### UNITED STATES SECURITIES AND EXCHANGE COMMISSION

Washington, D.C. 20549

### FORM 20-F/A

### Amendment No. 2 to FORM 20-F

(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

OR

□ TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 FOR THE TRANSITION PERIOD FROM TO

COMMISSION FILE NUMBER:

## ADHEREX TECHNOLOGIES INC.

(Exact name of Registrant as specified in its charter)

Not Applicable

(Translation of Registrant's name into English)

Canada (Jurisdiction of incorporation or organization)

2300 Englert Drive, Suite G

**Research Triangle Park** 

Durham, North Carolina 27713

(Address of principal executive offices)

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

Title of each class

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. Not applicable

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 short period that the registrant was required to file such reports), and (2) has been subject to such filing requirements for the past 90 days.  $\Box$  Yes  $\boxtimes$  No

Indicate by check mark which financial statement item the registrant has elected to follow. Item 17 Item 18 (APPLICABLE ONLY TO ISSUERS INVOLVED IN BANKRUPTCY PROCEEDINGS DURING THE PAST FIVE YEARS)

Indicate by check mark whether the registrant has filed all documents and reports required to be filed by Sections 12, 13 or 15(d) of the Securities

Exchange Act of 1934 subsequent to the distribution of securities under a plan confirmed by a court. 🛛 Yes 🖓 No

### TABLE OF CONTENTS

BASIS OF P	RESENTATION	1
TECHNICAL	L GLOSSARY	1
<u>PART I</u>		4
ITEM 1.	IDENTITY OF DIRECTORS, SENIOR MANAGEMENT AND ADVISERS	4
А.	Directors and senior management	4
В.	Advisers	4
С.	Auditor	4
ITEM 2.	OFFER STATISTICS AND EXPECTED TIMETABLE	4
ITEM 3.	KEY INFORMATION	4
А.	Selected consolidated financial data	4
В.	<u>Capitalization and indebtedness</u>	8
С.	Reasons for the offer and use of proceeds	8
D.	Risk factors	8
ITEM 4.	INFORMATION ON THE COMPANY	21
А.	History and development of the Company	21
В.	Business overview	24
C.	Organizational structure	33
D.	<u>Property, plant and equipment</u>	33
ITEM 5.	OPERATING AND FINANCIAL REVIEW AND PROSPECTS	34
ITEM 6.	DIRECTORS, SENIOR MANAGEMENT AND EMPLOYEES	42
А.	Directors and senior management	42
B.	Scientific and Clinical Advisory Board	46
C.	Compensation	47
D.	Board practices	48
E.	<u>Employees</u>	54
F.	Share ownership	54
ITEM 7.	MAJOR SHAREHOLDERS AND RELATED PARTY TRANSACTIONS	56
A.	Major shareholders	56
B.	Related party transactions	57
C.	Interests of experts and counsel	57
ITEM 8.	FINANCIAL INFORMATION	57
A.	Consolidated statements and other financial information	57
B.	Significant changes	58
ITEM 9.	THE OFFER AND LISTING	58
A.	Offer and listing details	58
B.	Plan of distribution	59
C.	Markets	59
D. E	<u>Selling shareholders</u> Dilution	59
E. F.	Expenses of the issue	59 59
г. ITEM 10.	ADDITIONAL INFORMATION	59
	Share capital	59
А. В.	<u>Memorandum and articles of association</u>	62
Б. С.	Material contracts	66
С. D.	Exchange controls	69
D. Е.	Taxation	70
F.	Dividends and paying agents	75
G.	<u>Statement by experts</u>	75
Ы. Н.	Documents on display	75
I.	Subsidiary information	75

i

ITEM 11.	QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK	76
<u>PART II</u>		77
ITEM 13.	DEFAULTS, DIVIDEND ARREARAGES AND DELINQUENCIES	77
ITEM 14.	MATERIAL MODIFICATIONS TO THE RIGHTS OF SECURITY HOLDERS AND USE OF PROCEEDS	77
ITEM 15.	CONTROLS AND PROCEDURES	77
ITEM 16.	RESERVED	77
PART III		78
ITEM 17.	FINANCIAL STATEMENTS	78
ITEM 18.	FINANCIAL STATEMENTS	78
ITEM 19.	EXHIBITS	78
CONSOLIDAT	TED FINANCIAL STATEMENTS	F-2
	ii	

### **BASIS OF PRESENTATION**

Unless otherwise indicated, all references in this registration statement 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 and in Canadian dollars. When we refer to "dollars," "\$," "Canadian dollars," and "CAD\$" in this document, we are referring to Canadian dollars, the legal currency of Canada. When we refer to "U.S. dollars" and "US\$" in this document, we are referring to United States dollars, the legal currency of the United States.

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<sup>™</sup>; EXHERIN<sup>™</sup>. All other product names referred to in this document are the property of their respective owners.

