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: November 13, 2006

Commission File Number 001-32295

ADHEREX TECHNOLOGIES INC.

(Translation of registrant's name into English)

4620 Creekstone Drive, Suite 200
Durham, North Carolina 27703
(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 November 13, 2006, the Company issued a press release announcing its financial results for the third quarter ended September 30, 2006 and 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 furnished as Exhibits 99.1-99.5 hereto and are incorporated herein by reference.

The information in this Form 6-K (including the exhibits attached hereto) 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.

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 November 13, 2006

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

EXHIBIT INDEX

Exhibit Number	Description
99.1	The Registrant's Press Release dated November 13, 2006
99.2	The Registrant's Financial Statements for the Third Quarter Ended September 30, 2006
99.3	Management's Discussion and Analysis for the Third Quarter Ended September 30, 2006
99.4	Certification of Interim Filings Period by Chief Executive Officer
99.5	Certification of Interim Filings Period by Chief Financial Officer

Exhibit 99.1

PRESS RELEASE

ADHEREX REPORTS THIRD QUARTER 2006 FINANCIAL RESULTS

Research Triangle Park, NC, November 13, 2006 — 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 third quarter ended September 30, 2006. Unless otherwise indicated, all amounts included in this press release are in U.S. dollars.

The net loss for the quarter ended September 30, 2006 was $5.0 million, or $0.10 loss per share, compared to a net loss of $4.4 million, or $0.11 loss per share, for the quarter ended September 30, 2005. Operating expenses for the quarter ended September 30, 2006 totaled $5.3 million, an increase of $0.5 million from the same period last year. The increase over the prior year relates primarily to costs associated with the Asian Phase I/II eniluracil trial, the Phase I program with ADH-1 in combination with chemotherapy and the continued advancement of the single agent Phase II studies for ADH-1.

The net loss for the nine-month period ended September 30, 2006 was $12.7 million, or $0.27 loss per share, compared to a net loss of $12.1 million, or $0.32 loss per share, for the nine-month period ended September 30, 2005. Operating expenses totaled $13.7 million for the nine-month period ended September 30, 2006 and $13.2 million for the same period in the prior year. The current period reflects increased spending primarily related to the advancement of the eniluracil program.

Cash and cash equivalents totaled $9.0 million as of September 30, 2006, compared to $13.1 million at December 31, 2005, with a decrease in working capital of $5.0 million. The decreased cash balance reflects the net proceeds of $6.0 million from our May 2006 private placement offset by current year spending to fund operations.

“We have recently made major progress in the development of our drug candidates, ADH-1, eniluracil and STS. We believe last week’s presentations of data by Adherex clinical investigators at scientific and investor meetings highlighted both the medical need and the enthusiasm of physicians for the therapeutic opportunity these drugs offer,” said William P. Peters, MD, PhD, Chairman and CEO. “With ADH-1, the unexpected magnitude of synergy in combination with chemotherapy in preclinical models has prompted us to quickly initiate human clinical trials. With eniluracil, the data from both our clinical proof-of-mechanism study and from our Phase I trial of eniluracil + 5-FU have demonstrated that each of the critical components of our hypothesis for making eniluracil + 5-FU an effective drug combination has thus far been correct. Finally, with STS, our agreement with SIOPEL on the conduct of a world-wide randomized trial in children receiving cisplatin chemotherapy has significantly advanced another drug in our portfolio. In this trial, Adherex will only be responsible for paying for drug and drug distribution costs, and the trial will otherwise be fully conducted by SIOPEL.”

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)

	September 30, 2006 (unaudited)	December 31, 2005
Condensed Consolidated Balance Sheets:		
Assets:		
Cash and cash equivalents	$ 9,003	$ 13,144
Other current and long-term assets	914	1,147
Acquired intellectual property rights	12,522	14,154
Total assets	$ 22,439	$ 28,445
Liabilities and shareholders' equity:		
Accounts payable and accrued liabilities	$ 3,407	$ 2,664
Future income taxes	4,577	5,174
Other long-term liabilities	642	550
Total shareholders' equity	13,813	20,057
Total liabilities and shareholders' equity	$ 22,439	$ 28,445

	Three Months Ended September 30,	
	2006 (unaudited)	2005 (unaudited)
Condensed Consolidated Statements of Operations:		
Operating expenses:		
Research and development	$ 4,096	$ 3,147
General and administration	673	973
Amortization of acquired intellectual property rights	544	681
Loss from operations	(5,313)	(4,801)
Net interest income	121	148
Recovery of future income taxes	199	249
Net loss	$ (4,993)	$ (4,404)
Net loss per share of common stock, basic and diluted	$ (0.10)	$ (0.11)

	Nine Months Ended September 30,	
	2006 (unaudited)	2005 (unaudited)
Operating expenses:		
Research and development	$ 9,924	$ 8,525
General and administration	2,131	2,591
Amortization of acquired intellectual property rights	1,632	2,042
Loss from operations	(13,687)	(13,158)
Net interest income	376	266
Recovery of future income taxes	597	747
Net loss	$ (12,714)	$ (12,145)
Net loss per share of common stock, basic and diluted	$ (0.27)	$ (0.32)

