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

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**FORM 20-F**

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- (Mark One)
- REGISTRATION STATEMENT PURSUANT TO SECTION 12(b) OR (g) OF THE SECURITIES EXCHANGE ACT OF 1934
- OR
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE FISCAL YEAR ENDED December 31, 2006
- OR
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD
- OR
- SHELL COMPANY REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD

COMMISSION FILE NUMBER: 001-32295

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**ADHEREX TECHNOLOGIES INC.**

(Exact name of Registrant as specified in its charter)

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**Not Applicable**

(Translation of Registrant's name into English)

**Canada**

(Jurisdiction of incorporation or organization)

4620 Creekstone Drive, Suite 200

Research Triangle Park

Durham, North Carolina 27703

(Address of principal executive offices)

\_\_\_\_\_

**Securities registered or to be registered to Section 12(b) of the Act.**

\_\_\_\_\_  
Title of each class  
**Common Shares**

\_\_\_\_\_  
Name of each exchange on which registered  
**The American Stock Exchange**

**Securities registered or to be registered to Section 12(g) of the Act. None**

**Securities for which there is a reporting obligation pursuant to Section 15(d) of the Act. None**

\_\_\_\_\_

Indicate the number of outstanding shares of each of the issuer's classes of capital or common stock as of the close of the period covered by the annual report.  
50,381,787

Indicate by check mark whether the registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. Yes  No

If this report is an annual or transition report, indicate by check mark if the registrant is not required to file reports pursuant to Section 13 or 15(d) of the Securities Exchange Act. Yes  No

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

Indicate by check mark whether the registrant is a large accelerated filer, an accelerated filer, or a non-accelerated filer. See definition of "accelerated filer and larger accelerated filer" in Rule 12b-2 of the Securities Exchange Act. (check one):

Large Accelerated Filer  Accelerated Filer  Non-Accelerated Filer

Indicate by check mark which financial statement item the registrant has elected to follow. Item 17  Item 18

If this is an annual report, indicate by check mark whether the registrant is a shell company (as defined in Rule 12b-2 of the Securities Exchange Act). Yes  No

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## BASIS OF PRESENTATION

The year covered by this Annual Report for the period ended December 31, 2006 represents the second full year since we changed our year end to December 31 from June 30. Prior to this filing, our most recent Annual Report on Form 20-F was filed on March 31, 2006 and covered the period ended December 31, 2005. In this report, we may refer to the 12-month period ended December 31, 2006 as “Fiscal 2006”; the 12-month period ended December 31, 2005 as “Fiscal 2005”; the six-month period ended December 31, 2004 as the “six-month fiscal transition 2004”; the 12-month period ended June 30, 2004 as “Fiscal 2004”; the 12-month period ended June 30, 2003 as “Fiscal 2003” and the 12-month period ended June 30, 2002 as “Fiscal 2002”.

Unless otherwise indicated, all references in this Annual Report to the “Company,” “Adherex,” “we,” “us,” “our” or similar terms refer to Adherex Technologies Inc., together with its subsidiaries.

We prepare our consolidated financial statements in accordance with generally accepted accounting principles (“GAAP”) in Canada. This Annual Report on Form 20-F contains a reconciliation to generally accepted accounting principles in the United States.

As the majority of our operations are now denominated in U.S. dollars, effective January 1, 2005, our functional currency is the U.S. dollar. Concurrent with the change in functional currency, the Company elected to change our reporting currency to the U.S. dollar, therefore, when we refer to “dollars,” or “\$,” we refer to U.S. dollars, the legal currency of the United States. Unless otherwise indicated, all amounts are in U.S. dollars.

When we refer to our common stock or common shares in this document, we are referring to the Common Shares of the Company.

The following words and logos are trademarks of the Company and may be registered in Canada, the United States and certain other jurisdictions: ADHEREX™ and EXHERIN™. All other product names referred to in this document are the property of their respective owners.

## TECHNICAL GLOSSARY

In this Annual Report, unless the context otherwise requires, the following words and phrases have the meanings set forth below:

<i>ADH-1</i>	A small peptide molecule that selectively targets the adhesion of certain cells possessing the N-cadherin protein. ADH-1 was previously know as Exherin™.
<i>Angiolytic</i>	Any drug or agent that is capable of disrupting or breaking up established blood vessels.
<i>Anti-angiogenic</i>	Any drug or agent that is capable of inhibiting the growth of new blood vessels.
<i>Anti-tumor activity</i>	Measurable evidence that a drug is affecting the growth, counteracting or preventing the formation of malignant tumors.
<i>Apoptosis</i>	One mechanism of causing cell death, also known as programmed cell death, and a potential mechanism for anti-tumor activity.
<i>Cadherins</i>	A family of proteins generally located at the surface of cells that bind identical molecules on neighboring cells resulting in the process known as cell adhesion.
<i>Cadherin Antagonist</i>	A substance that inhibits the binding or other functions of cadherin molecules.
<i>Cancer</i>	A heterogeneous group of diseases characterized by the uncontrolled or aberrant growth of cells. In addition to the uncontrolled growth of tumor cells, these cells are able to invade and colonize other sites in the body and thus by definition, these tumors are malignant.
<i>Cell Adhesion</i>	The physiological process whereby cells adhere to one another to form tissues or other aggregates, also called cell-to-cell adhesion.
<i>Chemoenhancers</i>	Agents that enhance the effectiveness and tumor killing properties of chemotherapeutic agents.
<i>Chemoprotectants</i>	Agents that protect against the side effects of chemotherapies.
<i>Chemotherapy</i>	Treatment of cancer with chemical agents.

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<i>Dihydropyrimidine dehydrogenase (DPD)</i>	The rate limiting enzyme involved in the catabolism of pyrimidines like thymidine and uracil, and is the main enzyme involved in the degradation of structurally-related compounds like 5-fluorouracil (5-FU).
<i>Eniluracil</i>	An oral dihydropyrimidine dehydrogenase (DPD) inhibitor, previously under development by GlaxoSmithKline for oncology indications in Phase III studies and now in-licensed to Adherex.
<i>5-fluorouracil (5-FU)</i>	5-FU is part of a group of chemotherapy drugs known as the anti-metabolites. Anti-metabolites are similar to normal body molecules, but they are slightly different in structure. These differences mean that anti-metabolites stop cells working properly instead of helping them. Anti-metabolites often stop cells from making and repairing DNA. Cancer cells need to make and repair DNA in order to grow and multiply. Anti-metabolites also stop normal cells from working properly, which result in side effects.
<i>Food and Drug Administration (FDA)</i>	The U.S. agency responsible for regulation of pharmaceutical, biotechnology and food products.
<i>Good Manufacturing Practices (GMP)</i>	That part of quality assurance designed to ensure that medicinal products are consistently produced and controlled to the quality standards appropriate to their intended use and as required by their marketing authorization or product specification. GMP relates to both production and quality control.
<i>Hand Foot Syndrome (HFS)</i>	A painful swelling of the hands and feet occurring as a toxic side effect of certain chemotherapy treatments including 5-FU and capecitabine.
<i>Health Canada's Therapeutic Products Directorate (TPD)</i>	The Government of Canada agency charged with overseeing the development and marketing of drugs in Canada.
<i>Investigational New Drug Submission (IND)</i>	Documentation filed with U.S. government agencies responsible for evaluating and licensing pharmaceutical drugs. This documentation is necessary for the initiation of clinical trials.
<i>Mesna</i>	2-mercaptoethanesulfonic acid sodium salt often administered with ifosfamide and cyclophosphamide as a chemoprotective agent. Mesna, as a chemoenhancer, is a compound that has displayed anti-cancer activity by reducing the resistance of cancer cells to certain chemotherapeutic agents.
<i>NAC</i>	N-Acetylcysteine, an agent currently used to break up, destroy or dissolve mucin or mucus and to treat acetaminophen poisoning.
<i>New Drug Application (NDA)</i>	A submission made to the FDA for marketing authorization.
<i>Necrosis</i>	One mechanism of causing cell death through injury or disease.
<i>New Drug Submission (NDS)</i>	A submission made to the TPD for marketing authorization.
<i>Oncology</i>	The study and treatment of cancer and tumors.
<i>Orphan Drug Designation</i>	A category created by the FDA for medications used to treat diseases that occur rarely (less than 200,000 cases annually in the United States) or where there is no hope for recovery of development costs. Orphan Drug Designation gives the recipient specific financial incentives. Orphan Drug Designations are controlled by the FDA's Office of Orphan Products Development.
<i>Ototoxicity</i>	Toxicity to the auditory systems that results in hearing loss or other vestibular damage.
<i>Patent Cooperation Treaty (PCT)</i>	An international patent treaty, of which Canada and the United States are signatories, whereby a single international patent application can be filed in the applicant's or inventor's home country for possible protection of intellectual property in over 100 PCT member countries.

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<i>Pharmacokinetics</i>	The way a drug is distributed, metabolized and excreted from the body after dosing.
<i>Phase I Clinical Trials</i>	Clinical trials to evaluate a drug's safety, tolerability and pharmacokinetics that typically take approximately one year to complete and are usually conducted on a small number of healthy human subjects.
<i>Phase II Clinical Trials</i>	Clinical trials that are conducted to provide an estimate of the magnitude of effectiveness of a treatment, and typically take one to two years to complete and are carried out on a relatively small number of patients (generally between 15 and 50 patients) in a specific setting of targeted disease or medical condition.
<i>Phase Ib/II Clinical Trials</i>	Clinical trials that combine aspects of both Phase I and Phase II clinical trials and which are designed to estimate the effectiveness of a new treatment in a select subgroup of patients, which display a specific tumor phenotype, with particular attention to safety and efficacy at differing dosage levels. As used in this document, it refers to clinical trials conducted in patients with a specific tumor molecular phenotype in which the relative effectiveness of the drug at several dosage levels will be evaluated. The trial design combines aspects of classical Phase I trials in that several dosages and schedules will be evaluated and aspects of classical Phase II trials in which larger numbers of a particular patient and tumor phenotype are studied to provide an estimate of the magnitude of effectiveness of a treatment.
<i>Phase III Clinical Trials</i>	Randomized clinical trials that compare two or more treatment programs that typically take two to four, or even more years, to complete and involve tests on a large population of patients suffering from the targeted condition or disease. These studies are generally required to establish the drug's clinical safety and effectiveness.
<i>Platinum-based</i>	Containing platinum, which is important for the pharmacological action of the drug.
<i>Redox Clamping</i>	Maintaining oxygen levels (reduction-oxidation potential) within a certain range.
<i>Sodium Thiosulfate (STS)</i>	Sodium thiosulfate, an antidote agent currently used in cyanide poisoning in conjunction with sodium nitrite. STS is being developed by Adherex as a chemoprotectant.
<i>Toxicology</i>	The scientific determination of the relationship between the quantity of a substance and adverse side effects.
<i>Tumor</i>	An abnormal growth of tissue whether benign or malignant.

## **PART I**

### **ITEM 1. IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS**

#### **A. Directors and senior management**

Not applicable.

### **ITEM 2. OFFER STATISTICS AND EXPECTED TIMETABLE**

Not applicable.

### **ITEM 3. KEY INFORMATION**

#### **A. Selected consolidated financial data**

The following tables set forth the selected consolidated financial data of the Company for the twelve-month period ended December 31, 2006, December 31, 2005, the six-month fiscal transition 2004 and the twelve-month periods ended June 30, 2004, 2003 and 2002. We derived the data from our consolidated financial statements, which were audited by our independent auditor. You should read this data in conjunction with Item 5, "Operating and Financial Review and Prospects" and our consolidated financial statements and related notes thereto included in this Annual Report.

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Our consolidated financial statements included in this Annual Report under Item 18, “Financial Statements” have been prepared in accordance with Canadian generally accepted accounting principles (“GAAP”). A reconciliation to United States (“U.S.”) GAAP can be found in Item 18, “Financial Statements,” footnote 19 in our audited consolidated financial statements. All amounts are expressed in U.S. dollars.

### Exchange Rates

We publish our consolidated financial statements and this Annual Report in U.S. dollars. The following table illustrates the rate of exchange for Canadian dollars per U.S. \$1.00 in effect at the end of the following periods and the average rate of exchange on noon buying rate in New York City for cable transfers in Canadian dollars as certified for custom purposes by the Federal Reserve Bank of New York. The yearly averages of the noon buying rates for Canadian dollars were calculated using the average noon buying rate on the last business day of each month during the relevant period.

	<u>Average rate</u> (CAD\$ per U.S.\$1.00)
<b>For the twelve-month period ended December 31:</b>	
December 31, 2006	1.1340
December 31, 2005	1.2115
<b>For the six-month period ended December 31, 2004:</b>	
December 31, 2004	1.2646
<b>For the twelve-month period ended June 30:</b>	
June 30, 2004	1.3440
June 30, 2003	1.5106
June 30, 2002	1.5686
June 30, 2001	1.5195
June 30, 2000	1.4735

### Monthly Exchange Rates

	<u>High</u>	<u>Low</u>
	(CAD\$ per U.S. \$1.00)	
September 2006	1.1272	1.1052
October 2006	1.1384	1.1154
November 2006	1.1474	1.1275
December 2006	1.1652	1.1415
January 2007	1.1824	1.1647
February 2007	1.1852	1.1586

**Selected Canadian GAAP Consolidated Statements of Operations**  
**U.S. Dollars**  
(In thousands, except per share data)

	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Years Ended June 30,		
				2004	2003	2002
Revenue	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
<b>Operating expenses:</b>						
Research and development	14,003	12,441	3,443	3,561	2,745	2,762
General and administration	2,883	3,182	2,727	3,481	1,996	1,145
Amortization of acquired intellectual property rights	2,177	2,723	1,234	2,323	1,265	—
Total operating expenses	(19,063)	(18,346)	(7,404)	(9,365)	(6,006)	(3,907)
Loss on impairment of intellectual property	(2,021)	(3,539)	—	—	—	—
Settlement of Cadherin Biomedical Inc. litigation	—	—	(1,283)	—	—	—
Other income	—	—	—	—	—	98
Interest income	449	361	171	162	72	213
Interest expense	(3)	(11)	—	(331)	(11)	—
Loss before income taxes	(20,638)	(21,535)	(8,516)	(9,534)	(5,945)	(3,596)
Recovery of future income taxes	1,535	2,290	451	849	462	—
Net loss	\$ (19,103)	\$ (19,245)	\$ (8,065)	\$ (8,685)	\$ (5,483)	\$ (3,596)
Net loss per share of common stock, basic and diluted	\$ (0.40)	\$ (0.49)	\$ (0.22)	\$ (0.36)	\$ (0.42)	\$ (0.45)
Weighted average number of shares of common stock outstanding, basic and diluted	47,663	39,276	35,989	24,233	12,920	8,033

**Selected U.S. GAAP Consolidated Statements of Operations**  
**U.S. Dollars**  
(In thousands, except per share data)

	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Years Ended June 30,	
				2004	2003
Revenue	\$ —	\$ —	\$ —	\$ —	\$ —
<b>Operating expenses:</b>					
Research and development	14,003	11,678	3,448	3,691	2,992
In-process research and development	—	—	—	—	13,094
General and administration	2,883	2,543	2,290	3,486	2,023
Total operating expenses	(16,886)	(14,221)	(5,738)	(7,177)	(18,109)
Settlement of Cadherin Biomedical Inc. litigation	—	—	(1,283)	—	—
Interest income	449	361	171	162	72
Interest expense	(3)	(11)	—	—	(5)
Loss before income taxes	(16,440)	(13,871)	(6,850)	(7,015)	(18,042)
Recovery of current income taxes	—	—	166	130	247
Net loss in accordance with U.S. GAAP	\$ (16,440)	\$ (13,871)	\$ (6,684)	\$ (6,885)	\$ (17,795)
Net loss per share of common stock, basic and diluted	\$ (0.34)	\$ (0.35)	\$ (0.19)	\$ (0.28)	\$ (1.38)
Weighted average number of shares of common stock outstanding, basic and diluted	47,663	39,276	35,989	24,233	12,920



**Selected Canadian GAAP Consolidated Balance Sheet Data**  
**U.S. Dollars**  
**(In thousands)**

	December 31,	December 31,	December 31,	June 30,	
	2006	2005	2004	2004	2003
Cash, cash equivalents and short-term investments	\$ 5,718	\$ 13,144	\$ 17,548	\$ 20,701	\$ 2,360
Working capital	1,200	10,735	16,133	20,091	2,231
Acquired intellectual property rights	9,956	14,154	20,415	19,496	21,583
Total assets	16,584	28,445	38,989	41,509	25,502
Future income taxes	3,639	5,174	7,463	7,126	7,889
Liability component of convertible notes	—	—	—	—	1,174
Common stock	46,486	41,268	34,324	33,565	16,688
Contributed surplus	26,751	25,338	22,587	20,258	11,147
Accumulated deficit	(71,502)	(52,399)	(33,154)	(23,403)	(14,718)
Shareholders' equity	\$ 7,585	\$ 20,057	\$ 29,607	\$ 32,824	\$ 15,217
Number of shares of common stock outstanding	50,382	42,629	36,535	35,891	16,069

**Selected U.S. GAAP Consolidated Balance Sheet Data**  
**U.S. Dollars**  
**(In thousands)**

The following consolidated balance sheet items, are presented under U.S. GAAP:

	December 31,	December 31,	December 31,	June 30,	
	2006	2005	2004	2004	2003
Cash, cash equivalents and short-term investments	\$ 5,718	\$ 13,144	\$ 17,548	\$ 20,701	\$ 2,360
Working capital	1,200	10,735	16,132	20,091	2,231
Total assets	6,628	14,291	18,573	22,014	3,919
Common stock	46,524	41,306	34,362	33,603	16,726
Contributed surplus	24,523	23,110	21,760	21,117	11,147
Accumulated deficit	(71,022)	(54,582)	(40,711)	(34,117)	(27,244)
Shareholders' equity	\$ 1,268	\$ 11,077	\$ 16,654	\$ 20,454	\$ 699
Number of shares of common stock outstanding	50,382	42,629	36,535	35,891	16,069

**B. Capitalization and indebtedness**

Not applicable.

**C. Reasons for the offer and use of proceeds**

Not applicable.

**D. Risk factors**

An investment in our common stock should be considered highly speculative. In addition to the other information in this Annual Report, you should carefully consider the following factors when evaluating the Company and our business.

**Risks Related to Our Business**

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

We believe that our current cash and cash equivalents will be sufficient to satisfy our anticipated capital requirements into the fourth quarter of 2008. Our projections of our capital requirements through 2008 and beyond, however, are subject to substantial uncertainty. Our current and future working capital requirements may change depending upon numerous factors, including: results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; our drug substance requirements to support clinical programs; our ability to enter into collaborations that provide us with funding, upfront payments, milestone or other payments; changes in the focus, direction, or costs of our research and development programs; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; the establishment of marketing and sales capabilities; our business development activities; new regulatory requirements implemented by regulatory authorities; and the timing and outcome of any regulatory review process or our commercialization activities, if any. Any changes could mean we might need additional capital earlier than the fourth quarter of 2008 or need more capital thereafter than we had anticipated. To finance our operations beyond late 2008 or earlier, if necessary, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. We might not be able to raise the necessary capital or that such funding will be available on favorable terms or at all.

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

To date, we have been engaged primarily in research and development activities. We have had no revenues to date through the sale of products, and we do not expect to have significant revenues until we either are able to sell our product candidates after obtaining applicable regulatory approvals or current or future collaborations provide us with licensing fees, milestone payments, royalties, upfront payments or other revenue. We have incurred significant operating losses every year since our inception on September 3, 1996. We experienced net losses of approximately \$19.1 million for the year ended December 31, 2006 and \$19.2 million for the fiscal year ended December 31, 2005. As of December 31, 2006, we had an accumulated deficit of approximately \$71.5 million. We anticipate incurring substantial additional losses over the next several years due to the need to expend substantial amounts on our continuing clinical trials, anticipated research and development activities, and general and administrative expenses, among other factors. We have not commercially introduced any product and our product candidates are in varying early stages of development and testing. Our ability to attain profitability will depend upon our ability to develop products that are safe, effective and commercially viable, to obtain regulatory approval for the manufacture and sale of our product candidates and to license or otherwise market our product candidates successfully. Any revenues generated from such products, assuming they are successfully developed, marketed and sold, may not be realized for a number of years. We may never achieve or sustain profitability on an ongoing basis.

**Our product candidates are at an early stage of development. Due to the long, expensive and unpredictable drug development process, we might not ever successfully develop and commercialize any of our product candidates.**

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

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

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

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

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

The agreements with McGill and OHSU are terminable by either party in the event of an uncured breach by the other party. We may also terminate our agreement with McGill after September 2006 and our agreement with OHSU at any time upon prior written notice of specified durations to the licensor. Termination of any of our collaborative arrangements could materially adversely affect our business. In addition, our collaborators might not perform as agreed in the future.

In addition to the collaborative arrangements above, we have received approval from the Drug Development Group (“DDG”) of the U.S. National Cancer Institute’s (“NCI”) Division of Cancer Treatment and Diagnosis for a Level III collaboration for the clinical development of the Company’s lead biotechnology compound, ADH-1. The NCI has no obligation to sponsor clinical trials of ADH-1 or to continue to perform preclinical or screening work for us and may terminate the collaboration at any time, as may we. In the event that we or the NCI terminate the collaboration, we may seek another third party to conduct similar work for us, which may result in increased costs for us.

The success of our business strategy will be dependent on our ability to maintain current and enter into new collaborations with other industry participants that advance the development and clinical testing of, regulatory approval for and commercialization of our product candidates, as well as collaborations that provide us with funding, such as licensing fees, milestone payments, royalties, upfront payments or otherwise. We may not be successful in maintaining current collaborations or establishing any further collaborations, and any collaborations we have or establish may not lead to the successful development of our product candidates.

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

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

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

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

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

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

Our planned future growth will strain our management, human, operational, financial and other resources. As of February 28, 2007, we had 22 full-time employees. In order to manage our future growth effectively, we will have to implement and improve operational, financial, manufacturing and management information systems and to expand, train, manage and motivate our employees. To the extent that we are unable to manage our growth effectively, we may not be able to successfully accomplish our business objectives.

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

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

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

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

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

Our success depends upon certain key personnel, in particular Dr. William P. Peters, our Chief Executive Officer and Chairman of the Board, the loss of whose services might significantly delay or prevent the achievement of our scientific or business objectives. Although we have an employment agreement with Dr. Peters through March 2010, and with each of our key personnel, we cannot be certain that any individual will continue in such capacity for any particular period of time. For example, our former Chief Scientific Officer and Chief Medical Officer have both left the Company and while this does not currently affect our ability to conduct business, it has increased our reliance on our remaining employees. The loss of further key personnel, or the inability to hire and retain qualified employees, could negatively affect our ability to manage our business. We do not currently carry key person life insurance.

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

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

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

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

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

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

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

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

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

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

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

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

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

We plan to continue to rely on contract manufacturers for the foreseeable future to produce quantities of products and substances necessary for research and development, preclinical trials, human clinical trials and product commercialization, and to perform their obligations in a timely manner and in accordance with applicable government regulations. If we develop any products with commercial potential, we will need to develop the facilities to independently manufacture such products or secure arrangements with third parties to manufacture them. We may not be able to independently develop manufacturing capabilities or obtain favorable terms for the manufacture of our products. While we intend to contract for the commercial manufacture of our product candidates, we may not be able to identify and qualify contractors or obtain favorable contracting terms. We or our contract manufacturers may also fail to meet required manufacturing standards, which could result in delays or failures in product delivery, increased costs, injury or death to patients, product recalls or withdrawals and other problems that could significantly hurt our business. We intend to maintain a second source for back-up commercial manufacturing, wherever feasible. However, if a replacement to our future internal or contract manufacturers were required, the ability to establish second-sourcing or find a replacement manufacturer may be difficult due to the lead times generally required to manufacture drugs and the need for the Food and Drug Administration (“FDA”) compliance inspections and approvals of any replacement manufacturer, all of which factors could result in production delays and additional commercialization costs. Such lead times would vary based on the situation, but might be 12 months or longer.

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

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

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

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

**Risks Related to Our Industry**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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



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

There may be new accounting or regulatory pronouncements or rulings, which could have an impact on our future financial position and results of operations. In particular, there have been a number of rule changes and proposed legislative initiatives following recent corporate bankruptcies and accounting scandals. Changing laws, regulations and standards relating to corporate governance and public disclosures can create uncertainty and such uncertainty may lead to increased expenses and exposure to liabilities.

**Risks Related to Owning Our Common Shares**

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

As further described in Item 10.E “Taxation,” we have determined that we are currently a passive foreign investment company, or PFIC, under U.S. tax law and likely will continue to be a PFIC at least until we develop a source of significant operating revenues. As a result, there are adverse tax consequences to U.S. holders of our Common Shares. A U.S. holder whose holding period for our shares includes a period during which we are classified as a PFIC generally will be required to treat certain excess distributions with respect to our shares and gains realized on the disposition of our shares as ordinary income earned ratably over the holder’s holding period and will be subject to a special tax and interest charge on amounts treated as earned in the periods in which we are a PFIC. In addition, the holder’s shares will not receive a “stepped-up” basis upon a transfer at death. These PFIC tax rules will not apply if a U.S. holder makes an election for the first taxable year of the holder’s holding period to be taxed currently on the holder’s pro rata share of our ordinary earnings and net capital gain for any year we are a PFIC. Alternatively, a U.S. holder may avoid the special tax and interest charge on excess distributions and gains by making an election to mark the shares to market annually during any period in which we are a PFIC and our shares are treated as marketable shares. If a mark-to-market election is made, amounts included in or deducted from income pursuant to the election and actual gains and losses realized upon disposition generally will be treated as ordinary gains or losses. Whether or not an applicable election is made, if we are classified as a PFIC for the taxable year in which a dividend is paid, or for the preceding taxable year, a dividend paid to a non-corporate U.S. holder will not qualify for the reduced long-term capital gains rates. These tax issues could make our stock less attractive to U.S. investors and therefore negatively affect our stock price and your ability to sell your shares.

**The market price of our Common Shares is highly volatile and could cause the value of your investment to significantly decline.**

Historically, the market price of our Common Shares has been highly volatile and the market for our Common Shares has from time to time experienced significant price and volume fluctuations, some of which are unrelated to our operating performance. From November 12, 2004 to February 28, 2007, the trading price of our stock fluctuated from a high closing price of CAD\$2.09 per share to a low closing price of CAD\$0.255 per share on the TSX, and from a high closing price of US\$1.71 per share to a low closing price of US\$0.20 per share on the AMEX. Historically, our Common Shares have had a low trading volume, and likely will continue to have a low trading volume in the future. This low volume may contribute to the volatility of the market price of our Common Shares. It is likely that the market price of our Common Shares will continue to fluctuate significantly in the future.

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

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

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

Sale or issuance of a substantial number of our Common Shares in the future could cause the market price of our common stock to decline. It may also impair our ability to obtain additional financing. As of February 28, 2007, we had outstanding warrants to purchase approximately 11.1 million of our Common Shares at exercise prices ranging from CAD\$2.05 to CAD\$3.59 per share, and outstanding warrants to purchase approximately 49.4 million of our Common Shares at exercise prices ranging from \$0.33 to \$1.75. In addition, as of February 28, 2007, there were approximately 5.8 million Common Shares issuable upon exercise of stock options granted by us of which approximately 3.0 million were denominated in Canadian dollars and had a weighted average exercise price of CAD\$2.18 per Common Share and approximately 2.8 million denominated in U.S. dollars and had a weighted average exercise price of \$0.74 per Common Share. We may also issue further warrants as part of any future financings as well as the additional 0.4 million Common Shares currently remaining available for issuance under our stock option plan. In April 2007, as part of our annual shareholders meeting, we will be asking shareholders to approve amendments to the Company's stock option plan changing the maximum number of Common Shares issuable under the plan from the current 5.6 million to 20.0 million.

**Following the \$25.0 million public offering completed on February 21, 2007 we are no longer a foreign private issuer and will incur additional expenses associated with compliance with the U.S. securities laws applicable to U.S. domestic issuers.**

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

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

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

**There is no public market for our outstanding warrants.**

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

#### **NOTE REGARDING FORWARD-LOOKING STATEMENTS**

This Annual Report on Form 20-F contains forward-looking statements that involve significant risks and uncertainties. Our actual results, performance or achievements may be materially different from any results, performance or achievements expressed or implied by such forward-looking statements. Words such as "may," "will," "expect," "believe," "anticipate," "intend," "could," "estimate," "project," "plan," and other similar words are one way to identify such forward-looking statements. Forward-looking statements in this Annual Report include, but are not limited to, statements with respect to (i) our anticipated commencement dates, completion dates and results of clinical trials; (ii) our anticipated progress and costs of our clinical and preclinical research and development programs; (iii) our corporate and development strategies; (iv) our expected results of operations; (v) our anticipated levels of expenditures; (vi) our ability to protect our intellectual property; (vii) the anticipated applications and efficacy of our drug candidates; (viii) our ability to attract and retain key employees; (ix) our efforts to pursue collaborations with the government, industry groups or other companies; (x) the nature and scope of potential markets for our drug candidates and (xi) our anticipated sources and uses of cash, cash equivalents and short-term investments. All statements, other than statements of historical fact, included in this Annual Report that address activities, events or developments that we expect or anticipate will or may occur in the future are forward-looking statements. We include forward-looking statements because we believe that it is important to communicate our expectations to our investors. However, all forward-looking statements are based on management's current expectations of future events and are subject to a number of risks and uncertainties, including those discussed above in Item 3.D., "Risk Factors,". Although we believe the expectations reflected in the forward-looking statements are based upon reasonable assumptions, we can give no assurance that our expectations will be attained, and we caution you not to place undue reliance on such statements.

## ITEM 4. INFORMATION ON THE COMPANY

### A. History and development of the Company

Our legal and commercial name is Adherex Technologies Inc. On September 3, 1996, our predecessor, Adherex Inc., was incorporated under the CBCA to develop and commercialize cell adhesion work that was initiated at McGill. On August 14, 1998, Adherex Technologies Inc. was incorporated under the CBCA and on September 11, 1998, it acquired all of the shares of Adherex Inc. On April 30, 2001, Adherex Technologies Inc. amalgamated with its wholly owned subsidiary, Adherex Inc., to form the Company. On December 19, 2003, the Company acquired 50 percent of 2037357 Ontario Inc., an Ontario corporation that performed specific research and development activity for the Company in Ontario. In June 2004, 2037357 Ontario Inc. became a wholly-owned subsidiary of the Company and continued its existence under the CBCA as Adherex Research Corp. On June 29, 2004, the Company amalgamated with Adherex Research Corp. to continue as Adherex Technologies Inc. We have two wholly owned Delaware subsidiaries, Oxiquant, Inc. and Adherex, Inc., and one wholly owned Canadian subsidiary, Cadherin Biomedical Inc. Our registered office address is: Adherex Technologies Inc., c/o LaBarge Weinstein Professional Corporation, 515 Legget Drive, Suite 800, Kanata, Ontario K2K 3G4; Telephone: (613) 599-9600; Facsimile: (613) 599-0018. Our U.S. offices are located at 4620 Creekstone Drive, Suite 200, Research Triangle Park, Durham, North Carolina 27703; Telephone: (919) 484-8484; Facsimile: (919) 484-8001.

Important corporate events in the development of our business during the fiscal year ended December 31, 2006 and through the filing of this Annual Report include the following:

- On March 1, 2007, we purchased all of GSK's remaining options to buy back eniluracil under our Development and License Agreement for an upfront fee of \$1.0 million. As a result, Adherex has assumed the full direction and control over the product's future development pursuant to the terms of the license, including the ability to partner and/or sub-license the product to third parties.
- On February 21, 2007, we completed a public offering for \$25.0 million in gross proceeds.
- On December 31, 2006, we completed patient enrollment in our single agent ADH-1 Phase Ib/II and Phase II clinical studies.
- In October 2006, GSK's one-time option to license ADH-1 expired unexercised. As a result, we regained all rights relating to ADH-1 and continue with the clinical development of the compound.
- In October 2006, we executed an agreement with SIOPEL for the conduct of a randomized trial of STS.
- In October 2006, we initiated a Phase I trial of ADH-1 in combination with three different anti-cancer chemotherapies.
- In September 2006, we initiated a Phase I/II trial of the combination of eniluracil and 5-FU in Asian patients with hepatocellular (liver) cancer.
- In May 2006, we completed a private placement offering for gross proceeds of \$6.5 million.
- In April 2006, we initiated a clinical proof-of-mechanism trial of eniluracil. This study, which was conducted at the University of Alabama at Birmingham ("UAB"), concluded at the end of 2006 and supported the Adherex hypothesis of how best to combine eniluracil with 5-FU.
- In April 2006, we executed a Clinical Trial Agreement ("CTA") for the evaluation of ADH-1 with the U.S. National Cancer Institute's ("NCI") division of Cancer Treatment and Diagnosis. The agreement provides for the NCI to sponsor non-clinical studies and clinical trials of ADH-1 in a variety of administration schedules and tumor types, both as a single agent and in combination with other anti-cancer agents.

We have not been involved in any bankruptcy, receivership or similar proceedings. We may consider from time to time potential acquisitions, dispositions, joint ventures, collaborations and other strategic transactions.

For information concerning our capital expenditures and divestitures and further information concerning our methods of financing, see Item 5, "Operating and Financial Review and Prospects."

### B. Business overview

#### Company Overview

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

- *Eniluracil* is a dihydropyrimidine dehydrogenase ("DPD") inhibitor that 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, head and neck, ovarian, and basal cell cancer of the skin, among others.

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- *ADH-1* is a molecularly targeted anti-cancer drug that selectively targets N-cadherin that is present on certain tumor cells and the established blood vessels that supply tumors. ADH-1 is currently in a clinical program in combination with various chemotherapy agents and completed patient enrollment in the single-agent Phase Ib/II and Phase II clinical studies in Europe and North America at the end of 2006.
- *STS* is a chemoprotectant that has been shown in Phase I and Phase II clinical studies conducted by investigators at Oregon Health & Science University to reduce the disabling loss of hearing in patients, both adults and children, treated with platinum-based anti-cancer agents. In 2006, we executed an agreement with SIOPEL for the conduct of a randomized study of STS. Under the terms of the agreement, SIOPEL will conduct and fund the clinical activity and we will provide drug and drug distribution for the study. We also continue to work with the U.S. Children's Oncology Group to initiate a randomized U.S. clinical trial with STS in children.
- N-Acetylcysteine is a bone marrow protectant that 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 portfolio 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 small chemical molecules and peptide antagonists and agonists for a wide array of cadherin adhesion molecules, with drug candidates available to move into future clinical development, particularly in the following areas:

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

In addition to our current development efforts, we continue to pursue collaborations with other pharmaceutical companies, governmental agencies 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.

Adherex Technologies Inc. is incorporated under the *Canada Business Corporations Act* and has three wholly-owned subsidiaries: Oxiquant, Inc. and Adherex, Inc., both Delaware corporations, and Cadherin Biomedical Inc., a wholly-owned Canadian subsidiary.

### ***Eniluracil***

Eniluracil, which was previously under development by GSK for the treatment of cancer, is being developed by Adherex 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 the first or second line therapy for colorectal, breast, gastric, head and neck, and ovarian cancers and basal cell cancer of the skin, among others. Eniluracil could make 5-FU even better by increasing its effectiveness, reducing its side effects and making it orally available.

Normally, 5-FU is rapidly broken down in the body by an enzyme known as dihydropyrimidine dehydrogenase or DPD. Eniluracil irreversibly inhibits DPD, thereby substantially slowing the breakdown of 5-FU and prolonging exposure of the tumor cells to the drug.

While 5-FU is currently a mainstay of contemporary oncology treatment, it has some therapeutic drawbacks:

- It is given intravenously and often by prolonged, multi-day infusion.
- Its use is typically associated with variable blood and tissue levels. Variable levels can reduce its effectiveness and can increase its side effects.

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- It can cause severe and often dose-limiting side effects. For example, a breakdown product of 5-FU is alpha-fluoro-beta-alanine (“F-BAL”). This degradation product may be associated with neurotoxicity and hand-foot syndrome, which are disabling and dose-limiting side effects of 5-FU therapy and other 5-FU prodrug therapy.
- Some tumors may be resistant to 5-FU due to intrinsically elevated DPD levels in the tumor cells. In other cases, the tumor may develop resistance to 5-FU as DPD levels rise in the tumor.

