences to U.S. holders of our common shares. A U.S. holder whose holding period for our shares includes a period during which we are classified as a PFIC generally may be required to treat certain excess distributions with respect to our shares and gains realized on the disposition of our shares as ordinary income earned ratably over the holder’s holding period and may be subject to a special tax and interest charge on amounts treated as earned in the periods in which we are a PFIC. In addition, the holder’s shares may not receive a “stepped-up” basis upon a transfer at death. These PFIC tax rules may not apply if a U.S. holder makes an election for the first taxable year of the holder’s holding period to be taxed currently on the holder’s pro rata share of our ordinary earnings and net capital gain for any year we are a PFIC. Alternatively, a U.S. holder may avoid the special tax and interest charge on excess distributions and gains by making an election to mark the shares to market annually during any period in which we are a PFIC and our shares are treated as marketable shares. If a mark-to-market election is made, amounts included in or deducted from income pursuant to the election and actual gains and losses realized upon disposition generally may be treated as ordinary gains or losses. Whether or not an applicable election is made, if we are classified as a PFIC for the taxable year in which a dividend is paid, or for the preceding taxable year, a dividend paid to a non-corporate U.S. holder may not qualify for the reduced long-term capital gains rates. These tax issues could make our stock less attractive to U.S. investors and therefore negatively affect our stock price and the ability to sell our shares.

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

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

Item 6. Exhibits

<u>Exhibit No.</u>	<u>Description of Exhibit</u>	<u>Registrant's Form</u>	<u>Dated</u>	<u>Exhibit Number</u>	<u>Filed Herewith</u>
31.1	Certification of Chief Executive Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002				X
31.2	Certification of Chief Financial Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002				X
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				X

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: October 28, 2009

By: /s/ Rostislav Raykov
Rostislav Raykov
Chief Executive Officer
(principal executive officer)

Date: October 28, 2009

By: /s/ Robert Andrade
Robert Andrade
Chief Financial Officer
(principal financial and chief accounting officer)

**ADHEREX TECHNOLOGIES INC
CERTIFICATION**

I, Rostislav Raykov, Chief Executive Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Adherex Technologies Inc.
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 registrant as of, and for, the periods presented in this quarterly report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) and we have:
 - (a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to filing this quarterly report (the "Evaluation Date"); and
 - (c) Presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies in the design or operation of internal control which could adversely affect the registrant's ability to record, process, summarize and quarterly report financial data and have identified for the registrant's auditors any material weakness in internal controls; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls;
6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: October 28, 2009

By: /s/ Rostislav Raykov
Rostislav Raykov
Chief Executive Officer

ADHEREX TECHNOLOGIES INC.
CERTIFICATION

I, Robert Andrade, Chief Financial Officer, certify that:

1. I have reviewed this quarterly report on Form 10-Q of Adherex Technologies Inc.
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 registrant as of, and for, the periods presented in this quarterly report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-14 and 15d-14) and we have:
 - (a) Designed such disclosure controls and procedures to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this quarterly is being prepared;
 - (b) Evaluated the effectiveness of the registrant's disclosure controls and procedures as of a date within 90 days prior to filing this quarterly report (the "Evaluation Date"); and
 - (c) Presented in this quarterly report our conclusions about the effectiveness of the disclosure controls and procedures based on our evaluation as of the Evaluation date;
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
 - (a) All significant deficiencies in the design or operation of internal control which could adversely affect the registrant's ability to record, process, summarize and quarterly report financial data and have identified for the registrant's auditors any material weakness in internal controls; and
 - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal controls;
6. The registrant's other certifying officers and I have indicated in this quarterly report whether or not there were significant changes in internal controls or in other factors that could significantly affect internal controls subsequent to the date of our most recent evaluation, including any corrective actions with regard to significant deficiencies and material weaknesses.

Date: October 28, 2009

By: /s/ Robert Andrade
Robert Andrade
Chief Financial Officer

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

In connection with the Quarterly Report of Adherex Technologies Inc. (the "Company") on Form 10-Q for the period ended June 30, 2009 (the "Report"), each of the undersigned, Rostislav Raykov, Chief Executive Officer of the Company, and Robert Andrade, 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: October 28, 2009

By: /s/ Rostislav Raykov
Rostislav Raykov
Chief Executive Officer

Date: October 28, 2009

By: /s/ Robert Andrade
Robert Andrade
Chief Financial Officer