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 development plans of the Company and the expected timing and results of such development. We can provide no assurance that such 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 the uncertainties of clinical trials, drug development and regulatory review, our need for additional capital to fund our operations, the early stage of our product candidates, our reliance on collaborative partners, our history of losses, and other risks inherent in the biopharmaceutical industry. 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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Exhibit 99.2

Quarterly Report

For the quarter ended
September 30, 2006

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

	September 30, 2006 (unaudited)	December 31, 2005
Assets		
Current assets		
Cash and cash equivalents	$ 8,950	$ 11,916
Cash pledged as collateral	53	53
Short-term investments	—	1,175
Accounts receivable	16	15
Investment tax credits recoverable	74	129
Prepaid expense	31	59
Other current assets	23	52
Total current assets	9,147	13,399
Capital assets	310	374
Leasehold inducements	460	518
Acquired intellectual property rights	12,522	14,154
Total assets	**$ 22,439**	**$ 28,445**
Liabilities and shareholders' equity		
Current liabilities		
Accounts payable	$ 1,121	$ 1,385
Accrued liabilities	2,286	1,279
Total current liabilities	3,407	2,664
Deferred lease inducement	602	537
Future income taxes	4,577	5,174
Other long-term liabilities	40	13
Total liabilities	**8,626**	**8,388**
Commitments and contingencies		
Shareholders' equity		
Common stock, no par value; unlimited shares authorized; 50,382 and 42,629 shares issued and outstanding, respectively	46,486	41,268
Contributed surplus	26,590	25,338
Cumulative translation adjustment	5,850	5,850
Deficit accumulated during development stage	(65,113)	(52,399)
Total shareholders' equity	**13,813**	**20,057**
Total liabilities and shareholders' equity	**$ 22,439**	**$ 28,445**

(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 September 30,		Nine Months Ended September 30,	
	2006	2005	2006	2005
Revenue	$ —	$ —	$ —	$ —
Operating expenses:				
Research and development	4,096	3,147	9,924	8,525
General and administration	673	973	2,131	2,591
Amortization of acquired intellectual property rights	544	681	1,632	2,042
Loss from operations	(5,313)	(4,801)	(13,687)	(13,158)
Interest expense	(1)	(3)	(3)	(10)
Interest income	122	151	379	276
	121	148	376	266
Loss before income taxes	(5,192)	(4,653)	(13,311)	(12,892)
Recovery of future income taxes	199	249	597	747
Net loss	**$ (4,993)**	**$ (4,404)**	**$ (12,714)**	**$ (12,145)**
Accumulated deficit - Beginning of period	**(60,120)**	**(40,895)**	**(52,399)**	**(33,154)**
Accumulated deficit - End of period	**$ (65,113)**	**$ (45,299)**	**$ (65,113)**	**$ (45,299)**
Net loss per share of common stock, basic and diluted	**$ (0.10)**	**$ (0.11)**	**$ (0.27)**	**$ (0.32)**
Weighted-average number of shares of common stock outstanding, basic and diluted	**50,382**	**41,308**	**46,747**	**38,146**

(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 September 30,		Nine Months Ended September 30,	
	2006	2005	2006	2005
Cash flows from (used in):				
Operating activities:				
Net loss	$ (4,993)	$ (4,404)	$ (12,714)	$ (12,145)
Adjustments for non-cash items:				
Amortization of capital assets	32	64	69	228
Amortization of acquired intellectual property rights	544	681	1,632	2,042
Recovery of future income taxes	(199)	(249)	(597)	(747)
Amortization of leasehold inducements	40	24	123	24
Stock-based compensation to consultants	—	149	—	214
Stock-based employee compensation	147	253	431	1,127
Changes in operating assets and liabilities	1,116	(575)	866	467
Net cash used in operating activities	(3,313)	(4,057)	(10,190)	(8,790)
Investing activities:				
Purchase of capital assets	—	(17)	(5)	(50)
Redemption (purchase) of short-term investments	—	(3,435)	1,175	(3,435)
Net cash provided (used) in investing activities	—	(3,452)	1,170	(3,485)
Financing activities:				
Issuance of common stock and warrants	—	8,134	6,096	8,134
Proceeds from exercise of stock options	—	—	—	25
Stock issuance costs	(2)	2	(57)	(141)
Security deposits	—	—	28	—
Other liability repayments	—	(7)	(13)	(43)
Net cash provided (used) in financing activities	(2)	8,129	6,054	7,975
Net change in cash and cash equivalents	**(3,315)**	**620**	**(2,966)**	**(4,300)**
Cash and cash equivalents - Beginning of period	**12,265**	**12,553**	**11,916**	**17,473**
Cash and cash equivalents - End of period	**$ 8,950**	**$13,173**	**$ 8,950**	**$ 13,173**

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

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

1. Going Concern

These consolidated financial statements have been prepared using generally accepted accounting principles 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 use of these principles may not be appropriate because at September 30, 2006 there was significant doubt that the Company will be able to continue as a going concern. The Company's ability to continue as a going concern is dependent upon the raising of additional financial resources.

The Company's management is considering all financing alternatives and is seeking to raise additional funds for operations from current stockholders, other potential investors 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 the above plans, there is no assurance that such funding will be available or obtained on favorable terms.