When eniluracil is properly used in combination with 5-FU, it may be significantly better than 5-FU alone and may resolve many of the therapeutic drawbacks of 5-FU noted above. For instance, combining eniluracil and 5-FU should have the following benefits:

- 5-FU becomes orally active, eliminating the need for intravenous (“IV”) administration.
- The blood and tissue levels become more consistent, resulting in improved efficacy.
- The consistent blood and tissue levels may also lead to an improved side effect profile.
- Elimination of F-BAL production could improve the side effect profile.

Thus, the use of eniluracil in combination with 5-FU has the potential to make 5-FU more effective, better tolerated and orally available.

There is another important potential benefit of the combination of eniluracil and 5-FU: the combination may expand the range of cancers that currently respond to 5-FU. Some tumors have inherently high levels of DPD that may result in resistance to 5-FU. Eniluracil may eliminate these high levels of DPD activity in the tumor, thereby potentially expanding the use of 5-FU into new cancer indications.

GSK’s clinical development program for the combination of 5-FU and eniluracil met with success in early development. However, three Phase III trials failed, and development was stopped. We believe new scientific data obtained subsequent to those Phase III trials may account for the early suboptimal efficacy and provide a basis for enhancing the effectiveness of the combination. This proprietary data forms the basis of a patent application by Adherex, which claims that the combination of eniluracil and 5-FU has the potential to be more effective than 5-FU alone when used in accordance with Adherex’s proprietary methods.

Adherex’s initial development plan for eniluracil is focused on two indications: 1) hepatocellular (liver) cancer, and 2) taxane- and anthracycline-resistant breast cancer.

Liver cancer is one of the most common cancers in the world, and there are currently no approved satisfactory treatments. In the U.S., there are approximately 17,000 new cases per year, providing the opportunity for orphan drug status. Adherex has already received orphan drug designation from the U.S. Food and Drug Administration for the use of eniluracil in combination with fluoropyrimidines (including 5-FU) to treat liver cancer. The rationale for targeting liver cancer is: 1) liver cancer has intrinsically high levels of DPD, making it resistant to treatment with 5-FU. Eniluracil inhibits DPD and, therefore, may make liver cancer more susceptible to therapy with 5-FU, and 2) two Phase II studies conducted by GSK in liver cancer showed extended periods of stable disease and survival, even though those studies were conducted using what now appears to be a suboptimal dose and schedule.

Our second development strategy is in taxane- and anthracycline-resistant breast cancer. Capecitabine (Xeloda®) is currently approved for this indication, yet therapy with capecitabine often results in a painful side effect known as hand-foot syndrome (reported to occur in up to 60% of patients), frequently requiring dose reduction or cessation of therapy as a result. A breakdown product of 5-FU known as F-BAL is thought but not proven to be, responsible for this side effect. Eniluracil inhibits DPD, the enzyme responsible for the breakdown of 5-FU to metabolites such as F-BAL. In GSK’s studies of eniluracil in combination with 5-FU, the incidence of hand-foot syndrome was less than 2%. Adherex may, therefore, be able to seek approval for eniluracil through either a reduced toxicity profile in comparison to capecitabine or an enhanced efficacy profile, or both.

To optimize our proprietary method of administration for the combination of eniluracil and 5-FU, we commenced a Phase I dose escalation study in patients with solid tumors. As of February 28, 2007, 23 patients have been enrolled; an MTD has not yet been reached. Upon completion of this study, we plan to commence a Phase II trial in breast cancer in the second half of 2007. During 2006, we also completed a clinical Proof of Mechanism ("POM") study that investigated the specific effects of eniluracil on the enzymatic pathways of 5-FU metabolism in patients with colorectal cancer; that study, which demonstrated the intended proof-of-mechanism, enrolled five patients and concluded by December 31, 2006. In the fourth quarter of 2006, we commenced a Phase I/II clinical trial in liver cancer in Asian patients. As of February 28, 2007, four patients have been enrolled in the Phase I portion of the trial and up to 21 further patients are expected to be enrolled. We anticipate concluding the Phase I portion of this trial by the third quarter 2007 and commencing the Phase II portion with trial completion expected in early 2008. Together, these studies are intended to define the optimal dose of eniluracil, the optimal dose ratio and schedule of eniluracil in combination with 5-FU, and the clinical response rate to Adherex's proprietary combination of these two drugs.

## **ADH-1**

ADH-1 is a small peptide that selectively targets N-cadherin present on certain tumor cells and the established blood vessels that supply blood to the tumor. Pursuant to a general collaboration agreement, McGill granted us an exclusive worldwide license to certain intellectual property rights relating to ADH-1 and certain uses thereof. N-cadherin is found throughout the body and, like other cadherins, is important in cell-to-cell binding and in maintaining the structural integrity of cells. ADH-1 appears to inhibit the binding of the N-cadherin protein molecules to each other. Within tumors, the N-cadherin protein can be found on the tumor cells themselves and on the blood vessels that supply the tumor. Therefore, N-cadherin is a single target where antagonizing N-cadherin with ADH-1 could have a dual effect; both on the tumor cells themselves and on the tumor blood vessels. In our Phase I single agent studies, radiologic changes consistent with areas of cell death (by either apoptosis or necrosis) have been seen following administration of ADH-1. Our Phase Ib/II and Phase II single agent studies completed patient enrollment as of December 31, 2006. Data from the Phase Ib/II study were presented at the International Symposium on Targeted Anticancer Therapies in March 2007, and we expect data from the North American Phase II single agent trial to be presented at the ASCO Annual Meeting in June 2007. ADH-1 has been well tolerated in our clinical trials to date and has not been shown to adversely impact normal healthy cells within the body. Some of our preclinical studies using ADH-1 in combination with chemotherapies have demonstrated significant synergies and tumor regression. Our studies are, however, at an early stage and future study results may vary.

In two Phase I single-agent studies, ADH-1 was well tolerated and demonstrated evidence of anti-tumor activity in seven patients whose tumors expressed N-cadherin. In total, the Phase I studies included 70 patients (49 of whom had N-cadherin positive tumors) who received 247 doses of ADH-1. One example of anti-tumor activity from the Phase I studies is a 62-year old woman with N-cadherin positive esophageal cancer and metastases in the lung who had previously received and was unresponsive to chemotherapy and radiation therapy. Four weeks following the initial dose of ADH-1, her lung metastases had reduced in size by 48%. This patient went on to receive additional doses of ADH-1. After three months, her lung metastases had reduced in size by 65%, a partial response by RECIST criteria. In total, this patient received 11 doses of ADH-1, maintained the 65% reduction in tumor size for six months, and did not experience tumor progression for a total of nine months from start of therapy.

At the end of 2006, we initiated a clinical program of ADH-1 in combination with chemotherapeutic agents. The first study in this program was initiated in October 2006 and is intended to define the dose limiting toxicities and maximum tolerated dose of ADH-1 in three separate combinations: ADH-1 + docetaxel (Taxotere®), ADH-1 + carboplatin (a generically available agent), and ADH-1 + capecitabine (Xeloda®). That study, which is ongoing, has enrolled an aggregate of 9 patients as of February 28, 2007 and is expected to conclude in the second half of 2007. On March 27, 2007, we initiated a further combination study of systemic ADH-1 in combination with isolated limb infusion melphalan for the treatment of melanoma. This clinical study is expected to enroll up to 25 patients and conclude in the second half of 2007.

The Phase Ib/II and Phase II single agent trials were intended to (i) provide the safety information and estimates of the expected range of therapeutic effectiveness that are a pre-requisite to the design and conduct of future randomized trials and/or (ii) help guide the dosing and scheduling of ADH-1 for use in combination with other anti-cancer chemotherapies.

## **STS**

STS is currently approved by the FDA for use in humans as part of a treatment for cyanide poisoning. We have licensed from OHSU intellectual property rights for the use of STS as a chemoprotectant, and intend to develop STS as a protectant against the hearing loss often caused by platinum-based anti-cancer agents. Preclinical studies conducted by OHSU and others on a number of agents indicated that STS effectively reduced the incidence of hearing loss caused by platinum-based anti-cancer agents. To support our development, we have or are considering novel formulations and branding strategies, and have received Orphan Drug Designation in the United States for the use of STS in the prevention of platinum-induced ototoxicity in pediatric patients.

Hearing loss among children receiving platinum-based chemotherapy is frequent, often permanent and severely disabling. The incidence of hearing loss in these children depends upon the dose and duration of chemotherapy, and many of these children require lifelong hearing aids. There is currently no established preventive agent for this hearing loss and only expensive, technically difficult and sub-optimal cochlear (inner ear) implants have been shown to provide some relief. In addition, adults undergoing chemotherapy for several common malignancies, including ovarian cancer, testicular cancer, and particularly head and neck cancer and brain cancer, receive intensive platinum-based therapy and may experience severe, irreversible hearing loss, particularly in the high frequencies.

Investigators at OHSU have conducted Phase I and Phase II studies with STS that have shown STS reduces the hearing loss associated with platinum-based chemotherapy. In one study at OHSU, the need for hearing aids to correct high frequency hearing loss was reduced from about 50% to less than 5%. We expect to continue the development of STS as a hearing loss protectant for children undergoing platinum-based chemotherapy.

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In October 2006, we entered into an agreement with SIOPEL, a multi-disciplinary group of specialists under the umbrella of the International Society of Pediatric Oncology (“SIOP”), for the conduct of a randomized trial with STS in children. We expect this randomized study to commence in the first half of 2007. The trial is expected to enroll approximately 100 children with hepatoblastoma (liver cancer) from participating centers in up to 30 countries. Patients will either receive cisplatin, a platinum-based drug frequently used to treat hepatoblastoma, or cisplatin plus STS. The study, which will be coordinated through the Children’s Cancer and Leukemia Group (“CCLG”) in the United Kingdom (“UK”), is intended to compare the level of hearing loss or ototoxicity associated with cisplatin alone versus the combination of cisplatin plus STS, as well as the safety, tolerability and anti-tumor activity in both arms of the study. We also continue to work with the U.S. COG to initiate a randomized clinical trial of STS in children in the United States.

### **NAC**

NAC had been studied at OHSU for use in the prevention of bone marrow toxicity (low white blood cells, red blood cells, and platelets) caused by certain cancer drugs. These side effects can often limit the use of agents for the treatment of cancer. A severe decrease in platelet count has been reported in some studies to occur in approximately 20% of patients undergoing chemotherapy for certain types of cancer. Platelets are critical in the maintenance of normal blood clotting function and their loss can have a range of consequences from minor manifestations such as bruising to life-threatening hemorrhages. A severe decrease in white blood cells, and specifically a type of white blood cell called a neutrophil, can increase the risk of severe infections for patients receiving chemotherapy. A severe decrease in red blood cells, known as anemia, can affect a patient’s quality of life and outcome. Currently, the most commonly used therapeutic approach to platelet loss is the use of platelet transfusions, which are expensive and have the complications and risks associated with blood transfusions.

We have licensed certain intellectual property rights from OHSU that support the use of NAC for various indications, including preventative therapy against the bone marrow toxicity caused by certain chemotherapy agents. NAC has been the subject of Phase I investigation at OHSU under an investigator investigational new drug application (“IND”) for use as a bone marrow protectant in the context of platinum-based chemotherapy. We currently have no clinical development plans for NAC as we are devoting our limited resources to higher priority programs.

### **Mesna**

In December 2006, we terminated our license agreement with Rutgers, The State University of New Jersey and have no further development plans for mesna.

### **Preclinical Portfolio**

Our product candidates are in the early stages of clinical development, so we strive to maintain a robust preclinical portfolio to hedge against unavoidable development risks and to provide possible new product candidates for the clinic. In considering our product candidates, it is important to remember we are subject to the risks of failure that are inherent in the development of therapeutic products and procedures based on innovative technologies as described in Item 3.D., “Risk Factors.”

Our preclinical portfolio 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 small chemical molecules and peptide antagonists and agonists for a wide array of cadherin adhesion molecules, with drug candidates available to move into future clinical development, particularly in the following areas:

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



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In addition to our own development efforts, we intend to continue to pursue collaborations with other pharmaceutical companies, government entities or corporate collaborators with respect to our most promising agents. One such collaboration is with the NCI. In 2005, we received approval from the DDG of the NCI's Division of Cancer Treatment and Diagnosis for a Level III collaboration for the clinical development of the Company's lead biotechnology compound, ADH-1. As part of that collaboration, we executed a CTA with the NCI's Cancer Therapy Evaluation Program and Developmental Therapeutics Program to support additional preclinical studies of ADH-1 in preparation of future NCI-sponsored clinical trials, to further evaluate the anti-cancer and vascular targeting effects of ADH-1 both as a single agent and in combination with other anti-cancer agents in patients with advanced resistant cancers that express the molecular marker, N-cadherin. We also have entered into a standard form screening agreement with the NCI from 2003, under which NCI continues to screen and test select Adherex compounds from our preclinical pipeline for their anti-cancer properties in various preclinical anti-cancer assays and tumor models. The NCI has no obligation to sponsor clinical trials of ADH-1 or to continue to perform preclinical or screening work for us and may terminate the CTA or screening agreement at any time, as may we. In the event that we or the NCI terminate the CTA or screening agreement, we may seek another third party to conduct similar work for us, which may result in increased costs for us.

### **Intellectual Property**

Our general policy is to seek patent protection in the United States, major European countries, Japan, Canada and other jurisdictions as appropriate for our compounds and methods. Our cadherin-based patent portfolio currently includes patents with respect to our unique composition of matter, broad claims with respect to modulating cell adhesion, specific claims for the use of these compounds in various diseases and the pharmaceutical formulation of these compounds. We have also sought patent protection with respect to alternate "sites" of cell adhesion activity as well as related compounds, screening methods and antibodies. With respect to the intellectual property licensed from GSK, McGill and OHSU, we work closely with these institutions to continually strengthen and expand our worldwide patent protection.

Currently, we own or have licensed more than 40 issued U.S. patents and more than 50 pending patents worldwide.

Our success is significantly dependent on our ability to obtain patent protection for our product candidates, both in the United States and abroad. The patent position of biotechnology and pharmaceutical companies, in general, is highly uncertain and involves complex legal and factual questions, which often results in apparent inconsistencies regarding the breadth of claims allowed and general uncertainty as to their legal interpretation and enforceability. Further, some of our principal candidates, including STS and NAC, are based on previously known compounds, and candidates or products that we develop in the future may include or be based on the same or other compounds owned or produced by other parties, some or all of which may not be subject to effective patent protection. In addition, regimens that we may develop for the administration of pharmaceuticals, such as specifications for the frequency, timing and amount of dosages, may not be patentable. Accordingly, our patent applications may not result in patents being issued and issued patents may not afford effective protection. In addition, products or processes that we develop may turn out to be covered by third party patents, in which case we may require a license under such patents if we intend to continue the development of those products or processes. Any legal actions against us on the basis of a third party patent could be costly.

### **Corporate Relationships**

#### ***General Collaboration Agreement with McGill University***

In February 2001, we entered into a general collaboration agreement with McGill. Pursuant to the terms of the agreement, McGill granted us a 27-year exclusive worldwide license to develop, use and market certain cell adhesion technology and compounds. In particular, McGill granted us an exclusive worldwide license to U.S. Patent 6,031,072 covering specific compounds including ADH-1 (composition of matter), U.S. Patent 6,551,994 covering alpha-catenin and beta-catenin inhibiting compounds, related international filings under the Patent Cooperation Treaty ("PCT"), continuations and certain other patents and patent applications.

In consideration, we issued 508,416 shares of our common stock to McGill. We also agreed to pay to McGill future royalties of 2% of any gross revenues from the use of the technology and compounds. In addition, we agreed to fund research at McGill over a period of 10 years totaling CAD\$3.3 million. Annual funding commenced in 2001, the first year of the agreement, for a total of CAD\$200,000, and increases annually by 10% through 2010, when the required annual funding reaches CAD\$660,000. This research commitment can be deferred in any given year if it would exceed 5% of our cash and cash equivalents. To date, there have been no deferrals and we have paid out approximately CAD\$1.0 million in research and development milestone funding to McGill pursuant to this agreement and other research-related payments. Pursuant to the terms of the agreement, we are entitled to certain intellectual property rights that result from this research.

The term of the general collaboration agreement expires on September 23, 2028, unless earlier terminated by operation of law or as provided in the agreement. The agreement is terminable by either Adherex or McGill in the event of an uncured breach by either party after 60 days prior written notice. We also have the right to terminate the agreement at any time after September 2006 upon 60 days prior written notice to McGill.

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### ***Exclusive License Agreement with Rutgers, The State University of New Jersey***

In November 2002, we acquired an exclusive license agreement with Rutgers through our acquisition of Oxiquant, which had entered into the license agreement with Rutgers in April 2001. In consideration, Rutgers was issued 500,000 shares of common stock of Oxiquant, which were subsequently converted upon our acquisition of Oxiquant into 764,264 shares of Adherex common stock and warrants to purchase 43,899 shares of Adherex common stock at CAD\$3.59 per share until May 20, 2007. Through December 31, 2006, we have paid Rutgers cumulative payments under this agreement totaling \$45,000. In December 2006, we terminated the license agreement with Rutgers and as a result, we no longer have any rights to or any future development plans for this technology.

### ***License Agreement with Oregon Health & Science University***

In November 2002, we acquired an exclusive license agreement with OHSU through our acquisition of Oxiquant, which had entered into the license agreement with OHSU in September 2002. Pursuant to the license agreement, OHSU granted us an exclusive worldwide license to intellectual property directed to thiol-based compounds and their use in oncology. In consideration, OHSU was issued 250,250 shares of common stock of Oxiquant that were subsequently converted upon the acquisition of Oxiquant into 382,514 shares of Adherex common stock and warrants to purchase 21,971 shares of Adherex common stock at CAD\$3.59 per share until May 20, 2007. In addition, we are required to make the following milestone payments: (i) \$50,000 upon completion of Phase I clinical trials, (ii) \$200,000 upon completion of Phase II clinical trials, (iii) \$500,000 upon completion of Phase III clinical trials and (iv) \$250,000 upon the first commercial sale for any licensed product. We are also required to pay OHSU a 2.5% royalty on net sales of any licensed products and a 15% royalty on any consideration received from sublicensing of the licensed technology.

The term of the license agreement expires on the date of the last to expire claim(s) covered in the patents licensed to us, unless earlier terminated as provided in the agreement. The agreement is terminable by OHSU in the event of a material breach of the agreement by us or our sublicensees after 60 days prior written notice from OHSU. We have the right to terminate the agreement at any time upon 60 days prior written notice and payment of all fees due to OHSU under the agreement.

### ***Development and License Agreement with GlaxoSmithKline***

In July 2005, Adherex in-licensed eniluracil from GSK. Under the terms of the Development and License Agreement, Adherex received an exclusive license for eniluracil for all indications, and GSK retained options to buy back the compound at various points in time during its development in return for milestone payments and sales royalties to Adherex, the size of which were dependent upon if and when GSK actually exercised one of its options. If GSK did not exercise any of its buy-back options, Adherex would have been free to develop eniluracil alone or with other partners and would have been required to pay GSK development and sales milestone payments and sales royalties. Adherex paid no upfront cash for the license, and GSK made a concurrent equity investment of US\$3.0 million to assist in its further development.

As part of the Development and License Agreement, we granted GSK an option to receive a worldwide, exclusive license for ADH-1 for all indications. On October 11, 2006, we announce that GSK's option to ADH-1 had expired unexercised. We now have regained full control regarding the development of ADH-1 and are free to enter into collaborations or partnerships with pharmaceutical and biotech companies for ADH-1.

In March 2007, Adherex purchased all of GSK's remaining options for eniluracil under the agreement for a \$1.0 million upfront fee. Adherex now has full control over the development of eniluracil and is required to pay GSK the same development and sales milestone payments and sales royalties as previously agreed, but GSK's options to buy back the product no longer remain. Specifically, if we file an NDA with the FDA, the Company will be obligated to pay GSK development milestones of \$5.0 million. Depending upon the commercial success of eniluracil, we could also be required to pay GSK an additional \$70.0 million in development and sales milestones, plus double-digit royalties based on our annual net sales. If we pursue other indications, we may be required to pay up to an additional \$15.0 million to GSK for each indication approved by the FDA.

## **Competition**

Competition in the biotechnology and pharmaceutical industries is intense and characterized by the rapid advancement of technology. We expect that if any of our product candidates achieve regulatory approval for sale, they will compete on the basis of drug efficacy, safety, patient convenience, reliability, ease of manufacture, price, marketing, distribution and patent protection, among other variables. Our competitors may develop technologies or drugs that are more effective, safer or affordable than any we may develop.

There are a number of different approaches to the development of therapeutics for the treatment of cancer that are currently being used and studied. These approaches include: (i) surgery to excise the cancerous tissue; (ii) radiation therapy, which attacks cancerous cells but does not easily distinguish between healthy and diseased cells; (iii) chemotherapy, which works by preventing a cancerous cell from dividing or by killing cells that divide; (iv) immunotherapy, which stimulates the body's immune system to respond to the disease; and (v) hormone therapy, which may slow the growth of cancer cells or even kill them.

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We are aware of a number of companies engaged in the research, development and testing of new cancer therapies or means of increasing the effectiveness of existing therapies, including, among many others, Abbott Laboratories, Amgen, Antisoma, AstraZeneca, Bayer, Bristol-Myers Squibb, Entremed, Genentech, Merck & Co., NeoPharm, Novartis, Johnson & Johnson, OXiGENE, Peregrine Pharmaceuticals, Pfizer, Roche, OSI Pharmaceuticals, Taiho and Sanofi-Aventis. Some of these companies have products that have already received, or are in the process of receiving, regulatory approval or are in later stages of clinical development. Many of them have greater financial resources than we do. Many of these companies have marketed drugs or are developing targeted cancer therapeutics which, depending upon the mechanism of action of such agents, could be viewed as competitors. However, we are not aware of any other N-cadherin targeted compound in clinical trials. Because cancer treatment often consists of using different drug combinations, it is possible that agents that are either marketed (e.g., Taxotere or Avastin) or investigational could be combined with ADH-1 (after achievement of applicable regulatory requirements) in an effort to improve the efficacy in comparison to the agents used alone. In other words, while a drug with a similar mechanism of action, or with anti-tumor activity in a disease where ADH-1 is also shown to be active, could be viewed as a potential competitor when both drugs are used alone, the combination could prove to be superior to the current standard of care.

We are aware of at least four companies, AstraZeneca, Aventis, OXiGENE and Roche that are clinically developing cancer angiolytics. Their product candidates are tubulin depolymerizing agents that destroy the scaffold-like structure that supports the lining cells (endothelial cells) of blood vessels, causing the endothelial cells to round and cutting off blood flow through the blood vessel. They thus cut off a tumor's blood supply and lead to tumor cell death. Some other angiolytic agents are known to us to be in preclinical development, including antibodies to tumor blood vessel wall components and agents linked with liposomal cytotoxic agents, but little information about these agents is publicly available at this time. These competing angiolytics work in a very different manner than ADH-1 and, to our knowledge, we are the only company approaching tumor angiolysis from the perspective of peptide -based cadherin antagonism, or the disruption of tumor blood vessels by inhibiting the proteins that hold the blood vessels together. Tumor angiolysis is an emerging field, and our competitors' tubulin depolymerizing agents, like our drug candidates, are still in clinical development. OXiGENE recently commenced a Phase III study with its angiolytic agent in the UK. To our knowledge, no other angiolytic compounds have entered late-stage development. Accordingly, it is premature to speculate on the potential advantages and disadvantages of different angiolytic agents because the efficacy and tolerability profiles of these agents are not yet publicly available. Our competitors might obtain regulatory approval for their drug candidates sooner than we do, and/or their drugs may prove to be more competitive than ours are.

Anti-angiogenic compounds, which aim to prevent the growth of new tumor vessels, may compete with angiolytic compounds like ADH-1, but they may also be complementary. For instance, it may be useful to consider the use of an anti-angiogenic agent in sequential therapy with an angiolytic agent as a way to initially destroy existing tumor vessels and subsequently prevent new tumor blood vessel growth.

Programmed cell death or apoptosis has a critical role in the maintenance of healthy tissues. It is being increasingly recognized that defects in apoptotic mechanisms and pathways commonly occur to allow cancer cells to survive, flourish and accumulate – in fact, the defects in the apoptotic pathways are fundamental properties of cancer biology. In recent years, the molecular underpinning of apoptosis pathways has received considerable attention and provides another opportunity for potential therapeutic intervention by inducing apoptosis in tumor cells. Many such apoptosis inducers are in preclinical and clinical development as oncology therapeutics candidates with companies that include Sanofi-Aventis, Abbott Laboratories, Novartis, Pfizer and Merck & Co.

There are several potential therapies that may be competitive to our eniluracil with 5-FU combination strategy including; Capecitabine which is marketed by Roche is an oral prodrug of 5-FU that is converted to 5-FU following absorption from the gastrointestinal tract. Capecitabine is approved by the FDA and many other regulatory agencies worldwide for use in breast and colorectal cancer. UFT, marketed by Merck KGaA is another oral 5-FU prodrug that has not been approved by the FDA, but is marketed in Japan and several European countries.

5-FU is normally rapidly metabolized and broken down by the enzyme DPD. Eniluracil is an irreversible inhibitor of DPD and its use with 5-FU leads to prolonged and elevated levels of 5-FU. Uracil is a competitive inhibitor of DPD. Although not FDA approved as a therapeutic agent, uracil has sometimes been used with 5-FU and tegafur for the treatment of certain cancers. UFT is an orally active combination of uracil and tegafur that is available in some international markets through Merck KGaA.

S-1, which is under development by Taiho is an orally active combination of tegafur, a DPD inhibitor (5-chloro-2, 4-dihydrozypyridine, or CDHP) and oxonic acid, an inhibitor of phosphoribosyl pyrophosphate transferase, an enzyme that reduces the incorporation of 5-FU into RNA. S-1 is currently in clinical development. Other DPD inhibitors are in development, including a Roche molecule, Ro 09-4889, that has completed a Phase I clinical study.

We are not aware of any commercially available agents that reduce the incidence of hearing loss associated with the use of platinum-based anti-cancer agents, for which purpose we are attempting to develop STS. We are aware of one company, Sound Pharmaceuticals, that is developing agents for noise and age related hearing loss. We are also aware of research relating to the use of high doses of amifostine (a drug used to control some of the side effects of chemotherapy and radiation therapy) for the

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protection of hearing in connection with platinum-based chemotherapy. Cochlear implants, which are small electronic devices that are surgically placed in the inner ear to assist with certain types of deafness, are utilized to offer some relief, and other companies may seek to develop such agents in the future.

Many chemotherapeutic agents are currently available and numerous others are being developed. Any chemotherapeutic products that we are able to develop may not be able to compete effectively with existing or future chemotherapeutic agents. However, cancer as a disease is not currently controlled by any one anti-cancer agent, and there is typically a need for several agents at any one time and over time, different regimens and cocktails of agents are often used.

Many of our existing or potential competitors have substantially greater financial, technical and human resources than we do and may be better equipped to develop, manufacture and market products. In addition, many of these competitors have extensive experience with preclinical testing and human clinical trials and in obtaining regulatory approvals. In addition, many of the smaller companies that compete with us have formed collaborative relationships with large, established companies to support the research, development, clinical trials and commercialization of any products that they may develop. We may rely on third parties to commercialize any products we develop, and our success will depend in large part on the efforts and competitive merit of these collaborative partners. Academic institutions, government agencies and other public and private research organizations may also conduct research, seek patent protection and establish collaborative arrangements for research, clinical development and marketing of products similar to those we seek to develop. These companies and institutions compete with us in recruiting and retaining qualified scientific and management personnel as well as in acquiring technologies complementary to our projects. The existence of competitive products, including products or treatments of which we are not aware, or products or treatments that may be developed in the future, may adversely affect the marketability of any products that we may develop.

## **Government Regulation**

The production and manufacture of our product candidates and our research and development activities are subject to regulation for safety, efficacy and quality by various governmental authorities around the world.

In Canada, these activities are subject to regulation by Health Canada's Therapeutic Products Directorate (TPD) and the rules and regulations promulgated under the Food and Drug Act. In the United States, drugs and biological products are subject to regulation by the FDA. The FDA requires licensing of manufacturing and contract research facilities, carefully controlled research and testing of products, governmental review and/or approval of results prior to marketing therapeutic products. Additionally, the FDA requires adherence to "GLP" as well as "GCP" during clinical testing and "GMP" and adherence to labeling and supply controls. The systems of new drug approvals in Canada and the United States are substantially similar, and are generally considered to be among the most rigorous in the world.

Generally, the steps required for drug approval in Canada and the United States, specifically in cancer related therapies, include:

*Preclinical Studies:* Preclinical studies, also known as non-clinical studies, primarily involve evaluations of pharmacology, toxic effects, pharmacokinetics and metabolism of a drug in animals to provide evidence of the relative safety and bioavailability of the drug prior to its administration to humans in clinical studies. A typical program of preclinical studies takes 18 to 24 months to complete. The results of the preclinical studies as well as information related to the chemistry and comprehensive descriptions of proposed human clinical studies are then submitted as part of the IND application to the FDA, a Clinical Trial Application to the TPD, or similar submission to other foreign regulatory bodies. This is necessary (in Canada, the United States and most other countries) prior to undertaking clinical studies. Additional preclinical studies are conducted during clinical development to further characterize the toxic effects of a drug prior to submitting a marketing application.

*Phase I Clinical Trials:* Most Phase I clinical trials take approximately one year to complete and are usually conducted on a small number of healthy human subjects to evaluate the drug's safety, tolerability and pharmacokinetics. In some cases, such as cancer indications, Phase I clinical trials are conducted in patients rather than healthy volunteers.

*Phase II Clinical Trials:* Phase II clinical trials typically take one to two years to complete and are generally carried out on a relatively small number of patients (generally between 15 and 50 patients) in a specific setting of targeted disease or medical condition, in order to provide an estimate of the drug's effectiveness in that specific setting. This phase also provides additional safety data and serves to identify possible common short-term side effects and risks in a somewhat larger group of patients. Phase II testing frequently relates to a specific disease, such as breast or lung cancer. Some contemporary methods of developing drugs, particularly molecularly targeted therapies, do not require broad testing in specific diseases, and instead permit testing in subsets of patients expressing the particular marker. In some cases, such as cancer indications, the company sponsoring the new drug may submit a marketing application to seek accelerated approval of the drug based on evidence of the drug's effect on a "surrogate endpoint" from Phase II clinical trials. A surrogate endpoint is a laboratory finding or physical sign that may not be a direct measurement of how a patient feels, functions or survives, but is still considered likely to predict therapeutic benefit for the patient. If accelerated approval is received, the company sponsoring the new drug must continue testing to demonstrate that the drug indeed provides therapeutic benefit to the patient.

*Phase III Clinical Trials:* Phase III clinical trials typically take two to four, or even more years to complete and involve tests on a much larger population of patients suffering from the targeted condition or disease. These studies

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involve conducting controlled testing and/or uncontrolled testing in an expanded patient population (several hundred to several thousand patients) at separate test sites (multi-center trials) to establish clinical safety and effectiveness. These trials also generate information from which the overall benefit-risk relationship relating to the drug can be determined and provide a basis for drug labeling. Phase III trials are generally the most time consuming and expensive part of a clinical trial program. In some instances, governmental authorities (such as the FDA) will allow a single Phase III clinical trial to serve as a pivotal efficacy trial to support a Marketing Application.

*Marketing Application:* Upon completion of Phase III clinical trials, the pharmaceutical company sponsoring the new drug assembles all the chemistry, preclinical and clinical data and submits it to the TPD or the FDA as part of a New Drug Submission in Canada or a New Drug Application in the United States. The marketing application is then reviewed by the regulatory body for approval to market the product. The review process generally takes 12 to 18 months.

Any clinical trials that we conduct may not be successfully completed, either in a satisfactory time period or at all. The typical time periods described above may vary substantially and may be materially longer. In addition, the FDA and its counterparts in other countries have considerable discretion to discontinue trials if they become aware of any significant safety issues or convincing evidence that a therapy is not effective for the indication being tested. The FDA and its counterparts in other countries may not (i) allow clinical trials to proceed at any time after receiving an IND, (ii) allow further clinical development phases after authorizing a previous phase, or (iii) approve marketing of a drug after the completion of clinical trials.

While both European and U.S. regulatory systems require that medical products be safe, effective, and manufactured according to high quality standards, the drug approval process in Europe differs from that in the United States and Canada and may require us to perform additional preclinical or clinical testing regardless of whether FDA or TPD approval has been obtained. The amount of time required to obtain necessary approvals may be longer or shorter than that required for FDA or TPD approval. European Union Regulations and Directives generally classify health care products either as medicinal products, medical devices or in vitro diagnostics. For medicinal products, marketing approval may be sought using either the centralized procedure of the European Agency for the Evaluation of Medicinal Products ("EMA") or the decentralized, mutual recognition process. The centralized procedure, which is mandatory for some biotechnology derived products, results in an approval recommendation from the EMA to all member states, while the European Union mutual recognition process involves country by country approval.

### **C. Organizational structure**

We carry on operations in Canada and the United States through our parent company, Adherex Technologies Inc., a wholly owned Canadian subsidiary, Cadherin Biomedical Inc., and through two wholly owned Delaware subsidiaries, Oxiquant, Inc. and Adherex, Inc.

### **D. Property, plant and equipment**

We lease two facilities, one of which we sublease to another tenant. The facility we occupy has approximately 18,272 square feet of laboratory and office space in Research Triangle Park, North Carolina and the current monthly lease payments for \$13,000 and the lease expires in August 2012. The subleased space consists of approximately 7,636 square feet of laboratory and office space and the current monthly payments are approximately \$9,000 and the lease expires in March 2010 and is sublet through March 2008. The sublease agreement is on the same terms as our original lease.

### **E. Unresolved Staff Comments**

None.



## ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

### Presentation

The following management's discussion and analysis ("MD&A") should be read in conjunction with our December 31, 2006 audited consolidated financial statements and the related notes, which are prepared in accordance with Canadian generally accepted accounting principles ("GAAP"). A reconciliation from Canadian to United States ("U.S.") GAAP can be found in Item 18, "Financial Statements," footnote 19. All references to "years," unless otherwise noted, refer to our twelve-month fiscal year, which prior to July 1, 2004, ended on June 30.

The year ended December 31, 2006 represents the second full year since we changed our fiscal year end to December 31 from June 30. The six-month period ended December 31, 2004 was our transition year and covered the period July 1, 2004 through December 31, 2004. For ease of reading the MD&A we refer throughout to the periods reported as follows:

January 1, 2006 – December 31, 2006	Fiscal 2006
January 1, 2005 – December 31, 2005	Fiscal 2005
July 1, 2004 – December 31, 2004	Six-Month Fiscal Transition 2004
July 1, 2003 – June 30, 2004	Fiscal 2004

### Functional and Reporting Currency

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

### Share Consolidation

On July 20, 2005, we announced a share consolidation of our common stock at a ratio of one-for-five. The share consolidation became effective at the close of business on July 29, 2005. The share consolidation equally affected all of our common shares, stock options and warrants outstanding at the effective date. The number of shares of our 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 retroactively adjusted for all periods presented to reflect the one-for-five share consolidation.

### Forward-Looking Statements

Certain statements in this discussion may constitute "forward-looking" statements that involve significant known and unknown risks and uncertainties. Our actual results, performance or achievements may be materially different from any results, performance or achievements expressed or implied by such forward-looking statements. Forward-looking statements include, but are not limited to, statements with respect to: (i) our anticipated commencement dates, completion dates and results of clinical trials; (ii) our anticipated progress and costs of our clinical and preclinical research and development programs; (iii) our corporate and development strategies; (iv) our expected results of operations; (v) our anticipated levels of expenditures; (vi) our ability to protect our intellectual property; (vii) the anticipated applications and efficacy of our drug candidates; (viii) our ability to attract and retain key employees; (ix) our efforts to pursue collaborations with the government, industry groups or other companies; (x) the nature and scope of potential markets for our drug candidates; and (xi) our anticipated sources and uses of cash, cash equivalents and short-term investments. When used in this discussion, words such as "may", "will", "expect", "believe", "anticipate", "intend", "could", "estimate", "project", "plan" and other similar terminology would denote such forward-looking statements. All statements, other than statements of historical fact, included in this discussion that address activities, events or developments that we expect or anticipate will or may occur in the future are forward-looking statements. These forward-looking statements are based upon what our management believes are reasonable assumptions, reflect current expectations regarding future events and operating performance, and speak only as of the date of this discussion. For further information regarding such risks, please refer to Item 3.D., "Risk Factors".

