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

Form 6-K

REPORT OF FOREIGN PRIVATE ISSUER PURSUANT TO RULE 13a-16 OR 15d-16
UNDER THE SECURITIES EXCHANGE ACT OF 1934

Dated: August 12, 2005

Commission File Number 001-32295

ADHEREX TECHNOLOGIES INC.

(Translation of registrant's name into English)

2300 Englert Drive, Suite G
Research Triangle Park
Durham North Carolina 27713
(Address of principal executive office)

Indicate by check mark whether the registrant files or will file annual reports under cover of Form 20-F or Form 40-F. Form 20-F ☒ Form 40-F ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101(b)(1): ☐

Indicate by check mark if the registrant is submitting the Form 6-K in paper as permitted by Regulation S-T Rule 101 (b)(7): ☐

Indicate by check mark whether the registrant by furnishing the information contained in this Form is also thereby furnishing the information to the Commission pursuant to Rule 12g3-2(b) under the Securities Exchange Act of 1934. Yes ☐ No ☒

If "Yes" is marked, indicate below the file number assigned to the registrant in connection with Rule 12g3-2(b): 82 - _____.

Adherex Technologies Inc.

Form 6-K

On August 10, 2005, the Company issued a press release announcing its financial results for the second quarter ended June 30, 2005 and on August 12, 2005, the Company issued its interim financial statements for the quarter, as well as the related Management's Discussion and Analysis and CEO/CFO certifications. These materials are attached hereto as Exhibits 99.1 through 99.5 and are incorporated herein in their entirety by reference.

The information in this Form 6-K (including Exhibits 99.1 through 99.5) shall not be deemed "filed" for purposes of Section 18 of the Securities Exchange Act of 1934 (the "Exchange Act") or otherwise subject to the liabilities of that section, nor shall it be deemed incorporated by reference in any filing under the Securities Act of 1933 or the Exchange Act, except as expressly set forth by specific reference in such a filing.

EXHIBIT INDEX

Exhibit Number	Description
99.1	The Registrant's Press Release dated August 10, 2005
99.2	The Registrant's Financial Statements for the Second Quarter Ended June 30, 2005
99.3	Management's Discussion and Analysis for the Second Quarter Ended June 30, 2005
99.4	Certification of Interim Filings During Transition Period by Chief Executive Officer
99.5	Certification of Interim Filings During Transition Period by Chief Financial Officer

SIGNATURES

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

ADHEREX TECHNOLOGIES INC.
(Registrant)

Date: August 12, 2005

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

James A. Klein, Jr.
Chief Financial Officer

PRESS RELEASE

ADHEREX REPORTS SECOND QUARTER 2005 FINANCIAL RESULTS

Research Triangle Park, NC, August 10, 2005 — Adherex Technologies Inc. (AMEX:ADH, TSX: AHX), a biopharmaceutical company with a broad portfolio of oncology products under development, today reported its financial results for the second quarter ended June 30, 2005.

Financial Update

As the majority of the Company's operations are now denominated in United States ("U.S.") dollars, effective January 1, 2005, Adherex changed its functional and reporting currency to the U.S. dollar. Unless otherwise indicated, the amounts included in this press release are in U.S. dollars.

Net loss for the quarter ended June 30, 2005 was $4.6 million or $0.13 per share, up $1.9 million from the same period last year. This increase mainly relates to our expanding drug development program, including the ongoing ADH-1 (Exherin™) Phase Ib/II trial in Europe as well as the second quarter commencement of our Phase Ib/II trial in the United States and our Phase II trial in Canada. These R&D increases offset a decrease of $0.6 million for G&A as compared to the prior year.

The net loss for the six-month period ended June 30, 2005 was $7.7 million, or $0.21 loss per share, compared to a net loss of $5.1 million, or $0.16 loss per share, for the six-month period ended June 30, 2004. Operating expenses totaled $8.4 million, an increase of 48% over the same period last year. These operating expenses primarily reflect increased research and development expenditures related to the expanding drug development program, including the commencement of our ADH-1 Phase Ib/II trial in Europe, our Phase Ib/II trial in the U.S. and Phase II trial in Canada. These operating expense increases for R&D offset the $0.9 decrease in G&A as compared to the prior year.

Cash, cash equivalents and short-term investments totaled $12.6 million as of June 30, 2005, compared to $17.5 million as of December 31, 2004, with a corresponding decrease in working capital of $6.0 million. The decreased cash balance reflects

spending during the six month period to fund operations. Subsequent to the quarter end, the Company received approximately $8.5 million in gross proceeds from a private placement.

Corporate Update

“In the past four months, we have achieved some of the most significant events in Adherex’s history, events that I believe can transform the Company,” said William P. Peters, MD, PhD, Adherex Chairman and CEO. “We announced a two-product licensing agreement with GlaxoSmithKline (GSK), such that we now have two ‘blockbuster’ drug candidates with potential development and sales milestones of up to approximately $220 million plus up to double digit sales royalties. We have completed an $8.5 million private placement, including a $3 million investment by GSK, providing us with additional resources to reach the next set of development milestones. We have improved our capital structure by implementing a reverse stock split. We have presented promising data from our Phase I trial of ADH-1 and maintained the momentum generated in the development of this drug with the initiation of a Phase II and two Phase Ib/II trials. In my opinion, Adherex is in its strongest position to date, and it is the job of management to leverage these transforming events to the benefit of the Company and our shareholders.”