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

2. 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.

3. Significant Accounting Policies

Basis of presentation

These unaudited interim consolidated financial statements have been prepared by management in accordance with Canadian generally accepted accounting principles ("GAAP") 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 year ended December 31, 2005.

Use of estimates

The preparation of financial statements in conformity with Canadian GAAP 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.

4. 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 reside in Oxiquant, a holding company with no active business. The acquired intellectual property rights are being amortized over their estimated useful lives of 10 years. The amortization of the acquired intellectual property rights totaled $1,632 and $2,042 for the nine-month periods ended September 30, 2006 and 2005, respectively.

5. Shareholders' Equity

Stock-based Compensation

Stock-based compensation expense relating to employees totaled $430 for the nine-months ended September 30, 2006 and $1,127 for the nine-months ended September 30, 2005. The Company has not granted any stock options during the nine-month period ended September 30, 2006. During the same period in 2005, the Company issued 1,161 stock options. To estimate the value of the stock options granted during the nine-months ended September 30, 2005, the Black-Scholes option pricing model was used with the following calculation assumptions: expected dividend 0%; risk free interest rate of 3.78%; volatility of 73%; and expected life of seven years.

There was no stock-based compensation expense relating to external consultants for the nine-month period ended September 30, 2006 and $214 for the nine-month period ended September 30, 2005.

6. Subsequent Event

GlaxoSmithKline Relationship

On October 11, 2006 Adherex announced that the GlaxoSmithKline ("GSK") one-time option to license ADH-1 has expired as unexercised. As a result, Adherex has regained all rights relating to ADH-1 while continuing clinical development of the compound. There will be no future milestone payments to the Company relating to ADH-1 under the development and license agreement with GSK. The expiration of the ADH-1 option does not impact the terms of the GSK development and license agreement for eniluracil.

Management's Discussion and Analysis

For the quarter ended
September 30, 2006

Basis of Presentation

This management's discussion and analysis should be read in conjunction with our September 30, 2006 interim consolidated financial statements and the accompanying notes, which were prepared in accordance with Canadian generally accepted accounting principles ("GAAP"). This report should also be read in conjunction with management's discussion and analysis and the fiscal year-end financial statements contained in the Company's fiscal annual report for the year ended December 31, 2005.

Forward-Looking Statements

The following discussion contains forward-looking statements regarding our financial condition and the results of operations that involve significant risks and uncertainties, some of which are outside of our control. Our actual results could differ materially from those expressed or implied in these forward-looking statements. For further information regarding such risks, please refer to "Operating and Business Risks" below.

Recent Company Accomplishments

- Initiation of Phase I program with ADH-1 in combination with chemotherapy. The first study will enroll up to 55 patients and will include up to 10 sites. The study is intended to define the dose limiting toxicities and maximum tolerated dose of ADH-1 in three separate combinations: ADH-1 plus docetaxel (Taxotere®), ADH-1 plus carboplatin, and ADH-1 plus capecitabine (Xeloda®). Docetaxel is currently used in the treatment of breast cancer, prostate cancer and non-small cell lung cancer, among others. Carboplatin is commonly used in the treatment of ovarian and lung cancer. Capecitabine is currently used to treat breast cancer and colon cancer.
- Expansion of the single agent Phase II ADH-1 studies to six centers in Canada and three sites in the U.S. We expect this trial to complete patient recruitment by the end of 2006. Decisions regarding a single-agent Phase III trial with ADH-1 will be made based on the results of the single-agent Phase II program.
- Completion of the Phase Ib component of the single agent Phase Ib/II ADH-1 trial in Europe with weekly dosing up to 2,400 mg/m^2 and expansion of enrollment in the Phase II component at a dose of 2,400 mg/m^2 in patients with N-cadherin positive non-small cell lung cancer and ovarian cancer. We expect this trial to complete patient recruitment by the end of 2006.
- Re-acquisition of all rights to ADH-1 upon the expiration of the one-time option granted to GlaxoSmithKline ("GSK") in July 2005. We plan to continue with the development of ADH-1 which has progressed well in the clinic thus far. The expiration of the ADH-1 option did not impact the development and license agreement for eniluracil.
- Expansion of the eniluracil clinical program. The program includes (i) a Phase I eniluracil plus 5-fluorouracil ("5-FU"), study in solid tumors to define the maximum tolerated dose of weekly dosing of the combination, (ii) a clinical proof-of-mechanism ("POM") study to confirm the dose effect of eniluracil directly in tumor cells and (iii) a Phase I/II study in hepatocellular cancer in Asia. We expect the Phase I and POM studies to conclude by the end of 2006 and plan to commence a Phase II study in breast cancer shortly thereafter.
- Execution of an agreement with the International Childhood Liver Tumor Strategy Group (known as SIOPEL) in which SIOPEL will conduct a Phase III trial of Sodium Thiosulfate ("STS"). We will provide SIOPEL the drug and drug distribution activities and they will conduct the clinical activities. We expect SIOPEL to commence the study in early 2007. We continue to work with the U.S. Children's Oncology Group ("COG") to initiate a prospective, randomized trial with STS in children.