### TECHNICAL GLOSSARY

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

Angiolytic	Any drug or agent that is capable of disrupting or breaking up established blood vessels.
Anti-angiogenic	Any drug or agent that is capable of inhibiting the growth of new blood vessels.
Cadherins	A family of proteins located at the surface of cells that bind identical molecules on neighboring cells resulting in the process known as cell adhesion.
Cadherin Antagonist	A substance that inhibits the binding or other functions of cadherin molecules.
Cancer	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.
Cell Adhesion	The physiological process whereby cells adhere to one another to form tissues, also called cell-to-cell adhesion.
Chemoenhancers	Agents that enhance the effectiveness and tumor killing properties of chemotherapeutic agents.
Chemoprotectants	Agents that protect against the side effects of chemotherapies.
Chemotherapy	Treatment of cancer with certain chemical agents.
Clinical Trial Application (CTA)	A regulatory application required by Health Canada before a clinical trial in humans can proceed.
Exherin™	A small peptide molecule that selectively targets blood vessels in cancers. This compound is an angiolytic agent.
Food and Drug Administration (FDA)	The U.S. agency responsible for regulation of pharmaceutical, biotechnology and food products.

Good Clinical Practices (GCP)	A standard for the design, conduct, performance, monitoring, auditing, recording, analyses and reporting of clinical trials that provides assurance that the data and reported results are credible and accurate, and that the rights, integrity and confidentiality of trial subjects are protected.
Good Laboratory Practices (GLP)	A set of principles that provide a framework within which laboratory studies are planned, performed, monitored, recorded, reported and archived. GLP help assure regulatory authorities that data submitted are a true reflection of the results obtained during a particular study and can, therefore, be relied upon when making risk/safety assessments.
Good Manufacturing Practices (GMP)	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.
Health Canada's Therapeutic Products Directorate (TPD)	The Government of Canada agency charged with overseeing the development and marketing of drugs in Canada.
Ifosfamide or Cyclophosphamide Induced Hemorrhagic Cystitis	Bleeding and inflammation of the urinary bladder as a consequence of treatment with ifosfamide or cyclophosphamide, two chemotherapeutic agents.
Investigational New Drug Submission (IND)	Documentation filed with U.S. government agencies responsible for evaluating and licensing pharmaceutical drugs. This documentation is necessary for the initiation of clinical trials.
Mesna	2-mercaptoethanesulfonic acid sodium salt administered with ifosfamide and cyclophosphamide. Mesna, a chemoenhancer, is a compound that has displayed anti-cancer activity by reducing the resistance of cancer cells to certain chemotherapeutic agents.
NAC	N-Acteylcysteine, an agent currently used to break up, destroy or dissolve mucin or mucus and to treat acetaminophen poisoning. NAC is being developed by Adherex as a chemoprotectant.
New Drug Application (NDA)	A submission made to the FDA for marketing authorization.
New Drug Submission (NDS)	A submission made to the TPD for marketing authorization.
Oncology	The study and treatment of cancer and tumors.
Orphan Drug Designation	A category created by the FDA for medications used to treat diseases that occur rarely (less than 200,000 cases annually) 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.
Ototoxicity	Toxicity to the auditory systems that results in hearing loss or other vestibular damage.

Toxicity to the auditory systems that results in hearing loss or other vestibular damage.

Patent Cooperation Treaty (PCT)	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.
Pharmacodynamics	The effect a drug has on its target.
Pharmacokinetics	The way a drug is distributed, metabolized and excreted from the body after dosing.
Phase I Clinical Trials	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.
Phase Ib/II Clinical Trials	Clinical trials which 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.
Phase II Clinical Trials	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 14 and 50 patients) in a specific setting of targeted disease or medical condition.
Phase III Clinical Trials	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.
Platinum-based	Containing platinum, which is important for the pharmacological action of the drug.
Redox Clamping	Maintaining oxygen levels (reduction-oxidation potential) within a certain range.
Redox State	The state of oxygen levels of cells (the oxygen reduction potential).
STS	Sodium thiosulfate, an antidote agent currently used in cyanide poisoning in conjunction with sodium nitrite. STS is being developed by Adherex as a chemoprotectant.
Thrombocytopenia	A reduction of the important blood cells called platelets that can be caused by various anti-cancer therapies. Platelets are important in maintaining normal blood clotting potential.
Toxicology	The scientific determination of the relationship between the quantity of a substance and adverse side effects.
Tumor	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

The following table sets forth the names, position and business address of each of the directors and senior management of the Company. Each director and officer may be reached by contacting our offices at 2300 Englert Drive, Suite G, Research Triangle Park ("RTP"), Durham, North Carolina 27713.