During and subsequent to the quarter ended June 30, 2005, Adherex:

- Completed a license and development agreement with GlaxoSmithKline (NYSE: GSK) for the in-license by Adherex of GSK’s oncology product, eniluracil, and an option for GSK to license Adherex’s lead biotechnology compound, ADH-1. Adherex could receive development and sales milestone payments of up to approximately $220 million in aggregate, plus up to double-digit royalties, depending upon if and when the options are exercised.
- Completed a private placement for gross proceeds of $8.5 million in connection with the GSK license agreement under which GSK invested $3 million as a part of the financing.
- Implemented a 1-for-5 reverse stock split of its outstanding common shares, stock options and warrants outstanding at the effective date. The Company had previously indicated that it would undertake a reverse stock split when conditions were appropriate to enhance the marketability of the Company’s common shares.
- Initiated two additional sites in its Phase II trial of ADH-1: Princess Margaret Hospital in Toronto, Ontario, Canada and Jewish General Hospital in Montreal, Quebec, Canada. The study, which was launched in May 2005 at the Ottawa Regional Cancer Centre, is designed to evaluate the anti-tumor activity and tolerability of repeated doses of ADH-1 in patients whose tumors express the molecular target N-cadherin.
- Presented Phase I data at the American Society of Clinical Oncology annual meeting on 68 treatment cycles in 46 patients indicating that ADH-1 has been

well tolerated over a 20-fold dose range and has shown evidence of anti-tumor activity in certain patients with advanced chemotherapy resistant cancer; one of these patients achieving a rapid and durable partial response, defined as a reduction of at least 50% in tumor size.

Conference Call

Adherex will host a conference call at 10:00 a.m. ET on Thursday, August 11, 2005 to review the financial results for the six-month period ended June 30, 2005. This call will be webcast live via the Internet at www.adherex.com. The event will also be archived and available for telephone replay through August 16, 2005 and webcast replay through August 11, 2006.

Live Participant Dial In (Toll Free, Canadian and US callers): 800-795-1259
Live Participant Dial In (International): 785-832-2422

Conference Passcode: 7682304
Replay Number (Toll Free): 800-839-7076
Replay Number (International): 420-220-6063
Replay Passcode: 7682304

About Adherex Technologies

Adherex Technologies Inc. is a biopharmaceutical company dedicated to the discovery and development of novel cancer therapeutics. We aim to be a leader in developing innovative treatments that address important unmet medical needs in cancer. We currently have multiple products in the clinical stage of development, including ADH-1 (Exherin™), eniluracil and sodium thiosulfate (STS). ADH-1, our lead biotechnology compound, selectively targets N-cadherin, a protein present on certain tumor cells and established blood vessels that feed solid tumors. Eniluracil, an oral dihydropyrimidine dehydrogenase (DPD) inhibitor, was previously under development by GlaxoSmithKline for oncology indications. STS, a drug from our specialty pharmaceuticals pipeline, protects against the disabling hearing loss that can often result from treatment with platinum-based chemotherapy drugs. With a diversified portfolio of unique preclinical and clinical-stage cancer compounds and a management team with expertise in identifying, developing and commercializing novel cancer therapeutics, Adherex is emerging as a pioneering oncology company. For more information, please visit our website at www.adherex.com.

FINANCIAL CHARTS FOLLOW

Adherex Technologies Inc.
Selected Financial Data
(U.S. dollars in thousands except per share amounts)

	June 30, 2005	December 31, 2004
	(unaudited)	
Condensed Consolidated Balance Sheets:		
Assets:		
Cash and cash equivalents	$ 12,628	$ 17,473
Other current and long-term assets	773	1,101
Acquired intellectual property rights	19,055	20,415
Total assets	$ 32,456	$ 38,989
Liabilities and shareholders' equity:		
Accounts payable and accrued liabilities	$ 2,700	$ 1,779
Other current and long-term liabilities	104	140
Future income taxes	6,965	7,463
Total shareholders' equity	22,687	29,607
Total liabilities and shareholders' equity	$ 32,456	$ 38,989

	Six Months Ended June 30,	
	2005	2004
	(unaudited)	(unaudited)
Condensed Consolidated Statements of Operations:		
Operating expenses:		
Research and development	$ 5,378	$ 2,016
General and administration	1,618	2,465
Amortization of acquired intellectual property rights	1,361	1,166
Loss from operations	(8,357)	(5,647)
Net interest income	118	149
Recovery of future income taxes	498	426
Net loss	$ (7,741)	$ (5,072)
Net loss per share of common stock, basic and diluted	$ (0.21)	$ (0.16)

This press release contains forward-looking statements that involve significant risks and uncertainties. The actual results, performance or achievements of the Company might differ materially from the results, performance or achievements of the Company expressed or implied by such forward-looking statements. Such forward-looking statements include, without limitation, those regarding the milestone payments and royalties that may become payable to the Company under the agreement with GSK as well as the development plans of the Company and the expected timing and results of such development. We can provide no assurance that such payments will be made or the development will proceed as currently anticipated or that the expected timing or results of such development will be realized. We are subject to various risks, including those inherent in the biopharmaceutical industry, the early stage of our product candidates, the uncertainties of drug development, clinical trials and regulatory review, our reliance on collaborative partners, our need for additional capital to fund our operations, and our history of losses. For a more detailed discussion of related risk factors, please refer to our public filings available at www.sedar.com and www.sec.gov.

— END —

For further information, please contact:

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

	June 30, 2005	December 31, 2004
	(unaudited)	
Assets		
Current assets		
Cash and cash equivalents	$ 12,553	$ 17,473
Cash pledged as collateral	75	75
Accounts receivable	9	17
Investment tax credits recoverable	169	252
Prepaid expense	15	11
Other current assets	51	84
Total current assets	12,872	17,912
Capital assets	521	652
Acquired intellectual property rights	19,055	20,415
Other long-term assets	8	10
Total assets	**$ 32,456**	**$ 38,989**
Liabilities and shareholders' equity		
Current liabilities		
Accounts payable	$ 1,467	$ 1,065
Accrued liabilities	1,233	714
Total current liabilities	2,700	1,779
Future income taxes	6,965	7,463
Other long-term liabilities	104	140
Total liabilities	**9,769**	**9,382**
Commitments and contingencies		
Shareholders' equity		
Common stock, no par value; unlimited shares authorized; 36,550 and 36,536 shares issued and outstanding, respectively	34,206	34,324
Contributed surplus	23,526	22,587
Cumulative translation adjustment	5,850	5,850
Deficit accumulated during development stage	(40,895)	(33,154)
Total shareholders' equity	**22,687**	**29,607**
Total liabilities and shareholders' equity	**$ 32,456**	**$ 38,989**