Overview

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

- ADH-1 (Exherin™) is a molecularly targeted anti-cancer drug currently in single agent Phase II clinical studies and a Phase I study in combination with three different chemotherapy agents. ADH-1 is a small peptide 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 a DPD inhibitor that was previously under development by GSK for the treatment of cancer. Eniluracil is being developed to enhance the therapeutic value and effectiveness of 5-FU, one of the world's most widely-used oncology agents. 5-FU is currently used as first or second-line therapy for a variety of cancers including colorectal, breast, gastric, ovarian, basal cell and head and neck.
- STS is a chemoprotectant which has been shown in Phase I and Phase II clinical studies conducted by investigators at Oregon Health & Science University ("OHSU") to reduce the disabling loss of hearing in patients, both adults and children, treated with platinum-based anti-cancer agents. We recently executed of an agreement with SIOPEL for the conduct of a Phase III trial of STS. Under the terms of the agreement SIOPEL will conduct and fund the clinical activity and we will provide the drug and drug distribution for the study. We also continue to work with the U.S. COG to initiate a prospective, randomized trial with STS in children.
- N-Acetylcysteine ("NAC") is a bone marrow protectant which has been the subject of investigator-initiated Phase I clinical trials at OHSU studying its use as a chemoprotectant with platinum-based chemotherapy.

Our preclinical program includes (i) backup peptides and small chemical molecule successors to ADH-1; (ii) peptides and small molecules targeted to inhibiting the metastatic spread of some cancers; and (iii) peptides that combine both angiolytic and antiangiogenic properties. We have synthesized peptide antagonists and agonists for a wide array of cadherin adhesion molecules, which should facilitate our efforts to select other drug candidates to move into clinical development, particularly in the following areas:

- *Small molecule N-cadherin antagonists*. We have identified a series of small chemical molecules that, in our preliminary studies, have displayed potent N-cadherin antagonism activity. Unlike ADH-1, these molecules are not peptides and are smaller and simpler in structure. Compared to peptides small chemical molecules are often (i) active after oral administration, (ii) more stable, and (iii) have different potency and toxicity profiles. We continue to advance our lead candidate from this program through the preclinical development and toxicology studies which would be required for an Investigational New Drug Submission ("IND") to the Food and Drug Administration ("FDA").
- *OB-cadherin*. OB-cadherin is reported to be involved in the metastatic spread of certain cancers. Metastatic disease is a major determinant of both a patient's survival and quality-of-life. We are developing OB-cadherin peptide and small molecule antagonists to reduce or slow down the metastatic spread of tumors, such as breast and prostate cancers.
- *VE-cadherin*. Like N-cadherin, VE-cadherin is important in the structural integrity of certain tumor blood vessels. We have designed peptide VE-cadherin antagonists and believe that the development of VE-cadherin antagonists may be synergistic with N-cadherin antagonists.

In addition to our current development efforts, we continue to pursue collaborations with other pharmaceutical companies, governmental agencies and/or corporate collaborators with respect to these and

other cadherin agonist and antagonist molecules. Our drug discovery and development efforts are supported by more than 40 issued U.S. patents and more than 50 pending patents worldwide that we either own or have exclusively licensed.

We have not received any revenues to date through the sale of products and do not expect to have significant revenues until we either are able to sell our product candidates after obtaining applicable regulatory approvals or we receive funding through established or future collaborations, such as licensing fees, upfront payments, milestone payments, or royalties. As of September 30, 2006, our deficit accumulated during development stage was $65.1 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, stock-based compensation, research contracts, toxicology studies, and internal and outsourced laboratory activities, will be dependent on the results of our drug development efforts. General and administration ("G&A") expenses include employee compensation, stock-based compensation, rent expense, insurance, legal and patent expense and other administrative activities associated with our operations in the Research Triangle Park, N.C. ("RTP") in support of our drug development programs. The amortization of acquired intellectual property rights relates to the intellectual property acquired through our acquisition of Oxiquant, Inc. ("Oxiquant") in November 2002.

Drug development timelines and expenses are variable and collaborative arrangement milestone payments occur only when the relevant milestone is achieved. 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.

Results of Operations

(In U.S. dollars)

Three-Month Periods Ended September 30, 2006 and 2005

Interest Income

Interest income for the three-month period ended September 30, 2006 was $0.1 million as compared to $0.2 million for the same period in 2005. This decrease was the result of lower cash balances in the three-month period in 2006 as compared to 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 we receive funding through established or future collaborations, such as licensing fees, upfront payments, milestone payments, or royalties.

Research and Development Expenses

R&D expenses for the three-month period ended September 30, 2006 totaled $4.1 million, as compared to $3.1 million for the same period in 2005. R&D expenditures consisted primarily of preclinical and clinical activities advancing our product candidates, ADH-1 and eniluracil. Included in the R&D expense for the three-month period ended September 30, 2006 are $0.1 million of non-cash stock-based compensation expense, as compared to $0.2 million for the same period in the prior year.

The increase in R&D expense for the three-month period ended September 30, 2006, as compared to the same period in 2005 was primarily due to costs incurred in the preparation for the Asian Phase I/II trial for eniluracil, the Phase I studies with ADH-1 in combination with chemotherapy and the continued advancement of the single agent Phase II studies for ADH-1.