### Recent Key Company Accomplishments

- On March 1, 2007 we purchased all of GlaxoSmithKline's ("GSK") remaining options to buyback eniluracil under our Development and License Agreement for an upfront fee of \$1.0 million. As a result, Adherex has assumed the full direction and control over the product's future development pursuant to the terms of the license, including the ability to partner and/or sub-license the product to third parties.

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- On February 21, 2007, we completed a public offering for \$25.0 million in gross proceeds.
- On December 31, 2006, we completed patient enrollment in our single agent ADH-1 Phase Ib/II and Phase II clinical studies.
- In October 2006, GSK's one-time option to license ADH-1 expired unexercised. As a result, we regained all rights relating to ADH-1 and continue with the clinical development of the compound.
- In October 2006, we executed an agreement with the International Childhood Liver Tumour Strategy Group (known as SIOPEL) for the conduct of a randomized trial of sodium thiosulfate ("STS").
- In October 2006, we initiated a Phase I trial of ADH-1 in combination with three different anti-cancer chemotherapies.
- In September 2006, we initiated a Phase I/II trial of the combination of eniluracil and 5-fluorouracil ("5-FU") in Asian patients with hepatocellular (liver) cancer.
- In May 2006, we completed a private placement offering for gross proceeds of \$6.5 million.
- In April 2006, we initiated a clinical proof-of-mechanism trial of eniluracil. This study, which was conducted at the University of Alabama at Birmingham ("UAB"), concluded at the end of 2006 and supported the Adherex hypothesis of how best to combine eniluracil with 5-FU.
- In April 2006, we executed a Clinical Trial Agreement for the evaluation of ADH-1 with the U.S. National Cancer Institute's ("NCI") Division of Cancer Treatment and Diagnosis. The agreement provides for the NCI to sponsor non-clinical studies and clinical trials of ADH-1 in a variety of administration schedules and tumor types, both as a single agent and in combination with other anti-cancer agents.

## Overview

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

- *Eniluracil* is a dihydropyrimidine dehydrogenase ("DPD") inhibitor that 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, head and neck, ovarian, and basal cell cancer of the skin, among others.
- *ADH-1* is a molecularly targeted anti-cancer drug that selectively targets N-cadherin that is present on certain tumor cells and the established blood vessels that supply tumors. ADH-1 is currently in a clinical program in combination with three different chemotherapy agents and completed patient enrollment in the single-agent Phase Ib/II and Phase II clinical studies in Europe and North America at the end of 2006.
- *STS* is a chemoprotectant that has been shown in Phase I and Phase II clinical studies conducted by investigators at Oregon Health & Science University ("OHSU") to reduce the disabling loss of hearing in patients, both adults and children, treated with platinum-based anti-cancer agents. In 2006, we executed an agreement with SIOPEL for the conduct of a randomized study of STS. Under the terms of the agreement, SIOPEL will conduct and fund the clinical activity and we will provide drug and drug distribution for the study. We also continue to work with the U.S. Children's Oncology Group ("COG") to initiate a randomized U.S. clinical trial with STS in children.

Our preclinical portfolio 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 small chemical molecules and peptide antagonists and agonists for a wide array of cadherin adhesion molecules, with drug candidates available to move into future clinical development, particularly in the following areas:

- *Peptide N-cadherin antagonists*: We have identified small peptide molecules that differ in structure from ADH-1 and that have extended stability in plasma. These molecules offer the potential advantages of extended plasma half-life and enhanced potency compared to ADH-1.
- *Small molecule N-cadherin antagonists*. We have identified a series of small chemical molecules that, in our preliminary studies, have displayed potent N-cadherin antagonism activity. Unlike ADH-1 and the other peptide N-cadherin antagonists, these molecules are not peptides and are smaller and simpler in structure. Compared to peptides small chemical molecules are often active after oral administration, more stable and have different potency and toxicity profiles.

- *OB-cadherin*. OB-cadherin is reported to be involved through several mechanisms in the metastatic spread of certain cancers to sites distant from the original tumor. Metastatic disease is a major determinant of both a patient's survival and quality-of-life. We have developed OB-cadherin peptide and small molecule antagonists with the potential to reduce or slow down the metastatic spread of tumors, such as breast and prostate cancers.

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- *VE-cadherin*. Like N-cadherin, VE-cadherin is important in the structural integrity of certain tumor blood vessels. We have developed peptide VE-cadherin antagonists that have the potential to be synergistic with our N-cadherin antagonists.

In addition to our current development efforts, we continue to pursue collaborations with other pharmaceutical companies, governmental agencies, academic and/or corporate collaborators with respect to these and other cadherin agonist and antagonist molecules. Our drug discovery and development efforts are supported by more than 40 issued U.S. patents and more than 50 pending patents worldwide that we either own or have exclusively licensed.

We have not received any revenues to date through the sale of products and do not expect to have significant revenues until we either are able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with licensing fees, milestone payments, royalties, upfront payments or other revenue. As of December 31, 2006, our deficit accumulated during development stage was \$71.5 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 expenses associated with headcount and facilities, stock-based compensation, insurance and other administrative matters associated with our facilities 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 that are being amortized on a straight line basis over their remaining useful life. Loss on impairment of intellectual property relates to expense recorded in the period when the recoverability of the intellectual property may no longer be recoverable. Settlement of Cadherin Biomedical Inc. (“CBI”) litigation expense refers to our acquisition of CBI to reacquire the non-cancer intellectual property rights relating to our cadherin technology and to settle the lawsuit between CBI and Adherex.

Drug development timelines and expenses are variable. In some cases, management may 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. Due to the differing lengths of reporting financial periods in the MD&A, certain results may not be directly comparable. Accordingly, percentage and amount of changes in these results in these periods are not meaningful. Where applicable, useful comparisons may be possible through annualizing the six-month fiscal transition 2004 period by multiplying those results by two. This method, however, does not reflect actual results for the extrapolated periods.

### **\$25.0 Million Public Offering**

On February 21, 2007, we completed the sale of equity securities with gross proceeds of \$25.0 million. We sold 75.8 million units at a price of \$0.33 per unit providing net proceeds of \$23.3 million after deducting broker fees and other offering expenses. Each unit sold consisted of one common share and one-half of a common share purchase warrant. The public offering included an aggregate of 75.8 million shares of common stock, along with 37.9 million investor warrants and 6.8 million broker warrants to acquire additional shares of our common stock. Each whole investor warrant entitles the holder to acquire one additional share of our common stock at an exercise price of \$0.40 per share for a period of three years. Each whole broker warrant entitles the holder to acquire one unit (the same as the units sold to investors) at an exercise price of \$0.33 per unit for a period of two years.

### **Eniluracil—Development and License Agreement**

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

On March 1, 2007, we purchased all of GSK's remaining options to buy back eniluracil for an upfront fee of \$1.0 million. As a result, we have assumed full direction and control over the future development of eniluracil and are free to partner and/or sub-license the product to third parties. Also as a result, we may be required to pay GSK the same development and sales milestone payments and sales royalties as previously agreed, but GSK's options to buy back the product no longer remain. Specifically, if we file an NDA with the Food and Drug Administration ("FDA"), we will be obligated to pay GSK development

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milestones of \$5.0 million. Depending upon the commercial success of eniluracil, we could also be required to pay GSK as much as \$70.0 million in additional development and sales milestones, plus double-digit royalties based on our annual net sales. If we pursue other indications, we may be required to pay up to an additional \$15.0 million to GSK for each indication approved by the FDA.

### **ADH-1—Development and License Agreement**

As part of the July 14, 2005 Development and License Agreement, we granted GSK an option to receive a worldwide, exclusive license for ADH-1 for all indications. On October 11, 2006, we announced that GSK's option to ADH-1 had expired unexercised. We now have regained full control regarding the development of ADH-1 and are free to enter into collaborations or partnerships with other pharmaceutical and biotech companies for ADH-1.

### **Executive Financial Overview**

The following table presents certain financial information for the years ended December 31, 2006 and 2005, the six-month fiscal transition 2004 ended December 31, 2004 and the year ended June 30, 2004 (U.S. dollars in thousands):

	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004
<b>Revenue</b>	\$ —	\$ —	\$ —	\$ —
<b>Operating expenses:</b>				
Research and development	14,003	12,441	3,443	3,561
General and administration	2,883	3,182	2,727	3,481
Amortization of acquired intellectual property rights	2,177	2,723	1,234	2,323
Loss from operations	(19,063)	(18,346)	(7,404)	(9,365)
Loss on impairment of intellectual property	(2,021)	(3,539)	—	—
Settlement of Cadherin Biomedical Inc. litigation	—	—	(1,283)	—
Interest expense	(3)	(11)	—	(331)
Interest income	449	361	171	162
<b>Loss before income taxes</b>	<b>(20,638)</b>	<b>(21,535)</b>	<b>(8,516)</b>	<b>(9,534)</b>
Recovery of future income taxes	1,535	2,290	451	849
<b>Net loss</b>	<b>\$ (19,103)</b>	<b>\$ (19,245)</b>	<b>\$ (8,065)</b>	<b>\$ (8,685)</b>
Net loss per share of common stock outstanding, basic and diluted	\$ (0.40)	\$ (0.49)	\$ (0.22)	\$ (0.36)
Weighted-average number of common stock outstanding, basic and diluted	47,663	39,276	35,989	24,233

### **Net Loss and Cash Flow from Operations**

#### ***Fiscal 2006 versus Fiscal 2005***

The net loss for the fiscal year ended December 31, 2006 was \$19.1 million, as compared to \$19.2 million for fiscal 2005. The slight decrease in the net loss in fiscal 2006, as compared to fiscal 2005, is primarily due to higher loss on impairment of intellectual property recorded in fiscal 2006 offset by increased R&D expenses during 2005. In fiscal 2005, we recorded an impairment of \$3.5 million relating to mesna. In fiscal 2006, we recorded an impairment of \$2.0 million associated with N-Acetylcysteine ("NAC").

Our loss from operations totaled \$19.1 million for fiscal 2006, as compared to \$18.3 million for fiscal 2005. The increase was primarily due to increased expense in R&D due to the advancement of ADH-1 in clinical development and the acquisition of eniluracil in July 2005. This increase was offset by lower G&A expense and lower amortization of acquired intellectual property rights in fiscal 2006. The decrease in G&A was primarily due to lower bonus payments in fiscal 2006, as compared to fiscal 2005. The decrease in the amortization of intellectual property is due to the write-off of mesna in fiscal 2005.

Cash used in operating activities fiscal 2006 totaled \$13.5 million or approximately \$1.1 million per month, as compared to usage of \$12.3 million in fiscal 2005. Non-cash items in the net loss of \$19.1 million in fiscal year 2006 included \$2.2 million for the amortization of intellectual property, \$2.0 million for the impairment of intellectual property relating to NAC and \$0.6 million of expense relating to stock compensation issued to employees and consultants. Cash used in operating activities for

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fiscal 2005 totaled \$12.3 million or approximately \$1.0 million per month. Non-cash items included in the net loss of \$19.2 million for fiscal 2005 included a \$3.5 million charge for the impairment of intellectual property relating to mesna, \$2.7 million for the amortization of intellectual property and \$1.7 million of stock-based compensation expense relating to stock options issued to employees and consultants.

### ***Fiscal 2005 versus the Six-Month Fiscal Transition 2004***

The net loss for fiscal 2005 was \$19.2 million, as compared to \$8.1 million for the six-month fiscal transition 2004. If the \$8.1 million net loss for the six-month fiscal transition 2004 was annualized, the amount would be \$16.2 million. The fiscal 2005 net loss of \$19.2 million would therefore represent an increase over the annualized amount for the six-month fiscal transition 2004. The increase is primarily due to increased R&D expense and the loss on impairment of intellectual property related to mesna, partially offset by the \$1.3 million charge recorded in the six-month fiscal transition 2004 associated with issuance of common stock to settle the CBI litigation. The increase in R&D is primarily due to the advancement of ADH-1 and eniluracil in clinical development.

Cash used in operating activities for the fiscal 2005 totaled \$12.3 million, as compared to \$4.7 million for the six-month fiscal transition 2004 or approximately \$9.4 million on an annualized basis. Non-cash items included in the net loss of \$12.3 million for the fiscal 2005 primarily consisted of \$3.5 million from the loss on impairment charge relating to mesna, \$2.7 million associated with the amortization of the intellectual property rights, \$1.4 million of expense relating to stock options issued to employees and \$0.3 million of expense relating to stock options issued to consultants. The increase in cash used in operations in fiscal 2005, as compared to the six-month fiscal transition 2004 is primarily due to the addition of eniluracil in July 2005 and the clinical advancement of ADH-1.

### ***Six-Month Fiscal Transition 2004 versus Fiscal 2004***

The net loss for the six-month fiscal transition 2004 was \$8.1 million or \$16.2 million annualized, as compared to \$8.7 million for fiscal year ended June 30, 2004. The increase is primarily due to increased R&D expenses associated with ADH-1 and STS, increased G&A expenses associated with the move to the U.S. from Canada and a full year of amortization of intellectual property during fiscal 2004.

Cash used in operating activities for the six-month fiscal transition 2004 totaled \$4.7 million or \$9.4 million annualized, as compared to \$6.0 million for the fiscal year ended June 30, 2004. Non-cash items included in the net loss for the six-month fiscal transition 2004 primarily consist of \$1.2 million associated with the partial year of amortization of intellectual property from the acquisition of Oxiquant in November 2002, which consisted of an exclusive worldwide license to mesna from Rutgers, The State University of New Jersey ("Rutgers") and certain intellectual property from OHSU relating to the use of STS and NAC.

## **Research and Development Expense**

### ***Fiscal 2006 versus Fiscal 2005***

R&D expense for the fiscal year ended December 31, 2006 totaled \$14.0 million, as compared to \$12.4 million during fiscal 2005. The primary reason for the increase is due to the advancement of ADH-1 into single agent Phase II clinical trials and a full year of development of eniluracil, which we licensed from GSK in July 2005. During fiscal 2006, we expanded the single agent Phase II clinical studies for ADH-1 to additional centers in Canada and the U.S., which allowed us to complete patient enrollment by the end of 2006. We have expanded our ADH-1 development program to include combination trials with other anti-cancer therapies due to positive combination preclinical studies. During fiscal 2006, we expanded our Phase I program for eniluracil, and also obtained orphan drug designation from the FDA for the use of eniluracil with fluoropyrimidines, such as 5-FU, in the treatment of hepatocellular (liver) cancer.

The R&D expense of \$14.0 million incurred during fiscal 2006 was primarily related to clinical development activities, manufacture of drug substance and preclinical activities. R&D expense also includes non-cash stock-based compensation expense of \$0.4 million and \$1.0 million for fiscal 2006 and 2005, respectively.

We expect R&D expenses to increase in future periods due to the continued expansion and advancement of our clinical and preclinical programs. In addition, our future development program will be dependent upon the results and interpretation of the data from our on-going clinical studies.

***Fiscal 2005 versus Six-Month Fiscal Transition 2004***

R&D expense for the fiscal year ended December 31, 2005 totaled \$12.4 million as compared to \$3.4 million during the six-month fiscal transition 2004 representing a significant increase even if the \$3.4 million six-month amount is annualized to \$6.8 million. The increase is primarily due to the advancement of ADH-1 and the acquisition of eniluracil from GSK and subsequent clinical advancement. During fiscal 2005, we initiated our single-agent Phase Ib/II programs and single-agent Phase II programs for ADH-1 thereby increasing the ADH-1 expense. The advancement of these clinical programs resulted in the



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additional expense associated with preclinical support and the manufacture of drug substance for ADH-1. In total, approximately \$8.2 million in internal and external financial resources were devoted to ADH-1 during fiscal year 2005. In addition, we commenced the Phase I program for eniluracil, along with the necessary preclinical activities to support the clinical programs. In total, we dedicated approximately \$2.6 million in internal and external financial resources to the eniluracil compound.

The R&D expense of \$3.4 million incurred during the six-month fiscal transition 2004 was primarily associated with the single agent Phase I program for ADH-1, which included the clinical activities, preclinical support for the single agent Phase I studies and the manufacture of drug substance for the ADH-1 program. R&D expenditures were offset by investment tax credits during the fiscal 2005 and six-month fiscal transition 2004 by nil and \$ 0.2 million, respectively.

### ***Six-Month Fiscal Transition 2004 versus Fiscal 2004***

R&D expense for the six-month fiscal transition 2004 totaled \$3.4 million as compared to \$3.6 million for the fiscal year ended June 30, 2004. If the six-month fiscal transition 2004 amount of \$3.4 million is annualized to \$6.8 million, it would represent a significant increase over fiscal 2004. The primary reason for the increase in R&D spending is due to our financings completed in December 2003 and May 2004. As a result of these financings, we were able to carryout our drug development plans during the six-month fiscal transition 2004. R&D expense consisted primarily of preclinical, clinical and drug manufacture activities associated with the advance of ADH-1. R&D expenditures were offset by investment tax credits during the six-month fiscal transition 2004 and fiscal year 2004 by \$0.2 million and \$0.1 million, respectively.

## **General and Administration Expense**

### ***Fiscal 2006 versus Fiscal 2005***

G&A expense in fiscal 2006 totaled \$2.9 million, as compared to \$3.2 million in fiscal 2005. The decrease is primarily due to less non-cash stock-based compensation expense in fiscal 2006, as compared to fiscal 2005. G&A expense includes non-cash stock-based compensation expense of \$0.2 million and \$0.7 million in fiscal 2006 and 2005, respectively.

G&A expense in fiscal 2006 and 2005 primarily consisted of employee compensation, stock-based compensation, external professional fees and other administrative activities.

We expect G&A expenses to increase in future periods but not as much as R&D expense.

### ***Fiscal 2005 versus Six-Month Fiscal Transition 2004***

G&A expense in fiscal 2005 totaled \$3.2 million as compared to \$2.7 million in the six-month fiscal transition 2004. If the \$2.7 million G&A expense in the six-month fiscal transition 2004 was annualized it would equate to approximately \$5.4 million, which would have been greater than fiscal 2005. The primary reasons for this difference include higher employee stock-based compensation expense recorded in G&A during the six-month fiscal transition 2004, as compared to fiscal 2005, additional expense in the six-month fiscal transition 2004 for the establishment of offices in the United States, severance payments in the six-month fiscal transition 2004 associated with the closing of the Ottawa office and relocation expense in the six-month fiscal transition 2004 associated with the relocation of certain employees from Canada to the United States.

G&A expense in fiscal 2005 primarily consisted of employee compensation, stock-based compensation, external professional fees and other administrative activities. For the six-month fiscal transition 2004, G&A expense primarily consisted of expenses associated with the relocation from Canada to the United States.

### ***Six-Month Fiscal Transition 2004 versus Fiscal 2004***

G&A expense in the six-month fiscal transition 2004 totaled \$2.7 million as compared to \$3.5 million in fiscal 2004. If the \$2.7 million in the six-month fiscal transition 2004 is annualized it would equate to approximately \$5.4 million which would represent an increase as compared to fiscal 2004. The primary reason for the difference is that activities were curtailed because of a lack of funds in fiscal 2004 and the additional expense in the six-month fiscal transition 2004 associated with the move from Canada to the United States.

G&A expense in the six-month fiscal transition 2004 primarily consisted of employee compensation, external professional fees and other administrative activities. G&A expense for fiscal 2004 primarily consisted of costs associated with the establishment of the U.S. operations.

**Amortization of Acquired Intellectual Property Rights**

***Fiscal 2006 versus Fiscal 2005***

The expense associated with the amortization of intellectual property rights was \$2.2 million in fiscal 2006 as compared to \$2.7 million for fiscal 2005. The expense relates to the value of anti-cancer intellectual property 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 because we recorded an impairment charge relating to the intellectual property associated with our product candidate mesna during the fourth quarter of the year ended December 31, 2005.

Future taxes recovered totaled \$1.5 million for fiscal 2006 as compared to \$2.3 million for fiscal 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 should 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. 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.

In addition, as of December 31, 2006, we had \$21.0 million in unrecorded net tax assets arising primarily from tax loss carry forwards and scientific research and experimental development expenses which cannot be recognized until it is more likely than not that these assets will be realized.

***Fiscal 2005 versus Six-Month Fiscal Transition 2004***

The expense associated with the amortization of intellectual property rights was \$2.7 million in fiscal 2005 as compared to \$1.2 million for the six-month fiscal transition 2004. The expense relates to the value of anti-cancer intellectual property acquired in the acquisition of Oxiquant in November 2002 that we are amortizing on a straight-line basis over a 10-year period. The increase is due to twelve months in fiscal 2005 as compared to six-months in the six-month fiscal transition 2004.

Future taxes recovered totaled \$2.3 million for fiscal 2005 as compared to \$0.5 million in the six-month fiscal transition 2004. 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. 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.

As a result of the addition of eniluracil to the Company's R&D portfolio, along with the financial resources devoted to the development of ADH-1, we did not have any further developmental plans for mesna. Therefore, at December 31, 2005, we determined that the carrying value of the intellectual property relating to mesna, which had a book value of \$3.5 million and a recovery of future income tax benefit of \$1.3 million, was fully impaired. Therefore, we expensed the amount and included the write-off in the Statement of Operations. The license agreement with Rutgers relating to mesna was subsequently terminated in December 2006.

***Six-Month Fiscal Transition 2004 versus Fiscal 2004***

The expense associated with the amortization of intellectual property rights was \$1.2 million in the six-month fiscal transition 2004 as compared to \$2.3 million for the fiscal 2004. The difference is due to the six months of expense during the six-month fiscal transition 2004 versus twelve months in the fiscal 2004.

**Loss on Impairment of Intellectual Property Rights**

***Fiscal 2006 versus Fiscal 2005***

As a result of our purchase from GSK of all of their remaining eniluracil buy-back options we now have full development control of eniluracil. We plan to allocate most of our corporate and financial resources to the development of eniluracil and ADH-1. Due to this allocation of our resources and no current development plans for NAC, at December 31, 2006 we determined NAC's carrying value of \$2.0 million and potential future income tax benefit of \$0.7 million were fully impaired. Therefore, we expensed these amounts and included the write-off in the Statement of Operations. Should the facts and circumstances change, we could reinstate the NAC development program because we continue to have rights to the compound under our license agreement with OHSU.

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### ***Fiscal 2005 versus Six-Month Fiscal Transition 2004***

As a result of the in-license of eniluracil from GSK, along with the financial resources devoted to the development of ADH-1, we did not have any further developmental plans for mesna. Therefore, at December 31, 2005, we determined that the carrying value of the intellectual property relating to mesna, which had a book value of \$3.5 million was fully impaired. Therefore, we expensed the amount and included the write-off in the Statement of Operations. In December 2006, we terminated the license agreement with Rutgers for mesna.

### **Settlement of Cadherin Biomedical Inc. Litigation**

Adherex acquired CBI in December 2004 to settle the litigation between the two companies and to re-acquire the non-cancer rights relating to our cadherin-based intellectual property. We believe the reacquisition of non-cancer rights may be beneficial when seeking any future collaborations with other pharmaceutical and biotech companies.

We have recorded the issuance of common shares of Adherex to acquire CBI for approximately \$1.2 million and the associated transaction expenses of approximately \$0.1 million as settlement of CBI litigation on our Statement of Operations, resulting in an expense of \$1.3 million for the six-month fiscal transition 2004. There were no such charges in any other periods during our history.

### **Interest Expense**

#### ***Fiscal 2006 and 2005, Six-Month Fiscal Transition 2004 and Fiscal 2004***

Interest expense recorded in fiscal 2006 relates to interest charged on office equipment leases.

Interest expense recorded in fiscal 2005 related to the financing of certain leasehold improvements financed by the landlord on our previous U.S. facility. Because we have subleased the facility and the loan payments were assumed by the tenant who subleased the facility, we do not anticipate future interest expense charges relating to this facility unless the tenant defaults on their payments.

There were no interest expenses incurred during the six-month fiscal transition 2004 and \$0.3 million incurred during fiscal 2004. This fiscal 2004 expense relates to the accretion of a portion of the face value of the convertible notes issued in June 2003 and December 2003 ascribed to the note's equity-like features. The notes were converted into equity in December 2003 and therefore did not accrue future interest expense.

### **Interest Income**

#### ***Fiscal 2006 versus Fiscal 2005***

Interest income for fiscal 2006 was approximately 24% greater than for fiscal 2005 primarily due to higher interest rate yields and increased cash associated with the May 2006 financing.

#### ***Fiscal 2005 versus Six-Month Fiscal Transition 2004***

Interest income was \$0.4 million for fiscal 2005 and \$0.2 million for the six-month fiscal transition 2004. A lower cash balance during fiscal 2005 was offset by the higher interest yields during fiscal 2005.

#### ***Six-Month Fiscal Transition 2004 versus Fiscal 2004***

Interest income for the six-month fiscal transition 2004 and fiscal 2004 was \$0.2 million for both years. If the interest income for the six-month period was annualized, it would suggest interest income of \$0.4 million for an equivalent twelve-month period, which would be an increase. This increase was due to higher cash balances during the six-month fiscal transition 2004 as compared to fiscal 2004 due to the successful completion of financings in December 2003 and May 2004 and higher interest yields during the six-month fiscal transition 2004.

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### Quarterly Information

The following table presents selected consolidated financial data for each of the last eight quarters through December 31, 2006 (dollars in thousands, except per share information):

<u>Period</u>	<u>Net Loss for the Period</u>	<u>Basic and Diluted Net Loss per Common Share</u>
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)
December 31, 2006	\$ (6,389)	\$ (0.13)

The net loss for the quarter ended December 31, 2006 includes \$2.0 million for the impairment of intellectual property associated with NAC. It is important to note that this charge was a non-cash expense in our Statement of Operations.

The net loss increase in the quarter ended December 31, 2005 was primarily due to the impairment of intellectual property associated with the mesna compound. The \$3.5 million impairment charge was a non-cash expense in our Statement of Operations.

The net loss for the quarter ended September 30, 2005 and June 30, 2005 are higher than previous quarters due to increased R&D expenses. Our improved liquidity from the completion of financings in May 2004 and July 2005 has allowed these increases to occur.

### 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 approximately \$86.0 million through February 28, 2007. We have incurred net losses and negative cash flow from operations each year, and we had an accumulated deficit of \$71.5 million as of December 31, 2006. We have not generated any revenues to date through the sale of products. We do not expect to have significant revenues or income, other than interest income, until we are able to sell our product candidates after obtaining applicable regulatory approvals, and/or establish collaborations that provide us with licensing fees, royalties, milestone payments or upfront payments.

The net cash flow used in operating activities for fiscal 2006 was \$13.5 million or an average of approximately \$1.1 million per month, as compared to \$12.3 million for the fiscal 2005 or an average of approximately \$1.0 million per month. The increase in the average monthly net cash flow used is due to our expanding drug development activities associated with our product candidates, including the addition of eniluracil during the fourth quarter of fiscal 2005.

On February 21, 2007, we completed the sale of equity securities for gross proceeds of \$25.0 million, resulting in net proceeds of \$23.3 million after deducting broker fees and other offering expenses.

As of December 31, 2006, our consolidated cash and cash equivalents were \$5.7 million, as compared to \$13.1 million at December 31, 2005. This decrease reflects the continued funding of our corporate operations including the development and advancement of our product candidates. Working capital at December 31, 2006 and 2005 was approximately \$1.2 million and \$10.7 million, respectively.

We believe that our current cash and cash equivalents will be sufficient to satisfy our anticipated capital requirements into the fourth quarter of 2008. Our projections of further capital requirements are subject to substantial uncertainty. Our working capital requirements may fluctuate in future periods depending upon numerous factors, including: results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; our drug substance requirements to support clinical programs; our ability to enter into collaborations that provide us with funding, upfront payments, milestone or other payments; changes in the focus, direction, or costs of our research and development programs; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; establishment of marketing and sales capabilities; our business development activities; new regulatory requirements implemented by regulatory authorities; and the timing and outcome of any regulatory review process or our commercialization activities, if any.

To finance our operations beyond late 2008, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. There can be no assurance that we will be able to raise the necessary capital or that such funding will be available at all or on favorable terms.

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Through December 31, 2006, we have received \$1.6 million of research tax credits including potential research tax credit receivables of \$0.1 million and have received \$0.2 million in other government grants.

### **Financial Instruments**

During fiscal 2006, we held cash and cash equivalents and did not hold any short-term investments or other financial instruments. For fiscal 2005, our financial instruments consisted primarily of short-term investments. These investments were liquidated to support our ongoing operations.

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

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

Investments with original maturities at date of purchase beyond three months, and which mature at or less than twelve months from the balance sheet date, are classified as current. Investments are carried at book value plus accrued interest with unrealized gains and losses recognized as investment income. At December 31, 2006 we had no short term investments while at December 31, 2005 short-term investments of \$1.2 million consisted of corporate commercial paper with maturities at acquisition from 154 to 175 days. The market value of the investments at December 31, 2005 approximated their book value. Short-term investments were nil at December 31, 2004.

During the fiscal years 2006 and 2005, the six-month fiscal transition 2004 and fiscal 2004, we earned interest income of \$0.4 million, \$0.4 million, \$0.2 million and \$0.2 million, respectively, on our cash, cash equivalents and short-term investments.

### **Leasehold Inducements**

On August 31, 2005, we entered into agreements to lease a new office and laboratory facility and sublease our existing facility. As an incentive to enter into the new lease, we received free rent and capital inducements. We received a 50 percent discount for the new facility for the first 24 months of the 84-month lease term. In conjunction with the transaction, we also received inducements in the form of furniture, equipment and leasehold improvements with a fair market value of approximately \$0.5 million and, in return, we provided furniture, equipment and leasehold improvements with a net book value of \$0.2 million with an approximate fair market value of \$0.1 million.

We record rent expense on a straight-line basis by accumulating the total rental payments and allocating them over the 84-month term of the lease, which expires on August 31, 2012. The difference between the cash payment and lease expense is charged to deferred lease inducements.

### **Off-Balance Sheet Arrangements**

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

### **Contractual Obligations**

Since our inception, inflation has not had a material effect on our operations. We had no material commitments for capital expenses as of December 31, 2006.

The following table represents our contractual obligations and commitments at December 31, 2006 (in thousands of U.S. dollars):

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

- (1) In April 2004, we entered into a lease for our facilities in RTP. Amounts shown assume the maximum amounts due under the lease. This facility has now been subleased to another company that is responsible for payments until March 31, 2008; however, in the event of their default Adherex would become responsible for the obligation. In addition, Adherex is contractually obligated under the lease until August 31, 2010.
- (2) In August 2005 we entered into a lease for new office and laboratory facilities in RTP. Amounts shown assume the maximum amounts due under the lease. We received lease and capital inducements to enter into the lease, including a 50 percent discount for the first 24 months of the 84-month lease term and capital inducements with a fair market value of \$0.5 million.
- (3) Research obligations shown. Royalty payments, which are contingent on sales, are not included.
- (4) Royalty and milestone payments that we may be required to pay, which are contingent on sales or progress of clinical trials, are not included.

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

In connection with the OHSU 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, which has not yet commenced. There can be no assurance that we will commence and complete that clinical trial when anticipated, if at all.

Under the terms of the Development and License agreement with GSK as amended, if we file a New Drug Application (“NDA”) with the FDA, we will be required to pay development milestones of \$5.0 million to GSK. Depending upon whether the NDA is approved by the FDA and whether eniluracil becomes a commercial success, we may be required to pay up to an additional \$70.0 million in development and sales milestones for the initially approved indication, plus double-digit royalties based on annual net sales. If we pursue other indications, we may be required to pay up to an additional \$15 million to GSK per FDA-approved indication.

## 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 include ADH-1, eniluracil, STS 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 reviewed internally by 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.

Research and development expenses totaled \$14.0 million, \$12.4 million, \$3.4 million and \$3.6 million for the fiscal years 2006 and 2005, the six-month fiscal transition 2004 and fiscal 2004, respectively.

ADH-1 is a molecularly-targeted anti-cancer drug currently in a clinical program in combination with three different chemotherapy agents. We completed patient enrollment in our single agent Phase Ib/II and our single agent Phase II studies as of December 31, 2006. We incurred \$9.8 million of internal and external expense on this compound during fiscal 2006. ADH-1 is a small peptide molecule that selectively targets N-cadherin, a protein present on certain tumor cells and the established blood vessels that supply the tumors.

Eniluracil, which we acquired as part of the Development and License agreement with GSK, is a DPD inhibitor that was previously under development by GSK for the treatment of cancer. During fiscal 2006 we incurred \$2.9 million of internal and external expenditures for eniluracil, primarily to commence a Phase I clinical program. Eniluracil is being developed to enhance the therapeutic value and effectiveness of 5-FU, one of the world’s most widely-used oncology agents. 5-FU is currently used as first or second-line therapy for a variety of cancers including colorectal, breast, gastric, head and neck, ovarian and basal cell cancer of the skin, among others. We have obtained new proprietary data regarding the optimal usage of eniluracil in combination with 5-FU, which formed the basis of a patent application filed by us.

STS is a chemoprotectant that has been shown in Phase I and Phase II clinical studies conducted by investigators at OHSU to reduce loss of hearing in patients, both adults and children, treated with platinum-based agents. In 2006, we entered into an agreement with SIOPEL, a multi-disciplinary group of specialists under the umbrella of the International Society of Pediatric Oncology, for the conduct of a randomized trial of STS, a drug that Adherex is developing to reduce or prevent hearing loss in children associated with platinum-based chemotherapies. The trial is currently projected to begin in the first half of 2007. We continue to work with the Children’s Oncology Group to initiate a randomized STS trial in children in the U.S.



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As of December 31, 2006, our internal and external spending for each research and development program is as follows (in thousands of U.S. dollars):

	Fiscal Year Ended December 31, 2006	Fiscal Year Ended December 31, 2005	Six Months Ended December 31, 2004	Fiscal Year Ended June 30, 2004	Cumulative From September 3, 1996 to December 31, 2006
ADH-1	\$ 9,792	\$ 8,248	\$ 2,550	\$ 2,503	\$ 28,783
Eniluracil	2,910	2,552	—	—	5,462
Other anti-cancer	249	374	358	341	2,276
Total anti-cancer	12,951	11,174	2,908	2,844	36,521
STS	292	472	263	628	1,799
Other chemoprotectants and enhancers	—	17	—	—	33
Total chemoprotectants and enhancers	292	489	263	628	1,832
Other discovery projects	760	778	272	89	3,343
Transdermal drug delivery	—	—	—	—	689
Total research and development program expense	<u>\$ 14,003</u>	<u>\$ 12,441</u>	<u>\$ 3,443</u>	<u>\$ 3,561</u>	<u>\$ 42,385</u>

### **Critical Accounting Policies and Estimates**

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

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

#### **Functional and Reporting Currency**

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

The change was effected for prior periods as follows: assets and liabilities were translated into U.S. dollars at the prevailing exchange rates at each balance sheet date; revenues and expenses were translated at the average exchange rates prevailing during each reporting period, and equity transactions were translated at the prevailing historical exchange rates at each transaction date. Adjustments resulting from the translations are included in the cumulative translation adjustments in shareholders' equity and totaled \$5.9 million at December 31, 2006 and 2005.

#### **Acquired Intellectual Property Rights**

At December 31, 2006, our acquired intellectual property rights had a net book value of approximately \$10.0 million and relate to intellectual property acquired in the acquisition of Oxiquant in November 2002. At December 31, 2006 only STS, a hearing protectant for patients undergoing platinum-based chemotherapy, remains recorded as acquired intellectual property. In accordance with the Canadian Institute of Chartered Accountants ("CICA") Section 3063 "Impairment of Long-Lived Assets," we review our intellectual property to determine if any events or changes have impaired the carrying value of the assets. We determine impairment by comparing the undiscounted future cash flows estimated to be generated by the asset to their respective carrying amounts. During the fourth quarter of 2006, we determined the carrying value of NAC, which has a net book value of \$2.0 million, was fully impaired. During fiscal 2005, we determined our product candidate mesna was fully impaired resulting in a loss on impairment of \$3.5 million.

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The remaining intellectual property continues as an asset as required under Canadian GAAP and is being amortized on a straight-line basis over its estimated useful life of ten years from the date of acquisition.