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2005	2004	2005	2004
Revenue	$ —	$ —	$ —	$ —
Operating expenses:				
Research and development	3,360	840	5,378	2,016
General and administration	900	1,540	1,618	2,465
Amortization of acquired intellectual property rights	680	574	1,361	1,166
Loss from operations	(4,940)	(2,954)	(8,357)	(5,647)
Interest expense	(3)	—	(7)	(1)
Interest income	72	63	125	150
	(69)	(63)	(118)	(149)
Loss before income taxes	(4,871)	(2,891)	(8,239)	(5,498)
Recovery of future income taxes	249	210	498	426
Net loss	**$ (4,622)**	**$ (2,681)**	**$ (7,741)**	**$ (5,072)**
Accumulated deficit - Beginning of period	**(36,273)**	**(20,722)**	**(33,154)**	**(18,331)**
Accumulated deficit - End of period	**$ (40,895)**	**$ (23,403)**	**$ (40,895)**	**$ (23,403)**
Net loss per share of common stock, basic and diluted	**$ (0.13)**	**$ (0.08)**	**$ (0.21)**	**$ (0.16)**
Weighted-average number of shares of common stock outstanding, basic and diluted	**36,541**	**32,666**	**36,538**	**31,541**

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

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

	Three Months Ended June 30,		Six Months Ended June 30,	
	2005	2004	2005	2004
Cash flows from (used in):				
Operating activities:				
Net loss	$ (4,622)	$ (2,681)	$ (7,741)	$ (5,072)
Adjustments for non-cash items:				
Amortization of capital assets	76	31	164	142
Amortization of acquired intellectual property rights	680	574	1,361	1,166
Recovery of future income taxes	(249)	(210)	(498)	(426)
Amortization of leasehold inducements	—	—	—	(14)
Stock options issued to consultants	65	—	65	19
Stock options issued to employees	686	—	874	—
Changes in operating assets and liabilities	1,219	724	1,042	789
Net cash used in operating activities	(2,145)	(1,562)	(4,733)	(3,396)
Investing activities:				
Purchase of capital assets	(14)	(95)	(33)	(130)
Release of restricted cash	—	192	—	192
Purchase of short-term investments	—	(7,056)	—	(7,056)
Net cash used in investing activities	(14)	(6,959)	(33)	(6,994)
Financing activities:				
Issuance of common stock	—	7,342	—	7,464
Proceeds from convertible note	—	(125)	—	(114)
Proceeds from exercise of stock options	25	1	25	22
Issue costs	2	1,003	(143)	778
Other liability repayments	(18)	(15)	(36)	(28)
Net cash provided (used) in financing activities	9	8,206	(154)	8,122
Effect of exchange rate changes on cash and cash equivalents	—	(280)	—	(646)
Net change in cash and cash equivalents	**(2,150)**	**(595)**	**(4,920)**	**(2,914)**
Cash and cash equivalents - Beginning of period	**14,703**	**14,194**	**17,473**	**16,513**
Cash and cash equivalents - End of period	**$12,553**	**$13,599**	**$12,553**	**$13,599**

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

1. Nature of Operations

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 wholly-owned Canadian subsidiary, collectively referred to herein as the “Company,” is a development stage biopharmaceutical company with a portfolio of product candidates under development for use in the treatment of cancer.

2. Significant Accounting Policies

Reporting currency

Effective January 1, 2005, the Company changed its functional currency from the Canadian dollar to the United States (“U.S.”) dollar as the majority of its operations are denominated in U.S. dollars as the result of increasing activities undertaken in the United States. Concurrent with this change in functional currency, the Company adopted the U.S. dollar as its reporting currency.

The change was effected for prior periods as follows: assets and liabilities were translated into U.S. dollars at the prevailing exchange rates at each balance sheet date, revenues and expenses were translated at the average exchange rates prevailing during each reporting period, and equity transactions were translated at the prevailing historical exchange rates at each transaction date. Adjustments resulting from the translations are included in the cumulative translation adjustments in shareholders’ equity and total $5,850 at December 31, 2004.

Basis of presentation

These unaudited condensed consolidated financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles and include the accounts of Adherex Technologies Inc. and its wholly-owned subsidiaries. The accounting policies used in the preparation of these interim financial statements conform to those used in the Company’s annual financial statements. These interim financial statements do not include all of the disclosures included in the annual financial statements. Accordingly, these interim financial statements should be read in conjunction with the Company’s audited financial statements and notes for the six-month transitional period ended December 31, 2004.

Use of estimates

The preparation of financial statements in conformity with Canadian generally accepted accounting principles requires management to make estimates and assumptions that impact 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. Actual results could differ from those estimates.

Comparative figures

Certain comparative figures have been reclassified to conform to the current year’s presentation.

3. Acquired Intellectual Property

On November 20, 2002, Adherex acquired certain intellectual property rights directed to therapeutics with a focus in chemoprotection and chemoenhancement. The intellectual property rights resided in Oxiquant, a holding company with no active business.

U.S. dollars and shares in thousands, except per share information

The acquired intellectual property rights are being amortized over their estimated useful lives of 10 years. The cost and accumulated amortization of the acquired intellectual property rights as of June 30, 2005 and December 31, 2004 are as follows:

	June 30, 2005	December 31, 2004
Cost	$25,891	$ 25,891
Accumulated amortization	(6,836)	(5,476)
Net book value	$19,055	$ 20,415

4. Shareholders' Equity

Stock options

Information with respect to stock option activity is as follows:

		Exercise price per option	
	Number of Options	Range	Weighted-average
Outstanding at December 31, 2004	3,763	$1.6375 - $7.50	$ 2.40
Cancelled	(1)	$1.55	$ 1.55
Exercised	(15)	$1.6375 - $1.70	$ 1.65
Granted	756	$1.45 - $1.55	$ 1.45
Outstanding at June 30, 2005	4,503	$1.45 - $7.50	$ 2.25

Stock-based compensation

Effective January 1, 2002, the Company adopted the recommendations of the Canadian Institute of Chartered Accountants ("CICA") outlined in Section 3870 "Stock-Based Compensation and Other Stock-Based Payments" ("CICA 3870"). Until January 1, 2004, this standard only required the expensing of the fair value of non-employee options, with note disclosure of the fair value and effect of employee and director options on the financial statements. For fiscal years beginning after January 1, 2004, the fair value of all options granted must be expensed in the Statement of Operations. Upon adopting this new standard, the Company elected to retroactively adjust accumulated deficit without restatement. On July 1, 2004, the Company increased the accumulated deficit by $1,686 and increased contributed surplus by the same amount.