Provided we have sufficient capital resources, we expect our R&D expenses to increase in future quarters due to the expansion and advancement of our clinical and preclinical programs.

General and Administration Expenses

G&A expenses totaled $0.7 million for the three-month period ended September 30, 2006, as compared to $1.0 million for the same period in 2005. The decrease is primarily due to the fact that we incurred no stock-based compensation for the three-month period ended September 30, 2006 as compared to $0.2 million for the same period in 2005.

Provided we have sufficient capital resources, we expect G&A expenses to increase in future quarters, although we expect this growth rate 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 $0.5 million for the three-month period ended September 30, 2006 and $0.7 million for the three-month period ended September 30, 2005. The expense relates to the value of intellectual property rights acquired in the acquisition of Oxiquant in November 2002 that is being amortized on a straight-line basis over a 10-year period. The amortization expense has decreased due to an impairment charge relating to the intellectual property associated with our product candidate mesna recorded during the fourth quarter of the year ended December 31, 2005.

Recovery of Future Income Taxes

Future taxes recoverable totaled $0.2 million each for the three-month periods ended September 30, 2006 and 2005. The recovery of future taxes, as recognized on the balance sheet, relates to the intellectual property acquired in the acquisition of Oxiquant 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, the entity that holds the acquired intellectual property, has no other material activity and the future tax assets of our other corporate entities cannot be used to offset this future tax liability. Thus, the future tax recovery will continue in direct proportion to the amortization of the intellectual property unless the Company changes its tax strategy with respect to Oxiquant.

Nine-Month Periods Ended September 30, 2006 and 2005

Interest Income

Interest income for the nine-month period ended September 30, 2006 was $0.4 million as compared to $0.3 million for the same period in 2005. The increase in 2006 is primarily due to higher interest rate yields and increased cash associated with the May 2006 financing.

Research and Development Expenses

R&D expenses for the nine-month period ended September 30, 2006 totaled $9.9 million, as compared to $8.5 million for the same period in 2005. R&D expenses consisted primarily of preclinical and clinical activities related to the advancement of the ADH-1 and eniluracil development programs. R&D expenses for the nine-month period ended September 30, 2006 include $0.2 million of non-cash stock-based compensation expense, as compared to $0.9 million for the same period in 2005.

The increase in R&D expense for the nine-month period ended September 30, 2006, as compared to the same period in 2005 was primarily due to increased costs incurred for the eniluracil clinical program. Development of eniluracil commenced in July 2005 upon execution of the development and license agreement with GSK, thus there were only three months of development in 2005, as compared to nine months in 2006.

Provided we have sufficient capital resources, we expect R&D expenses to increase in future quarters due to the continued expansion and advancement of our clinical and preclinical programs.

General and Administration Expenses

G&A expenses totaled $2.1 million for the nine-month period ended September 30, 2006, as compared to $2.6 million for the same period in 2005. The decrease relates primarily to non-cash stock-based compensation which totaled $0.1 million for the nine months ended September 30, 2006 and $0.4 million for the same period in 2005.

Provided we have sufficient capital resources, we expect G&A expenses to increase in future quarters; however, we expect this growth rate 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 $1.6 million for the nine-month period ended September 30, 2006 and $2.0 million for the same period in 2005. The expense relates to the value of intellectual property rights acquired in the acquisition of Oxiquant in November 2002 that is being amortized on a straight-line basis over a 10-year period. The amortization expense has decreased due to an impairment charge relating to mesna recorded during the fourth quarter of the year ended December 31, 2005.

Recovery of Future Income Taxes

Future taxes recovered totaled $0.6 million for the nine-month period ended September 30, 2006 and $0.7 million for the same period in 2005. The decrease was due to the impairment charge relating to mesna recorded in the fourth quarter of the year ended December 31, 2005.

Quarterly Information

The following table presents selected consolidated financial data for each of the last eight quarters through September 30, 2006 (dollars in thousands, except per share information):

Period	Net Loss for the Period	Basic and Diluted Net Loss per Common Share
December 31, 2004	$ (5,309)	$ (0.15)
March 31, 2005	$ (3,119)	$ (0.09)
June 30, 2005	$ (4,622)	$ (0.13)
September 30, 2005	$ (4,404)	$ (0.11)
December 31, 2005	$ (7,100)	$ (0.17)
March 31, 2006	$ (3,522)	$ (0.08)
June 30, 2006	$ (4,199)	$ (0.09)
September 30, 2006	$ (4,993)	$ (0.10)

The net loss for the quarter ended September 30, 2006 is higher than the previous quarter ended June 30, 2006 due to increased costs incurred in preparation for the Asian Phase I/II trial for eniluracil, the Phase I studies with ADH-1 in combination with chemotherapy and the advancement of the single agent Phase II studies for ADH-1. Our improved liquidity as a result of the May 2006 private placement financing allowed for these R&D expenditures to occur. The increase in the net loss for the quarter ended June 30, 2006, as compared to the quarter ended March 31, 2006 was primarily due to the expansion of the eniluracil clinical development program. The net loss for the quarter ended March 31, 2006 is lower than the quarter ended December 31, 2005, primarily due to the $3.5 million non-cash impairment charge of intellectual property associated with mesna.