Under U.S. GAAP, management has determined that the intellectual property is in-process research and development (“IPRD”), a concept that is not applicable under Canadian GAAP. IPRD is not capitalized under U.S. GAAP, but rather expensed at the time of acquisition. Consequently, the entire cost of the IPRD of CAD\$31.2 million associated with the Oxiquant acquisition is reflected as a reconciling item in the December 31, 2006 consolidated financial statements, footnote 19, United States Accounting Principles, which reconciles Canadian GAAP to U.S. GAAP. In addition, during fiscal 2006 and 2005 the loss on impairment was not recorded under U.S. GAAP because the amount was previously expensed as IPRD.

### ***Stock-Based Compensation***

Effective January 1, 2002, we adopted the recommendations of the 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 deficit by \$2.1 million and increased contributed surplus by the same amount.

### ***Deferred Leasehold Inducements***

Leasehold inducements consist of periods of reduced rent and other capital inducements provided by the lessor. The leasehold inducements relating to the reduced rent periods are deferred and allocated over the term of the lease.

### **Outstanding Share Information**

The outstanding share data for the Company as of December 31, 2006, is as follows (in thousands):

	<b>December 31, 2006</b>
Common shares	50,382
Warrants	15,820
Stock options	5,280
Total	<u>71,482</u>

On February 21, 2007, we completed the sale of equity securities with gross proceeds of \$25.0 million. We sold 75.8 million units at a price of \$0.33 per unit providing net proceeds of \$23.3 million after deducting broker fees and certain other expenses. Each unit sold consisted of one common share and one-half of a common share purchase warrant. The public offering included an aggregate of 75.8 million shares of common stock along with 37.9 million investor warrants and 6.8 million broker warrants to acquire additional shares of our common stock. Each whole investor warrant entitles the holder to acquire one additional share of our common stock at an exercise price of \$0.40 per share for a period of three years. Each whole broker warrant entitles the holder to acquire one unit at an exercise price of \$0.33 per unit for a period of two years. As of February 28, 2007, the outstanding share data for the Company is as follows (in thousands):

	<b>February 28, 2007</b>
Common shares	126,141
Warrants	60,517
Stock options	5,829
Total	<u>192,487</u>

### **Canadian to U.S. GAAP**

We present our consolidated financial results in accordance with Canadian GAAP. Significant differences exist between Canadian and U.S. GAAP and are presented in footnote 19 in the consolidated financial statements.

### **Recent Accounting Pronouncements**

#### ***Financial Instruments***

In January 2005, the CICA issued Section 1530, “Comprehensive Income,” Section 3855, “Financial Instruments -Recognition and Measurement,” and Section 3865, “Hedges.” The new standards will be effective for interim and annual

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financial Statements commencing in 2007. Earlier adoption is permitted. Most significantly for us, the new standards will require presentation of a separate statement of comprehensive income. We currently are evaluating the impact of adopting these standards on our consolidated financial statements.

### **Operating and Business Risks**

We operate in a highly competitive environment that involves significant risks and uncertainties, some of which are outside of our control, as further described in Item 3.D “Risk Factors”. 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.

**ITEM 6. DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES****A. Directors and senior management**

The following table lists the directors and senior management of the Company and the positions they hold with the Company:

<u>Name</u>	<u>Age</u>	<u>Position</u>
William P. Peters, MD, PhD, MBA	56	Chief Executive Officer and Chairman of the Board of Directors
Donald W. Kufe, MD <sup>(3)(4)</sup>	62	Director
Michael G. Martin <sup>(1)(2)</sup>	56	Director
Fred H. Mermelstein, PhD <sup>(3)(4)</sup>	48	Lead Independent Director of the Board of Directors
Peter Morand, PhD <sup>(1)(2)(4)</sup>	72	Director
Robin J. Norris, MD	60	President, Chief Operating Officer and Director
Arthur T. Porter, MD, MBA <sup>(1)(2)(3)</sup>	50	Director
James A. Klein, Jr., CPA	44	Chief Financial Officer
D. Scott Murray, BScPharm, LLB, MBA	37	Senior Vice President, General Counsel and Secretary
Jeff Solash, PhD	59	Chief Licensing Officer

- (1) Member of the Audit Committee
- (2) Member of the Compensation Committee
- (3) Member of the Nominating Committee
- (4) Member of the Governance Committee

**Board of Directors**

The current Board of Directors (the “Board”) was elected at our annual general meeting of shareholders on April 29, 2006. Mr. Martin joined the Board and Mr. Hession concurrently resigned from the Board effective September 15, 2006. Dr. Porter is the director that was originally nominated by HBM BioVentures. Dr. Porter does not currently have nor has he ever had any affiliation with HBM BioVentures.

The Board is currently composed of seven members. The Board has determined that each member other than Dr. Peters and Dr. Norris qualifies as “independent” under the current rules of the SEC, American Stock Exchange and Canadian securities laws. We are of the view that the composition of the Board of Directors reflects a diversity of background and experience that is important for effective corporate governance.

Under our by-laws, as amended, the term in office of our directors expires at each annual meeting of shareholders. If there is a vacancy in the Board, the remaining directors may exercise all the powers of the Board so long as a quorum remains in office. Under the CBCA, at least 25% of the Board must be residents of Canada.

Biographical information about each director and officer follows. Information about the Board’s functions and its committees is set forth below under “—Broad practices—Report on Corporate Governance.”

**William P. Peters, MD, PhD, MBA.** Dr. Peters has been the Chief Executive Officer of Adherex since March 2003, the Chairman of our Board of Directors since February 2004, and a member of the Board since November 2002. From March 2003 to February 2004, Dr. Peters served as the Vice Chairman of the Board. Dr. Peters has served on the faculty at Harvard University, Duke University and Wayne State University. He originated the solid tumor high-dose chemotherapy and bone marrow transplant program at the Dana-Farber Cancer Institute, and was Director of Bone Marrow Transplantation and Professor of Medicine at Duke University from 1984 to 1995 and was an Associate Director of the Cancer Center. He served as President, Director and CEO of the Karmanos Cancer Institute from 1995 to 2001. Simultaneously, he served as Associate Dean for Cancer at Wayne State University and was the Senior Vice President for Cancer Services at the Detroit Medical Center. In 2001, he organized the Institute for Strategic Analysis and Innovation at the Detroit Medical Center of which he served as President. Dr. Peters has three Bachelor degrees (Biochemistry, Biophysics and Philosophy) from Pennsylvania State University, received his MPhil, MD and PhD degrees from the Columbia University College of Physicians & Surgeons in New York and trained clinically at Harvard University Medical School’s Brigham and Women’s Hospital and Dana-Farber Cancer Institute. He is board certified in internal medicine and medical oncology. He earned his MBA at the Duke University Fuqua School of Business.

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**Donald W. Kufe, MD.** Dr. Kufe has been on the Board since December 2003. Dr. Kufe is the chair of the Scientific and Clinical Advisory Board of Adherex. Dr. Kufe received his MD in 1970 from the University of Rochester School of Medicine and postgraduate training at Harvard's Beth Israel Hospital. Subsequently, he undertook extensive laboratory-based research in molecular virology at the Institute of Cancer Research of Columbia University. In 1979, he joined the faculty of Harvard's Dana-Farber Cancer Institute where he is now Professor of Medicine. He has served as Chief of the Division of Cancer Pharmacology, Deputy Director of the Dana-Farber Cancer Center, Director of the Harvard Phase I Oncology Group and Leader of the Experimental Therapeutics Program. He has served as the senior editor of *Cancer Medicine*, one of the major text books in oncology, and on the editorial board of multiple international cancer research journals.

**Michael G. Martin.** Mr. Martin has been on the Board since September 2006. He is Chief Executive Officer of BioEnergy of America, Inc., a company dedicated to developing renewable sources of energy. Prior to assuming his role at BioEnergy, Mr. Martin served as managing director of R&M Financial Associates, a merger & acquisition consulting firm specializing in small and mid-size companies across multiple industries. From 1991 to 1999, he was Chairman and President of Proformix, Inc., a publicly-traded manufacturer of computer equipment. He has previously served as President of Centercore of NJ, a business-to-business consulting company, as well as President and Vice President of Centercore, Inc., a publicly traded manufacturing company.

**Fred H. Mermelstein, PhD.** Dr. Mermelstein has been a director of Adherex since November 2002. Dr. Mermelstein is Founder and President of Javelin Pharmaceuticals, Inc. and previously served as Director of Venture Capital at Paramount Capital Investments, LLC, a merchant banking and venture capital firm specializing in biotechnology, from 1998 to 2003. He has served as director and Chief Science Officer of PolaRx Biopharmaceuticals, and is a director of both Cardiome Pharma and previously the Jordan Heart Foundation. Dr. Mermelstein holds a dual Ph.D. in Pharmacology and Toxicology from Rutgers University and the University of Medicine and Dentistry of New Jersey ("UMDNJ") Robert Wood Johnson Medical School. He completed his post-doctoral training supported by two grant awards, a National Institutes of Health fellowship and a Howard Hughes Medical Institute fellowship in the department of biochemistry at UMDNJ Robert Wood Johnson Medical School.

**Peter Morand, PhD.** Dr. Morand has been a director of Adherex since December 1998. He is President of Peter Morand & Associates and from 1996 to 2005, Dr. Morand served as President, CEO and Director of the Canadian Science and Technology Growth Fund Inc., a venture capital fund that invests in the commercialization of the results of early-stage advanced technology companies. Dr. Morand is currently a member of the Boards of Directors of Variations Biotechnologies Inc., the Institute on Governance and the Ottawa Life Sciences Council (past Chair) and is a member of the Advisory Board of the Institute on Biodiagnostics. Dr. Morand was a director of D-Box Technology Inc. from 2004 to 2006. Dr. Morand is a past President of the Natural Sciences and Engineering Research Council (NSERC, 1990-95), a federal agency that invests more than \$600 million annually in support of research. Prior to his NSERC appointment, Dr. Morand spent many years at the University of Ottawa as a Professor of Chemistry and occupied the positions of Dean of Science and Engineering and Vice Rector. Dr. Morand started his career in the pharmaceutical industry at Ayerst Laboratories.

**Robin J. Norris, MD.** Dr. Norris has been the Chief Operating Officer of Adherex since January 2002, President of Adherex since June 2002 and a member of the Board since November 2002. Prior to joining Adherex, Dr. Norris was Chief Operating Officer and Chairman of the Scientific Advisory Committee of PowderJect plc from March 1998 to December 2001 and Chief Operating Officer of Noven Inc. from March 1995 to March 1998. Dr. Norris received his medical education and degree in the United Kingdom with postgraduate qualifications in obstetrics, general medicine and pharmaceutical medicine. Following eight years of clinical practice, Dr. Norris has spent over 28 years in the pharmaceutical industry, predominantly based in the United States, but with global drug development responsibilities. During his career, Dr. Norris has been responsible for the successful development of a wide range of pharmaceutical products and devices moving and transitioning them from fundamental "bench-level" research and development through the regulatory process and into the global marketplace.

**Arthur T. Porter, MD, MBA.** Dr. Porter has served as a director of Adherex since February 2004 and was originally nominated to the Board pursuant to an arrangement between the Company and HBM BioVentures (Cayman) Ltd. Dr. Porter has served as the Executive Director of the McGill University Health Centre since January 2004. Dr. Porter was the President and Chief Executive Officer of the Detroit Medical Center from 1999 to 2003. From 1991 to 1998, Dr. Porter served as the Chief of the Gershenson Radiation Oncology Center at Harper Hospital, Radiation Oncologist-in-Chief at the Detroit Medical Center. He has also served as Senior Radiation Oncologist at the Cross Cancer Institute in Edmonton, Alberta and Associate Professor in the Faculty of Medicine at the University of Alberta, Chief of the Department of Radiation Oncology at the London Regional Cancer Centre and Chairman of the Department of Oncology at Victoria Hospital Corporation. Dr. Porter serves as a director of Munder Funds, Universal Healthcare Management Systems and Air Canada.

## **Senior Management**

In addition to Drs. Peters and Norris, the members of our senior management include:

**James A. Klein, Jr., CPA.** Mr. Klein joined Adherex as Chief Financial Officer in April 2004. From 1999 to April 2004, Mr. Klein founded and served as Chief Executive Officer and Chairman of DataScout Software Inc., a company that develops and

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commercializes software for the pharmaceutical industry. From 1995 to 1999, Mr. Klein served as Chief Financial Officer and Treasurer of Triangle Pharmaceuticals Inc., a publicly traded pharmaceutical company. Prior to that, Mr. Klein was the International Research and Development Financial Controller for Burroughs Wellcome Co., an international pharmaceutical group. Mr. Klein is a Certified Public Accountant.

**D. Scott Murray, BScPharm, LLB, MBA.** Mr. Murray has been General Counsel and Corporate Secretary of Adherex since February 2003, a Vice President of the Company since September 2003 and Senior Vice President, Corporate Development since February 2007. Prior to joining Adherex, Mr. Murray was an Associate at Osler, Hoskin & Harcourt LLP in Toronto specializing in private and public corporate finance, mergers and acquisitions as well as securities compliance and pharmaceutical regulatory matters. At Osler, Hoskin & Harcourt LLP, Mr. Murray worked with a number of international pharmaceutical corporations, some of the largest securities dealers in North America, various early-stage biotechnology clients and also spent a secondment in the legal department of General Motors of Canada. Prior to joining Osler, Hoskin & Harcourt LLP, Mr. Murray practiced as a pharmacist for over seven years, including several retail pharmacy management positions. Mr. Murray holds a Bachelor of Science in Pharmacy degree from Dalhousie University and LLB and MBA degrees from the University of Ottawa.

**Jeff Solash, PhD.** Dr. Solash joined Adherex as Chief Licensing Officer in October 2005 bringing with him more than 18 years experience in licensing and technology transfer. From 2003 to 2005, Dr. Solash served as a Licensing Executive at Delphi Technologies Inc., the technologies commercialization arm of Delphi Inc. Prior to that, he was Vice President, Technology Acquisition, for Paramount Capital Investments, a merchant banking and venture capital firm specializing in investments in biotechnology and pharmaceutical companies. From 1998 to 2000, Dr. Solash was President of Solash Consulting, a consulting practice focused on technology transfer from universities. Previously, he served as a licensing executive for Technology Management & Funding and the University of Pennsylvania. Dr. Solash's early career included positions as Vice President, Research at Energy & Minerals Research Company; Senior Research Chemist at Gulf Research & Development Company; Program Manager at the U.S. Department of Energy and Research Chemist at the Naval Research Laboratory. Dr. Solash received his Ph.D. in organic chemistry from the University of Pittsburgh.

### Scientific and Clinical Advisory Board

Our Scientific and Clinical Advisory Board consists of individuals with demonstrated expertise in various fields who advise us concerning long-term scientific planning, research and development. The Scientific and Clinical Advisory Board also evaluates our research programs and advises us on technological matters. The members of the Scientific and Clinical Advisory Board, which is chaired by Donald W. Kufe, MD, are:

Donald W. Kufe, MD	Professor of Medicine, Harvard's Dana-Farber Cancer Institute; Director, Adherex Technologies Inc.
Donald A. Berry, PhD	Frank T. McGraw Memorial Chair and Chairman of the Department of Biostatistics and Applied Mathematics at the University of Texas M.D. Anderson Cancer Center
Stephen Byers, PhD	Director of the MD/PhD Program and Professor of Oncology and Cell Biology at the Lombardi Cancer Center; Member of Interdisciplinary Program of Tumor Biology, Georgetown University Medical Center
Harold F. Dvorak, MD	Chief of the Department of Pathology, Beth Israel Deaconess Medical Center; Mallinckrodt Professor of Pathology, Harvard Medical School
Emil Frei, III, MD	Director and Physician-in-Chief Emeritus and Richard and Susan Smith Distinguished Professor of Medicine at Harvard Medical School
Robert Herfkens, MD	Professor of Radiology and Director of Magnetic Resonance Imaging at Stanford University
Mark Hughes, MD, PhD	President, Genesis Genetics Institute
Daniel D. Von Hoff, MD	Professor of Pathology, Molecular and Cellular Biology and Director of the Arizona Health Science Center's Cancer Therapeutic Programs at the University of Arizona; Chief Scientific Officer, US Oncology
Joseph Loscalzo, MD, PhD	Wade Professor and Chairman, Department of Medicine and Director of the Whitaker Cardiovascular Institute at the Boston University School of Medicine; Physician-in-Chief, Boston Medical Center
Ann Thor, MD	Lloyd E. Rader Professor and Chair, Department of Pathology, Adjunct Professor of Surgery, Associate Director for Translational Research and Program Director for Breast Cancer Program at the University of Oklahoma

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### B. Compensation

#### Statement of Executive Compensation

The following table sets forth the compensation earned during the year ended December 31, 2006 by our current Chief Executive Officer, Chief Financial Officer, two other most highly compensated executive officers and two former executive officers of Adherex Technologies Inc. and its subsidiaries (together, the "Named Executive Officers") in that year. All annual, bonus and other compensation amounts are in U.S. dollars.

Name and Principal Position	2006 Annual Compensation			Long-Term Compensation Awards	
	Salary (\$)	Bonus (\$)	Other Annual Compensation (\$)	Securities Under Options Granted #	All Other Compensation (\$)
Dr. William Peters Chief Executive Office and Chairman of the Board	486,875	—	—		2,387
James A. Klein, Jr. Chief Financial Officer	197,950	—	—		1,127
Dr. Robin Norris President and Chief Operating Officer	245,440	—	—		2,280
D. Scott Murray Senior Vice President, General Counsel and Secretary	176,550	—	—		976
Dr. Rajesh K. Malik (a) Former Chief Medical Officer	262,500	30,000	—		1,435
Dr. Brian E. Huber (b) Former Chief Scientific Officer	208,588	—	—		1,111

(a) Dr. Malik resigned effective January 12, 2007.

(b) Dr. Huber was terminated effective October 8, 2006. Dr. Huber's 2006 salary includes \$42,396 in severance payments pursuant to his employment agreement.

#### Option Grants During the Year Ended December 31, 2006

We made no grants stock options to our Named Executive Officer during the year ended December 31, 2006.

### C. Board practices

#### Compensation of Directors

During the fiscal year ended December 31, 2006, Adherex's non-executive directors, as a group, were paid an aggregate of approximately \$89,500 in cash fees. During this period, other than an initial grant of 60,000 options in October 2006 to Mr. Martin on joining the Board, the non-executive directors were not granted any further options to purchase Common Shares. Fees consisted entirely of board and committee meeting fees. No retainers or additional fees for service as lead independent director or committee chairs were paid. Director cash fees ranged from \$12,000 to \$30,000 per director. During the year ended December 31, 2006, directors who were also employees received no compensation for serving on the Board. Each non-executive director is paid \$2,000 for each Board meeting attended in person, \$500 for regular teleconference meetings (Level I), \$750 for extended teleconference meetings (Level II) and \$1,000 for extended and complex meetings (Level III). These various categories reflect the fact that the Board conducts a substantial portion of its work by teleconference, with some of the teleconferences being extended in time commitment and complexity. The Level III category is generally intended to be reserved for extended teleconference activities, such as retreats, in excess of two and one half hours. Directors who are also employees will receive no compensation for serving on the Board for the year ending December 31, 2006. In December 2006, the Board agreed to defer 50% of their usual Board fees until a financing was completed. At December 31, 2006, the amount of compensation deferred totaled \$40,500. On February 21, 2007, the Company completed a financing that produced gross proceeds to the Company of \$25.0 million, therefore the deferred amounts will be paid.

#### Employment Agreements and Termination Provisions

We have entered into employment agreements with our senior management. The compensation in each case includes a combination of base salary, cash bonus, stock options and other benefits.



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Pursuant to an employment agreement dated February 19, 2003 between Dr. William P. Peters and Adherex, Dr. Peters became employed as Chief Executive Officer and Vice Chairman of Adherex effective March 12, 2003 for a five-year term, and was appointed Chairman of the Board on February 28, 2004. Pursuant to this agreement, Dr. Peters (a) received an initial annual salary in the amount of \$350,000 (Dr. Peters' current annual salary is \$486,875), (b) received a signing bonus totaling \$200,000, and (c) was granted an option to purchase up to 750,000 Common Shares at an exercise price of CAD\$1.65 per share. The employment agreement also provided that on one occasion, upon the closing of an equity financing or strategic partner contract of at least \$3.75 million, Dr. Peters would be granted additional options sufficient for his aggregate option holdings to be 5% of the Common Shares of Adherex, calculated on a fully diluted basis, immediately following the closing of such a transaction, subject to and conditional upon applicable regulatory and shareholder approvals (the "Financing Grant Provision"). Accordingly, upon the occurrence of such a transaction in December 2003, the Financing Grant Provision provided for Dr. Peters to receive options to purchase 1,477,819 Common Shares, which would have brought his option holdings to 5% on a fully diluted basis, subject to applicable regulations and approvals. Adherex obtained shareholder approval on December 16, 2003 for 700,000 of such shares that were granted to Dr. Peters outside of the Stock Option Plan. However, at that time, the Toronto Stock Exchange required that no person may hold options representing more than 5% of Adherex's equity at any given time on an issued and outstanding basis (the "TSX Limit"). Accordingly, on December 30, 2003, Dr. Peters was granted options to purchase 770,217 Common Shares at an exercise price of CAD\$2.25 per share, which together with Common Shares issuable under his other option holdings represented 5% of the issued and outstanding Common Shares at such time. In May 2004, Adherex made a further grant to Dr. Peters under the Financing Grant Provision of options to purchase 234,000 Common Shares at an exercise price of CAD\$2.90 per share because Adherex had increased its issued and outstanding shares by virtue of its two equity financings in that month. In December 2004, the Corporation made a further grant to Dr. Peters under the Financing Grant Provision of options to purchase 32,000 Common Shares at an exercise price of CAD\$1.95 per share. Finally, on April 5, 2005, Adherex made a grant to Dr. Peters of options to purchase 441,601 Common Shares at an exercise price of \$1.20 per share, representing the remaining balance of the originally targeted 1,477,819 options under the Financing Grant Provision. The agreement also provides that annual bonuses, if any, will be awarded to Dr. Peters at the sole discretion of the Board. In the event of termination without "cause," or in the event Dr. Peters terminates his employment for Good Reason or a change of control, Adherex is obligated to pay Dr. Peters severance compensation equal to 24 months of salary. The agreement defines "cause" as (a) conviction of (i) any felony or (ii) any misdemeanor involving sexual misconduct, fraud, or embezzlement (other than a traffic infraction); (b) willful misconduct with regard to duties and responsibilities; (c) gross negligence (other than as a result of physical or mental impairment) with regard to his duties; or (d) material breach of the employment agreement. The agreement defines Good Reason as the occurrence of any of the following without Dr. Peters' written consent: (i) a change in Dr. Peters' position or duties (including any position or duties as a director of Adherex), responsibilities (including, without limitation, to whom Dr. Peters reports and who reports to Dr. Peters), title or office, which includes any removal of Dr. Peters from or any failure to re-elect or re-appoint Dr. Peters to any such position or offices; (ii) a reduction of Dr. Peters' salary, benefits or any change in the basis upon which Dr. Peters' salary or benefits is determined which is not consented to by Dr. Peters or which does not apply equally to all employees of the Corporation; (iii) any breach by us of any provision of the employment agreement; and (iv) after a change of control where the Board repeatedly overrides, supersedes, or disregards Dr. Peters' reasonable decisions or recommendations, such that the Board materially interferes with his ability to effectively function as the Chief Executive Officer, or the Board otherwise takes actions that constructively represent a lack of confidence in the ability of Dr. Peters to perform his duties and responsibilities. "Change of control" means the acquisition (at one time or over a period of time) of shares of the Corporation or of securities convertible into shares of the Corporation as a result of which a person or group of persons beneficially own enough shares of the Corporation to cast more than 50% of the votes attaching to all outstanding shares of the Corporation. It does not however include a reverse takeover or other reorganization where the holders of shares of the Corporation immediately prior to such transaction beneficially own, following the completion of the transaction, 50% of the votes attaching to the shares of the surviving corporation. On October 14, 2005, the term of Dr. Peters' employment agreement was extended by the Board through March 2010.

Pursuant to an employment agreement dated April 26, 2004 between James A. Klein, Jr. and Adherex, Mr. Klein is employed as Adherex's Chief Financial Officer. Pursuant to this agreement, Mr. Klein (a) received an initial annual salary in the amount of \$160,000 (Mr. Klein's current annual salary is \$225,000), (b) was granted options to purchase up to 200,000 Common Shares at a price per share of CAD\$2.65 under Adherex's Stock Option Plan, (c) received a signing bonus of \$15,000, and (d) may receive annual bonuses at the sole discretion of the Board. If Mr. Klein is dismissed from employment by Adherex for any reason other than "cause," Adherex is obligated to pay Mr. Klein severance compensation equal to six months of salary.

Pursuant to an employment agreement dated December 12, 2001 between Dr. Robin Norris and Adherex, Dr. Norris became employed as Adherex's Chief Operating Officer. He was also appointed President of Adherex on June 14, 2002. Pursuant to this agreement, Dr. Norris (a) received an initial annual salary in the amount of CAD\$225,000 (Dr. Norris' current annual salary is \$250,000), (b) was granted options to purchase up to 120,000 Common Shares at a price per share of CAD\$1.65 under Adherex's Stock Option Plan, and (c) was reimbursed for certain expenses related to his relocation from Colorado to Ottawa. If Dr. Norris is dismissed from employment by Adherex for any reason other than "cause," Adherex is obligated to pay Dr. Norris severance compensation equal to 12 months of salary.

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Pursuant to an employment agreement with dated January 27, 2003 between D. Scott Murray and Adherex, Mr. Murray was employed as Adherex's General Counsel and Corporate Secretary. He was appointed a Vice President on September 19, 2003 and promoted to Senior Vice President, Corporate Development on February 28, 2007. Pursuant to the January 27, 2003 agreement, Mr. Murray (a) received an initial annual salary in the amount of CAD\$150,000 (Mr. Murray's current annual salary is \$230,000), was (b) granted options to purchase up to 30,000 Common Shares at a price per share of CAD\$1.65 under the Stock Option Plan, and (c) was reimbursed for certain expenses related to his relocation from Toronto to Ottawa. If Mr. Murray is dismissed from employment by Adherex for any reason other than "cause," Adherex is obligated to pay Mr. Murray severance compensation equal to 12 months salary.

The Corporation entered into an employment agreement dated August 9, 2004 with Dr. Rajesh K. Malik upon his appointment as Chief Medical Officer. Dr. Malik resigned from the Corporation effective January 12, 2007. Dr. Malik's resignation did not trigger any severance payment under his employment agreement, which expired upon his resignation.

The Corporation entered into an employment agreement dated October 25, 2004 with Dr. Brian E. Huber upon his appointment as Chief Scientific Officer. The agreement provided that if Dr. Huber was terminated without "cause", the Corporation would pay his then-current salary and health insurance benefits (COBRA premiums) for a period of six months. Dr. Huber's employment with the Corporation terminated effective October 8, 2006. Pursuant to the terms of his agreement, Adherex is obligated to pay Dr. Huber \$101,750 in severance and health benefits for the six-month severance period.

In addition to such employment agreements, each of Drs. Peters and Norris, as well as Messrs. Klein and Murray, is a party to a confidentiality and intellectual property agreement with Adherex.

In the agreements for Dr. Huber and Messrs. Klein and Murray, "cause" is defined as: (1) material breach of the terms of the employment or intellectual property agreements; (2) failure to diligently and properly perform their duties and responsibilities, or to comply with any policies and directives of the company or the Board; (3) dishonest or illegal action (including, without limitation, embezzlement) or any other action whether or not dishonest or illegal by the employee that is materially detrimental to the interest and well-being of Adherex, including, without limitation, harm to its reputation; (4) failure to fully disclose any material conflict of interest he may have with Adherex in a transaction involving Adherex which conflict is materially detrimental to the interest of Adherex; or (5) conviction of (i) any felony or (ii) any misdemeanor or other crime of moral turpitude (other than a minor traffic offense). The employment agreement for Dr. Norris does not specifically define "cause" but similar principles would apply.

On December 14, 2005, the Corporation amended the option agreements with the Named Executive Officers and members of the Board relating to options granted prior to and on that date to provide that the Named Executive Officers and members of the Board would be allowed up to three years, rather than 30 days, after concluding their employment or engagement with Adherex to exercise their options that have vested on or prior to such conclusion of employment or engagement, provided that no options shall vest following such cessation of employment or engagement.

### **Indebtedness of Directors and Officers**

No individual, who is or was a director, executive officer or employee of Adherex, nor any proposed nominee for election as a director of Adherex, nor any associate of any one of them:

- (a) is or, at any time since the beginning of our most recent completed financial year, has been indebted to Adherex or any of its subsidiaries; or
- (b) was indebted to another entity, which indebtedness is, or was at any time during our most recent completed financial period, the subject of a guarantee, support agreement, letter of credit or other similar arrangement or understanding provided by Adherex or any of its subsidiaries.

### **Report on Corporate Governance**

Adherex believes that good corporate governance is important to ensure that Adherex is managed for the long-term benefit of its shareholders. In connection with Adherex's commitment to comply with the standards of applicable securities legislation, Adherex has continued to review Adherex's corporate governance practices and policies and has compared them to developing practices and regulation in Canada and the United States. In particular, Adherex has considered the developing rules and guidelines for corporate governance practices and policies, and related disclosures, promulgated by the Canadian Securities Administrators, the U.S. Securities and Exchange Commission ("SEC") and the American Stock Exchange (the "AMEX"), as well as the Sarbanes-Oxley Act of 2002.

In February 2004, Adherex's Board adopted a Mandate of the Board of Directors, Corporate Governance Guidelines and a Code of Business Conduct and Ethics applicable to all officers, directors and employees of Adherex. The Board also (i) restated the charter of the Audit Committee, (ii) established a separate Governance Committee and adopted a written charter for the committee, (iii) restated the charter of the Compensation Committee, (iv) established a Nominating Committee and adopted a

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written charter for the committee, and (v) appointed a Lead Independent Director, currently Dr. Fred Mermelstein. Each of the various committee charters and other corporate governance documents are regularly reviewed and updated. You can access Adherex's current committee charters, Mandate of the Board of Directors, Corporate Governance Guidelines and Code of Business Conduct and Ethics in the corporate governance section of Adherex's website at [www.adherex.com](http://www.adherex.com).

### ***Mandate of the Board of Directors***

The Board has the overall responsibility for the strategic planning and general management of Adherex's business and affairs. In fulfilling its responsibilities, the Board is responsible for, among other things:

- adoption of a strategic plan for Adherex;
- approval of the annual operating and capital expenditure budgets;
- identification of the principal risks of Adherex's business and ensuring the implementation of the appropriate systems to manage these risks;
- succession planning for Adherex, including appointing and monitoring senior management;
- adoption of a communications policy for Adherex;
- approval of acquisitions, dispositions, investments and financings, which exceed certain prescribed limits;
- integrity of Adherex's internal control and management information systems; and
- development of clear position descriptions for directors, including the Chair of the Board, the Lead Independent Director and the Chair of each Board committee; and, together with the CEO, a clear position description for the CEO.

The Board discharges its responsibilities directly and through committees that have specific areas of responsibility. The frequency of Board meetings and the nature of items discussed during the meetings depend on the opportunities or risks that Adherex faces. The Board, directly and through its committees, has adopted a process whereby it assesses the risk factors that must be identified and managed to ensure Adherex's long-term viability.

The Board mandate generally describes the Board's expectation of management and provides a list of specific matters for which management must obtain Board approval prior to implementation. The Board mandate also provides that the Board annually establish performance objectives for the CEO, which responsibility has been delegated to the Compensation Committee. In addition, the Board receives regular updates from management concerning the Corporation's progress toward achieving corporate goals. The Board has also delegated to the Compensation Committee responsibility for evaluating the CEO's compensation, which evaluation includes review of the CEO's performance against annual performance objectives for the year and input from the Lead Independent Director as well as other directors.

### ***Lead Independent Director***

Dr. Peters, Adherex's Chairman of the Board, is the Corporation's Chief Executive Officer and therefore not "independent". Adherex's Corporate Governance Guidelines require that the Board designate an independent director to act in a lead capacity to perform certain functions, as Lead Independent Director. The Lead Independent Director shall be elected annually by the independent directors. Dr. Mermelstein is the current Lead Independent Director. The Lead Independent Director's authority and responsibilities include:

- consulting with the Chairman of the Board on an appropriate schedule for Board meetings, seeking to ensure that the independent directors can perform their duties responsibly;
- providing the Chairman of the Board with input into agendas for Board meetings;
- advising the Chairman of the Board as to the quality, quantity and timeliness of the flow of information from management that is necessary for the independent directors to perform their duties responsibly, with the understanding that the independent directors will receive any information requested on their behalf by the Lead Independent Director;
- calling, and acting as the presiding director at, meetings of the independent directors, and developing the agenda for such meetings;

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- acting as principal liaison between the independent directors, the Chairman of the Board and the Chief Executive Officer on sensitive issues;
- providing input to the Compensation Committee regarding the Chief Executive Officer's performance and meeting, along with the Compensation Committee, with the Chief Executive Officer to discuss the Board's evaluation of his or her performance; and
- any other responsibilities as may be determined from time to time by the Board.

### ***Composition of Our Standing Committees***

The Board has created audit, compensation, nominating, and governance committees to ensure that the Board functions independently of management. It is also customary practice for directors (i) to regularly receive detailed information describing our performance, and (ii) when necessary, to speak directly with management regarding additional information required on particular matters of interest. Moreover, directors have access to information independent of management through our external auditor.

### ***Audit Committee***

On behalf of the Board, the Audit Committee of the Board retains, oversees and evaluates our independent auditor, reviews the financial reports and other financial information provided by the Company, including audited financial statements, and discusses the adequacy of disclosure with management and the auditor. The committee also reviews the performance of the independent auditor in the annual audit and in assignments unrelated to the audit, assesses the independence of the auditor, and reviews its fees. The committee is responsible for reviewing our internal controls over financial reporting and disclosure.

The Audit Committee operates under a written charter adopted by the Board. The committee met six times during the fiscal year ended December 31, 2006. The current members of the Audit Committee are Dr. Porter (Chair), Dr. Morand and Mr. Martin. The Board has determined that each is "independent" as required by the rules of the SEC and American Stock Exchange and applicable Canadian securities laws. The Board has determined that each member of the committee is financially literate for purposes of applicable laws and that Arthur Porter, MD, MBA has the requisite attributes of an "audit committee financial expert" as defined by regulations promulgated by the SEC.

### ***Compensation Committee***

The Compensation Committee of the Board determines the compensation to be paid to our executive officers and periodically reviews our compensation structure to ensure that we continue to attract and retain qualified and experienced individuals to our management team and motivate these individuals to perform to the best of their ability and in the Company's best interests. Among other things, the committee considers compensation levels of comparable positions in similarly sized organizations in the biotechnology industry. The committee also administers our Stock Option Plan and reviews recommendations from management for new stock option grants.

The Compensation Committee operates under a written charter adopted by the Board. The current members of the Compensation Committee are Dr. Porter (Chair), Mr. Martin and Dr. Morand. The Board has determined that each is "independent" as defined by the rules of the SEC and American Stock Exchange and applicable Canadian securities laws. The committee held two meetings during the fiscal year ended December 31, 2006.

### ***Nominating Committee***

The Nominating Committee of the Board of Directors is charged with nominating activities, including determining desired Board skills and attributes for directors; conducting appropriate and necessary evaluations of the backgrounds and qualifications of possible director candidates; and recommending director nominees for approval by the Board or the shareholders. The Nominating Committee is authorized to retain advisors and consultants and compensate them for their services.

The Nominating Committee operates under a written charter adopted by the Board. The Nominating Committee will not rely on a fixed set of qualifications for director nominees. The Committee's primary mandate with respect to director nominees is to create a Board with a broad range of skills and attributes that is aligned with the Company's strategic needs. The current members of the Nominating Committee are Dr. Kufe (Chair), Dr. Mermelstein and Dr. Porter. The Board has determined that each is "independent" as defined by the current rules of the SEC and American Stock Exchange and applicable Canadian securities laws. The committee held two meetings during the fiscal year ended December 31, 2006.

***Governance Committee***

The Governance Committee of the Board of Directors develops, recommends and oversees the effectiveness of the Company's corporate governance guidelines. In addition, the committee oversees the orientation and education of directors and the process of evaluating the Board and its committees.

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The current members of the Governance Committee are Dr. Morand (Chair), Dr. Mermelstein, and Dr. Kufe. The Board has determined that each is “independent” as defined by the current rules of the SEC and American Stock Exchange and applicable Canadian securities laws. The committee held one meeting during the fiscal year ended December 31, 2006.