U.S. dollars and shares in thousands, except per share information

Stock-based compensation expense relating to employees totaled $686 for the three-month period ended June 30, 2005 and $874 for the six-month period ended June 30, 2005. Had the Company applied the provisions of CICA 3870 for the quarter ended June 30, 2004, the net loss of the Company would have increased as follows:

	Three Months Ended June 30, 2004	Six Months Ended June 30, 2004
Net loss before compensation expense	$ (2,681)	$ (5,072)
Compensation expense	(536)	(710)
Pro forma net loss	$ (3,217)	$ (5,782)
Net loss per common share, basic and diluted	$ (0.10)	$ (0.18)

In estimating the value of each stock option grant, the Black-Scholes option pricing model was used and the following assumptions were used in the calculations: expected dividend of 0%, risk free interest rate of 3.73%, expected volatility of 71% and expected life of seven years.

Stock based compensation expense includes all options that vested during the quarter despite the date of grant. Stock based compensation expense relating to external consultants totaled $65 for both the three-month and six-month periods ended June 30, 2005.

5. Subsequent Events

GlaxoSmithKline Relationship

On July 14, 2005, the Company entered into a development and licensing agreement with GlaxoSmithKline (“GSK”) providing for total potential payments to Adherex of up to approximately $220 million. The agreement includes the in-license by Adherex of GSK’s oncology product, eniluracil, and an option for GSK to license ADH-1 (Exherin™) from Adherex. As part of the transaction GSK purchased $3.0 million of the Company’s units in the July 2005 Private Placement.

Under the terms of the agreement relating to eniluracil, Adherex received an exclusive license to develop eniluracil for all indications and GSK retained options to buy-back and assume development of the compound. If GSK exercises an option for eniluracil, Adherex will receive upfront payments, development milestone payments and sales milestone payments of up to $120 million in aggregate, plus up to double-digit royalties on annual net sales, dependent upon when the option is exercised. If GSK does not exercise its buy-back options, Adherex would be free to develop eniluracil alone or with other partners and would pay GSK development and sales milestones and double-digit royalties.

Adherex has also granted to GSK an option to receive a worldwide, exclusive license for ADH-1. If the ADH-1 option is exercised, a series of upfront payments, development milestone payments and sales milestone payments to Adherex would be triggered of up to approximately $100 million in aggregate plus double-digit royalties on annual net sales. In addition, if GSK exercises the option on ADH-1, GSK would be responsible for further development and associated expenses.

Reverse Stock Split

On July 20, 2005, our Board of Directors approved a reverse stock split of the Company's common stock at a ratio of one-for-five. The reverse stock split had previously been approved by the Company's shareholders at the Annual and Special Meeting held on April 29, 2005. The reverse stock split became effective at the close of business on July 29, 2005 and reduced the number of shares of common stock then outstanding from approximately 213 million to approximately 43 million**.** The reverse stock split affects all of the Company's common shares, stock options and warrants outstanding at the effective date. The number of shares of Adherex common stock, stock options and warrants issued and outstanding and the basic and diluted weighted-average shares outstanding as well as per share data and per stock option data have been adjusted for all periods to reflect the one-for-five reverse stock split.

July 2005 Private Placement

On July 20, 2005, the Company completed a private placement of equity securities totaling $8,510 for 6,079 units at a price of $1.40 per unit as adjusted for the reverse stock split, resulting in net proceeds of $8,094 after deducting broker fees and other expenses of $416. Each unit consisted of one common share and 0.30 of a common share purchase warrant. The private placement comprised an aggregate of 6,079 shares of common stock, along with 1,824 investor warrants and 57 broker warrants to acquire additional shares of Adherex common stock, each as adjusted for the reverse stock split. Each whole investor warrant entitles the holder to acquire one additional share of common stock of Adherex at an exercise price of $1.75 per share for a period of three years and each broker warrant entitles the holder to acquire one share of Adherex common stock at an exercise price of $1.75 per share for a period of two years, each as adjusted for the reverse stock split.

Management's discussion and analysis should be read in conjunction with our June 30, 2005 interim consolidated financial statements and the accompanying notes, which are prepared in accordance with Canadian generally accepted accounting principles ("GAAP"). This report should also be read in conjunction with the management's discussion and analysis of operating results and the six-month financial statements contained in the Company's fiscal transitional report for the period ended December 31, 2004.

As the majority of our operations are now denominated in United States ("U.S.") dollars, effective January 1, 2005, our functional currency is the U.S. dollar. To coincide with the change in functional currency, we elected to also change our reporting currency to the U.S. dollar. Unless otherwise indicated, the amounts shown are in U.S. dollars.

FORWARD-LOOKING STATEMENTS

The following discussion contains forward-looking statements regarding our financial condition and the results of operations that are based upon our consolidated financial statements. We operate in a highly competitive environment that involves significant risks and uncertainties, some of which are outside of our control. We are subject to risks inherent in the biopharmaceutical industry, including risks associated with research, preclinical testing, manufacture of drug substance to support clinical studies, toxicology studies, clinical studies of our compounds, uncertainty of regulatory agencies, enforcement and protection of our patent portfolio, the need for future capital, potential competitors, the ability to attract and maintain collaborative partners, dependence on key personnel, and the ability to successfully market our product candidates. Our actual results could differ materially from those expressed or implied in these forward-looking statements. For a more detailed discussion of related risk factors, please refer to our public filings available at www.sedar.com and www.sec.gov.

OVERVIEW

We have not received any revenues to date and do not expect to have significant revenues until we either are able to sell our product candidates after obtaining applicable regulatory approvals, achieve certain development milestones under our current collaboration or establish additional collaborations that provide us with funding. As of June 30, 2005, our deficit accumulated during development stage was $40.9 million.