During the quarter ended December 31, 2005, we recorded $3.5 million non-cash impairment charge of intellectual property associated with our product candidate, mesna. Additionally, R&D expenses have increased during the periods from September 30, 2005 through December 31, 2005 as a result of the expansion of the clinical development program for ADH-1 and the addition of eniluracil to our portfolio in July 2005. Our improved liquidity from the completion of financings in December 2003, May 2004 and July 2005 has allowed for these increased R&D activities to occur.

During the quarter ended December 31, 2004, we incurred a charge of $1.3 million associated with the acquisition of Cadherin Biomedical Inc. (“CBI”), which consisted of $1.2 million in common stock and $0.1 million in cash for transaction-related expenses. The acquisition was charged to expense on the Statement of Operations as the Settlement of CBI litigation.

Liquidity and Capital Resources

We have financed our operations since inception on September 3, 1996 through the sale of equity and debt securities and have raised gross proceeds totaling approximately $61.0 million, including the financing completed in May 2006. We have incurred net losses and negative cash flow from operations each year, and we had a deficit accumulated during development stage of $65.1 million as of September 30, 2006. We have not received any revenues to date and do not expect to have any revenues until we either are able to sell our product candidates after obtaining applicable regulatory approvals or we receive funding through established or future collaborations, such as licensing fees, upfront payments, milestone payments, or royalties.

The net cash used in operating activities during the three-month period ended September 30, 2006 was $3.3 million or an average of $1.1 million per month. The net cash used in operations for the three-month period ended September 30, 2005 was $4.1 million. The decrease in the net cash used in operating activities between periods is due to the timing of payments to vendors.

The net cash used in operating activities during the nine-month period ended September 30, 2006 was $10.2 million or an average of approximately $1.1 million per month. The net cash used in operations for the nine-month period ended September 30, 2005 was $8.8 million. The increase in the net cash used in operating activities is due to our expanding drug development activities associated with ADH-1 and the July 2005 addition of eniluracil to our portfolio.

As of September 30, 2006, our consolidated cash and cash equivalents were $9.0 million, as compared to cash, cash equivalents and short-term investments of $13.1 million at December 31, 2005. This decrease reflects the continued funding of our corporate operations offset by the net proceeds of $6.0 million from our private placement financing completed on May 8, 2006. Working capital at September 30, 2006 was approximately $5.7 million representing an approximate $5.0 million decrease as compared to December 31, 2005.

We believe that our cash and cash equivalents will be sufficient to satisfy our anticipated capital requirements into March 2007. We are considering all financing alternatives and are seeking to raise additional funds for operations from current stockholders, other potential investors or other sources. This disclosure is not an offer to sell, nor a solicitation of an offer to buy our securities. While we are striving to

achieve the above plans, there is no assurance that such funding will be available or obtained on favorable terms. At September 30, 2006, there was significant doubt that we would be able to continue as a going concern. The financial statements do not reflect adjustments in the carrying values of the assets and liabilities, the reported revenues and expenses, and the balance sheet classification used, that would be necessary if the going concern assumption were not appropriate, and such adjustments could be material. Our projections of further capital requirements are subject to substantial uncertainty. Our working capital requirements may fluctuate in future periods depending upon numerous factors, including: results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; our drug substance requirements to support clinical programs; our ability to achieve milestone payments under our current GSK relationship or any other collaborations we establish 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.

Warrants to Purchase Common Stock

In addition to 50.4 million shares of common stock outstanding at September 30, 2006 we also have a total of 15.8 million warrants outstanding as set forth below.

As of September 30, 2006, we have the following warrants to purchase common stock outstanding priced in Canadian dollars with a weighted-average exercise price of CAD$2.49 and a weighted-average remaining contractual life of 1.74 years.

Warrant Description	Number Outstanding at September 30, 2006 (In thousands)	Exercise Price In Canadian Dollars	Expiration Date	Remaining Contractual Life (years)
Investor warrants	2,335	CAD$ 3.50	May 20, 2007	0.64
Acquisition warrants	461	CAD$ 3.59	May 20, 2007	0.64
Convertible notes warrants	287	CAD$ 2.05	June 23, 2007	0.73
Convertible notes warrants	57	CAD$ 2.75	June 23, 2007	0.73
Introduction warrants	170	CAD$ 2.05	November 20, 2007	1.14
Convertible notes warrants	271	CAD$ 2.15	December 3, 2007	1.18
Investor warrants	7,567	CAD$ 2.15	December 19, 2008	2.22
Total warrants outstanding in CAD dollars	11,148			

As of September 30, 2006, we have the following warrants to purchase common stock outstanding priced in U.S. dollars with a weighted-average exercise price of $1.28 and a weighted-average remaining contractual life of 2.67 years.