**D. Employees**

As of December 31, 2006, we had 25 full-time employees. We have no current plans to increase the number of full-time employees during 2007.

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**E. Share ownership**

The following table shows the number of shares of common stock, options and warrants to purchase common stock beneficially owned by each director and Named Executive Officer as of February 28, 2007. We have included all securities of the Company owned by each individual, irregardless of when those securities vest.

Name	Common Shares Held Directly	Options and Warrants Outstanding	% of Outstanding Common Stock (1)	Exercise Price	Expiration Date			
William P. Peters, MD, PhD, MBA	165,982	15,566	2.51%	CAD\$ 2.7500	06/23/2007			
		30,591		CAD\$ 2.1500	12/19/2008			
		750,000		CAD\$ 1.6500	02/19/2010			
		770,217		CAD\$ 2.2500	12/30/2010			
		234,000		CAD\$ 2.9000	05/21/2011			
		32,000		CAD\$ 1.9500	12/17/2011			
		633,601		US\$ 1.2000	04/05/2012			
		150,000		US\$ 1.1000	10/14/2012			
		30,000		US\$ 0.8800	12/14/2012			
		25,000		US\$ 0.3300	02/21/2010			
Donald W. Kufe, MD	—	4,000	0.11%	CAD\$ 2.9000	05/21/2011			
		19,621		CAD\$ 3.2500	03/01/2011			
		4,000		CAD\$ 1.7000	05/03/2010			
		19,621		US\$ 1.2000	05/18/2012			
		40,000		US\$ 1.2000	09/21/2012			
		2,500		US\$ 0.8800	12/14/2012			
		50,000		US\$ 0.2800	02/28/2014			
		Michael G. Martin		—	60,000	0.09%	US\$ 0.3400	10/19/2013
					50,000		US\$ 0.2800	02/28/2014
		Fred H. Mermelstein, PhD		1,363,410	76,384	1.26%	CAD\$ 3.5850	11/20/2007
23,078	CAD\$ 2.1500		12/19/2008					
7,800	CAD\$ 1.7000		05/03/2010					
18,621	CAD\$ 3.2500		03/01/2011					
4,000	CAD\$ 2.9000		05/21/2011					
18,621	US\$ 1.2000		05/18/2012					
30,000	US\$ 1.2000		09/21/2012					
50,000	US\$ 0.2800		02/28/2014					
Peter Morand, PhD	65,000	7,800	0.16%	CAD\$ 1.7000	05/03/2010			
		18,621		CAD\$ 3.2500	03/01/2011			
		4,000		CAD\$ 2.9000	05/21/2011			
		18,621		US\$ 1.2000	05/18/2012			
		30,000		US\$ 1.2000	09/21/2012			
		5,000		US\$ 0.3300	02/21/2010			
Robin Norris, MD	8,100	50,000	0.33%	US\$ 0.2800	02/28/2014			
		120,000		CAD\$ 1.6500	12/12/2008			
		40,000		CAD\$ 1.7000	05/03/2010			
		75,600		CAD\$ 2.2500	12/30/2010			
		36,400		CAD\$ 2.9000	05/21/2011			
		15,000		US\$ 1.2000	09/21/2012			
		45,000		US\$ 0.8800	12/14/2012			
		75,000		US\$ 0.2800	02/28/2014			
Arthur T. Porter, MD, MBA	—	18,621	0.10%	CAD\$ 3.2500	03/01/2011			
		4,000		CAD\$ 2.9000	05/21/2011			
		2,000		CAD\$ 1.9500	12/17/2011			
		18,621		US\$ 1.2000	05/18/2012			
		30,000		US\$ 1.2000	09/21/2012			
		2,500		US\$ 0.8800	12/14/2012			
James A. Klein, Jr., CPA	—	50,000	0.26%	US\$ 0.2800	02/28/2014			
		200,000		CAD\$ 2.6500	04/26/2011			
		15,000		CAD\$ 2.9000	05/21/2011			
		5,000		CAD\$ 1.9500	12/17/2011			
		13,500		US\$ 1.2000	09/21/2012			
		39,000		US\$ 0.8800	12/14/2012			
D. Scott Murray	—	50,000	0.27%	US\$ 0.2800	02/28/2014			
		30,000		CAD\$ 1.7500	02/12/2010			
		10,000		CAD\$ 2.4500	12/19/2010			
		11,970		CAD\$ 2.2500	12/30/2010			
		8,000		CAD\$ 2.9000	05/21/2011			
		18,000		CAD\$ 1.9500	12/17/2011			
		24,900		US\$ 1.2000	09/21/2012			
		41,600		US\$ 0.8800	12/14/2012			
200,000	US\$ 0.2800	02/28/2014						
All executive officers and directors as a group (twelve persons)	1,602,492	4,882,973	4.95%					

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- (1) In computing the percentage of outstanding common stock owned by a person, we have deemed common stock subject to options or warrants held by that person (vested and unvested) to be outstanding, but we have not deemed those shares to be outstanding for purposes of computing the percentage ownership of any other person. Ownership percentage is based on 126,140,787 shares of our common stock outstanding as of February 28, 2007.



**Adherex Stock Option Plan**

Our Amended and Restated Stock Option Plan is intended to encourage the ownership of common stock by our employees, directors and key consultants and to provide additional incentive for such persons to promote our success in a highly competitive business environment. As of February 28, 2007, 5,600,000 shares of common stock have been reserved for issuance upon exercise of options issuable under our Stock Option Plan, of which options to purchase 5,129,047 shares of common stock have been granted to employees, directors, and key consultants and are outstanding, and 36,600 shares of common stock have been issued pursuant to stock option exercises. In April 2007, as part of our annual shareholders meeting, we will be asking shareholders to approve amendments to the Company's stock option plan changing the maximum number of Common Shares issuable under the plan from the current 5.6 million to 20.0 million.

Options to purchase common stock are granted in accordance with the terms of our Stock Option Plan. Pursuant to this Plan and the charter of the Compensation Committee, the Compensation Committee has the authority to approve those individuals of the Company to whom options will be granted and the number of options to be granted. The exercise price for purchasing common stock under our Stock Option Plan is fixed based upon the closing price of either the Toronto Stock Exchange or the American Stock Exchange on the day immediately preceding the date of grant.

In addition to the options to purchase common stock pursuant to our Stock Option Plan, on December 16, 2003, our shareholders approved a grant to Dr. William Peters of options to purchase 700,000 shares of common stock outside of the Stock Option Plan, having an exercise price equal to the market price of the our common stock on the date of the grant. For further information concerning Dr. Peters' option grants, see "—Employee Agreements and Termination Provisions."

**ITEM 7. MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS****A. Major shareholders**

As used in this section, a "beneficial owner" is any person who, even if not the record owner of securities, has or shares the underlying benefits of ownership. These benefits include the power to direct the voting or the disposition of the securities or to receive the economic benefit of ownership of the securities. A person also is considered to be the beneficial owner of securities that he or she has the right to acquire within 60 days by option or other agreement. Beneficial owners include person who hold their securities through one or more trustees, brokers, agents, legal representatives or other intermediaries, or through companies in which they have a "controlling interest," which means the direct or indirect power to direct the management and policies of the entity. In this section, ownership percentage is based on 126,140,787 shares of our common stock outstanding as of February 28, 2007.

To our knowledge, as at the date of this Annual Report, the only persons who beneficially own, directly or indirectly, or exercise control or direction over voting securities of the Company carrying more than 5% of the voting rights of the total issued and outstanding shares of the Company are as follows:

Name	Number of Voting Securities Owned	
	Common Stock	Percentage of Class
Southpoint Capital Advisors LP	62,256,000 (1)	42.4%
Lawrence Asset Management Inc.	19,396,071 (2)	16.9%
OrbiMed Advisors LLC	13,151,796 (3)	10.1%
HBM BioVentures (Cayman) Ltd.	6,802,220 (4)	5.28%

- (1) Includes a warrant to purchase 20,752,000 shares of common stock at an exercise price of \$0.40, expiring February 21, 2010.
- (2) Includes a warrant to purchase 7,575,757 shares of common stock at an exercise price of \$0.40, expiring February 21, 2010.
- (3) Includes a warrant to purchase 2,590,000 shares of common stock at an exercise price of \$0.40, expiring February 21, 2010, a warrant to purchase 1,145,000 shares of common stock at an exercise price of CAD\$2.15, expiring December 19, 2008, a warrant to purchase 373,359 shares of common stock at an exercise price of CAD\$3.50, expiring May 20, 2007 and a warrant to purchase 214,320 shares of common stock at an exercise price of \$1.75, expiring on July 20, 2008.
- (4) Includes a warrant to purchase 107,142 shares of common stock at an exercise price of CAD\$2.15, expiring December 3, 2007, a warrant to purchase 1,883,286 shares of common stock at an exercise price of CAD\$2.15, expiring December 19, 2008, a warrant to purchase 377,358 shares of common stock at an exercise price of CAD\$3.50, expiring May 20, 2007 and a warrant to purchase 321,429 shares of common stock at an exercise price of \$1.75, expiring on July 20, 2008.

During the past three years, the following significant changes occurred in the percentage ownership of the major shareholders listed in the table above. On December 19, 2003, HBM BioVentures (Cayman) Ltd. beneficially owned 17.8% of our common sock and OrbiMed Advisors LLC beneficially owned 10.9% of our common sock, in each case as the result of acquisitions of common stock and warrants in financings we completed in December 2003. On May 20, 2004, HBM BioVentures (Cayman) Ltd. beneficially owned 18.0% of our common stock and OrbiMed Advisors LLC beneficially owned 12.2% of our common stock, in each case as a result of acquiring common stock and warrants in the financing we completed in May 2004. On July 20, 2005, HBM BioVentures (Cayman) Ltd. beneficially owned 18.3% of our common stock and OrbiMed Advisors LLC beneficially owned 12.4% of our common stock, in each case as a result of acquiring common stock and warrants in the financing we competed in July 2005. On February 21, 2007, Southpoint Capital Advisors LP owned 42.4% of our common stock, Lawrence Asset Management Inc. beneficially owned 16.9% of our common stock and OrbiMed Advisors LLC beneficially owned 10.1% of our common stock, in each case as a result of acquiring common stock and warrants in the financing we completed in February 21, 2007.

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Southpoint Capital Advisors LP owned 42.4% of our common stock, Lawrence Asset Management Inc. beneficially owned 16.9% of our common stock and OrbiMed Advisors LLC beneficially owned 10.1% of our common stock, in each case as a result of acquiring common stock and warrants in the financing we completed in February 21, 2007.

As of February 28, 2007, (i) 71 of the record holders of our common stock were citizens or residents of the United States, or corporations created or organized in or under the laws of the United States and (ii) 60.0% of our total outstanding common stock was directly or indirectly held of record by U.S. residents, in each case calculated in accordance with Rule 3b-4(c) promulgated under the Securities Exchange Act of 1934, as amended.

We are not controlled directly or indirectly by any other corporation or any other foreign government or by any other natural or legal person, severally or jointly.

There are no arrangements the operation of which at a subsequent date may result in a change in our control.

### **B. Related party transactions**

In accordance with the CBCA, directors who have a material interest in any person who is a party to a material contract or a proposed material contract with us are required, subject to certain exceptions, to disclose that interest and abstain from voting on any resolution to approve that contract.

On February 21, 2007, Adherex completed a public offering approximately 75.8 million units for gross proceeds of \$25.0 million. The units were issued at a purchase price of \$0.33 per unit. Each unit consisted of one share of Adherex common stock and one-half of a common stock purchase warrant. Each whole warrant entitles the holder to acquire one additional share of Adherex common stock at an exercise price of \$0.40 per share for a period of three years. Southpoint Capital Advisors LP, Lawrence Asset Management Inc. and OrbiMed Advisors LLC, purchased 41.5 million, 15.2 million and 2.6 million units, respectively, as part of the offering. In addition, Dr. William P. Peters, the Chairman and CEO of Adherex, and Dr. Peter Morand, a board member, each subscribed for 50,000 and 10,000 units, respectively, in the offering.

### **C. Interests of experts and counsel**

Not applicable

## **ITEM 8. FINANCIAL INFORMATION**

### **A. Consolidated statements and other financial information**

Please see Item 18, "Financial Statements" for a list of the financial statements filed as part of this Annual Report.

In the fiscal year 2006, we did not receive revenue from exports.

We have not been involved in any material legal or arbitration proceedings, including bankruptcy, receivership or similar proceedings. To our knowledge, there has been no proceedings with third parties, which may have, or have had in the recent past, significant effects on our financial positions or profitability.

Other than the Class A Preferred Shares of CBI which were distributed as a dividend in November 2002, we have neither declared nor paid dividends on any of our outstanding common stock, and do not intend to do so in the foreseeable future. We intend to retain any future earnings to finance the expansion of our business. Any future determination to pay dividends will be at the discretion of the Board of Directors and will depend upon our financial condition, results of operations, capital requirements, as well as any other factors deemed relevant by our Board.

### **B. Significant changes**

Not applicable.

**ITEM 9. THE OFFER AND LISTING**

**A. Offer and listing details**

The issued and outstanding shares of our common stock are listed and posted for trading on the Toronto Stock Exchange under the trading symbol “AHX” and on the American Stock Exchange under the trading symbol “ADH.” Our shares of common stock are registered shares on the books of our transfer agent.

Computershare Investor Services Inc., 100 University Avenue, 9th Floor, Toronto, Ontario, M5J 2Y1 is the transfer agent and registrar for the Company’s common stock in Canada and the United States (through a U.S. affiliate). There are no transfer restrictions apart the requirement that any transfers comply with applicable securities laws and the rules of applicable securities exchanges.

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The following tables sets forth information regarding the price history of our common stock on the Toronto Stock Exchange and the American Stock Exchange, on which the Company began trading on November 12, 2004, for the periods indicated:

(1) the annual high and low market closing prices, and average daily trading volume on the Toronto Stock Exchange and the American Stock Exchange, for the five most recent full financial years:

	Toronto Stock Exchange (in Canadian dollars)			American Stock Exchange(a) (in U.S. dollars)		
	High \$	Low \$	Volume	High \$	Low \$	Volume
Fiscal 2006	\$1.64	\$0.35	29,467	\$ 1.40	\$ 0.31	80,789
Fiscal 2005	2.30	0.91	16,915	2.20	0.82	22,348
Six-Month Fiscal Transition 2004	2.60	1.75	21,660	2.20	1.55	11,898
Fiscal 2004	3.95	1.90	19,046	N/A	N/A	N/A
Fiscal 2003	2.95	1.50	8,179	N/A	N/A	N/A
Fiscal 2002	5.40	1.50	13,643	N/A	N/A	N/A

(2) the quarterly high and low market closing prices, and average daily trading volume on the Toronto Stock Exchange and the American Stock Exchange, for the two most recent full financial years and any subsequent period:

	Toronto Stock Exchange (in Canadian dollars)			American Stock Exchange (a) (in U.S. dollars)		
	High \$	Low \$	Volume	High \$	Low \$	Volume
<b>Fiscal 2006:</b>						
Quarter ended 12/31/06	\$0.52	\$0.35	40,283	\$ 0.44	\$ 0.31	119,058
Quarter ended 09/30/06	0.72	0.35	34,438	0.66	0.32	100,338
Quarter ended 06/30/06	1.32	0.70	20,125	1.11	0.64	53,284
Quarter ended 03/31/06	1.64	0.88	23,019	1.40	0.82	50,006
<b>Fiscal 2005:</b>						
Quarter ended 12/31/05	1.45	0.91	17,457	1.22	0.82	33,074
Quarter ended 09/30/05	2.30	1.29	25,481	1.90	1.10	34,127
Quarter ended 06/30/05	2.25	1.30	12,524	1.75	1.02	11,262
Quarter ended 03/31/05	2.20	1.50	12,039	1.80	1.25	10,002
<b>Six-Month Fiscal Transition 2004:</b>						
Quarter ended 12/31/04	2.60	1.88	21,455	2.20	1.55	11,898
Quarter ended 9/30/04	2.50	1.75	21,866	N/A	N/A	N/A
<b>Fiscal 2004:</b>						
Quarter ended 6/30/04	3.15	2.05	21,560	N/A	N/A	N/A
Quarter ended 3/31/04	3.95	2.50	38,272	N/A	N/A	N/A
Quarter ended 12/31/03	2.50	1.90	8,490	N/A	N/A	N/A
Quarter ended 9/30/03	2.70	2.30	7,530	N/A	N/A	N/A

(a) The Company began trading on the American Stock Exchange on November 12, 2004

(3) the high and low market closing prices, and average daily trading volume on the Toronto Stock Exchange and American Stock Exchange, for the most recent six months:

	Toronto Stock Exchange (in Canadian dollars)			American Stock Exchange (in U.S. dollars)		
	High \$	Low \$	Volume	High \$	Low \$	Volume
February 2007	\$0.39	\$0.315	157,478	\$0.34	\$0.28	397,416
January 2007	0.45	0.360	43,338	0.36	0.30	71,720
December 2006	0.41	0.350	46,848	0.36	0.31	80,170
November 2006	0.52	0.360	37,853	0.44	0.32	130,871
October 2006	0.47	0.370	36,890	0.43	0.32	143,077
September 2006	0.66	0.390	28,523	0.59	0.40	65,220

## B. Plan of distribution

Not applicable.

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### **C. Markets**

The Company's common stock is traded on the Toronto Stock Exchange under the symbol "AHX" and on the American Stock Exchange under the trading symbol "ADH."

### **D. Selling shareholders**

Not applicable.

### **E. Dilution**

Not applicable.

### **F. Expenses of the issue**

Not applicable.

## **ITEM 10. ADDITIONAL INFORMATION**

### **A. Share capital**

Not applicable.

### **B. Memorandum and articles of association**

Item 10.B of the Company's Form 20-F dated March 31, 2006 is incorporated herein by reference.

### **C. Material contracts**

Other than contracts entered into in the ordinary course of business and those previously reported in Item 19, the Company has entered into the material contracts listed as "Filed herewith" in Item 19 hereto in the last two calendar years.

### **D. Exchange controls**

There are currently no limitations imposed by Canadian federal or provincial laws on the rights of non-resident or foreign owners of Canadian securities to hold or vote the securities held by such persons in the Company, other than are provided in the Investment Canada Act, as described below. There are also no such limitations imposed by the Company's Articles and By-laws with respect to the common stock.

### **Investment Canada Act**

Under the Investment Canada Act, the acquisition of control by a "non-Canadian" of a Canadian business that carries on most types of business activities (including the business activity carried on by the Company) is subject to review in certain circumstances by the Investment Review Division of Industry Canada ("Industry Canada"), a Canadian federal government department, and will not be allowed unless the investment is found by the Minister responsible for Industry Canada likely to be of "net benefit" to Canada. On the other hand, the acquisition of control of a Canadian business, which carries on a specific type of business activity, as, prescribed, that is related to Canada's cultural heritage or national identity by a non-Canadian is subject to review in certain circumstances by the Department of Canadian Heritage.

Subject to the provisions relating to so-called World Trade Organization ("WTO") transactions as described below, an acquisition of control will be reviewable by Industry Canada if the "value of the assets" of the Canadian business for which control is being acquired is: (a) CAD\$5.0 million or more in the case of a "direct" acquisition; (b) CAD\$50.0 million or more in the case of an "indirect" acquisition, which is a transaction involving the acquisition of the shares of a corporation incorporated outside Canada which owns subsidiaries in Canada; or (c) CAD\$5.0 million or more but less than CAD\$50.0 million where the Canadian assets acquired constitute more than 50% of the value of the assets of all entities acquired, if the acquisition is effected through the acquisition of control of a foreign corporation.

These thresholds have been increased respecting the acquisition of control of a Canadian business (1) by investors which are ultimately controlled by nationals of countries which are members of the WTO, including Americans; or (2) which is a WTO member-controlled (other than Canadian controlled) Canadian business (either, a "WTO transaction"). A direct acquisition in WTO transactions is reviewable only if it involves the direct acquisition of a Canadian business where the value of the assets is CAD\$281.0 million or more for transactions closing in 2007 (this figure is adjusted annually to reflect the increase in the Canadian nominal gross domestic product at market prices). The Investment Review Division of Industry Canada has taken the position that an indirect acquisition of a Canadian business by or from WTO Investors are generally not reviewable.

These increased thresholds applicable in WTO transactions do not apply to the acquisition of control of a Canadian business that is engaged in certain sensitive areas such as uranium production, financial services, transportation services or culture businesses.

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Even if such acquisition of control is not so reviewable, a non-Canadian must still give notice to Industry Canada of the acquisition of control of a Canadian business within 30 days after its completion.

### **Competition Act (Canada)**

Under the Competition Act, certain transactions are subject to the pre-notification requirements of the Competition Act whereby notification of the transaction and specific information in connection therewith must be provided to the Commissioner of Competition. A transaction may not be completed until the applicable statutory waiting periods have expired, namely 14 days for a short-form filing or 42 days for a long-form filing. Where the parties elect to file a short-form notification, the Commissioner may convert the filing to a long-form, thereby restarting the clock once the parties submit their filing.

A proposed transaction is subject to pre-notification if two thresholds are exceeded. First, the parties and their affiliates must have assets in Canada or gross revenues from sales in, from or into Canada that exceed CAD\$400.0 million in aggregate value. Second, the parties to a transaction involving a corporation which carries on an “operating business” in Canada must then notify the Commissioner of Competition in cases where: (a) in respect of a proposed acquisition of assets of an operating business (defined in the Competition Act (Canada) as a business undertaking in Canada to which employees employed in connection with the undertaking ordinarily report for work), the value of the assets or the annual gross revenues from sales in or from Canada generated from those assets would exceed CAD\$35.0 million; (b) in respect of a proposed acquisition of voting shares of a corporation carrying on an operating business, the value of the assets of the acquired corporation or the annual gross revenues from sales in or from Canada generated from those assets would exceed CAD\$35.0 million, and the persons acquiring the shares would acquire an interest in the corporation exceeding either 20% in the case of a public corporation or 35% in the case of a private corporation. If the parties already surpass the 20% or the 35% threshold, and make a subsequent share purchase which results in their owning more than a 50% interest, then the subsequent transaction also requires notification; (c) in the case of a corporate amalgamation, where one or more of the corporations carries on an operating business, the value of the assets of the continuing corporation or the annual gross revenues sales in or from Canada generated from those assets would exceed CAD\$70.0 million; or (d) in the case of a proposed combination, the value of the assets of the continuing business or the annual gross revenues from sales in or from Canada generated from those assets would exceed CAD\$35.0 million.

Finally, all merger transactions, regardless of whether they are subject to pre-notification, are subject to the substantive provisions of the Competition Act, namely whether the proposed merger prevents or lessens, or is likely to prevent or lessen, competition substantially in a relevant market in Canada.

### **E. Taxation**

This section summarizes the material U.S. federal and Canadian federal income tax consequences of the ownership and disposition of the common stock. Nothing contained herein shall be construed as tax advice; you must rely only on the advice of your own tax advisor. The Company makes no assurances as to the applicability of any tax laws with respect to any individual investment. In this section, the Company has calculated whether it meets certain thresholds related to its status under various U.S. tax rules. Any such calculation is dependent on many facts, not all of which may be known to the Company and any of which might change, which could change the results of any calculation.

This summary relating to the common stock applies to the beneficial owners who are individuals, corporations, trusts and estates which:

- at all relevant times are: (i) U.S. persons for purposes of the U.S. Internal Revenue Code of 1986, as amended, through the date hereof (the “Code”), (ii) non-residents of Canada for purposes of the Income Tax Act (Canada)(the “Income Tax Act”) and (iii) residents of the United States for purposes of, and entitled to all the benefits under, the Canada-United States Income Tax Convention (1980), as amended through the date hereof (the “Tax Treaty”);
- hold common stock as capital assets for purposes of the Code and capital property for the purposes of the Income Tax Act;
- deal at arm’s length with, and are not affiliated with, the Company for purposes of the Income Tax Act; and
- do not and will not use or hold the common stock in carrying on a business in Canada.

Persons who satisfy the above conditions are referred to as “U.S. Shareholders.”

The tax consequences of an investment in common stock by persons who are not U.S. Shareholders may differ materially from the tax consequences discussed in this section. The Income Tax Act contains rules relating to securities held by some financial institutions. This Annual Report does not discuss these rules, and holders that are financial institutions should consult their own tax advisors.

- This discussion is based upon the following, all as currently in effect:
- the Income Tax Act and regulations under the Income Tax Act;



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- the Code and Treasury regulations under the Code;
- the Canada-United States Income Tax Convention (1980);
- the administrative policies and practices published by the Canada Revenue Agency, formerly Revenue Canada;
- all specific proposals to amend the Income Tax Act and the regulations under the Income Tax Act that have been publicly announced by or on behalf of the Minister of Finance (Canada) prior to the date of this report;
- the administrative policies published by the U.S. Internal Revenue Service; and
- judicial decisions.

All of the foregoing is subject to change either prospectively or retroactively. This summary does not take into account estate or gift tax laws, the tax laws of the various provinces or territories of Canada or the tax laws of the various state and local jurisdictions of the United States or foreign jurisdictions.

This discussion summarizes the material U.S. federal and Canadian federal income tax considerations of the ownership and disposition of common stock. This discussion does not address all possible tax consequences relating to an investment in common stock. No account has been taken of your particular circumstances and this summary does not address consequences peculiar to you if you are subject to special provisions of U.S. or Canadian income tax law (including, without limitation, dealers in securities or foreign currency, tax-exempt entities, banks, insurance companies or other financial institutions, persons that hold common stock as part of a “straddle,” “hedge” or “conversion transaction,” and U.S. Shareholders that have a “functional currency” other than the U.S. dollar or that own common stock through a partnership or other pass through entity). Therefore, you should consult your own tax advisor regarding the tax consequences of purchasing and owning common stock.

### **Material U.S. Federal Income Tax Considerations**

Subject to the discussion below regarding Foreign Personal Holding Company Rules, Passive Foreign Investment Company Rules and Controlled Foreign Corporation Rules, this section summarizes U.S. federal income tax consequences of ownership and disposition of the common stock.

U.S. Shareholders are generally required to include in income dividend distributions, if any, paid by the Company to the extent of the Company’s current or accumulated earnings and profits attributable to the distribution as computed based on U.S. income tax principles. The amount of any cash distribution paid in Canadian dollars will be equal to the U.S. dollar value of the Canadian dollars on the date of distribution based on the exchange rate on such date, regardless of whether the payment is in fact converted to U.S. dollars and without reduction for Canadian withholding tax. For a discussion of Canadian withholding taxes applicable to dividends paid by the Company, see “Material Canadian Federal Income Tax Considerations.” You will generally be entitled to a foreign tax credit or deduction in an amount equal to the Canadian tax withheld. To the extent distributions paid by the Company on the common stock exceed the Company’s current or accumulated earnings and profits, they will be treated first as a return of capital up to your adjusted tax basis in the shares and then as capital gain from the sale or exchange of the shares.

On May 28, 2003, the Jobs and Growth Tax Relief Reconciliation Act of 2003 (the “2003 Act”) was signed into law. In general, the 2003 Act reduces the maximum rate of U.S. federal income tax on dividends paid to non-corporate U.S. holders to 15% for tax years from 2003 to 2008. In order to qualify for the reduced tax rates on dividends, a non-corporate shareholder must satisfy certain holding period requirements and must not be under an obligation (whether pursuant to a short sale or otherwise) to make related payments with respect to positions in substantially similar or related property. In some circumstances, this holding period may be increased. Additionally, the new tax rates do not apply to dividends, which a non-corporate shareholder elects to treat as investment income for purposes of Section 163(d)(4) of the Code.

Dividends received from a “qualified foreign corporation” are eligible for the reduced dividends tax rates under the 2003 Act. In general, a Canadian corporation entitled to all the benefits of the Tax Treaty will be treated as a qualified foreign corporation. In addition, a foreign corporation will be treated as a qualified foreign corporation with respect to any dividend paid by that corporation if the stock with respect to which the dividend is paid is readily tradable on an established securities market in the United States. Regardless of the above rules, however, a foreign corporation will not be treated as a qualified foreign corporation if, for the taxable year of the corporation in which the dividend was paid, or the preceding taxable year, the corporation is classified for U.S. tax purposes as a foreign personal holding company (“FPHC”) or a passive foreign investment company (“PFIC”). Accordingly, any dividends paid by us in a year that we are a FPHC or a PFIC or in the next taxable year would not qualify for the reduced tax rates on dividends paid to non-corporate U.S. holders under the 2003 Act. As discussed below under “Foreign Personal Holding Company Rules” and “Passive Foreign Investment Company Rules,” we have determined that we are a PFIC for U.S. federal income tax purposes and likely will continue to be a PFIC at least until we develop a source of significant operating revenues.

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Dividends paid by the Company generally will constitute foreign source dividend income and “passive income” for purposes of the foreign tax credit, which could reduce the amount of foreign tax credits available to you. The Code applies various limitations on the amount of foreign tax credits that may be available to a U.S. tax payer.

Because of the complexity of those limitations, you should consult your own tax advisor with respect to the availability of foreign tax credits.

Dividends paid by the Company on the common stock generally will not be eligible for the “dividend received” deduction.

If you sell the common stock, you generally will recognize gain or loss in an amount equal to the difference between the amount realized on the sale and your adjusted tax basis in the shares. Any such gain or loss will be long-term or short-term capital gain or loss, depending on whether the shares have been held by you for more than one year, and will generally be U.S. source gain or loss.

Dividends paid by the Company on the common stock generally will be subject to U.S. information reporting, and a backup withholding tax may apply unless you furnish the paying agent or middleman with a duly completed and signed Form W-9. You will be allowed a refund or a credit equal to any amount withheld under the U.S. backup withholding tax rules against your U.S. federal income tax liability, provided you furnish the required information to the Internal Revenue Service.

### **Foreign Personal Holding Company Rules**

Special U.S. tax rules apply to a shareholder of a foreign personal holding company or FPHC. Furthermore, as discussed above, dividends from a FPHC do not qualify for the reduced tax rates on dividends paid to non-corporate U.S. holders under the 2003 Act. The Company would be classified as a FPHC in any taxable year if both of the following tests are satisfied:

- five or fewer individuals who are U.S. citizens or residents own or are deemed to own more than 50% of the total voting power of all classes of the Company’s stock entitled to vote or the total value of the Company’s stock; and
- at least 50% (60% in the first year that the Company is classified as a FPHC) of the Company’s gross income consists of “foreign personal holding company income,” which generally includes passive income such as dividends, interest, gains from the sale or exchange of stock or securities, rents and royalties.

The Company believes that it is not a FPHC. However, the Company cannot assure you that the Company will not be classified as a FPHC in the future.

### **Personal Holding Company Rules**

The Company will not be classified as a personal holding company (a “PHC”) for U.S. federal income tax purposes unless at any time during the last half of the Company’s taxable year, five or fewer individuals (without regard to their citizenship or residency) own or are deemed to own (pursuant to certain attribution rules) more than 50% of the Company’s stock by value, and at least 60% of the Company’s ordinary gross income for the taxable year is “personal holding company income” (generally passive income such as dividends and interest). If the Company is classified as a PHC, the corporation may be liable for the U.S. PHC tax on the Company’s U.S. source undistributed PHC income. The Company should not meet the PHC tests, and even if the Company were to become a PHC, it does not expect to have material undistributed PHC income. However, the Company cannot assure you that it will not become a PHC because of uncertainties regarding the application of the constructive ownership rules and the possibility of changes in its shareholder base and income or other circumstances that could change the application of the PHC rules to the Company. In addition, if the Company should become a PHC, the Company cannot assure you that the amount of its PHC income will be immaterial.

### **Passive Foreign Investment Company Rules**

The passive foreign investment company or PFIC provisions of the Code can have significant tax effects on U.S. Shareholders. The Company will be classified as a PFIC for any taxable year, if, after the application of certain “look through” rules, either:

- 75% or more of the Company’s gross income is “passive income,” which includes interest, dividends and certain rents and royalties; or
- the average quarterly percentage, by fair market value of the Company’s assets that produce or are held for the production of “passive income,” is 50% or more of the fair market value of all the Company’s assets.

Based upon our review of our financial data for the current and prior fiscal years, we have determined that we are currently a PFIC and likely will continue to be a PFIC at least until we develop a source of significant operating revenues.

Our classification as a PFIC for any period during a U.S. Shareholder’s holding period for our shares, absent the holder validly making one of the elections described below, would generally require the U.S. Shareholder to treat all “excess

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distributions” received during such holding period with respect to those shares as if those amounts were ordinary income earned ratably over such holding period. Excess distributions for this purpose would include all gain realized on the disposition of the shares as well as certain distributions made by us. Amounts treated under this analysis as earned in the year of the disposition or in any year before the first year in which we are a PFIC would be included in the holder’s ordinary income for the year of the disposition. Additionally, amounts treated as earned in a year of distribution would be included in the holder’s ordinary income for the year of the distribution. All remaining amounts would be subject to tax at the highest ordinary income tax rate that would have been applicable in the year in which such amounts were treated as earned, and interest would be charged on the tax payable with respect to such amounts. In addition, if we are classified as a PFIC, shares acquired from a decedent generally would not receive a “stepped-up” basis but would, instead, have a tax basis equal to the lower of the decedent’s basis or the fair market value of those shares or ADSs on the date of the decedent’s death.

The special PFIC tax rules described above will not apply to a U.S. Shareholder if the holder makes a QEF election to have us treated as a qualified electing fund for the first taxable year of the holder’s holding period in which we are a PFIC and we provide certain information to the U.S. Shareholder. A U.S. Shareholder that makes a QEF election with respect to us will be currently taxable on its pro rata share of our ordinary earnings and net capital gain during any years we are a PFIC (at ordinary income and capital gains rates, respectively), regardless of whether or not distributions were received. An electing U.S. Shareholder’s basis in the shares would be increased by the amounts included in income, and subsequent distributions by us of previously included earnings and profits generally would not be treated as a taxable dividend and would result in a corresponding reduction in basis. A U.S. Shareholder making such a timely election will not be taxed on our undistributed earnings and profits for any year that we are not a PFIC. Upon request by a U.S. shareholder, we will provide the information necessary for such holder to make the QEF election.

Alternatively, subject to specific limitations, U.S. Shareholders who actually or constructively own marketable shares in a PFIC may make an election under Section 1296 of the Code to mark those shares to market annually, rather than being subject to the above-described rules. Amounts included in or deducted from income under this mark-to-market election and actual gains and losses realized upon disposition, subject to specific limitations, will be treated as ordinary gains or losses. For this purpose, the Company believes that the Company’s shares will be treated as “marketable securities” within the meaning of Section 1296(e)(1) of the Code.

As discussed above, dividends from a PFIC do not qualify for the reduced tax rates on dividends paid to non-corporate U.S. Shareholders under the 2003 Act.

You should consult your tax advisor with respect to how the PFIC rules affect your tax situation.

### **Controlled Foreign Corporation Rules**

If more than 50% of the voting power or total value of all classes of the Company’s shares is owned, directly or indirectly, by U.S. shareholders, each of which owns 10% or more of the total combined voting power of all classes of the Company’s shares, the Company could be treated as a controlled foreign corporation (“CFC”) under Subpart F of the Code. This classification would require such 10% or greater shareholders to include in income their pro rata shares of the Company’s “Subpart F Income,” as defined in the Code. In addition, under Section 1248 of the Code, gain from the sale or exchange of shares by a U.S. Shareholder who is or was a 10% or greater shareholder while the Company was a CFC at any time during the five year period ending with the sale or exchange will be ordinary dividend income to the extent of the Company’s earnings and profits attributable to the shares sold or exchanged and not previously taxed under Subpart F.

The Company believes that it is not a CFC. However, the Company cannot assure you that the Company will not become a CFC in the future.

### **Material Canadian Federal Income Tax Considerations**

This section summarizes the material anticipated Canadian federal income tax considerations relevant to the ownership and disposition of the common stock.

Under the Income Tax Act, assuming you are a U.S. Shareholder, and provided the common stock is listed on a prescribed stock exchange, which includes the Toronto Stock Exchange and the American Stock Exchange, you will generally not be subject to Canadian tax on a capital gain realized on an actual or deemed disposition of the common stock unless you alone or together with persons with whom you did not deal at arm’s length owned or had rights to acquire 25% or more of the Company’s issued shares of any class at any time during the sixty (60) month period before the actual or deemed disposition.