Our operating expenses will depend on many factors, including the progress of our drug development efforts and the potential commercialization of our product candidates. Research and development ("R&D") expenses, which include expenses associated with clinical development activities, manufacturing of drug substance, employee compensation, research contracts, toxicology studies and laboratory activities, will be dependent on the results of our drug development efforts. General and administration ("G&A") expenses, which include expenses associated with headcount and facilities, insurance and other administrative matters, will be dependent on the development of our facilities in Research Triangle Park, NC ("RTP") in support of our drug development programs. The amortization of acquired intellectual property rights relates to the intellectual property acquired in November 2002.

GlaxoSmithKline Relationship

On July 14, 2005, the Company entered into a development and licensing agreement with GlaxoSmithKline ("GSK") providing for total potential payments to Adherex of up to approximately $220 million. The agreement includes the in-license by Adherex of GSK's oncology product, eniluracil, and an option for GSK to license ADH-1 (Exherin™). As part of the transaction GSK invested $3.0 million in the Company's July 2005 Private Placement – See Liquidity and Capital Resources.

Under the terms of the agreement relating to eniluracil, Adherex received an exclusive license to develop eniluracil for all indications and GSK retained options to buy-back and assume development of the compound. If GSK exercises an option for eniluracil, Adherex will receive upfront payments, development milestone payments and sales milestone payments of up to $120 million in aggregate, plus up to double-digit royalties on annual net sales, dependent upon when the option is exercised. In addition, if GSK elects to buy-back eniluracil, GSK would be responsible for the further development and associated expenses. If GSK does not exercise its buy-back options, Adherex would be free to develop eniluracil alone or with other partners and would pay GSK development and sales milestones and double-digit royalties.

Adherex has also granted to GSK an option to receive a worldwide, exclusive license for ADH-1 for all indications. If the ADH-1 option is exercised, a series of upfront payments, development milestone payments and sales milestone payments to Adherex would be triggered of up to approximately $100 million in aggregate plus double-digit royalties on annual net sales. In addition, if GSK exercises the option on ADH-1, GSK would be responsible for further development and associated expenses.

Product Candidates

We are a biopharmaceutical company with a focus on cancer therapeutics and a cadherin targeting technology platform. We have multiple product candidates in the clinical stage of development including:

- ADH-1 (Exherin) is a molecularly targeted anti-cancer drug currently in Phase Ib/II and Phase II clinical studies. ADH-1 has been generally well tolerated and has shown evidence of anti-tumor activity in our Phase I study in certain patients that express the molecular marker N-cadherin, a protein that plays a major role in holding together and stabilizing cells that make up blood vessels and certain tumor cells.
- Eniluracil is an oral dihydropyrimidine dehydrogenase (DPD) inhibitor that was previously under development by GlaxoSmithKline (“GSK”) for oncology indications. Eniluracil is being developed to enhance the therapeutic value and effectiveness of 5-fluorouracil (5-FU), one of the world’s most widely-used oncology agents and a current first-line therapy for a variety of cancers including colon, rectal, breast, head and neck and ovarian. We are implementing an accelerated development program to support the initiation of a Phase III clinical program as early as 2007.
- Sodium Thiosulfate (“STS”) is a chemoprotectant that has been shown in Phase I and Phase II clinical studies conducted by investigators at Oregon Health & Sciences University (“OHSU”) to reduce the disabling loss of hearing in some patients, particularly children, treated with platinum-based anticancer agents.
- N-Acetylcysteine (“NAC”) is a chemoprotectant that is currently the subject of ongoing Phase I clinical studies by investigators at OHSU for the prevention of bone marrow toxicity resulting from certain chemotherapy regimens.
- Mesna is a chemoenhancer that has displayed anticancer activity in preclinical studies conducted by investigators at Rutgers, The State University of New Jersey (“Rutgers”) and in a Phase I clinical study conducted by investigators in Argentina by reducing the development of resistance by cancer cells to certain chemotherapeutic agents.

We also have several preclinical product candidates targeted to enter clinical development over the next several years. Our drug discovery and development efforts are supported by 40 issued U.S. patents and more than 80 pending patents worldwide that we either own or have licensed.

Management may in some cases be able to control the timing of expenses by accelerating or decelerating preclinical and clinical activities. Accordingly, we believe that period-to-period comparisons are not necessarily meaningful and should not be relied upon as a measure of future financial performance. Our actual results may differ materially from the expectations of investors and market analysts. In such an event, the prevailing market price of our common stock may be materially adversely affected.

Change in Accounting Policy

Effective January 1, 2002, we adopted the recommendations of the Canadian Institute of Chartered Accountants (CICA) set out in Section 3870 “Stock-based Compensation and Other Stock-based Payments” (“CICA 3870”). Until January 1, 2004, this standard only required the expensing of the fair value of non-employee options, with note disclosure of the fair value and effect of employee and director options on the financial statements. For fiscal years beginning after January 1, 2004, the fair value of all options granted must be expensed in the Statement of Operations. Upon adopting this new standard, we elected to retroactively adjust retained earnings without restatement. On July 1, 2004, we increased the accumulated deficit by $1.7 million and increased contributed surplus by the same amount.

Reporting Currency

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

The change was effected for prior periods as follows: assets and liabilities were translated into U.S. dollars at the prevailing exchange rates at each balance sheet date, revenues and expenses were translated at the average exchange rates prevailing during each reporting period, and equity transactions were translated at the prevailing historical exchange rates at each transaction date. Adjustments resulting from the translations are included in the cumulative translation adjustments in shareholders’ equity and total $5.9 million at December 31, 2004.

Reverse Stock Split

On July 20, 2005, our Board of Directors approved a reverse stock split of the Company’s common stock at a ratio of one-for-five. The reverse split had previously been approved by the Company’s shareholders at the Annual and Special Meeting held on April 29, 2005. The reverse stock split became effective at the close of business on July 29, 2005 and reduced the number of shares of common stock then outstanding from approximately 213 million to approximately 43 million**.** The reverse stock split affects all of the Company’s common shares, stock options and warrants outstanding at the effective date. The number of shares of Adherex common stock, stock options and warrants issued and outstanding and the basic and diluted weighted-average shares outstanding as well as per share data and per stock option data have been adjusted for all periods to reflect the one-for-five reverse stock split.