Warrant Description	Number Outstanding at September 30, 2006 (In thousands)	Exercise Price In U.S. Dollars	Expiration Date	Remaining Contractual Life (years)
Agent warrants	57	$ 1.75	July 20, 2007	0.80
Investor warrants	1,824	$ 1.75	July 20, 2008	1.81
Investor warrants	2,326	$ 0.97	May 7, 2010	3.60
Agent warrants	465	$ 0.97	May 7, 2008	1.60
Total warrants outstanding in U.S dollars	4,672			

Stock Options

The Compensation Committee of the Board of Directors administers the Company's stock option plan, 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 5.6 million options, not including another 0.7 million options issued to the Chief Executive Officer and specifically approved by the stockholders in December 2003, are authorized for issuance under the plan. The option exercise price for all options issued under the plan is based on the fair market value of the underlying shares on the date of grant. All options vest within three years or less and are exercisable for a period of seven years from the date of grant. The stock option plan, as amended, provides for the issuance of Canadian and U.S. dollar denominated grants.

As of September 30, 2006, we had stock options outstanding totaling 5.1 million, of which 1.6 million were denominated in U.S dollars ("U.S. options") and 3.5 million were denominated in Canadian dollars ("Canadian options"). The weighted average exercise price of the U.S options was $1.14 and of the Canadian options was CAD$2.40.

Financial Instruments

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

The policy risks primarily include the opportunity cost of the conservative nature of the allowable investments. As 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 on the date of purchase beyond three months, and which mature at or less than twelve months from the balance sheet date, are classified as current. At September 30, 2006, we had no short-term investments. Short-term investments were $1.2 million at December 31, 2005 and consisted of commercial paper whose carrying value approximated its market value.

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 September 30, 2006.

The following table represents our contractual obligations and commitments at September 30, 2006 (in thousands of U.S. dollars):

	Less than 1 year	1-3 years	4-5 years	More than 5 years	Total
Englert Lease (1)	$110	$ 228	$ 118	$ —	$ 456
Maplewood Lease (2)	172	728	772	369	2,041
McGill License (3)	269	807	251	—	1,327
OHSU License (4)	—	—	—	—	—
Rutgers License (4)	25	100	100	—	225
Total	$576	$1,863	$1,241	$ 369	$4,049

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

(2) In August 2005, we entered into a lease for new office and laboratory facilities in RTP. Amounts shown assume the maximum amounts due under the lease. We received lease and capital inducements to enter into the lease, including a 50 percent discount for the first 24 months of the 84-month lease term and capital inducements with a fair market value of $0.5 million.

(3) Research obligations shown. Royalty payments, which are contingent on sales, are not included. Penalties for failure to achieve clinical trial progress milestones are not included.

(4) Royalty and milestone payments that we may be required to pay, which are contingent on sales or progress of clinical trials, are not included.

In connection with the OHSU License Agreement and the Rutgers, The State University of New Jersey ("Rutgers") License Agreement, we are required to pay specified amounts in the event that we achieve certain Adherex-initiated clinical trial milestones. A potential milestone payment to OHSU of up to $0.5 million may be required if we complete a planned clinical trial with STS, which has not yet commenced. There can be no assurance that we will commence or complete that clinical trial when anticipated, if at all.

Under the terms of the development and license agreement with GSK, should GSK not exercise any of its options to buy back eniluracil, we would be free to develop eniluracil alone or with other partners. If we file a New Drug Application ("NDA") with the FDA, we may be required to pay development milestones of $5.0 million to GSK. Depending upon whether the NDA is approved by the FDA and whether eniluracil becomes a commercial success, we may be required to pay up to an additional $70.0 million in development and sales milestones for the initially approved indication, plus double digit royalties based on annual net sales. If we pursue other indications, we may be required to pay up to an additional $15.0 million to GSK per FDA-approved indication.

Research and Development

Our research and development efforts have been focused on the development of cancer therapeutics and our portfolio includes ADH-1, eniluracil, STS, NAC, mesna and various cadherin technology-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 typically reviewed internally by our Chief Scientific Officer and senior scientific staff. Since the departure of Dr. Brian Huber, our former Chief Scientific Officer on October 9, 2006, such matters have been reviewed by our senior scientific staff and other members of our executive management. Major development issues are presented to the members of our Scientific and Clinical Advisory Board for discussion and review.

Research and development expenses totaled $9.9 million and $8.5 million for the nine-month periods ended September 30, 2006 and 2005, respectively.

ADH-1 is a molecularly-targeted anti-cancer drug currently in single agent Phase Ib/II and Phase II clinical studies. We incurred $6.6 million of internal and external expenses for this compound during the nine-month period ended September 30, 2006. ADH-1 is a small peptide that selectively targets N-cadherin, a protein that plays a major role in holding together and stabilizing cells that make up tumor blood vessels and certain tumor cells.

Eniluracil, which we in-licensed in July 2005 from GSK, is a DPD inhibitor that was previously under development by GSK for the treatment of cancer. During the nine-month period ended September 30,

2006, we incurred $2.3 million of internal and external expenditures for eniluracil, primarily related to the commencement of the Phase I clinical programs. Eniluracil is being developed to enhance the therapeutic value and effectiveness of 5-FU, one of the world's most widely-used oncology agents.

STS is a chemoprotectant which has been shown in Phase I and Phase II clinical studies conducted by investigators at OHSU to reduce the disabling loss of hearing in patients, both adults and children, treated with platinum-based anti-cancer agents. We recently executed of an agreement with SIOPEL for the conduct of a Phase III trial of STS. Under the terms of the agreement SIOPEL will conduct and fund the clinical activity and we will provide the drug and drug distribution for the study. We also continue to work with the U.S. COG to initiate a prospective, randomized trial with STS in children.