Dividends paid, credited or deemed to have been paid or credited on the common stock to U.S. Shareholders will be subject to a Canadian withholding tax under the Income Tax Act at a rate of 25% of the gross amount of the dividends. Under the Canada-United States Income Tax Convention (1980), the rate of withholding tax on dividends generally applicable to U.S. Shareholders who beneficially own the dividends is reduced to 15%. In the case of U.S. Shareholders that are corporations that beneficially own at least 10% of the Company's voting shares, the rate of withholding tax on dividends generally is reduced to 5%. United States limited liability companies ("LLCs") will not be entitled to these reduced rates. Shareholders that are partnerships will generally be subject to the 25% rate.

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Canada does not currently impose any federal estate taxes or succession duties. However, if you die, there is a deemed disposition of the common stock held at that time for proceeds of disposition generally equal to the fair market value of the common stock immediately before your death. Capital gains realized on the deemed disposition, if any, will have the income tax consequences described above.

### **F. Dividends and paying agents**

Not applicable.

### **G. Statement by experts**

The financial statements of Adherex Technologies Inc. as of December 31, 2006, December 31, 2005, December 31, 2004 and June 30, 2004 included in this Annual Report have been so included in reliance on the audit report of PricewaterhouseCoopers LLP, independent accountants, given the authority of said firm as experts in auditing and accounting.

### **H. Documents on display**

The Company is subject to the informational requirements of the Securities Exchange Act of 1934, as amended, and the Company will thereafter file reports and other information with the SEC. You may read and copy any of the Company's reports and other information at, and obtain copies upon payment of prescribed fees from, the Public Reference Room maintained by the SEC at 100 F Street, N.E., Room 1580, Washington, D.C. 20549 and at the SEC's regional offices at Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago, IL 60661. The public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330. In addition, the SEC maintains a Web site that contains reports, proxy and information statements and other information regarding registrants that file electronically with the SEC at <http://www.sec.gov>.

The Company is required to file reports and other information with the securities commissions in each of the Canadian provinces. You are invited to read and copy any reports, statements or other information, other than confidential filings, that the Company files with such provincial securities commissions. These filings are also electronically available from the Canadian System for Electronic Document Analysis and Retrieval ("SEDAR") (<http://www.sedar.com>), the Canadian equivalent of the SEC's electronic document gathering and retrieval system.

The Company will provide without charge to each person, including any beneficial owner, on the written or oral request of such person, a copy of any or all documents referred to above which have been or may be incorporated by reference in this report (not including exhibits to such incorporated information that are not specifically incorporated by reference into such information). Requests for such copies should be directed to the Company at the following address: 4620 Creekstone Drive, Suite 200, Research Triangle Park, Durham, North Carolina 27703, Attention: Corporate Secretary.

### **I. Subsidiary information**

Not applicable.

## **ITEM 11. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

### **Foreign Exchange Risk**

Currently the Company's principal operations are located in the United States. Effective January 1, 2005 our functional currency is the U.S. dollar. Concurrent with the change in functional currency, the Company elected to change our reporting currency to the U.S. dollar. Therefore, when we refer to dollars, "\$," we refer to "U.S. dollars," the legal currency of the United States. Historically, the functional currency of the Company had been the Canadian dollar. At December 31, 2006, the Company had approximately \$5.7 million in cash and cash equivalents. To date, derivative financial instruments have not been needed or used. Security of principal versus income historically governed investment decisions, with excess funds invested in short term, government backed securities or bankers acceptances.

At December 31, 2006, the Company held approximately CAD\$2.4 million of its cash to fund certain research and development activities in Canada. At this time the Company, does not utilize derivative financial instruments. Should business conditions dictate, the Company may consider the use of derivative instruments. However, security of principal versus income generation will continue to govern investment decisions.

## **ITEM 12. DESCRIPTION OF SECURITIES OTHER THAN EQUITY SECURITIES**

Not applicable.

**PART II**

**ITEM 13. DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES**

Not Applicable.

**ITEM 14. MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS**

Not Applicable.

**ITEM 15. CONTROLS AND PROCEDURES**

Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended (the “Exchange Act”)) as of the end of the fiscal year ended December 31, 2006 covered by this Annual Report. Based on this evaluation, our principal executive officer and principal financial officer concluded that these disclosure controls and procedures are effective and designed to ensure that the information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the requisite time periods.

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

**ITEM 16. RESERVED**

**ITEM 16A. AUDIT COMMITTEE FINANCIAL EXPERT**

The Board has determined that Arthur Porter, MD, MBA, who serves on the Audit Committee, qualifies as an “audit committee financial expert” as defined by the rules of the U.S. Securities and Exchange Commission and is “independent” as defined by the current rules of the American Stock Exchange. See “Directors, Senior Management and Employees — Board Practices — Report on Corporate Governance.”

**ITEM 16B. CODE OF ETHICS**

The Board has adopted a Code of Business Conduct and Ethics applicable to all officers, directors and employees of the Company, including the principal executive officer, the principal financial officer, the principal accounting officer or controller and persons performing similar functions. You can access the Code of Business Conduct and Ethics in the corporate governance section of our website under “Investor Relations” at <http://www.adherex.com>. See “Directors, Senior Management and Employees — Board Practices — Report on Corporate Governance.”

[Table of Contents](#)**ITEM 16C. PRINCIPAL ACCOUNTANT FEES AND SERVICES**

The following table presents the aggregate fees for professional services and other services rendered by our independent auditors in the fiscal year 2006 and 2005 and the six-month fiscal transition 2004 (in Canadian dollars):

	Fiscal Year 2006	Fiscal Year 2005	Six-Month Fiscal Transition 2004
Audit Fees (1)	\$ 111,238	\$ 70,090	\$ 53,500
Audit-Related Fees (2)	—	6,545	—
Tax Fees (3)	40,000	22,510	5,000
All Other Fees (4)	3,295	4,794	7,000
<b>Total</b>	<b>\$ 154,533</b>	<b>\$ 103,939</b>	<b>\$ 65,500</b>

- (1) *Audit Fees* include fees for the standard audit work that needs to be performed each year in order to issue an opinion on the consolidated financial statements of the Company and to issue reports on the local statutory and regulatory financial statements. It also includes fees for services that can only be provided by the Company's auditor such as auditing of non-recurring transactions and application of new accounting policies, audits of significant and newly implemented system controls, pre-issuance reviews of quarterly financial results, consents and comfort letters and any other audit services required for U.S. Securities and Exchange Commission or other regulatory filings.
- (2) *Audit-Related Fees* include fees for those other assurance services provided by auditors but not restricted to those that can only be provided by the auditor signing the audit report.
- (3) *Tax Fees* include fees for periodic tax consultations and compliance services in various local, regional and national tax jurisdictions.
- (4) *All Other Fees* include fees for fiscal 2006 and fiscal 2005 for access to online database service. The fee for the six-month fiscal transition 2004 relate to tax preparation to certain executives.

The Audit Committee has adopted procedures requiring Audit Committee review and approval in advance of all particular engagements for services provided by our independent auditors. Consistent with applicable laws, the procedures permit limited amounts of services, other than audit, review or attest services, to be approved by one or more members of the Audit Committee pursuant to authority delegated by the Audit Committee, provided the Audit Committee is informed of each particular service. All of the engagements and fees for the fiscal year ended December 31, 2006, December 31, 2005, the six-month fiscal transition 2004 and fiscal year 2004 were approved by the Audit Committee.

**ITEM 16D. EXEMPTIONS FROM THE LISTING STANDARDS FOR AUDIT COMMITTEES**

Not Applicable.

**ITEM 16E. PURCHASE OF EQUITY SECURITIES BY THE ISSUER AND AFFILIATED PURCHASERS**

There were no purchases made by or on behalf of the Company or any "affiliated purchaser" of the Company's equity securities.

## PART III

**ITEM 17. FINANCIAL STATEMENTS**

Not applicable.

**ITEM 18. FINANCIAL STATEMENTS**

Our financial statements follow the signature page of this Annual Report.

**ITEM 19. EXHIBITS**

<u>Exhibit No.</u>	<u>Description</u>	<u>Location</u>
1.1	Articles of Amalgamation dated June 29, 2004	Exhibit 1.7 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
1.2	By-laws of the Company, as amended on November 2, 2004	Exhibit 1.9 to the Form 20-F/A Registration Statement (No. 001-32295) of Adherex, filed November 5, 2004
4.2	General Collaboration Agreement, dated as of February 26, 2001, by and between Adherex Technologies Inc. and McGill University	Exhibit 4.2 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.5	Exclusive License Agreement, dated as of September 26, 2002, by and between Oregon Health & Science University and Oxiquant, Inc.	Exhibit 4.5 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.8	Lease Agreement, dated as of March 8, 2004, by and between Realmark-Commercial, LLC and Adherex, Inc.	Exhibit 4.8 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.9	Registration Rights Agreement, dated as of December 19, 2003, by and between Adherex Technologies Inc. and HBM BioVentures (Cayman) Ltd.	Exhibit 4.9 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
*4.10	Executive Employment Agreement, dated as of December 12, 2001, by and between Adherex Technologies Inc. and Robin J. Norris	Exhibit 4.10 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
*4.12	Executive Employment Agreement, dated as of February 19, 2003, by and between Adherex Technologies Inc. and William P. Peters	Exhibit 4.12 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
*4.13	Executive Employment Agreement, dated April 21, 2004, by and between Adherex, Inc. and James A. Klein, Jr.	Exhibit 4.13 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.16	Form of Common Stock Warrant, dated November 20, 2002	Exhibit 4.16 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.18	Form of Insider Common Stock Warrant, dated June 23, 2003	Exhibit 4.18 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.19	Form of Non-Insider Common Stock Warrant, dated June 23, 2003	Exhibit 4.19 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004



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<u>Exhibit No.</u>	<u>Description</u>	<u>Location</u>
4.21	Form of Common Stock Warrant, dated December 3, 2003	Exhibit 4.21 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.22	Common Stock Warrant issued to HBM BioVentures (Cayman) Ltd., dated December 3, 2003	Exhibit 4.22 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.24	Form of Common Stock Warrant, dated December 19, 2003	Exhibit 4.24 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.25	Common Stock Warrant issued to The Vengrowth Advanced Life Sciences Fund Inc., dated December 19, 2003	Exhibit 4.25 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.26	Common Stock Warrant issued to HBM BioVentures (Cayman) Ltd., dated December 19, 2003	Exhibit 4.26 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.27	Form of Common Stock Warrant, dated May 20, 2004	Exhibit 4.27 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
4.29	Second Amendment to Lease Agreement dated September 14, 2004 between Realmark Commercial LLC and Adherex, Inc.	Exhibit 4.29 to the Form 20-F/A Registration Statement (No. 001-32295) of Adherex, filed November 5, 2004
4.30	Development and License Agreement dated July 14, 2005 between Adherex Technologies Inc. and Glaxo Group Limited**	Exhibit 4.30 to Form 6-K of Adherex, filed July 22, 2005
4.31	Executive Employment Agreement, dated as of October 3, 2005, by and between Adherex, Inc. and Jeffery Solash	Exhibit 4.31 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.32	Sublease Agreement, dated as of August 31, 2005, by and between Biostratum, Inc. and Adherex, Inc. (Englert)	Exhibit 4.32 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.33	Sublease Agreement, dated as of August 31, 2005, by and between Biostratum, Inc. and Adherex, Inc. (Creekstone)	Exhibit 4.33 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.34	Form of Common Stock Warrant, dated July 20, 2005	Exhibit 4.34 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.35	Form of Placement Agent Common Stock Warrant, dated July 20, 2005	Exhibit 4.35 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.36	Amendment No. 1 to Development and License Agreement dated December 20, 2005 between Glaxo Group Limited and Adherex Technologies Inc.**	Exhibit 4.36 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.37	Amended and Restated Stock Option Plan	Exhibit 4.37 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005

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<u>Exhibit No.</u>	<u>Description</u>	<u>Location</u>
4.38	Partial Assignment of Lease and Lease Amendment Number Two dated August 31, 2005	Exhibit 4.38 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.39	Highwoods Realty Limited Partnership Office Master Lease (Creekstone)	Exhibit 4.39 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.40	Consent to Sublease dated August 31, 2005 among Highwoods Realty Limited Partnership, BioStratum, Inc. and Adherex, Inc.	Exhibit 4.40 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005
4.41	Amendment No. 2 to Development and License Agreement dated June 23, 2006 between Glaxo Group Limited and Adherex Technologies Inc.**	Exhibit 4.41 to Form 6-K of Adherex, filed August 9, 2006
4.42	Amendment No. 3 to Development and License Agreement dated January 17, 2007 between Adherex Technologies Inc. and Glaxo Group Limited	Exhibit 4.42 to Form 6-K of Adherex, filed January 19, 2007
4.43	Form of Common Stock Warrant dated February 21, 2007	Exhibit 4.43 to Form 8-K of Adherex, filed February 21, 2007
4.44	Form of Underwriter's Warrant dated February 21, 2007	Exhibit 4.44 to Form 8-K of Adherex, filed February 21, 2007
4.45	Warrant Indenture dated February 21, 2006 between Adherex Technologies Inc. and Computershare Trust Company of Canada	Exhibit 4.45 to Form 8-K of Adherex, filed February 21, 2007
4.46	Sub-SubLease Agreement dated December 22, 2006 between Biostratum, Inc and NephroGenex, Inc	Filed herewith
4.47	Executive Employment Agreement, dated as of February 28, 2007, by and between Adherex Technologies Inc. and D. Scott Murray	Filed herewith
8	Subsidiaries	Exhibit 8 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004
12.1	Certification of Chief Executive Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
12.2	Certification of Chief Financial Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002	Filed herewith
13	Certification of Chief Executive Officer and Chief Financial Officer of the Company in accordance with Section 906 of the Sarbanes-Oxley Act of 2002	Filed herewith
14	Consent of PricewaterhouseCoopers LLP	Filed herewith

\* Indicates a management contract or compensatory plan.

\*\* The Company has requested confidential treatment with respect to certain portions of this exhibit. Those portions have been omitted from this exhibit and filed separately with the U.S. Securities and Exchange Commission.

**SIGNATURES**

The registrant hereby certifies that it meets all of the requirements for filing on Form 20-F and that it has duly caused and authorized the undersigned to sign this Annual Report on its behalf.

ADHEREX TECHNOLOGIES INC.

/s/ JAMES A. KLEIN, JR.

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

Date: March 30, 2007

**REPORT OF INDEPENDENT REGISTERED  
PUBLIC ACCOUNTING FIRM**

**To the Shareholders of Adherex Technologies Inc.**

We have audited the accompanying consolidated balance sheets of Adherex Technologies Inc. and its subsidiaries as of December 31, 2006 and December 31, 2005, and the consolidated statements of operations, cash flows and stockholders' equity for the years ended December 31, 2006 and December 31, 2005, the six months ended December 31, 2004, the year ended June 30, 2004 and, cumulatively, for the period from September 3, 1996 to December 31, 2006. These financial statements are the responsibility of the Company's management. Our responsibility is to express an opinion on these financial statements based on our audits.

We conducted our audits in accordance with the Standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform an audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. An audit also includes assessing the accounting principles used and significant estimates made by management, as well as evaluating the overall financial statement presentation. We believe our audits provide a reasonable basis for our opinion.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of Adherex Technologies Inc. and its subsidiaries at December 31, 2006 and December 31, 2005 and the results of its operations and its cash flows for the years ended December 31, 2006 and December 31, 2005, the six months ended December 31, 2004, the year ended June 30, 2004 and, cumulatively, for the period from September 3, 1996 to December 31, 2006 in accordance with Canadian generally accepted accounting principles.

Accounting principles generally accepted in Canada vary in certain respects from accounting principles generally accepted in the United States of America. Information relating to the nature and effect of such differences is presented in footnote 19 to the consolidated financial statements.

/s/ PricewaterhouseCoopers LLP

Raleigh, North Carolina  
March 26, 2007

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

	December 31, 2006	December 31, 2005
<b>Assets</b>		
<b>Current assets</b>		
Cash and cash equivalents	\$ 5,665	\$ 11,916
Cash pledged as collateral	53	53
Short-term investments	—	1,175
Accounts receivable	32	15
Investment tax credits recoverable	71	129
Prepaid expense	41	59
Other current assets	33	52
<b>Total current assets</b>	<b>5,895</b>	<b>13,399</b>
Capital assets	293	374
Leasehold inducements	440	518
Acquired intellectual property rights	9,956	14,154
<b>Total assets</b>	<b>\$ 16,584</b>	<b>\$ 28,445</b>
<b>Liabilities and shareholders' equity</b>		
<b>Current liabilities</b>		
Accounts payable	\$ 2,074	\$ 1,385
Accrued liabilities	2,621	1,279
<b>Total current liabilities</b>	<b>4,695</b>	<b>2,664</b>
Other long-term liabilities	40	13
Deferred lease inducement	625	537
Future income taxes	3,639	5,174
<b>Total liabilities</b>	<b>8,999</b>	<b>8,388</b>
<b>Commitments and contingencies</b>		
<b>Shareholders' equity</b>		
Common stock, no par value; unlimited shares authorized; 50,382 shares and 42,629 shares issued and outstanding, respectively	46,486	41,268
Contributed surplus	26,751	25,338
Cumulative translation adjustment	5,850	5,850
Deficit accumulated during development stage	(71,502)	(52,399)
<b>Total shareholders' equity</b>	<b>7,585</b>	<b>20,057</b>
<b>Total liabilities and shareholders' equity</b>	<b>\$ 16,584</b>	<b>\$ 28,445</b>

Signed on behalf of the Board of Directors

/s/ Arthur T. Porter  
\_\_\_\_\_  
Arthur T. Porter  
Director

/s/ Peter Morand  
\_\_\_\_\_  
Peter Morand  
Director

(The accompanying notes are an integral part of these 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**

	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004	Cumulative From September 3, 1996 to December 31, 2006
<b>Revenue</b>	\$ —	\$ —	\$ —	\$ —	\$ —
<b>Operating expenses:</b>					
Research and development	14,003	12,441	3,443	3,561	42,385
General and administration	2,883	3,182	2,727	3,481	17,669
Amortization of acquired intellectual property rights	2,177	2,723	1,234	2,323	9,722
(Loss from operations)	<u>(19,063)</u>	<u>(18,346)</u>	<u>(7,404)</u>	<u>(9,365)</u>	<u>(69,776)</u>
<b>Other income (expense):</b>					
Loss on impairment of intellectual property	(2,021)	(3,539)	—	—	(5,560)
Settlement of Cadherin Biomedical Inc. litigation	—	—	(1,283)	—	(1,283)
Interest expense	(3)	(11)	—	(331)	(355)
Other income	—	—	—	—	98
Interest income	449	361	171	162	1,631
Total other income and (expense)	<u>(1,575)</u>	<u>(3,189)</u>	<u>(1,112)</u>	<u>(169)</u>	<u>(5,469)</u>
<b>Loss before income taxes</b>	(20,638)	(21,535)	(8,516)	(9,534)	(75,245)
Recovery of future income taxes	1,535	2,290	451	849	5,587
<b>Net loss</b>	<u>\$ (19,103)</u>	<u>\$ (19,245)</u>	<u>\$ (8,065)</u>	<u>\$ (8,685)</u>	<u>\$ (69,658)</u>
<b>Net loss per share of common stock, basic and diluted</b>	<u>\$ (0.40)</u>	<u>\$ (0.49)</u>	<u>\$ (0.22)</u>	<u>\$ (0.36)</u>	
<b>Weighted-average number of shares of common stock outstanding, basic and diluted</b>	<u>47,663</u>	<u>39,276</u>	<u>35,989</u>	<u>24,233</u>	

(The accompanying notes are an integral part of these 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**

	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004	Cumulative From September 3, 1996 to December 31, 2006
<b>Cash flows from (used in):</b>					
<b>Operating activities:</b>					
Net loss	\$ (19,103)	\$ (19,245)	\$ (8,065)	\$ (8,685)	\$ (69,658)
Adjustments for non-cash items:					
Amortization of capital assets	86	224	50	224	1,158
Non-cash Cadherin Biomedical Inc. litigation expense	—	—	1,187	—	1,187
Unrealized foreign exchange loss	—	—	—	—	9
Amortization of acquired intellectual property rights	2,177	2,723	1,234	2,323	9,722
Recovery of future income taxes	(1,535)	(2,290)	(451)	(849)	(5,587)
Loss on impairment of intellectual property	2,021	3,539	—	—	5,560
Amortization of leasehold inducements	165	108	—	(48)	26
Non-cash severance expense	—	—	—	—	168
Stock options issued to consultants	101	275	40	145	565
Stock options issued to employees	491	1,402	598	—	2,491
Accrued interest on convertible notes	—	—	—	331	341
Changes in operating assets and liabilities	2,122	1,003	730	601	4,115
Net cash used in operating activities	<u>(13,475)</u>	<u>(12,261)</u>	<u>(4,677)</u>	<u>(5,958)</u>	<u>(49,903)</u>
<b>Investing activities:</b>					
Purchase of capital assets	(5)	(102)	(294)	(154)	(1,351)
Disposal of capital assets	—	—	67	—	115
Release of restricted cash	—	—	—	192	190
Restricted cash	—	22	(38)	—	(207)
Purchase of short-term investments	—	(3,435)	(6,467)	(7,056)	(22,148)
Redemption of short-term investments	1,175	2,260	13,965	—	22,791
Investment in Cadherin Biomedical Inc.	—	—	—	—	(166)
Acquired intellectual property rights	—	—	—	—	(640)
Net cash provided (used) in investing activities	<u>1,170</u>	<u>(1,255)</u>	<u>7,233</u>	<u>(7,018)</u>	<u>(1,416)</u>
<b>Financing activities:</b>					
Conversion of long-term debt to equity	—	—	—	—	68
Long-term debt repayments	—	—	—	—	(65)
Capital lease repayments	—	—	—	—	(8)
Issuance of common stock	6,096	8,134	—	23,458	52,772
Registration expense	—	—	(465)	—	(465)
Financing expenses	(57)	(141)	—	(346)	(544)
Proceeds from convertible note	—	—	—	1,292	3,017
Other liability repayments	(13)	(59)	36	(51)	(87)
Security deposits received	28	—	—	—	28
Proceeds from exercise of stock options	—	25	—	22	51
Net cash provided (used) in financing activities	<u>6,054</u>	<u>7,959</u>	<u>(429)</u>	<u>24,375</u>	<u>54,767</u>
Effect of exchange rate changes on cash and cash equivalents	—	—	1,747	62	2,217
<b>Net change in cash and cash equivalents</b>	<b>(6,251)</b>	<b>(5,557)</b>	<b>3,874</b>	<b>11,461</b>	<b>5,665</b>
<b>Cash and cash equivalents - Beginning of period</b>	<b>11,916</b>	<b>17,473</b>	<b>13,599</b>	<b>2,138</b>	<b>—</b>
<b>Cash and cash equivalents - End of period</b>	<b><u>\$ 5,665</u></b>	<b><u>\$ 11,916</u></b>	<b><u>\$ 17,473</u></b>	<b><u>\$ 13,599</u></b>	<b><u>\$ 5,665</u></b>
<b>Supplemental non-cash information:</b>					
Leasehold improvements financed by leasehold inducements	\$ —	\$ —	\$ 76	\$ —	\$ —
Leasehold improvements – Maplewood	—	544	—	—	—
Convertible notes settled in private placement	—	—	—	1,822	—
Acquisition of CBI	—	—	1,187	—	—

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

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

	Common Stock		Non-redeemable Preferred Stock of Subsidiary	Contributed Surplus	Cumulative Translation Adjustment	Deficit Accumulated During Development Stage	Total Shareholders' Equity
	Number	Amount					
<b>Balance at June 30, 1996</b>	—	\$ —	\$ —	\$ —	\$ —	\$ —	\$ —
Issuance of common stock	1,600	—	—	—	—	—	—
Net loss	—	—	—	—	—	(37)	(37)
<b>Balance at June 30, 1997</b>	1,600	—	—	—	—	(37)	(37)
Net loss	—	—	—	—	—	(398)	(398)
<b>Balance at June 30, 1998</b>	1,600	—	—	—	—	(435)	(435)
Exchange of Adherex Inc. shares for Adherex Technologies Inc. shares	(1,600)	—	—	—	—	—	—
Issuance of common stock	4,311	1,615	—	—	—	—	1,615
Cumulative translation adjustment	—	—	—	—	20	—	20
Net loss	—	—	—	—	—	(958)	(958)
<b>Balance at June 30, 1999</b>	4,311	1,615	—	—	20	(1,393)	242
Issuance of common stock	283	793	—	—	—	—	793
Issuance of equity rights	—	—	—	171	—	—	171
Issuance of special warrants	—	—	—	255	—	—	255
Settlement of advances:							
Issuance of common stock	280	175	—	—	—	—	175
Cancellation of common stock	(120)	—	—	—	—	—	—
Cumulative translation adjustment	—	—	—	—	16	—	16
Net loss	—	—	—	—	—	(1,605)	(1,605)
<b>Balance at June 30, 2000</b>	4,754	2,583	—	426	36	(2,998)	47
Issuance of common stock:							
Initial public offering	1,333	5,689	—	—	—	—	5,689
Other	88	341	—	—	—	—	341
Issuance of special warrants	—	—	—	1,722	—	—	1,722
Conversion of special warrants	547	1,977	—	(1,977)	—	—	—
Issuance of Series A special warrants	—	—	—	4,335	—	—	4,335
Conversion of Series A special warrants	1,248	4,335	—	(4,335)	—	—	—
Conversion of equity rights	62	171	—	(171)	—	—	—
Cumulative translation adjustment	—	—	—	—	141	—	141
Net loss	—	—	—	—	—	(2,483)	(2,483)
<b>Balance at June 30, 2001</b>	8,032	15,096	—	—	177	(5,481)	9,792
Cumulative translation adjustment	—	—	—	—	(124)	—	(124)
Net loss	—	—	—	—	—	(3,596)	(3,596)
<b>Balance at June 30, 2002</b>	8,032	15,096	—	—	53	(9,077)	6,072

(continued on next page)

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



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

	Common Stock		Non-redeemable Preferred Stock of Subsidiary	Contributed Surplus	Cumulative Translation Adjustment	Deficit Accumulated During Development Stage	Total Shareholders' Equity
	Number	Amount					
<b>Balance at June 30, 2002</b>	8,032	15,096	—	—	53	(9,077)	6,072
Stated capital reduction	—	(9,489)	—	9,489	—	—	—
Common stock issued for Oxiquant acquisition	8,032	11,077	—	543	—	—	11,620
Exercise of stock options	5	4	—	—	—	—	4
Distribution to shareholders	—	—	—	—	—	(158)	(158)
Stock options issued to non-employees	—	—	—	4	—	—	4
Equity component of June convertible notes	—	—	—	1,058	—	—	1,058
Financing warrants	—	—	—	53	—	—	53
Cumulative translation adjustment	—	—	—	—	2,047	—	2,047
Net loss	—	—	—	—	—	(5,483)	(5,483)
<b>Balance at June 30, 2003</b>	16,069	16,688	—	11,147	2,100	(14,718)	15,217
Stock options issued to consultants	—	—	—	148	—	—	148
Repricing of warrants related to financing	—	—	—	18	—	—	18
Equity component of December convertible notes	—	—	—	1,124	—	—	1,124
Financing warrants	—	—	—	54	—	—	54
Conversion of June convertible notes	1,728	1,216	—	(93)	—	—	1,123
Conversion of December convertible notes	1,085	569	—	(398)	—	—	171
Non-redeemable preferred stock	—	—	1,045	—	—	—	1,045
December private placement	11,522	8,053	—	5,777	—	—	13,830
May private placement	4,669	6,356	—	2,118	—	—	8,474
Exercise of stock options	18	23	—	—	—	—	23
Amalgamation of 2037357 Ontario Inc.	800	660	(1,045)	363	—	—	(22)
Cumulative translation adjustment	—	—	—	—	304	—	304
Net loss	—	—	—	—	—	(8,685)	(8,685)
<b>Balance at June 30, 2004</b>	35,891	33,565	—	20,258	2,404	(23,403)	32,824
Stock options issued to consultants	—	—	—	39	—	—	39
Stock options issued to employees	—	—	—	604	—	—	604
Retroactive adjustment for stock-based compensation	—	—	—	1,686	—	(1,686)	—
Cost related to SEC registration	—	(493)	—	—	—	—	(493)
Acquisition of Cadherin Biomedical Inc.	644	1,252	—	—	—	—	1,252
Cumulative translation adjustment	—	—	—	—	3,446	—	3,446
Net loss – six months	—	—	—	—	—	(8,065)	(8,065)
<b>Balance at December 31, 2004</b>	36,535	34,324	—	22,587	5,850	(33,154)	29,607

(continued on next page)

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

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

	Common Stock		Non-redeemable Preferred Stock of Subsidiary	Contributed Surplus	Cumulative Translation Adjustment	Deficit Accumulated During Development Stage	Total Shareholders' Equity
	Number	Amount					
<b>Balance at December 31, 2004</b>	36,535	34,324	—	22,587	5,850	(33,154)	29,607
Cost related to financing	—	(141)	—	—	—	—	(141)
Exercise of stock options	15	25	—	—	—	—	25
Stock options issued to consultants	—	—	—	275	—	—	275
Stock options issued to employees	—	—	—	1,402	—	—	1,402
July private placement	6,079	7,060	—	1,074	—	—	8,134
Net loss	—	—	—	—	—	(19,245)	(19,245)
<b>Balance at December 31, 2005</b>	42,629	41,268	-	25,338	5,850	(52,399)	20,057
Stock options issued to consultants	—	—	—	101	—	—	101
Stock options issued to employees	—	—	—	490	—	—	490
May private placement	7,753	5,218	—	822	—	—	6,040
Net loss	—	—	—	—	—	(19,103)	(19,103)
<b>Balance at December 31, 2006</b>	<u>50,382</u>	<u>\$46,486</u>	<u>\$ —</u>	<u>\$ 26,751</u>	<u>\$ 5,850</u>	<u>\$ (71,502)</u>	<u>\$ 7,585</u>

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

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

**1. Nature of Operations**

Adherex Technologies Inc. (“Adherex”), together with its wholly owned subsidiaries Oxiquant, Inc. (“Oxiquant”) and Adherex, Inc., both Delaware corporations and Cadherin Biomedical Inc. (“CBI”), 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.

On December 17, 2004, the Company’s Board of Directors approved a change in the Company’s fiscal year end from a twelve-month period ending June 30 to a twelve-month period ending December 31.

**2. Significant Accounting Policies**

**Basis of presentation**

These consolidated financial statements have been prepared by management in accordance with accounting principles generally accepted in Canada and include the accounts of Adherex and of all its subsidiaries. Investments over which the Company has control are fully consolidated. All material inter-company balances and transactions have been eliminated upon consolidation.

**Share consolidation**

On July 20, 2005, the Company announced that the Board of Directors had approved a share consolidation of the Company’s common stock at a ratio of one-for-five. The share consolidation had previously been approved by the Company’s shareholders at the Annual and Special Meeting held on April 29, 2005. 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 presented to reflect the one-for-five share consolidation.

**Use of estimates**

The preparation of financial statements in conformity with Canadian generally accepted accounting principles (“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 at 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.

**Change in functional and reporting currency**

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

The change was effected for prior periods as follows: assets and liabilities were translated into U.S. dollars at the prevailing exchange rates at each balance sheet date; revenues and expenses were translated at the average exchange rates prevailing during each reporting period and equity transactions were translated at the prevailing historical exchange rates at each transaction date. Adjustments resulting from the translations are included in the cumulative translation adjustments in stockholders’ equity and total \$5,850 at December 31, 2006, and December 31, 2005.

**Cash and cash equivalents**

The Company considers all highly liquid investments with maturity of three months or less at the date of purchase to be cash or cash equivalents. The carrying value of cash and cash equivalents approximates their fair value due to the short-term nature of these items.

**Cash pledged as collateral**

The Company has pledged cash as collateral on corporate credit accounts in the form of interest-bearing term deposits.

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**Short-term investments**

Short-term investments consist primarily of corporate bonds and bankers notes. The Company invests in high credit quality investments in accordance with its investment policy designed to protect the principal investment. 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.

**Capital assets**

Capital assets are initially recorded at cost and are then amortized using the declining balance method at the following annual rates:

Furniture, fixtures and office equipment	20%
Computer equipment	30%
Computer software	100%
Laboratory equipment	20%

Leasehold improvements are amortized on a straight-line basis over the lease term.

**Deferred leasehold inducements**

Leasehold inducements consist of periods of reduced rent and other capital inducements provided by the lessor. The leasehold inducements relating to the reduced rent periods are deferred and allocated over the term of the lease. The Company received lease inducements in the form of leasehold improvements and rent-free periods.

**Acquired intellectual property rights**

Acquired intellectual property rights are recorded at cost and are being amortized over their estimated useful lives on a straight-line basis over ten years.

**Impairment of long-lived assets**

The Company tests the recoverability of long-lived assets whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. The Company records an impairment loss in the period when it is determined that the carrying amount of the asset may not be recoverable. The impairment loss is calculated as the amount by which the carrying amount of the assets exceeds the undiscounted cash flows from the asset.

**Convertible notes**

The Company splits convertible notes into their respective liability and equity components based on the relative fair value of each component.

**Common stock and warrants**

Common stock is recorded as the net proceeds received on issuance after deducting all share issue costs and the value of investor warrants. Warrants are recorded at fair value and are deducted from the proceeds of common stock and recorded on the consolidated statements of shareholders' equity as contributed surplus.

**Revenue recognition**

The Company recognizes revenue from multiple element arrangements under development and license agreement, which include license payments, milestones and royalties. Revenue arrangements with multiple deliverables are accounted for under the provisions of the Emerging Issues Committee Abstract# -142, Revenue Arrangements With Multiple Deliverables, and are divided into separate units of accounting if certain criteria are met. The consideration the Company receives is allocated among the separate units of accounting based on their respective fair values, and the applicable revenue recognition criteria are considered separately for each of the separate units.

Non-refundable up-front payments received in conjunction with the development and license agreement, including license fees and milestones are deferred and recognized on a straight-line basis over the relevant periods.

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The Company records royalty revenue in accordance with the contract terms once it can be reliably measured and the collection is reasonably assured.

**Research and development costs and investment tax credits**

Research costs, including employee compensation, laboratory fees, lab supplies, and research and testing performed under contract by third parties, are expensed as incurred. Development costs, including drug substance costs, clinical study expenses and regulatory expenses are also generally expensed as incurred unless such costs meet the criteria under generally accepted accounting principles in Canada for deferral and amortization. To qualify for deferral, the costs must relate to a technically feasible, identifiable product that the Company intends to produce and market, there must be a clearly defined market for the product and the Company must have the resources, or access to resources, necessary to complete the development. To date, no development costs have been deferred.

Investment tax credits, which are earned as a result of qualifying research and development expenditures, are recognized when the expenditures are made and their realization is reasonably assured. They are applied to reduce related capital costs and research and development expenses in the year recognized.

**Income taxes**

The Company accounts for income taxes under the asset and liability method that requires the recognition of future income tax assets and liabilities for the expected future tax consequences of temporary differences between the carrying amounts and tax basis of assets and liabilities. The Company provides a valuation allowance on net future tax assets when it is more likely than not that such assets will not be realized.

**Foreign currency translation**

All of the Company's foreign operations are integrated. Financial statements of integrated foreign operations are translated as follows:

Monetary assets and liabilities denominated in foreign currencies are translated into U.S. dollars at exchange rates prevailing at the balance sheet date. Non-monetary items and any related amortization of such items are translated at the rates of exchange in effect when the assets were acquired or the obligations incurred. Expenses denominated in foreign currencies are translated at the relevant exchange rates prevailing during the year. Exchange gains and losses are included in net loss for the year.

**Stock-Based compensation plan**

Effective January 1, 2002, the Company adopted the recommendations of the 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, the Company elected to retroactively adjust retained earnings without restatement. On July 1, 2004, the Company increased the deficit by \$1,686 and increased contributed surplus by the same amount.

**Loss per share**

Basic net loss per share is computed by dividing net loss by the weighted average number of shares of common stock outstanding during the period. Diluted net loss per share is computed the same method, except the weighted average number shares of common stock and includes, where applicable convertible debentures, stock options and warrants, if dilutive.