Quarterly Information

The following table presents selected consolidated financial data for each of the last eight quarters ending June 30, 2005: (Dollars in thousands, except per share information):

Date	Net Loss for the Period	Basic and Diluted Net Loss per Common Share
September 30, 2003	$ (1,546)	$ (0.10)
December 31, 2003	$ (2,067)	$ (0.12)
March 31, 2004	$ (2,391)	$ (0.08)
June 30, 2004	$ (2,681)	$ (0.08)
September 30, 2004	$ (2,756)	$ (0.08)
December 31, 2004	$ (5,309)	$ (0.15)
March 31, 2005	$ (3,119)	$ (0.08)
June 30, 2005	$ (4,622)	$ (0.13)

The increase in the net loss for the quarters ended June 30, 2005, March 31, 2005 and December 31, 2004 is due to the increased R&D efforts associated with the clinical development of ADH-1. The improved liquidity of the Company from the completion of financings in December 2003 and May 2004 allowed these increased research and development activities to occur. Spending also increased throughout calendar year 2004 for costs associated with the expansion of our operations to the U.S.

The increase in the net loss for December 31, 2004 as compared to prior quarters is due to an increase in R&D spending and the acquisition of Cadherin Biomedical Inc. (“CBI”). The acquisition of CBI resulted in a charge to the statement of operations totaling $1.3 million.

RESULTS OF OPERATIONS

(In U.S. dollars)

Three Months Ended June 30, 2005 and 2004

Interest Income

Interest income for the three-month period ended June 30, 2005 was $0.1 million, compared to $0.1 million for the same period in 2004 due to similar cash balances.

We have not generated any revenues to date. We do not expect to have significant revenues or income, other than interest income, until we either are able to sell our product candidates after obtaining applicable regulatory approvals, achieve development milestones under our current collaboration, or we establish additional collaborations that provide us with funding, such as licensing fees, royalties, milestone payments or upfront payments.

Research and Development Expenses

R&D expenses for the three-month period ended June 30, 2005 totaled $3.4 million as compared to $0.8 million for the same period in 2004. During the three month period ended June 30, 2005, R&D expenses consisted primarily of manufacturing of drug substance, employee-related compensation expense and clinical trial expense**.** The increase of $2.6 million or 325% in R&D expense over the same period in 2004 relates to our expanding clinical trial program for ADH-1, including the ongoing ADH-1 Phase Ib/II trial in Europe, as well as the second quarter

commencement of our Phase Ib/II trial in the U.S. and our Phase II trial in Canada. During the three-month period ended June 30, 2004, R&D expense consisted primarily of costs relating to the manufacture of drug substance for use in these trials and headcount compensation.

We expect our R&D expenses to continue to increase in future quarters due to the expansion and advancement of our clinical and preclinical programs and the addition of related headcount. The expansion of R&D will involve increased outsourcing throughout the remainder of 2005.

R&D expenses for the three-month period ended June 30, 2005 include $0.6 million of non-cash stock-based employee compensation and consultant expense associated with the adoption of CICA 3870 on July 1, 2004. No stock-based compensation was recorded during the three month period ended June 30, 2004.

General and Administration Expenses

G&A expenses totaled $0.9 million for the three-month period ended June 30, 2005, as compared to $1.5 million for the same period in 2004. The decrease of $0.6 million or 40% as compared to 2004, is due primarily to expenses related to the establishment of our offices in RTP, along with costs associated with the relocation of management from Canada and recruitment costs during the three-month period ended June 30, 2004.

G&A expenses for the three-month period ended June 30, 2005 include $0.2 million of non-cash stock-based employee compensation and consultant expense associated with the adoption of CICA 3870 on July 1, 2004. No stock-based compensation was recorded during the three month period ended June 30, 2004.

While we do expect G&A expenses to increase in future quarters, we expect this growth rate to continue to be significantly lower than the growth rate in R&D expense.

Amortization of Acquired Intellectual Property Rights

The expense associated with the amortization of intellectual property rights was $0.7 million for the three-month period ended June 30, 2005 and $0.6 million for the three-month period ended June 30, 2004. The expense relates to the value of intellectual property rights acquired in November 2002 that is being amortized on a straight-line basis over a 10-year period.

Interest Expense

The expense relates primarily to interest associated with the financing of $0.1 million of leasehold improvements to our facilities through our landlord.

Recovery of Future Income Taxes

Future taxes recovered totaled $0.2 million for the three-month period ended June 30, 2005. The future tax liability, as recognized in the balance sheet, relates directly to the intellectual property rights acquired in November 2002. These rights have no tax basis and give rise to a future tax liability that will be realized in income over the useful life of the assets through a recovery of future income taxes charged to earnings. At this time, Oxiquant, Inc. (“Oxiquant”) the entity that holds the acquired intellectual property rights, has no other activity and the future tax assets of other corporate entities cannot be used to offset this future tax liability. The future tax recovery will continue in direct proportion to the amortization of the intellectual property.

Six Months Ended June 30, 2005 and 2004

Interest Income

Interest income for the six-month period ended June 30, 2005 was $0.1 million, compared to $0.1 million for the same period in 2004 due to similar cash balances.

We have not generated any revenues to date. We do not expect to have significant revenues or income, other than interest income, until we either are able to sell our product candidates after obtaining applicable regulatory approvals, achieve development milestones under our current collaboration or we establish additional collaborations that provide us with funding.

Research and Development Expenses

R&D expenses for the six-month period ended June 30, 2005 totaled $5.4 million as compared to $2.0 million for the same period in 2004**.** During the three month period ended June 30, 2005, R&D expenses consisted primarily of manufacturing of drug substance, employee related compensation expense and clinical trial expense**.** The increase of $3.4 million or 170% in R&D expense over the same period in 2004 relates to our expanding clinical trial program for ADH-1, including the commencement of our ADH-1 Phase Ib/II trial in Europe, our Phase Ib/II trial in the U.S. and Phase II trial in Canada. During the six-month period ended June 30, 2004, R&D expense consisted primarily of costs relating to the manufacture of drug substance for use in these trials.