NAC is a bone marrow protectant which has been the subject of investigator-initiated Phase I clinical trials at OHSU studying its use as a chemoprotectant with platinum-based chemotherapy.

Mesna is a chemoenhancer to prevent the development of resistance by cancer cells to certain chemotherapeutics agents. Although we continue to have rights to mesna under our license agreement with Rutgers, we do not currently have any further development plans for this compound. Should conditions warrant, we may elect to re-commence development of this compound in the future.

Our preclinical pipeline includes back-up peptides and small chemical molecule successors to ADH-1, peptides and small molecules being developed to inhibit the metastatic spread of some cancers and peptides that combine both angiolytic and antiangiogenic properties.

Operating and Business Risks

We operate in a volatile and 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:

- we need to raise additional capital to fund operations by early to mid-2007 or curtail our operations, but funding might not be available at all or on acceptable terms;
- our product candidates are at an early stage of development, and we may never successfully develop or commercialize any of our product candidates:
- we have a history of significant losses and no revenues to date and do not expect to have revenues until we are able to sell our product candidates after obtaining applicable regulatory approvals or we received funding through established or future collaboration, such as licensing fees, licensing fess, upfront payment, milestone payments or royalties;
- the possibility of delayed or unsuccessful human clinical trials with our product candidates might result in a significant increase to our development costs;
- our ability to maintain or enter into new collaborations might adversely impact the development of our drug candidates;
- GSK might not exercise any of their options under our development and license agreement which might hinder development of eniluracil;
- the Children's Oncology Group may not conduct a clinical trial with STS as planned, which might adversely impact the development of STS;
- we may experience difficulties in managing our growth as we expand;
- we may expand our business through mergers or new acquisitions that could disrupt our business, harm our financial condition and dilute current stockholders' ownership interests;
- we may lose key personnel or be unable to attract and retain additional personnel, which might adversely impact our business and the development of our drug candidates;
- our licenses to proprietary technology owned by others may terminate or expire, which may adversely impact our ability to successfully develop our product candidates;
- the protection and enforcement of our patents and licenses related to our product candidates, the possible infringement of the rights of others and potential off-label use or sale of our product candidates by competitors might harm our financial condition and our ability to develop our product candidates;

- our reliance on third-party contract manufacturers to produce drug substance may delay or adversely impact the development of our product candidates;
- we conduct business internationally and are subject to the laws and regulations of several countries, which may affect our ability to access regulatory agencies and the enforceability of our licenses;
- our exposure to exchange rate fluctuations may adversely impact our financial condition;
- the uncertainly of regulatory agencies and approvals may delay or adversely impact the development of our product candidates and may result in the significant increase in our development costs;
- the uncertainty of market acceptance of our products, the competitive environment, pricing and reimbursement of our product candidates, if and when they are commercialized, may adversely impact our financial condition;
- the potential for product liability lawsuits from our clinical trials or from commercial activities;
- the use of hazardous materials and chemicals in our research and development which may adversely impact our business;
- new accounting or regulatory pronouncements may impact our future financial results;
- we are a foreign investment company under U.S. tax law which may have an adverse tax consequence for our U.S. stockholders;
- the volatile nature of our common stock price may adversely impact our financial condition;
- the large number of common stock to be issued, through future financings, under currently issued warrants and stock options and warrants and stock options that may be issued in the future, could result in substantial dilution for our stockholders; and
- if we lose our foreign private issuer status, we will likely incur additional expenses to comply with U.S. securities law, which may adversely impact our financial condition.

Our financial results will fluctuate from period to period and therefore are not necessarily meaningful and should not be relied upon as an indication of future financial performance. Such fluctuations in quarterly results or other factors beyond our control could affect the market price of our common stock. These factors include changes in earnings estimates by analysts, market conditions in our industry, announcements by competitors, changes in pharmaceutical and biotechnology industries, and general economic conditions. Any effect on our common stock could be unrelated to our longer-term operating performance. For a more detailed discussion of our risk factors, please refer to the risk factors in our Annual Report on Form 20-F for the fiscal year ended December 31, 2005, as well as our other public filings available at www.sedar.com and www.sec.gov.

Exhibit 99.4

Form 52-109F2 - Certification of Interim Filings

I, 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 interim period ending September 30, 2006;

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;

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; and

4. The Issuer's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures for the Issuer, and we have:

   (a) designed such disclosure controls and procedures, or caused them to be designed under our supervision, to provide reasonable assurance that material information relating to the Issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which the interim filings are being prepared.

Date: November 13, 2006

/s/ William P. Peters

William P. Peters
Chief Executive Officer

Exhibit 99.5

Form 52-109F2 - Certification of Interim Filings

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 interim period ending September 30, 2006;

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;

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;

4. The Issuer's other certifying officers and I are responsible for establishing and maintaining disclosure controls and procedures for the Issuer, and we have:

   (a) designed such disclosure controls and procedures, or caused them to be designed under our supervision, to provide reasonable assurance that material information relating to the Issuer, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which the interim filings are being prepared.

Date: November 13, 2006

/s/ James A. Klein, Jr.

James A. Klein, Jr.
Chief Financial Officer