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### 3. Cash, Cash Equivalents and Short-Term Investments

The following table summarizes the Company's cash and cash equivalents, cash pledged as collateral and short-term investments at December 31, 2006 and December 31, 2005:

	December 31, 2006	December 31, 2005
Cash and cash equivalents	\$ 5,665	\$ 11,916
Cash pledged as collateral	53	53
Short-term investments	—	1,175
	<u>\$ 5,718</u>	<u>\$ 13,144</u>

The Company had no short-term investments at December 31, 2006. At December 31, 2005 short-term investments were \$1,175 and consisted of corporate commercial paper with maturities of 154 to 176 days with their market value approximating their fair value.

Cash pledged as collateral in all years presented relates to amounts to secure certain corporate credit accounts.

### 4. Acquired Intellectual Property

On November 20, 2002, Adherex acquired certain intellectual property for chemotherapeutics with a focus in chemoprotection and chemoenhancement. The intellectual property resided in Oxiquant, a holding company with no active business. The Company consummated the acquisition by reverse triangular merger, pursuant to which the Company acquired all of the issued and outstanding securities of Oxiquant through an amalgamation of Oxiquant with a wholly owned subsidiary of the Company formed for this purpose. The assets consisted of an exclusive worldwide license to mesna from Rutgers, The State University of New Jersey ("Rutgers"), and certain intellectual property from Oregon Health & Science University ("OHSU") relating to the use of sodium thiosulfate ("STS") and N-acetylcysteine ("NAC").

The intellectual property at the date of acquisition in Canadian dollars was valued at CAD\$31,162 reflecting net liabilities assumed of CAD\$401 and a provision for future income tax liability of CAD\$11,390, resulting in total consideration of CAD\$19,371. The consideration took the form of 8,032 shares of common stock of Adherex with a fair value, in Canadian dollars at the date of acquisition, of CAD\$17,544, as well as 461 warrants valued at CAD\$640, and 170 introduction warrants valued at CAD\$220. In addition, there were transaction costs in Canadian dollars of CAD\$967. The acquired intellectual property was deemed to have a ten year useful life, amortized on a straight-line basis.

At December 31, 2005, the Company determined the carrying value of the intellectual property relating to mesna, which had a book value of \$3,539, and a related future income tax benefit of \$1,294, was fully impaired and written off based on the Company's lack of any further developmental plans. This decision was based on the addition of eniluracil to the Company's R&D portfolio, along with the financial resources additionally devoted to the development of ADH-1. The loss on impairment is calculated as the amount by which the carrying amount of the asset exceeds its discounted cash flows.

At December 31, 2006, the Company determined the carrying value of the intellectual property relating to NAC, which had a book value of \$2,021, and a related future income tax benefit of \$739, was fully impaired and written off because the Company has no plans for further development of NAC and will allocate its resources to ADH-1, eniluracil and STS. The loss on impairment is calculated as the amount by which the carrying amount of the asset exceeds its undiscounted cash flows.

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**5. Capital Assets**

	December 31, 2006		December 31, 2005	
	Cost	Accumulated Amortization	Cost	Accumulated Amortization
Furniture, fixtures and office equipment	\$ 92	\$ 44	\$ 92	\$ 32
Computer equipment	131	75	125	48
Computer software	124	124	125	125
Laboratory equipment	591	405	591	358
Leasehold improvements	4	1	4	—
	<u>942</u>	<u>\$ 649</u>	<u>937</u>	<u>\$ 563</u>
Accumulated amortization	(649)		(563)	
Net book value	<u>\$ 293</u>		<u>\$ 374</u>	

Amortization of capital assets was \$86 and \$224 for the years ended December 31, 2006 and 2005, respectively.

**6. Leasehold Inducements**

On August 31, 2005 the Company entered into agreements to lease a new office and laboratory facility (“Maplewood Facility”) and sublease the Company’s existing facility (“Englert Facility”) on similar terms as in the original lease. As an incentive to enter into the new lease, the Company received free rent and capital inducements. The Company is paying only half rent for the Maplewood Facility over the first 24 months of the 84-month lease term and received additional inducements in the form of furniture, equipment and leasehold improvements with a fair market value of approximately \$544. As part of the sublease of the Englert Facility the Company provided furniture, equipment and leasehold improvements with a net book value of \$156 and an approximate fair market value of \$75. In addition, the Company has written-off the \$68 liability related to leasehold improvements at the Englert Facility and included this amount in the deferred rent inducement as the Company’s sublessee is now contractually obligated to make those payments; however, should the sublessee default on such payments Adherex would then become liable for the remaining amount.

The Company will record rent expense by charging the total rental payments plus the value of the capital inducements received against earnings on a straight-line basis over the 84-month term of the lease, which expires on August 31, 2012.

**7. Cadherin Biomedical Inc.**

On September 27, 2002, CBI was incorporated as a wholly owned subsidiary of Adherex. The Company granted CBI an exclusive worldwide, royalty-free license to develop, market and distribute pharmaceuticals and therapeutics for non-cancer applications based on or derived from the Company’s cadherin platform owned or licensed under a collaboration agreement with McGill University (“McGill”) and paid to CBI \$158 in cash, in exchange for 8,032 Class A Preferred Shares of CBI, which constituted all of the issued and outstanding shares of CBI. The Company distributed the Class A Preferred Shares of CBI pro rata to its shareholders of record at the time, after which such shareholders held all of the issued and outstanding shares of CBI. This divestiture of the Company’s non-cancer assets was a condition precedent to the acquisition in November 2002 of Oxiquant, a U.S.-based development stage pharmaceutical company with a focus in chemoprotection and chemoenhancement.

In February 2004, the Company filed a claim in the Ontario Superior Court of Justice against CBI in the amount of \$75 on account of unpaid goods and services rendered. In July 2004, CBI filed a statement of defense and counterclaim in response to such claim. CBI’s counterclaim sought approximately \$3,800 in damages relating to the license agreement between the companies. On December 3, 2004, the Company acquired all of the issued and outstanding shares of CBI. Pursuant to the terms of the amalgamation, the Company issued to CBI shareholders approximately 0.6 million shares of Adherex common stock valued at approximately \$1,300 based on a 20 day weighted average trading price in exchange for all of the issued and outstanding shares of CBI. Immediately prior to the acquisition of CBI, directors and officers of the Company owned an aggregate of 99 shares of CBI stock and were therefore entitled to receive approximately 7 shares of common stock of Adherex pursuant to the terms of the amalgamation. CBI had no material operations due to minimal financial resources. The total cost of the acquisition has been recorded as follows:

Adherex common stock	\$(1,252)
Transaction costs	(119)
Net financial assets acquired	<u>23</u>
Settlement of CBI litigation	<u>\$(1,348)</u>

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Adherex acquired CBI to settle the litigation between the two companies and to reacquire the non-cancer rights to the cadherin-based intellectual property. The issuance of the 640 shares of common stock and the associated transaction expenses have been recorded as settlement of CBI litigation and therefore expensed in the Statement of Operations for the six months ended December 31, 2004.

**8. Convertible Notes**

On June 23, 2003, the Company issued senior secured convertible notes with a face value totaling \$2,219. These notes were convertible into common stock and warrants to acquire common stock of the Company upon completion of an equity fund raising round. Investors also received warrants to purchase an aggregate of 345 shares of common stock of the Company with an exercise price of CAD\$2.75 per share. The notes bore interest at an annual rate of eight percent compounded semi-annually, and matured one year from issue but were renewable for one additional year at the option of the Company. In connection with this issuance, the Company issued broker warrants to purchase 101 shares of common stock exercisable at a price of CAD\$2.35 per share.

On December 3, 2003, the Company issued additional senior secured convertible notes with a face value totaling CAD\$1,458. These notes were convertible into common stock and warrants to acquire common stock of the Company upon completion of an equity fund raising round. Also, investors received warrants for 271 shares of common stock exercisable at a price of CAD\$2.15 per share. The notes bore interest at an annual rate of eight percent compounded semi-annually, and matured one year from issue but were renewable for one additional year at the option of the Company. The Company also issued broker warrants to purchase 94 shares of common stock exercisable at a price of CAD\$2.15 per share.

Under the terms of the June 2003 financing, the Company could not issue any further debt without the consent of the June convertible note holders. As an inducement to obtain consent to the December 3, 2003 financing, the exercise price of 287 warrants granted in the June financing were changed from CAD\$2.75 to CAD\$2.15 per share on December 3, 2003, making the terms of both debt financings substantially the same. Warrants held by Company insiders were not repriced. The reduction of exercise price resulted in an increase in the fair value of the warrants on the date of the change of \$18. The increase was recorded as interest expense.

Upon issuance, values were ascribed to the investor warrants and to the conversion feature with the remainder being ascribed to the debt portion of the note. These values were being amortized over the life of the notes. As a result, the notes accrued interest at an implied rate in excess of 50 percent, although cash interest was only 8 percent.

On December 19, 2003, the Company completed an equity round as described in footnote 9 – Shareholders' Equity, "Equity financings." This caused the June and the December notes to convert into 2,813 shares of common stock and 1,407 warrants to purchase common stock. The warrants are exercisable at CAD\$2.15 per share and expire December 19, 2008.

The carrying values of the debt and the conversion option components associated with the notes, net of expenses of the offerings, were transferred to equity and split between common stock and contributed surplus (\$1,785 to common stock and \$1,202 to contributed surplus).

**9. Shareholders' Equity**

**Authorized capital stock**

The Company's authorized capital stock consists of an unlimited number of shares of no par common stock.

**Special warrants**

From May 2000 through November 2000, the Company issued special warrants. Each special warrant was sold for CAD\$25.00 and entitled the holder thereof to acquire, for no additional consideration, four shares of common stock of the Company. The special warrants also included a price protection adjustment determined by dividing CAD\$32.50 by the initial public offering ("IPO") price of CAD\$7.50.

During the year ended June 30, 2000, 16 of 126 special warrants were issued, with the balance of 110 issued in the period ended June 30, 2001. Upon completion of the IPO, on June 5, 2001, these special warrants were converted to 547 shares of common stock, which included 42 shares of common stock issued under the price protection adjustment.



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**Series A special warrants**

During October 2000, the Company issued Series A special warrants. Each Series A special warrant was sold at CAD\$6.25 and entitled the holder to acquire, for no additional consideration, one share of common stock of the Company. The Series A special warrants also included a price protection adjustment determined by dividing CAD\$8.125 by the IPO price.

Upon completion of the IPO on June 5, 2001, these Series A special warrants were converted to 1,248 shares of common stock, which included 96 shares of common stock issued under the price protection adjustment.

In addition, each Series A special warrant included a share purchase warrant entitling the holder to purchase an additional share of common stock at the IPO price, which was also subject to the price protection adjustment, so that 1,248 additional common stock could have been sold at the IPO price. These share purchase warrants expired unexercised on September 3, 2001.

**Equity rights**

On September 28, 1999, University Medical Discoveries Inc. ("UMDI") invested \$171 for equity of the Company. The form of this equity was to be the same as the first class of securities to raise greater than \$683 subsequent to the date of the investment. The date of conversion was dependent on certain milestones being met under a specific research project. On August 24, 2000, the Company and UMDI agreed to convert UMDI's \$171 investment into 62 shares of common stock of the Company.

**Triathlon settlement**

During fiscal 2000, other advances totaling \$175 were settled by the issuance to Triathlon Limited of 280 shares of common stock of the Company. The number of shares issued was determined with reference to the fair value at the time the advances were made.

**Shire BioChem Inc. agreement**

On August 17, 2000, the Company entered into a subscription agreement and a license agreement with Shire BioChem Inc. ("BioChem"). Under the subscription agreement, BioChem purchased 80 shares of common stock of the Company for \$341. Pursuant to a price protection clause in the agreement, an additional seven shares of common stock were issued on completion of the Company's IPO on June 5, 2001.

**Initial public offering**

On June 5, 2001, the Company completed an IPO issuing 1,333 shares of common stock at a price of CAD\$7.50 per share. Net proceeds of this offering credited to capital stock amounted to \$5,689, after deducting the underwriting fee of \$501 and expenses of \$354. As additional compensation in connection with the offering, the Company granted the underwriters non-assignable support options representing ten percent of the offered shares. Each support option entitled the holder to purchase one share of common stock on or before June 5, 2003 at CAD\$7.50. The Company also granted the underwriters an option ("Over-allotment Option") to purchase up to 200 shares of common stock at the offering price for a period ending 30 days from the close of the offering. On July 5, 2001, the Over-allotment Option expired unexercised.

**Stated capital reduction**

As a prerequisite of the Oxiquant transaction, Adherex licensed all of its cadherin-related intellectual property for non-cancer applications and transferred \$158 cash to CBI, a wholly-owned subsidiary of Adherex at the time, in return for Class A Preferred Shares of CBI. These CBI Class A Preferred Shares were then distributed to all of the Adherex shareholders of record by way of special dividend, effecting a "spin out" of CBI and the non-cancer assets from Adherex.

In order to effect such a distribution under Section 42 of the CBCA, the Company was legally required to reduce its stated capital so that the aggregate amount of its liabilities and stated capital did not exceed the realizable value of Adherex's assets.

Management determined that the stated capital needed to be reduced by \$9,489, in order to comply with the requirements of Section 42 of the CBCA.

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**Warrants issued on acquisition of intellectual property**

In connection with the acquisition of the intellectual property of Oxiquant in November 2002, the Company issued 461 warrants with an exercise price of CAD\$3.585 that expire on May 20, 2007 and 170 introduction warrants with an exercise price of CAD\$2.05 that expire on November 20, 2007.

**Convertible note warrants**

In connection with the June 2003 issuance of senior secured convertible notes, the Company issued 345 warrants with an exercise price of CAD\$2.75 per share that expire on June 23, 2007 and 101 broker warrants with an exercise price of CAD\$2.35 per share that expired on June 23, 2005 unexercised. As an inducement to consent to the issuance of the December 2003 convertible notes, the exercise price of 287 of these warrants was changed from CAD\$2.75 per share to CAD\$2.05 per share on December 3, 2003.

In connection with the December 2003 issuance of additional senior secured convertible notes, the Company issued 271 investor warrants with an exercise price of CAD\$2.15 per share that expire on December 3, 2007 and 94 broker warrants with an exercise price of CAD\$2.05 per share that expired on December 3, 2005 unexercised.

**Equity financings**

On December 19, 2003, the Company completed a private placement of equity securities totaling \$16,095, comprised of (i) \$15,050 for 11,522 units, at a price of CAD\$1.75 per unit, comprised of an aggregate of 11,522 shares of common stock and warrants to acquire 5,761 shares of common stock of Adherex with an exercise price of CAD\$2.15 per share and (ii) \$1,045 for 800 Series 1 Preferred Shares and warrants to purchase 400 Series 1 Preferred Shares of 2037357 Ontario Inc. The \$5,777 estimated fair value of the warrants has been allocated to contributed surplus and the balance of \$8,031 has been credited to common stock. The non-redeemable Series 1 Preferred Shares of 2037357 Ontario Inc. ("Preferred Shares") were exchangeable into 800 shares of common stock of Adherex. Upon such an exchange, all of the then outstanding warrants to purchase the Preferred Shares would be exchanged for an equal number of warrants to purchase Adherex common stock, which would have an exercise price of CAD\$2.15 per share. The \$1,045 was to be spent on specific research and development projects in Ontario, Canada as designated by Adherex. Adherex could compel the exchange of the Preferred Shares into common stock and warrants for common stock of Adherex at any time after January 3, 2005. The Company also issued broker warrants to purchase 1,226 shares of common stock exercisable at a price of CAD\$2.15 per share.

2037357 Ontario Inc. has been accounted for in accordance with the substance of the transaction. The \$1,045 has been recorded as non-redeemable Preferred Shares and the amounts expended were recorded as expenses in the relevant periods. On June 14, 2004, the preferred shares and warrants were exchanged for 800 shares of Adherex common stock and warrants to purchase 400 shares of Adherex common stock. In June 2004, 2037357 Ontario Inc. became a wholly owned subsidiary of the Company and was amalgamated with Adherex Technologies Inc. The investment has been split between the estimated fair value of the warrants of \$371, which has been included in contributed surplus, and the remainder of \$674, which has been recorded in common stock.

On May 20, 2004, the Company completed equity financings with total gross proceeds of \$9,029 less \$555 in estimated issuance costs. The Company issued 4,669 units at a purchase price of CAD\$2.65 per unit with each unit consisting of one share of common stock and one-half of a common stock purchase warrant. Each whole warrant entitles the holder to acquire one additional share of common stock at an exercise price of CAD\$3.50. The \$2,118 value of the warrants has been allocated to contributed surplus and the balance of \$6,356 has been credited to common stock.

On July 20, 2005, the Company completed a private placement of equity securities for gross proceeds of \$8,510 for 6,079 units at a price of \$1.40 per unit, providing net proceeds of \$8,134 after deducting broker fees and other expenses of \$376. 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 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 whole broker warrant entitles the holder to acquire one share of Adherex common stock at an exercise price of \$1.75. The investor warrants, with a value of \$1,074 based on the Black-Scholes option pricing model, have been allocated to contributed surplus and the remaining balance of \$7,060 has been credited to common stock.

On May 8, 2006, the Company completed a private placement of equity securities for gross proceeds of \$6,512 for 7,753 units at a price of \$0.84 per unit providing net proceeds of \$6,040 after deducting broker fees and certain other expenses. Each unit consisted of one common share and 0.30 of a common share purchase warrant. The private placement comprised an aggregate of 7,753 shares of common stock, along with 2,326 investor warrants and 465 broker warrants to acquire additional shares of

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Adherex common stock. Each whole investor warrant entitles the holder to acquire one additional share of Adherex common stock at an exercise price of \$0.97 per share for a period of four years. Each whole broker warrant entitles the holder to acquire one share of Adherex common stock at an exercise price of \$0.97 per share for a period of two years. The investor warrants, with a value of \$822 based on the Black-Scholes option pricing model, have been allocated to contributed surplus and the remaining balance of \$5,218 has been credited to common stock.

**Warrants to Purchase Common Stock**

As of December 31, 2006 the Company has 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 1.48 years.

Warrant Description	Number Outstanding at December 31, 2006	Exercise Price In Canadian Dollars	Expiration Date	Remaining Contractual Life (years)
Investor warrants	2,335	CAD\$ 3.50	May 20, 2007	0.38
Acquisition warrants	461	CAD\$ 3.59	May 20, 2007	0.38
Convertible notes warrants	287	CAD\$ 2.05	June 23, 2007	0.48
Convertible notes warrants	57	CAD\$ 2.75	June 23, 2007	0.48
Agent warrants	170	CAD\$ 2.05	November 20, 2007	0.89
Convertible notes warrants	271	CAD\$ 2.15	December 3, 2007	0.92
Investor warrants	7,567	CAD\$ 2.15	December 19, 2008	1.97
	<u>11,148</u>			

As of December 31, 2006 the Company has 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 2.42 years.

Warrant Description	Number Outstanding at December 31, 2006	Exercise Price In U.S. Dollars	Expiration Date	Remaining Contractual Life (years)
Agent warrants	57	\$ 1.75	July 20, 2007	0.55
Agent warrants	465	\$ 0.97	May 7, 2008	1.35
Investor warrants	1,824	\$ 1.75	July 20, 2008	1.55
Investor warrants	2,326	\$ 0.97	May 7, 2010	3.35
	<u>4,672</u>			

**Stock options**

The Compensation Committee of the Board of Directors administers the Company's stock option plan. The Compensation Committee designates eligible participants to be included under the plan and approves the number of options to be granted from time to time under the plan. A maximum of 5,600 options, not including the 700 options issued to the Chief Executive Officer and specifically approved by the shareholders, are authorized for issuance under the plan. The option exercise price for all options issued under the plan is based on the fair value of the underlying shares on the date of grant. 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, allows the issuance of Canadian and U.S. dollar grants. A summary of the stock option transactions, for both the Canadian and U.S. dollar grants, through the year ended December 31, 2006 is below. The following options granted under the stock option plan are exercisable in Canadian dollars:

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	Number of Options	Exercise Price in Canadian Dollars	
		Range	Weighted- average
<b>Outstanding at June 30, 2002</b>	741	\$ 1.6375 - 7.50	\$ 3.70
Cancelled	(114)	1.6375 - 6.25	4.65
Exercised	(3)	1.6375	1.65
Granted	1,021	1.65 - 1.75	1.65
<b>Outstanding at June 30, 2003</b>	1,645	1.6375 - 7.50	2.40
Cancelled	(27)	1.70 - 3.25	1.75
Exercised	(18)	1.6375 - 1.75	1.70
Granted	1,676	2.25 - 3.25	2.50
<b>Outstanding at June 30, 2004</b>	3,276	1.6375 - 7.50	2.45
Cancelled	(10)	3.25 - 6.25	5.65
Granted	497	1.95 - 2.20	2.00
<b>Outstanding at December 31, 2004</b>	3,763	1.6375 - 7.50	2.40
Cancelled	(84)	1.6375 - 6.25	2.93
Exercised	(15)	1.6375 - 1.70	1.66
Granted	—	—	—
<b>Outstanding at December 31, 2005</b>	3,664	1.6375 - 7.50	2.39
Cancelled	(262)	1.6375 - 6.25	2.00
Granted	—	—	—
<b>Outstanding at December 31, 2006</b>	<u>3,402</u>	<u>\$ 1.6375 - 7.50</u>	<u>\$ 2.42</u>

Range of Exercise Price in Canadian Dollars	Options Outstanding			Options Exercisable		
	Number Outstanding at December 31, 2006	Weighted- average Exercise Price in Canadian Dollars	Weighted- average Remaining Contractual Life (years)	Number Outstanding at December 31, 2006	Weighted- average Exercise Price	Weighted- average Remaining Contractual Life (years)
\$1.50 - \$2.25	2,458	\$ 1.94		2,373	\$ 1.94	
\$2.26 - \$3.00	578	2.79		515	2.79	
\$3.01 - \$3.75	221	3.43		184	3.47	
\$6.01 - \$6.75	1	6.25		1	6.25	
\$6.76 - \$7.50	144	7.50		144	7.50	
	<u>3,402</u>	<u>\$ 2.42</u>	<u>3.40</u>	<u>3,217</u>	<u>\$ 2.41</u>	<u>3.34</u>

The following options granted under the stock option plan are exercisable in U.S. dollars:

	Number of Options	Exercise Price in U.S. Dollars	
		Range	Weighted- average
<b>Outstanding at December 31, 2004</b>	—	—	—
Granted	1,603	\$ 0.88 - 1.35	\$ 1.14
Exercised	—	—	—
Cancelled	(20)	1.20	1.20
<b>Outstanding at December 31, 2005</b>	1,583	0.88 - 1.35	\$ 1.14
Granted	375	0.34 - 0.36	0.35
Exercised	—	—	—
Cancelled	(80)	0.88 - 1.20	0.97
<b>Outstanding at December 31, 2006</b>	<u>1,878</u>	<u>\$ 0.34 - 1.35</u>	<u>\$ 0.99</u>

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Range of Exercise Price in U.S. Dollars	Options Outstanding			Options Exercisable		
	Number Outstanding at December 31, 2006	Weighted-average Exercise Price	Weighted-average Remaining Contractual Life (years)	Number Outstanding at December 31, 2006	Weighted-average Exercise Price	Weighted-average Remaining Contractual Life (years)
\$0.34-\$0.75	375	\$ 0.35		205	\$ 0.35	
\$0.76-\$1.50	1,503	1.15		953	1.18	
	<u>1,878</u>	<u>\$ 0.99</u>	<u>5.80</u>	<u>1,158</u>	<u>\$ 1.03</u>	<u>5.67</u>

**Stock-based compensation expense**

The value of each option is estimated on the date of grant using the Black-Scholes option-pricing model and recorded as an expense ratably over the vesting period of the option. Calculations were based on the following assumptions:

	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004
Expected dividend	0%	0%	0%	0%
Risk-free interest rate	4.60%	3.82%	4.15%	4.46%
Expected volatility	84%	70%	68%	68%
Expected life	7 years	7 years	7 years	7 years
Weighted average fair value of options issued	US\$ 0.35	US\$ 1.13	CAD\$ 2.00	CAD\$ 2.50

**10. Research and Development**

Investment tax credits earned as a result of qualifying research and development expenditures and government grants have been applied to reduce research and development expenses as follows:

	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004	Cumulative From September 3, 1996 to December 31, 2006
Research and development	\$ 14,003	\$ 12,441	\$ 3,609	\$ 3,695	\$ 44,214
Investment tax credits	—	—	(166)	(130)	(1,632)
National Research Council grants	—	—	—	(4)	(197)
	<u>\$ 14,003</u>	<u>\$ 12,441</u>	<u>\$ 3,443</u>	<u>\$ 3,561</u>	<u>\$ 42,385</u>

The Company's claim for any Scientific Research and Experimental Development ("SR&ED") deductions and related investment tax credits for income tax purposes are based upon management's interpretation of the applicable legislation in the Canadian Income Tax Act. These amounts are subject to review and acceptance by the Canada Revenue Agency prior to collection.

**11. Capital and Operating Lease Commitments**

The Company has entered into operating lease agreements for the office and laboratory facilities located in the U.S. As of December 31, 2006 the minimum cash payments per the lease agreements are as follows:

Year Ending	Amount
December 31, 2007	\$ 334
December 31, 2008	474
December 31, 2009	488
December 31, 2010	471
December 31, 2011 and thereafter	664
Total minimum rent payments	<u>\$2,431</u>

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The table above includes a lease agreement which has been subleased to a third party until March 31, 2008. Under the terms of the operating lease for the office facilities, the Company financed \$80 of leasehold improvements through the building's owner. The amount is being financed over the term of the lease which expires in September 2010 and bears an annual interest rate of six percent. This obligation was assumed by the sublessee when the Company subleased the facility to a third party; however, should the sublessee default, the Company would become liable.

Rental payments on operating leases and interest on capital lease payments are summarized in the table below:

<u>Period Ending</u>	<u>Amount</u>	<u>Interest</u>
December 31, 2006	\$ 264	\$ —
December 31, 2005	184	4
December 31, 2004	66	—
June 30, 2004	156	—

## 12. Commitments and Contingencies

### McGill Agreement

On February 26, 2001, the Company entered into a general collaboration agreement with McGill that grants the Company a 27-year exclusive, worldwide license to develop, use and market certain cell adhesion technology and compounds. The license agreement provides for the Company to pay future royalties of two percent of gross revenues from the use of the technology and compounds and will require the Company to make payments in order to maintain the license as follows:

- CAD\$100 if the Company has not filed an investigational new drug ("IND") application, or similar application with Canadian, US, European or a recognized agency, relating to the licensed product prior to September 23, 2002. On August 1, 2002, McGill acknowledged that work completed on the clinical development of ADH-1 was sufficient to meet the requirements of the September 23, 2002 milestone and thus no payment was required.
- CAD\$100 if the Company has not commenced Phase II clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2004. On September 20, 2004, McGill acknowledged that the Company had met obligations with respect to the September 23, 2004 milestone and thus no payment was required.
- CAD\$200 if the Company has not commenced Phase III clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2006, which was accrued at December 31, 2006.

In addition, the Company is required to fund mutually agreed upon research at McGill over a period of ten years totaling CAD\$3,300. Annual funding commenced in 2001 with a total payment of CAD\$200 and increases annually by 10 percent through to the tenth year of the agreement when annual funding reaches CAD\$500. The additional research commitment can be deferred in any year if it exceeds five percent of the Company's cash and cash equivalents. As of December 31, 2006, there have been no deferrals. The Company receives certain intellectual property rights resulting from this research.

### Rutgers agreement

The Company terminated the agreement with Rutgers in December 2006.

### Oregon Health & Science University agreement

The Company has an exclusive license agreement with OHSU for exclusive worldwide license rights to intellectual property directed to thiol-based compounds and their use in oncology. OHSU will receive certain milestone payments, a 2.5 percent royalty on net sales for licensed products and a 15 percent royalty on any consideration received from sublicensing of the licensed technology. Milestone payment fees payable to OHSU include: \$50 upon completion of Phase I clinical trials; \$200 upon completion of Phase II clinical trials; \$500 upon completion of Phase III clinical trials; and \$250 upon first commercial sale for any licensed product. To date no milestone payments have been required.

### Employment matters

Under the terms of an agreement dated February 19, 2003, the prior Chief Executive Officer of the Company was terminated by mutual agreement. Pursuant to that agreement, the Company agreed to pay a total of \$350. The initial payment of \$150 was

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made during the quarter ended March 31, 2003 and was recorded as a General and Administration expense. Additionally, he will receive \$50 per year for four years paid in semi-monthly installments. The present value of the remaining payments has been recorded as a General and Administration expense. The present value of the amounts due in the next twelve months is recorded in accrued liabilities, with the remaining amounts recorded as a long-term liability.

**GlaxoSmithKline**

On July 14, 2005, the Company entered into a development and license agreement with GSK. The agreement included the in-license by Adherex of GSK's oncology product, eniluracil, and an option for GSK to license ADH-1. As part of the transaction, GSK invested \$3,000 in the Company's common stock. 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 at various points in time. On March 1, 2007, the GSK agreement was amended and the Company purchased all of GSK's remaining buy-back options for an upfront fee of \$1,000. The Company is now free to develop eniluracil alone or with other partners and is required to pay GSK development and sales milestones and double-digit royalties. Specifically, if the Company files a NDA with the FDA, the Company may be required to pay development milestones of \$5,000 to GSK. Depending upon whether the NDA is approved by the FDA and whether eniluracil becomes a commercial success, the Company may be required to pay up to an additional \$70,000 in development and sales milestones for the initially approved indication, plus double digit royalties based on annual net sales. If the Company pursues other indications, it may be required to pay up to an additional \$15,000 to GSK per FDA-approved indication.

The Company had granted GSK an option to receive a worldwide, exclusive license for ADH-1 for all indications. On October 11, 2006, the GSK option to ADH-1 expired unexercised. As a result, the Company has regained full control over the development of ADH-1 and is free to enter into collaborations with other pharmaceutical and biotech companies for ADH-1.

**13. Income Taxes**

The Company operates in several tax jurisdictions. Its income is subject to varying rates of tax and losses incurred in one jurisdiction cannot be used to offset income taxes payable in another. A reconciliation of the combined Canadian federal and provincial income tax rate with the Company's effective tax rate is as follows:

	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004
Domestic loss	\$ (15,129)	\$ (15,498)	\$ (6,594)
Foreign loss	(5,509)	(6,037)	(1,922)
<b>Loss before income taxes</b>	<b>(20,638)</b>	<b>(21,535)</b>	<b>(8,516)</b>
Expected statutory rate (recovery)	32.01%	36.12%	36.12%
Expected provision for (recovery of) income tax	(6,606)	(7,778)	(3,076)
Permanent differences	477	513	252
Change in valuation allowance	5,560	5,129	2,564
Non-refundable investment tax credits	(50)	(35)	(41)
Share issue costs and effect of change of carryforwards	(54)	(51)	(100)
Effect of foreign exchange rate differences	(54)	(68)	21
Effect of tax rate changes	(808)	—	(71)
<b>Recovery of income taxes</b>	<b>\$ (1,535)</b>	<b>\$ (2,290)</b>	<b>\$ (451)</b>

The Canadian statutory income tax rate of 32.01 percent is comprised of federal income tax at approximately 22.12 percent and provincial income tax at approximately 9.89 percent.

The primary temporary differences which gave rise to future income tax assets and liabilities at December 31, 2006, December 31, 2005 and December 31, 2004 are as follows:

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	December 31, 2006	December 31, 2005	December 31, 2004
<b>Future tax assets:</b>			
SR&ED expenditures	\$ 2,159	\$ 2,390	\$ 2,065
Income tax loss carryforwards	15,701	12,060	8,607
Non-refundable investment tax credits	1,323	998	839
Share issue costs	150	311	633
Reserves	450	518	—
Fixed and intangible assets	1,235	1,106	854
	<u>21,018</u>	<u>17,383</u>	<u>12,998</u>
Less: valuation allowance	<u>(21,018)</u>	<u>(17,383)</u>	<u>(12,998)</u>
<b>Net future tax assets</b>	<u>—</u>	<u>—</u>	<u>—</u>
<b>Future tax liabilities:</b>			
Asset basis differences	<u>(3,639)</u>	<u>(5,174)</u>	<u>(7,463)</u>
<b>Net future tax liabilities</b>	<u>\$ (3,639)</u>	<u>\$ (5,174)</u>	<u>\$ (7,463)</u>

The future income tax liability recognized on the balance sheets relates to the acquired intellectual property of Oxiquant. These acquired intellectual property rights have no basis for income tax purposes and therefore will not provide any income tax deduction as they are amortized. There are no current income taxes owing nor are any income taxes expected to be due in the near term.

At December 31, 2006, the Company has unclaimed SR&ED expenditures, income tax loss carry forwards and investment tax credits. The unclaimed amounts and their expiry dates are as listed below:

	Federal	Province/ State
SR& ED expenditures (no expiry)	\$ 6,676	\$ 6,897
Income tax loss carryforwards (expiry date):		
2007	569	569
2008	3,365	3,365
2009	3,898	3,898
2010	6,900	6,900
2014	10,357	10,359
2015	4,236	4,236
2026	15,362	15,362
Investment tax credits (expiry date):		
2007	8	—
2008	7	—
2009	82	—
2010	47	—
2011	467	—
2012	340	—
2013	152	—
2014	122	—
2015	48	—
2016	50	—

**14. Net Loss Per Share**

The outstanding number and type of securities that could potentially dilute basic earnings per share in the future and which were not included in the computation of diluted earnings per share, because to do so would have reduced the loss per share (anti-dilutive) for the years presented, are as follows:

	December 31, 2006	December 31, 2005	December 31, 2004
Stock options	5,280	5,246	3,762
Convertible note warrants	615	615	615
Acquisition warrants	461	461	461
Broker warrants	692	227	1,591
Investor warrants	14,052	11,726	9,902
Totals	<u>21,100</u>	<u>18,275</u>	<u>16,331</u>



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**15. Segment Information**

The Company operates in one business segment, which is the development of pharmaceutical products based on its licensed and proprietary technologies, with substantially all of its capital assets and operations, which were previously located in Canada, now located in the United States in Research Triangle Park, North Carolina.

**16. Research and Development Projects**

The Company is in the development stage and conducts research and development in the areas of anti-cancer and chemoprotection:

Anti-Cancer:

- ADH-1 is a molecularly-targeted anti-cancer compound that selectively targets N-cadherin, a protein present on certain tumor cells and the established blood vessels that supply the tumors and is in clinical development.
- Eniluracil is an anti-cancer compound that was previously under development by GSK for oncology indications. Eniluracil is being developed to enhance the therapeutic value and effectiveness of an approved anti-cancer compound called 5-FU and is in clinical development.

Chemoprotectants and Chemoenhancers:

- STS is a chemoprotectant that has been shown to reduce the disabling loss of hearing in patients being treated with platinum-based anti-cancer agents.
- NAC is a chemoprotectant that is no longer under development by the Company.
- Mesna is a chemoenhancer that is no longer under development by the Company.

The following summarizes our research and development expenses, net of any investment tax credits or grants, through December 31, 2006:

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	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004	Cumulative From September 3, 1996 to December 31, 2006
ADH-1	\$ 9,792	\$ 8,248	\$ 2,550	\$ 2,503	\$ 28,783
Eniluracil	2,910	2,552	—	—	5,462
Other anti-cancer	249	374	358	341	2,276
Total anti-cancer	12,951	11,174	2,908	2,844	36,521
STS	292	472	263	628	1,799
Other chemoprotectants and enhancers	—	17	—	—	33
Total chemoprotectants and enhancers	292	489	263	628	1,832
Other discovery projects	760	778	272	89	3,343
Transdermal drug delivery	—	—	—	—	689
Total research and development program expense	<u>\$ 14,003</u>	<u>\$ 12,441</u>	<u>\$ 3,443</u>	<u>\$ 3,561</u>	<u>\$ 42,385</u>

The Company has made no upfront cash payments for research and development projects and is not obligated to repay research and development amounts to any third parties.

**17. Financial Instruments**

Financial instruments recognized on the balance sheets at December 31, 2006 and December 31, 2005 consist of cash and cash equivalents, cash pledged as collateral, short-term investments, accounts receivable, accounts payable and other long-term liabilities. The Company does not hold or issue financial instruments for trading purposes and does not hold any derivative financial instruments. With the exception of the other long-term liabilities, the Company believes that the carrying value of its financial instruments approximates their fair values because of their short terms to maturity.