We expect our R&D expenses to continue to increase in future periods due to the expansion and advancement of our clinical and preclinical programs and the addition of related headcount. The expansion of R&D will also involve increased outsourcing throughout the remainder of 2005.

R&D expenses for the six-month period ended June 30, 2005 include $0.7 million of non-cash stock-based employee compensation and consultant expense associated with the adoption of CICA 3870 on July 1, 2004. Stock-based compensation for the six months ended June 30, 2004 was below $0.1 million.

General and Administration Expenses

G&A expenses totaled $1.6 million for the six-month period ended June 30, 2005, as compared to $2.5 million for the same period in 2004. The decrease of $0.9 million or 36% as compared to 2004, is due primarily to decreased expenses related to the Company’s relocation of staff to RTP, restructuring charges from staffing changes as a result of refocused scientific activity, incentive bonuses to executives and consulting fees incurred during the six-month period ended June 30, 2004.

G&A expenses for the six-month period ended June 30, 2005 include $0.2 million of non-cash stock-based employee compensation and consultant expense associated with the adoption of CICA 3870 on July 1, 2004. Stock-based compensation for the six months ended June 30, 2004 was below $0.1 million.

While we do expect G&A expenses to increase in future periods, we expect this growth rate to continue to be significantly lower than the growth rate in R&D expense.

Amortization of Acquired Intellectual Property Rights

The expense associated with the amortization of intellectual property rights was $1.4 million for the six-month period ended June 30, 2005 and $1.2 million for the six-month period ended June 30, 2004. The expense relates to the value of intellectual property rights acquired in November 2002 that is being amortized on a straight-line basis over a 10-year period.

Interest Expense

The expense relates primarily to interest associated with the financing of $0.1 million of leasehold improvements to our facilities through our landlord.

Recovery of Future Income Taxes

Future taxes recovered totaled $0.5 million for the six-month period ended June 30, 2005. The future tax liability, as recognized in the balance sheet, relates directly to the intellectual property rights acquired in November 2002. These rights have no tax basis and give rise to a future tax liability that will be realized in income over the useful life of the assets through a recovery of future income taxes charged to earnings. At this time, Oxiquant, Inc. (“Oxiquant”) the entity that holds the acquired intellectual property rights, has no other activity and the future tax assets of other corporate entities cannot be used to offset this future tax liability. The future tax recovery will continue in direct proportion to the amortization of the intellectual property.

LIQUIDITY AND CAPITAL RESOURCES

We have financed our operations since our inception on September 3, 1996 through the sale of equity and debt securities and have raised gross proceeds totaling $46.5 million through June 30, 2005. We have incurred net losses and negative cash flow from operations each year, and we have an accumulated deficit of $40.9 million as of June 30, 2005. We have not generated any revenues to date. We do not expect to have significant revenues or income, other than interest income, until we either are able to sell our product candidates after obtaining applicable regulatory approvals or achieve development milestones under our current collaboration or we establish additional collaborations that provide us with funding.

On July 20, 2005, the Company completed a private placement of equity securities totaling $8,510 for 6,079 units at a price of $1.40 per unit as adjusted for the reverse stock split, resulting in net proceeds of $8,094 after deducting broker fees and other expenses of $416. Each unit consisted of one common share and 0.30 of a common share purchase warrant. The private placement comprised an aggregate of 6,079 shares of common stock, along with 1,824 investor warrants and 57 broker warrants to acquire additional shares of Adherex common stock, each as adjusted for the reverse stock split. Each whole investor warrant entitles the holder to acquire one additional share of common stock of Adherex at an exercise price of $1.75 per share for a period of three years and each broker warrant entitles the holder to acquire one share of Adherex common stock at an exercise price of $1.75 per share for a period of two years, each as adjusted for the reverse stock split.

As of June 30, 2005, the Company’s consolidated cash and cash equivalents were $12.6 million, as compared to $17.5 million at December 31, 2004. This decrease reflects the continued funding of our corporate operations including the development and advancement of our product candidates. Working capital at June 30, 2005 and December 31, 2004 was $10.2 million and $16.1 million, respectively.

The cash flow used in operations was $4.7 million for the six months ended June 30, 2005, as compared to $3.4 million for the same period in 2004. The cash flow used in operations for the three months ended June 30, 2005 was $2.1 million as compared to $1.6 million for the same three month period in 2004. The increase in 2005 as compared to 2004 for both periods is primarily due to expanding drug development activities associated with our product candidates.

We believe that our cash and cash equivalents plus the net proceeds from the July 2005 Private Placement will be sufficient to satisfy our anticipated capital requirements until at least August 31, 2006. However, any projections of further capital requirements are subject to substantial uncertainty. Our working capital requirements may fluctuate in future periods depending upon numerous factors, including: results of research and development activities; progress or lack of progress in our preclinical studies or clinical trials; our drug substance requirements to support clinical programs; our ability to achieve development milestones under our current collaboration or we establish additional collaborations that provide us with funding ; changes in the focus, direction, or costs of our research and development programs; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; establishment of marketing and sales capabilities; our business development activities; new regulatory requirements implemented by regulatory authorities; the timing and outcome of any regulatory review process; or our commercialization activities, if any.

To finance the Company’s operations, we will need to raise additional funds through either the sale of additional equity, issue debt, achieve development milestones under our current collaboration or establish funding from additional collaborations or other sources. There can be no assurance that we will be able to raise the necessary capital or that such funding will be available on favorable terms.

We are a biopharmaceutical company with a focus on cancer therapeutics and a cadherin-based technology platform. We have multiple product candidates in the clinical stage of development as well as several preclinical product candidates. We will need to invest substantial amounts of capital to further develop and potentially commercialize our product candidates. In addition to our in-house development efforts, we will outsource many aspects of our drug development programs, which will involve substantial payments to clinical investigators, contract research organizations, academic institutions and drug substance manufacturers. We will also continue to incur expenses in connection with the continued development of our facilities in RTP.

Financial Instruments

The Company's financial instruments consist primarily of cash and cash equivalents. These investments will ultimately be liquidated to support the ongoing operations of the Company.

The investment policy of the Company 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 government obligations and chartered 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 a maximum-weighted average time to maturity of twelve months. This policy applies to all financial resources of the Company.

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

Investments with original maturities at date of purchase beyond three months, and which mature at or less than twelve months from the balance sheet date, are classified as current. Investments are carried at book value plus accrued interest with unrealized gains and losses recognized as investment income. Short-term investments were nil for June 30, 2005 and 2004. During both the three-month and six-month periods ended both June 30, 2005 and 2004, the Company earned interest income of $0.1 million on its cash and cash equivalents.

Contractual Obligations

Since our inception, we have not had any material off-balance sheet arrangements, and inflation has not had a material effect on our operations. We had no material commitments for capital expenses as of June 30, 2005.

As of June 30, 2005, our contractual obligations and commitments are as follows:

(In Thousands of U.S. Dollars)

	Less than 1 year	1-3 years	4-5 years	More than 5 years	Total
Office Lease, U.S. (1)	$ 55	$227	$ 238	$ 82	$ 602
McGill License (2)	253	622	763	64	1,702
OHSU License (3)	—	—	—	—	—
Rutgers License (4)	25	100	50	—	175
Total	$ 333	$949	$1,051	$ 146	$2,479

(1) In April 2004 we entered into a lease for our facilities in RTP. Our obligations under the lease are payable in U.S. dollars. Amounts shown assume the maximum amounts due under the lease.
(2) Research obligations shown. Royalty payments, which are contingent on sales, are not included. Penalties for failure to achieve clinical trial progress goals are not included. We expect that clinical trials will progress more rapidly than required by the agreement.
(3) Royalty and milestone payments that we may be required to pay, which are contingent on sales or progress of clinical trials, are not included.
(4) Royalty payments, which are contingent on sales, and other contingent payments that we may be required to pay are not included.

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

Research and Development

Our research and development efforts have been focused on the development of cancer therapeutics and our cadherin targeting technology platform and currently includes ADH-1, Eniluracil, STS, NAC, Mesna and various preclinical programs.

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

During the three-month period ended June 30, 2005, Company-sponsored research and development expenses totaled $3.4 million and $0.8 million for the same period during 2004. During the six-month periods ended June 30, 2005 and June 30, 2004, Company-sponsored research and development expenses totaled $5.4 million and $2.0 million, respectively. During the three months ended June 30, 2005, we spent $3.0 million on ADH-1 and $0.1 million on our other anti-cancer programs, while during the six-months ended June 30, 2005, we spent $4.7 million on ADH-1 and $0.3 million on our other anti-cancer programs.

ADH-1 is a molecularly-targeted anti-cancer drug currently in Phase Ib/II and Phase II clinical studies. ADH-1 is a small peptide molecule that selectively targets N-cadherin, a protein that plays a major role in holding together and stabilizing cells that make up blood vessels and certain tumor cells.

Eniluracil is an oral dihydropyrimidine dehydrogenase (DPD) inhibitor that was previously under development by GlaxoSmithKline ("GSK") for oncology indications. Eniluracil is being developed to enhance the therapeutic value and effectiveness of 5-fluorouracil (5-FU), one of the world's most widely-used oncology agents and a current first-line therapy for a variety of cancers including colon, rectal, breast, head and neck and ovarian. We have obtained new proprietary data regarding the optimal usage of eniluracil and 5-FU, which forms the basis of a patent application filed by the Company. We are implementing an accelerated development program to support the initiation of a Phase III clinical program as early as 2007, however, there can be no assurance that we will commence and complete that clinical trial when anticipated, if at all. Since the GSK transaction was completed on July 14, 2005, there was no expense for eniluracil for the three and six month periods ending June 30, 2005

STS is a chemoprotectant that has been shown in Phase I and Phase II clinical studies conducted at OHSU to reduce hearing loss in patients, particularly children, treated with platinum-based agents. We continue to work with the Children's Oncology Group to develop a protocol for a randomized STS trial in children.

NAC is being developed as a bone marrow protectant to prevent the bone marrow toxicity caused by certain anti-cancer drugs. Upon the completion of ongoing investigator-sponsored Phase I clinical studies, we will re-evaluate the market potential of NAC.

Mesna is under development as a chemoenhancer directed at reducing the development of resistance by cancer cells to certain chemotherapeutics agents. During each of the three-month and six-month period ended June 30, 2005, we spent $0.2 million on our chemoprotectant and chemoenhancer programs.

Exhibit 99.4

Form 52-109FT2
Certification of Interim Filings During Transition Period

I, Dr. William P. Peters, Chief Executive Officer of Adherex Technologies Inc., certify that:

1. I have reviewed the interim filings (as this term is defined in Multilateral Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings) of Adherex Technologies Inc., (the issuer) for the period ending June 30, 2005;
2. Based on my knowledge, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings; and
3. Based on my knowledge, the interim financial statements together with the other financial information included in the interim filings fairly present in all material respects the financial condition, results of operations and cash flows of the issuer, as of the date and for the periods presented in the interim filings.

Date: August 11, 2005

Signed: */s/ Dr. William P. Peters*

Dr. William P. Peters
Chief Executive Officer

Exhibit 99.5

Form 52-109FT2
Certification of Interim Filings During Transition Period

I, James A. Klein, Jr., Chief Financial Officer of Adherex Technologies Inc., certify that:

1. I have reviewed the interim filings (as this term is defined in Multilateral Instrument 52-109 Certification of Disclosure in Issuers' Annual and Interim Filings) of Adherex Technologies Inc., (the issuer) for the period ending June 30, 2005;
2. Based on my knowledge, the interim filings do not contain any untrue statement of a material fact or omit to state a material fact required to be stated or that is necessary to make a statement not misleading in light of the circumstances under which it was made, with respect to the period covered by the interim filings; and
3. Based on my knowledge, the interim financial statements together with the other financial information included in the interim filings fairly present in all material respects the financial condition, results of operations and cash flows of the issuer, as of the date and for the periods presented in the interim filings.

Date: August 11, 2005

Signed: */s/ James A. Klein, Jr.*

James A. Klein, Jr.
Chief Financial Officer