The Company's 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 are made in U.S. or Canadian obligations and bank securities, commercial paper of U.S. or Canadian industrial companies, utilities, financial institutions and consumer loan companies, and securities of foreign banks provided the obligations are guaranteed or carry ratings appropriate to the policy. Securities must have a minimum Dun & Bradstreet rating of A for bonds or R1 low for commercial paper.

The policy 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 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. At December 31, 2006 we had no short term investments while at December 31, 2005 short-term investments of \$1.2 million consisted of corporate commercial paper with maturities at acquisition from 154 to 175 days. The market value of the investments at December 31, 2005 approximated their book value.

**18. Changes in Operating Assets and Liabilities**

The following table details the changes in operating assets and liabilities as per the statements of cash flows:

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	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004
Accounts receivable	\$ (17)	\$ 2	\$ 25	\$ (16)
Prepaid expenses	31	(48)	116	(13)
Deferred expense	19	41	394	87
Investment tax credits recoverable	58	123	57	122
Accounts payable	2,031	885	138	421
Net changes in operating assets and liabilities	<u>\$ 2,122</u>	<u>\$ 1,003</u>	<u>\$ 730</u>	<u>\$ 601</u>

**19. United States Accounting Principles**

The consolidated financial statements have been prepared in accordance with Canadian GAAP in U.S. dollars. These principles differ, as they affect the Company, for the fiscal years ended December 31, 2006 and December 31, 2005, the six-months ended December 31, 2004 and for the year ended June 30, 2004 in the following material respects from U.S. GAAP. There are no differences in reported cash flow for the periods presented.

**Consolidated balance sheets - U.S. GAAP:**

	December 31, 2006	December 31, 2005
<b>Assets</b>		
Current assets	\$ 5,895	\$ 13,399
Other assets	440	518
Capital assets	293	374
Total assets	<u>\$ 6,628</u>	<u>\$ 14,291</u>
<b>Liabilities</b>		
Current liabilities	\$ 4,695	\$ 2,664
Other long-term liabilities	40	13
Deferred lease inducement	625	537
Total liabilities	5,360	3,214
<b>Shareholders' equity</b>		
Common stock	46,524	41,306
Additional paid-in-capital	24,523	23,110
Cumulative translation adjustment	1,243	1,243
Deficit accumulated during development stage	(71,022)	(54,582)
Total shareholders' equity	1,268	11,077
Total liabilities and shareholders' equity	<u>\$ 6,628</u>	<u>\$ 14,291</u>

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<u>Consolidated statements of operations - U.S. GAAP:</u>	Year Ended December 31, 2006	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004
Net loss in accordance with Canadian GAAP	\$ (19,103)	\$ (19,245)	\$ (8,065)	\$ (8,685)
Adjustments to reconcile to U.S. GAAP:				
Acquired intellectual property rights (2)	—	—	—	—
Acquired intellectual property rights amortization (2)	2,177	2,723	1,234	2,323
Loss on impairment of intellectual property (2)	2,021	3,539	—	—
Future income taxes (2)	(1,535)	(2,290)	(451)	(849)
Stock-based compensation costs (3)	—	—	—	(5)
Stock-based compensation—CICA 3870 (4)	—	1,402	598	—
Interest charges—convertible notes (5)	—	—	—	331
Net loss in accordance with U.S. GAAP (6)	<u>\$ (16,440)</u>	<u>\$ (13,871)</u>	<u>\$ (6,684)</u>	<u>\$ (6,885)</u>
Net loss per share of common stock, basic and diluted	<u>\$ (0.34)</u>	<u>\$ (0.35)</u>	<u>\$ (0.19)</u>	<u>\$ (0.28)</u>
Weighted-average number of shares of common stock outstanding, basic and diluted	<u>47,663</u>	<u>39,276</u>	<u>35,989</u>	<u>24,233</u>

**Notes—U.S. GAAP:**

**1. Current accounting pronouncements**

In July 2006, the FASB issued Interpretation No. 48 (“FIN 48”), “Accounting for Uncertainty in Income Taxes”. FIN 48 prescribes a recognition and measurement model for tax positions taken or expected to be taken in a tax return, and provides guidance on recognition, classification, interest and penalties, accounting in interim periods, disclosure, and transition. The requirements of FIN 48 are effective for fiscal years beginning after December 15, 2006. The Company has not yet determined the impact of adopting FIN 48 on its consolidated results of operations or financial position.

In November 2006, the FASB issued SFAS 157, “Fair Value measurements”. SFAS 157 defines fair value, establishes a framework for measuring fair value in U.S. GAAP, and expands disclosures about fair value measurements. The Company has not yet determined the impact of adopting SFAS 157 on its consolidated results of operations or financial position.

**2. Acquired intellectual property rights**

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

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

Under U.S. GAAP, the acquired intellectual property is considered IPRD in accordance with “Accounting for Research and Development Costs” (“FAS 2”). Given the Company’s development and patent strategy surrounding the compounds, the acquired intellectual property does not meet the criteria for alternative use as outlined in FAS 2. As a result, the amounts were expensed as IPRD.

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During the years ended December 31, 2006 and 2005, the Company recorded a loss on impairment of intellectual property under Canadian GAAP. Since the amounts were previously expensed as IPRD, the amount is reversed under U.S. GAAP for the years ended December 31, 2006 and 2005.

### 3. Stock-based compensation – Initial Public Offering

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

### 4. Stock-based compensation

Canadian GAAP requires the fair value of employee and director stock options to be expensed in the statement of operations for fiscal years beginning after January 1, 2004 under CICA Section 3870 Stock-Based Compensation and Other Stock-Based Payments ("CICA 3870"). For the fiscal year ended December 31, 2006, the Company adopted FASB Statement No. 123 (Revised 2004), Accounting for Stock-Based Compensation which requires companies to record the fair value of employee and director stock options as expense in the statement of operations. As a result, there are no differences between Canadian and U.S. GAAP for the fiscal year ended December 31, 2006. For years prior to fiscal 2006, had compensation expense for stock options been recorded based on Black-Scholes option-pricing model at the grant date, the net loss under U.S. GAAP would be as follows below:

	Year Ended December 31, 2005	Six Months Ended December 31, 2004	Year Ended June 30, 2004
Net loss before compensation expense, U.S. GAAP	\$ (13,871)	\$ (6,684)	\$ (6,885)
Compensation expense	(1,402)	(598)	—
Pro forma net loss, U.S. GAAP	<u>\$ (15,273)</u>	<u>\$ (7,282)</u>	<u>\$ (6,885)</u>
Pro forma net loss per share of common stock, basic and diluted	<u>\$ (0.39)</u>	<u>\$ (0.20)</u>	<u>\$ (0.28)</u>

### 5. Convertible notes and warrants

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

### 6. Warrants and certain stock options denominated in Canadian dollars

Effective January 1, 2005, the Company determined that its functional currency had changed from the Canadian dollar to the U.S. dollar because the majority of its operations were denominated in U.S. dollars as the result of increasing activities being undertaken in the United States. Concurrent with this change in functional currency, the Company adopted the U.S. dollar as its reporting currency. Prior to January 1, 2005, the Company's functional and reporting currency was the Canadian dollar.

The Company has primarily financed its operations through the sale of equity and debt securities that have been denominated in U.S. and Canadian dollars. As part of these financings, the Company has issued warrants to purchase common stock that have also been denominated in U.S. and Canadian dollars. The Company therefore has warrants outstanding at December 31, 2006, 2005 and 2004 that are denominated in both currencies.

Under Canadian GAAP all warrants to purchase common stock are classified as equity in the Company's financial statements. The Securities and Exchange Commission ("SEC") and the Financial Accounting Standards Board ("FASB") have issued recent interpretations for U.S. GAAP that suggest warrants whose exercise price is different from the entity's functional currency cannot be classified as equity. As a result, these instruments should be treated as derivatives and recorded as liabilities which are carried at their fair value, with changes in the fair value from period to period recorded as a gain or loss in the statement of operations.

The recent SEC and FASB interpretations relate to FASB Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities" and Emerging Issue Task Force ("EITF") "EITF 00-19 "Accounting for Derivative Financial Instruments Indexed to and Potentially Settled in a Company's Own Stock". The FASB has initiated a project to determine the accounting treatment for certain equity instruments with elements of foreign currency risk. This project is expected to provide further guidance with respect to U.S. GAAP accounting for such items.

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

The Company is awaiting the results of the FASB's project and has therefore not recorded warrants outstanding that have an exercise price in Canadian dollars as derivatives. If the Company had recorded such instruments as derivatives, it would have reported a gain of approximately \$8,300 related to these instruments in the Statement of Operations for the year ended December 31, 2005 and a gain of approximately \$1,700 for the year ended December 31, 2006, under U.S. GAAP. The amounts were calculated using the Black-Scholes option pricing model and the Company used the following assumptions to value the instruments: a 0% dividend rate for both fiscal 2006 and fiscal 2005, a 84% volatility for fiscal 2006 and a 70% volatility for fiscal 2005, the actual exercise price of each instrument, the actual Company closing stock price for December 31, 2006 and 2005 and the Canadian risk free interest rate based on the actual remaining life of the related warrant.

**20. Subsequent Events**

**Public Offering**

On February 21, 2007, the Company completed the sale of equity securities for gross proceeds of \$25,000 for 75,759 units at a price of \$0.33 per unit providing net proceeds of \$23,300 after deducting broker fees and certain other expenses. Each unit consisted of one common share and one-half of a common share purchase warrant. The offering was comprised of an aggregate of 75,759 shares of common stock, along with 37,879 investor warrants and 6,818 broker warrants to acquire additional shares of Adherex common stock. Each whole investor warrant entitles the holder to acquire one additional share of Adherex common stock at an exercise price of \$0.40 per share for a period of three years. Each whole broker warrant entitles the holder to acquire one unit at an exercise price of \$0.33 per unit for a period of two years.

**Eniluracil**

On March 1, 2007, the GSK Development and License Agreement was amended and the Company purchased all of GSK's remaining buy-back options for eniluracil for an upfront fee of \$1,000. The Company is now free to develop eniluracil alone or with other partners and is required to pay GSK development and sales milestones and double-digit royalties. Specifically, if the Company files a NDA with the FDA, the Company may be required to pay development milestones of \$5,000 to GSK. Depending upon whether the NDA is approved by the FDA and whether eniluracil becomes a commercial success, the Company may be required to pay up to an additional \$70,000 in development and sales milestones for the initially approved indication, plus double digit royalties based on annual net sales. If the Company pursues other indications, it may be required to pay up to an additional \$15,000 to GSK per FDA-approved indication.

**SUB-SUBLEASE AGREEMENT**

This Agreement (this "Agreement") is made this 22nd day of December, 2006, by and between **Biostratum, Inc.** ("Biostratum") and **NephroGenex, Inc.** ("NephroGenex").

**WITNESSETH:**

WHEREAS, pursuant to a Lease Agreement dated April 9, 2004, and amended by First Amendment of Lease dated July 27, 2004, and by Second Amendment to Lease Agreement dated September 14, 2004, by and between Adherex, Inc. ("Adherex") as Tenant, and Realmark-Commercial, LLC, the predecessor-in-interest to SVN CPW 2300-4915, LLC ("SVN") as Landlord (the "Master Lease"), a copy of which is attached hereto as Exhibit A and incorporated herein by reference, Adherex has leased from SVN certain building space located in Commercial Park West, 2300 Englert Drive, Suite G, Durham, North Carolina, containing approximately 7,636 square feet (the "Premises"); and

WHEREAS, pursuant to a Sublease Agreement (the "Sublease"), a copy of which is attached hereto as Exhibit B and incorporated herein by reference, dated August 31, 2005, between Biostratum, as Sublessee, and Adherex, as Sublessor, Biostratum has subleased from Adherex the entire Premises containing approximately 7,636 square feet, as more specifically described therein; and

WHEREAS, NephroGenex desires to sublease from Biostratum all of the Premises (the "Sublet Premises") on the terms and conditions set forth herein; and

WHEREAS, Landlord and Adherex have consented to the sublease of the Sublet Premises and all of the terms and conditions of this Agreement, as indicated by Landlord's and Adherex's duly-authorized signatures appearing at the end of this Agreement.

NOW, THEREFORE, for and in consideration of the payments referenced herein, and other mutual good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the parties hereto agree as follows:

1. **Term:** Biostratum subleases the Sublet Premises to NephroGenex for a term commencing January 1, 2007 ("Commencement Date"), and terminating March 31, 2008 ("Term").
2. **Base Rent:** During the Term of this Agreement, NephroGenex shall pay to Biostratum Base Rent for the Sublet Premises in the same amount as is owed by Biostratum under the Sublease ("Base Rent"). Each installment of Base Rent shall be due and payable for each month during the Term of this Agreement on or before the twentieth day of the previous month, and shall be paid at the office of Adherex located at 4620 Creekstone Drive, Suite 200, Durham, NC 27703, or at such other address as Biostratum may direct in writing.
3. **Additional Rent:** In addition to the Base Rent, NephroGenex shall pay to Biostratum, at the same time as monthly installment payments of rent are made, a sum which represents NephroGenex's proportionate share of insurance costs, taxes and operating expense charges

owed by Biostratum under the terms of the Lease and Sublease. The amount of Additional Rent due from NephroGenex shall be adjusted when the actual amount of Biostratum's proportionate share of insurance costs, taxes and operating expense charges are determined under the Lease and Sublease. Upon request of NephroGenex, Biostratum shall provide NephroGenex evidence supporting any and all amounts allocated to the Sublet Premises.

4. **Compliance with Lease:** With respect to the Sublet Premises, NephroGenex shall comply with all of the provisions of the Lease and Sublease, except those provisions which conflict with or are different from the terms of this Agreement, in which event the terms of this Agreement shall control, and all rules and regulations of Landlord promulgated thereunder. Notwithstanding anything to the contrary in this Agreement, NephroGenex shall not take any action or omit to take any action which would cause Biostratum or Adherex to be in default under the Lease or Sublease.
5. **Utilities:** During the Term, NephroGenex shall pay directly to the service provider or providers for the cost of the Utilities for the Premises. For purposes of this Section 5, "Utilities" shall mean costs with respect to the Premises for water, electricity, gas, sewage and any other utilities used at the Premises.
6. **Indemnity and Insurance:** NephroGenex agrees to indemnify and hold harmless Biostratum, from any liability for damages to any person or property in, on or about the Premises from any cause. NephroGenex shall procure and keep in effect during the Term public liability and property damage insurance coverage of at least amounts as required under the Master Lease and workers' compensation insurance in at least the statutory amounts with Biostratum named as an additional insured thereunder. Such policies shall contain language that the policies may not be canceled or changed except after thirty (30) days notice to Biostratum. NephroGenex shall deliver copies of original policies or satisfactory certificates thereof.
7. **Condition of Premises:** NephroGenex acknowledges it has examined the Sublet Premises and accepts the same "as is". All improvements or alterations proposed for the Sublet Premises must be approved by Biostratum, Adherex and Landlord prior to construction and shall be at NephroGenex's sole expense.
8. **Assignment or Subletting:** NephroGenex may not assign its interest in this Agreement or further sublet any portion of the Premises without the prior written consent of Biostratum, Adherex and SVN, which consent shall not unreasonably be withheld.
9. **Default:** If at any time there shall occur any of the following events:
  - (a) If NephroGenex shall default in the payment of rent or any other sum of money becoming due hereunder; or
  - (b) If NephroGenex shall default in the performance of any other agreement, covenant or stipulation set forth in this Agreement and such default shall continue for ten (10) days after a written notice thereof; or



- (c) If NephroGenex shall be adjudicated bankrupt or insolvent under any federal or state law; or
- (d) If NephroGenex shall file or have filed against it a petition for the appointment of a receiver or trustee for all or essentially all of its assets and such appointment shall not be vacated or set aside within thirty (30) days,

then and in any such event after the expiration of any applicable cure periods, Biostratum, without excluding other rights or remedies that it may have, shall have the right of reentry without notice and may remove all persons and property from the Sublet Premises and dispose of such property with or without legal process and without being deemed guilty of trespass or becoming liable for any loss or damage which may be occasioned hereby. If Biostratum should elect to reenter as herein provided and take possession, it may either terminate this Agreement, or it may from time to time without terminating this Agreement make such alterations or repairs as may be necessary in order to relet the Premises and relet the same for such term and at such rentals and upon such other terms and conditions as Biostratum may deem advisable. No such reentry or taking of possession shall be construed as an election to terminate this Agreement unless a written notice of such intention be given to NephroGenex by Biostratum at the time of such reentry; but, notwithstanding such reentry and reletting without termination, Biostratum may at any time thereafter elect to terminate this Agreement for such previous breach. In the event of any termination by Biostratum, whether before or after reentry, NephroGenex shall remain obligated through the Term hereof to continue to make monthly payments of Base Rent and any additional rent pursuant to Section 3 hereof (except that the amount of such continuing payments shall be reduced by the amount of any rental payments received by Biostratum from a new sublessee in connection with the reletting of the Sublet Premises), and Biostratum may recover from NephroGenex damages incurred by reason of such breach. As a remedy upon occurrence of any default only in the event that NephroGenex fails to make timely and continued monthly payments, Biostratum may accelerate the Base Rent to accrue during the remainder of the Term and declare the same immediately due and payable. No remedy herein or otherwise conferred upon or reserved to Biostratum shall be considered exclusive of any other remedy but the same shall be distinct, separate and cumulative and shall be in addition to any other remedy given to Biostratum by this Agreement and may be exercised from time to time as often as occasion may arise or may be deemed expedient. No delay or omission of Biostratum to exercise any right or power arising from any delay on the part of NephroGenex shall impair any right or power or shall be construed to be a waiver of any such default or any acquisition thereto. NephroGenex shall pay all costs, expenses and attorneys' fees that may be incurred or paid by Biostratum in enforcing the covenants, conditions and agreements of this Agreement with the remedies provided hereunder whether incurred as a result of litigation or otherwise.

11. **Authorization and Warranty:** The parties warrant that they are fully authorized and empowered to enter into this Agreement. Biostratum further warrants that the Lease and Sublease are not currently in default and will not be in default at any time prior to the date of delivery of the Sublet Premises to NephroGenex.

12. **Covenant of Quiet Enjoyment:** Biostratum covenants that, provided NephroGenex is not in default hereunder beyond any applicable cure periods, NephroGenex shall have and enjoy the quiet and peaceful possession of the Sublet Premises without interference from any party claiming by or through Biostratum, including the Landlord and Adherex.
13. **Miscellaneous:**
- (a) The headings of the various articles of this Agreement are intended only for convenience and are not intended to limit, define or construe the scope of any article of this Agreement, nor offset the provisions thereof.
  - (b) Neither the method of computation of rent nor any other provision of this Agreement shall be deemed to create any relationship between the parties hereto other than that of sublessor and sublessee.
  - (c) This Agreement shall be governed by and construed in accordance with the laws of North Carolina.
  - (d) This Agreement may be modified or amended only by written agreement of both parties hereto.
  - (e) If any provision of this Agreement shall be deemed to be in contravention of any law, then the court rendering such determination shall have the authority to either strike the contravening provision from this Agreement or reform the provision to comply with the law, with the remaining provisions remaining in full force and effect.
  - (f) This Agreement, and the covenants, conditions, warranties and agreements made and entered into by the parties hereto are declared binding on their respective heirs, successors, representatives and assigns.
  - (g) Whenever under this Agreement a provision is made for notice of any kind, it shall be deemed sufficient service thereof if such notice is in writing addressed to the respective parties at the address shown below and delivered via hand delivery, certified or registered mail, or overnight courier.

All notices required or permitted hereunder shall be deemed given when given as follows:

If to Biostratum: Biostratum, Inc.  
Attn: Eugen Steiner, M.D., Ph.D.  
HealthCap  
Strandvagen 5B  
Stockholm, Sweden 114 51  
+46 (8) 442 5850 office  
+46 (8) 442 5879 fax  
Eugen.Steiner@pi.se

If to NephroGenex: NephroGenex, Inc.  
Attn: J. Wesley Fox, Ph.D.  
204 Cherwell Dr.  
Cary, NC 27513

(h) Biostratum and NephroGenex respectively represent and warrant to each other that neither of them has consulted or negotiated with any broker or finder with regard to the Premises or otherwise in connection with this transaction. Each such party shall indemnify the other against and hold the other harmless from and against all liabilities, costs and expenses (including reasonable attorneys' fees) for any claims for fees or commissions from anyone arising out of their respective actions in connection with this Agreement.

14. **Landlord's and Adherex's Consent:** The consent of Landlord and Adherex to this Agreement, evidenced by signatures appearing below, shall be a condition precedent to the effectiveness of this Agreement.
15. **Surrender.** At the expiration or earlier termination of this Agreement, NephroGenex shall surrender the Premises to Biostratum in broom clean condition in the same condition as on the Commencement Date hereof, ordinary wear and tear excepted. Notwithstanding the foregoing, NephroGenex further warrants, covenants and agrees that it will pay the full cost of any repairs or maintenance necessary to restore the Premises to the same condition as on the Commencement Date of the Sublease, including, but not limited to, reinstalling the original benches and furnishings located in the laboratory space located in the Premises. Upon satisfactory restoration of the Premises as described herein, the laboratory benches and equipment which were installed by Biostratum in the place of the original laboratory equipment shall become the property of NephroGenex.

[The next page is the signature page]

IN WITNESS WHEREOF, the undersigned have hereunto set their hands and seals as of the day and year first written above.

**SUBLESSOR:**

BIOSTRATUM, INC., a Delaware corporation

By: /s/ Gary M. Gordon

Name: Gary M. Gordon, M.D.

Title: Vice President

**SUBLESSEE:**

NEPHROGENEX, INC., a Delaware corporation

By: /s/ J. Wesley Fox

Name: J. Wesley Fox

Title: President & CEO

**CONSENT**

The undersigned Landlord hereby acknowledges and expresses its consent to the terms of this Agreement:

**LANDLORD:**

SVN CPW 2300-4915, LLC

By: /s/ Jack W. Carroll

Name: Jack W. Carroll

Title: Principal and Director

The undersigned Tenant hereby acknowledges and expresses its consent to the terms of this Agreement, subject to the understanding that BioStratum, Inc. is not relieved of its obligations under the Sublease:

**TENANT:**

ADHEREX, INC.

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

Name: James A. Klein, Jr.

Title: CFO



February 28, 2007

**Personal and Confidential**

D. Scott Murray, BScPharm LLB MBA  
106 Saddle Ridge Road  
Chapel Hill, NC 27514

**Re: New Employment Agreement**

Dear Scott:

This letter and the attached agreement are meant to reflect our recent discussions regarding the terms of your continued employment with Adherex, Inc. (the "Company"), the wholly-owned subsidiary of Adherex Technologies Inc. ("AHX"), in Durham, North Carolina.

Effective immediately, you will serve as **Senior Vice President, Corporate Development, General Counsel & Secretary** of the Company and of AHX. In this position, you will continue to report directly to me. As Senior Vice President, Corporate Development, your primary responsibilities will be expanded to include a more active role in the development and implementation of corporate strategy with respect to licensing, mergers, acquisitions, joint ventures and partnerships, along with continued oversight of the legal and secretarial functions. Other specifics of your employment with the Company will be governed by the terms and conditions set out in the enclosed agreement.

Sincerely,

**ADHEREX, INC.**

*/s/ William P. Peters*

\_\_\_\_\_  
William P. Peters, MD PhD MBA  
Chairman and Chief Executive Officer

4620 Creekstone Drive, Suite 200 • Research Triangle Park • Durham, North Carolina • 27703  
Tel: (919) 484-8484 • Fax: (919) 484-8001 • [www.adherex.com](http://www.adherex.com)

## EMPLOYMENT AGREEMENT

THIS EMPLOYMENT AGREEMENT (the "Agreement") dated as of this 28th day of February 2007 (the "Effective Date"), by and between Adherex, Inc. (the "Company"), a wholly-owned subsidiary of Adherex Technologies Inc. ("AHX"), and D. Scott Murray, an individual residing at the address set forth on the signature page hereof ("Employee").

**1. Duties.** While employed by the Company, Employee will be employed in the position of **Senior Vice President, Corporate Development, General Counsel & Secretary** of the Company and of AHX ("SVP"), and, as such, Employee agrees to faithfully perform the duties of the position of SVP and to perform such other duties of an executive, managerial or administrative nature as shall be reasonably specified and designated from time to time by the Chief Executive Officer of the Company. Employee agrees to perform his duties and responsibilities at the Company diligently and to the best of his ability, and further agrees to devote all of his business time and efforts to the performance of duties hereunder. Employee further agrees not to be employed by any entity or other third party while employed by the Company without first obtaining the advance written consent of the Company.

**2. Compensation.** In consideration of his services to the Company, Employee will be compensated as follows:

(a) **Base Salary.** Employee will be paid an annual base salary of **Two Hundred Thirty Thousand Dollars (USD \$230,000.00)**, less any withholdings required by law or properly requested by Employee (the "Base Salary"). In the sole discretion of the Company, the annual base salary may be increased following regularly scheduled performance reviews. The Company will pay Employee the Base Salary on its regularly scheduled paydays, in accordance with its regular payroll practices and procedures.

(b) **Signing Bonus.** Upon execution of this Agreement, Employee will be paid a one-time lump sum signing bonus of **Twenty-Five Thousand Dollars (USD \$25,000.00)** (the "Signing Bonus"). The Signing Bonus is subject to any withholdings required by law and/or properly requested by Employee.

(c) **Discretionary Bonus.** In addition to the Base Salary and Signing Bonus, the Company may award Employee an annual bonus (the "Annual Bonus") with acceptable performance as determined by the Company. The Company will have the sole discretion and authority to determine Employee's eligibility for and the amount of the Annual Bonus and the award of such bonus will be dependent upon performance objectives established by the Chief Executive Officer. The Annual Bonus is subject to any withholdings required by law and/or properly requested by Employee.

(d) **Stock Option Grant.** Subject to the approval of its Board of Directors (the “Board”), AHX further agrees to grant Employee an option to purchase up to **200,000** shares of AHX’s common stock (the “Option”). The Option will be subject to the terms and conditions of the AHX Stock Option Plan (the “Plan”) and a separate stock option agreement between the Company and Employee. Shares subject to the Option will have an exercise price equal to the fair market value on the date of grant, as determined by the Board. One-third of the shares subject to the Option will immediately vest and be fully exercisable on the date of grant. Thereafter, the remaining unvested shares will vest annually in equal installments over the next two years on the anniversary of the Effective Date for so long as Employee remains employed by the Company. As further detailed in the stock option agreement between the Company and Employee, if Employee’s employment terminates due to a change in control of the Company (as defined in the stock option agreement), any then-remaining unvested shares shall immediately vest and be fully exercisable.

(e) **Business Expenses.** The Company will reimburse Employee for all reasonable expenses incurred by Employee that are directly related to his employment or the business of the Company, including any professional fees, provided that Employee complies with the Company’s policies and procedures for reimbursement or the advance of business expenses.

**3. Benefits.** While employed by the Company, Employee will receive such other benefits as are provided from time to time to other similarly-situated employees of the Company. All such benefits are subject the terms and conditions of the plan documents by which such benefits are provided, and are subject to change by the Company at any time, with or without advance notice.

**4. Vacation and Paid Holidays.** You will be eligible for vacation in accordance with the Company’s vacation policy. You will be entitled to take twenty (20) days of paid vacation annually. In addition, Employee will be entitled to be paid for all holidays recognized by Company policy.

**5. Confidential Information and Restrictive Covenants.** As a condition of Employee’s continued employment with the Company, the **Confidentiality and Intellectual Property Agreement** dated January 27, 2003 between Employee and AHX (the “IP Agreement”), which includes Employee’s agreement to refrain from disclosing the Company’s confidential information, will continue in full force and effect and is fully incorporated into this Agreement by reference, and a breach of the IP Agreement will be construed as a breach of this Agreement.

**6. Conflicts of Interest.** You are subject to the Company’s conflict of interest requirements and policies, and are responsible for recognizing and avoiding any and all circumstances that may give rise to an actual conflict of interest or give the appearance of a conflict of interest situation.



**7. Termination of Employment.** Employee's employment with the Company is at-will, meaning that either Employee or the Company can terminate the employment relationship at any time, for any or no reason, subject to the following provisions:

(a) Termination for Cause. Employee's employment with the Company may be terminated for "Cause" at any time and without advance notice. If terminated for Cause, Employee will only be entitled to receive payment of any wages and vacation pay earned or accrued to the date of termination. For purposes of this Agreement, "Cause" means Employee's: (1) material breach of the terms of this Agreement or the IP Agreement; (2) failure to diligently and properly perform his duties and responsibilities, or to comply with any policies and directives of the Company or the Board; (3) dishonest or illegal action (including, without limitation, embezzlement) or any other action whether or not dishonest or illegal by Employee that is materially detrimental to the interest and well-being of the Company, including, without limitation, harm to its reputation; (4) failure to fully disclose any material conflict of interest he may have with the Company in a transaction involving the Company which conflict is materially detrimental to the interest of the Company; or (5) your conviction of (i) any felony or (ii) any misdemeanor or other crime of moral turpitude (other than a minor traffic offense).

(b) Termination upon Death or Disability. Employee's employment with the Company will terminate immediately in the event of his death or permanent disability. For purposes of this Agreement, permanent disability means that Employee is unable to perform the essential functions of his position, with or without a reasonable accommodation, for more than sixty (60) consecutive days or ninety (90) days in any 12-month period. If terminated pursuant to this Section 7(b), Employee or his successor(s) will only be entitled to receive payment of any wages and vacation pay earned or accrued to the date of termination.

(c) Resignation by Employee. Employee may resign employment with the Company upon thirty (30) days' advance written notice. If Employee fails to provide at least thirty (30) days advance notice of resignation, Employee will forfeit payment for any accrued, unused vacation pay. The Company reserves the right in its sole discretion to pay Employee's then-current Base Salary for all or a part of such notice period, in lieu of Employee's continued employment during the notice period. If Employee resigns his employment with the Company, Employee will be entitled to receive payment of any wages and vacation pay earned or accrued through the termination date.

(d) Termination by the Company Without Cause. Employee's employment with the Company may be terminated at any time without Cause. The termination of Employee's employment by the Company will be deemed to be "Without Cause" if Employee is terminated for any reason other than Sections 7(a) through (c) of this Agreement.

## **8. Payments upon Termination.**

(a) **Accrued Compensation.** If Employee's employment with the Company is terminated by either party for any reason, Employee will receive payment of any wages and vacation pay earned or accrued to the date of termination; provided, however, that if Employee resigns his employment with the Company, he must provide the notice specified in Section 7(c) hereof in order to receive payment for any accrued, unused vacation time.

(b) **Severance Benefits.** In addition to any accrued compensation, if Employee's employment is terminated by the Company Without Cause, the Company will provide Employee with the following severance benefits, subject to the conditions described below.

(1) If Employee is terminated by the Company Without Cause, the Company will (A) pay Employee an amount equal to twelve (12) months of Employee's then-current Base Salary, and (B) continue paying Employee's health insurance benefits (medical and dental) for the lesser of (i) a period of twelve (12) months after the termination of Employee's employment, or (ii) until the employee has accepted alternative employment (the "Benefits Period"). If the Company cannot allow Employee to continue his participation in its health insurance benefit plans during the Benefits Period, the Company agrees to reimburse Employee for his COBRA premiums during the Benefits Period (at a level of coverage equivalent to that in effect immediately prior to the termination).

(2) In order to receive any portion of the severance benefits described in this Section 8(b), Employee will be required to first execute a release of all claims against the Company, in form reasonably acceptable to the Company. In addition, to continue receiving the severance benefits, Employee must also comply with any post-termination obligations to the Company as a result of the IP Agreement.

**9. Notices.** Any notice or other communication required or permitted hereunder must be made in writing and shall be delivered personally, sent by facsimile transmission or sent by certified, registered or express mail, postage prepaid. Any such notice shall be deemed given when so delivered personally, sent by facsimile transmission or, if mailed, five days after the date of deposit in the United States mail as follows:

If to the Company, to:

Adherex, Inc.  
4620 Creekstone Drive, Suite 200  
Durham, North Carolina 27703  
Attention: General Counsel

If to the Employee, at the address set forth on the signature page hereof.

Any party may by notice given in accordance with this Section 9 to the other parties hereto designate another address or person for receipt by such person of notices hereunder.

**10. Entire Agreement.** This Agreement contains the entire agreement between the parties with respect to the subject matter hereof and supersedes all prior agreements, written or oral, with respect thereto, including without limitation any agreements that may have been entered into between the Company and Employee.

**11. Waivers and Amendments.** This Agreement may only be amended, superseded, canceled, renewed or extended, and the terms hereof may be waived, with a writing signed by all parties hereto, or, in the case of a waiver, by the party waiving compliance. No delay on the part of any party in exercising any right, power or privilege hereunder shall operate as a waiver thereof, nor shall any waiver on the part of any party of any such right, power or privilege nor any single or partial exercise of any such right, power or privilege, preclude any other or further exercise thereof or the exercise of any other such right, power or privilege.

**12. Governing Law; Venue.** This Agreement will be governed by and construed in accordance with the laws of the state of North Carolina, without regard to conflicts of law principles.

**13. Assignment.** This Agreement, and Employee's rights and obligations hereunder, may not be assigned by Employee; any purported assignment by Employee in violation hereof shall be null and void. In the event of any sale, transfer or other disposition of all or substantially all of the Company's assets or business, whether by merger, consolidation or otherwise, Employee agrees that the Company may assign this Agreement and its rights and obligations hereunder to a successor in interest.

**14. Binding Effect.** This Agreement shall be binding upon and inure to the benefit of the parties and their respective successors, permitted assigns, heirs, executors and legal representatives.

**15. Counterparts.** This Agreement may be executed by the parties hereto in separate counterparts, each of which when so executed and delivered shall be an original but all such counterparts together shall constitute one and the same instrument. Each counterpart may consist of two copies hereof each signed by one of the parties hereto.

*[Signature page follows]*

IN WITNESS WHEREOF, the parties hereto have executed this Employment Agreement as of the day and year first above written.

ADHEREX, INC.

By: /s/ William P. Peters  
Dr. William P. Peters, MD PhD MBA  
Chief Executive Officer

EMPLOYEE:

/s/ D. Scott Murray  
Employee: D. Scott Murray  
106 Saddle Ridge Road  
Chapel Hill, NC 27514

\_\_\_\_\_  
Witness

**CERTIFICATION**

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

1. I have reviewed this annual report on Form 20-F of Adherex Technologies Inc. (the "Company");
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Evaluated the effectiveness of the Company's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

- (c) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: March 30, 2007

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

**CERTIFICATION**

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

1. I have reviewed this annual report on Form 20-F of Adherex Technologies Inc. (the “Company”);
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements, and other financial information included in this report, fairly present in all material respects the financial condition, results of operations and cash flows of the Company as of, and for, the periods presented in this report;
4. The Company’s other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) for the Company and have:
  - (a) Designed such disclosure controls and procedures, or caused such disclosure controls and procedures to be designed under our supervision, to ensure that material information relating to the Company, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (b) Evaluated the effectiveness of the Company’s disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures, as of the end of the period covered by this report based on such evaluation; and

- (c) Disclosed in this report any change in the Company's internal control over financial reporting that occurred during the Company's most recent fiscal quarter (the Company's fourth fiscal quarter in the case of an annual report) that has materially affected, or is reasonably likely to materially affect, the Company's internal control over financial reporting; and
5. The Company's other certifying officer and I have disclosed, based on our most recent evaluation of internal control over financial reporting, to the Company's auditors and the audit committee of the Company's board of directors (or persons performing the equivalent functions):
- (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting which are reasonably likely to adversely affect the Company's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal control over financial reporting.

Date: March 30, 2007

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



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

In connection with the annual report of Adherex Technologies Inc. (the "Company") on Form 20-F (the "Report"), each of the undersigned, William P. Peters, Chairman and Chief Executive Officer of the Company, and James A. Klein, Jr., Chief Financial Officer of the Company, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: March 30, 2007

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

Date: March 30, 2007

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

**CONSENT OF INDEPENDENT REGISTERED PUBLIC ACCOUNTING FIRM**

We hereby consent to the incorporation by reference in the Registration Statements on Form S-8 (Nos. 333-126648 and 333-122334) and Form F-3 (No. 333-134732) of Adherex Technologies Inc. of our report dated March 26, 2007 relating to the financial statements which appear in this Annual Report on Form 20-F.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP  
Raleigh, North Carolina  
March 26, 2007