Position

### Name

William P. Peters, MD, PhD, MBA	Chief Executive Officer and Chairman of the Board of Directors
Raymond Hession	Lead Independent Director of the Board of Directors
Peter Karmanos, Jr.	Director
Donald W. Kufe, MD	Director
Fred H. Mermelstein, PhD	Director
Peter Morand, PhD	Director
Robin J. Norris, MD	President, Chief Operating Officer and Director
Arthur T. Porter, MD, MBA	Director
Brian E. Huber, PhD	Chief Scientific Officer
James A. Klein, Jr., CPA	Chief Financial Officer
Rajesh K. Malik, MD	Chief Medical Officer
D. Scott Murray, BScPharm, LLB, MBA	Vice President, General Counsel and Corporate Secretary

#### **B.** Advisers

Our legal counsel in the United States is Palmer & Dodge LLP, 111 Huntington Avenue, Boston, Massachusetts, 02199-7613. Our legal counsel in Canada is LaBarge Weinstein LLP, 515 Legget Drive, Suite 800, Kanata, Ontario, Canada, K2K 3G4. Our principal banker is the Royal Bank of Canada, 90 Sparks Street, Ottawa, Ontario, Canada, K1P 5T6.

### C. Auditor

Our auditor is PricewaterhouseCoopers LLP, Chartered Accountants, 700 – 99 Bank Street, Ottawa, Ontario, K1P 1K6. PricewaterhouseCoopers LLP has been our independent auditor for the preceding three years.

### **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 fiscal years ended June 30, 2004, 2003, 2002, 2001 and 2000. We derived the data from our annual 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 Form 20-F.

Our consolidated financial statements included in this registration statement under Item 18, "Financial Statements" have been prepared in accordance with generally accepted accounting principles ("GAAP") in Canada. A reconciliation to U.S. GAAP is included in Note 20 to our audited consolidated financial statements. All amounts are expressed in Canadian dollars.

### Selected Canadian GAAP Consolidated Statements of Operations Canadian dollars (In thousands, except per share data)

	Years Ended June 30,				
	2004	2003	2002	2001	2000
Revenue	\$ —	\$ —	\$ —	\$ —	\$ —
Research and development	4,783	4,145	4,332	2,487	1,452
General and administration	4,658	3,014	1,796	1,522	924
Amortization of acquired intellectual property rights	3,120	1,910		—	—
Total operating expenses	(12,561)	(9,069)	(6,128)	(4,009)	(2,376)
Other income			154		_
Interest income	217	107	333	294	12
Interest expense	(444)	(16)		—	—
Loss before income taxes	(12,788)	(8,978)	(5,641)	(3,715)	(2,364)
Recovery of future income taxes	1,140	698	—		_
Net loss	\$ (11,648)	\$ (8,280)	\$ (5,641)	\$ (3,715)	\$ (2,364)
Net loss per share of common stock, basic and diluted	\$ (0.10)	\$ (0.13)	\$ (0.14)	\$ (0.15)	\$ (0.11)
					. ,
Weighted average number of shares of common stock outstanding, basic and diluted	121,164	64,601	40,164	25,458	22,392

### Selected U.S. GAAP Consolidated Statements of Operations Canadian dollars

(In thousands, except per share data)

		Years Ended June 30,		
	2004	2003	2002	2001
Revenue	\$ —	\$ —	\$ —	\$ —
Research and development	4,958	4,518	4,562	2,896
In-process research and development	_	19,772		
General and administration	4,665	3,054	2,009	1,616
Total operating expenses	(9,623)	(27,344)	(6,571)	(4,512)
Other income	—		154	
Interest income	217	107	333	294
Interest expense		(7)		
Loss before income taxes	(9,406)	(27,244)	(6,084)	(4,218)
Recovery of current income taxes	175	373	230	409
Net loss in accordance with U.S. GAAP	\$ (9,231)	\$(26,871)	\$ (5,854)	\$ (3,809)
Net loss per share of common stock, basic and diluted	\$ (0.08)	\$ (0.42)	\$ (0.15)	\$ (0.15)
Weighted average number of shares of common stock outstanding, basic and diluted	121,164	64,601	40,164	25,458

### Selected Canadian GAAP Consolidated Balance Sheet Data Canadian dollars (In thousands, except per share data)

			June 30,		
	2004	2003	2002	2001	2000
Cash, cash equivalents and short-term investments	\$ 27,748	\$ 3,198	\$ 8,755	\$14,153	\$ 165
Working capital	26,930	3,024	8,325	14,242	(65)
Acquired intellectual property rights	26,132	29,252	—		
Total assets	55,639	34,563	10,338	15,824	952
Future income taxes	9,552	10,692	—		
Liability component of convertible notes		1,591	—		_
Common stock	48,343	25,550	23,028	23,028	4,520
Contributed surplus	29,639	17,410	_		_
Accumulated deficit	(33,985)	(22,337)	(13,807)	(8,166)	(4,451)
Shareholders' equity	\$ 43,997	\$ 20,623	\$ 9,221	\$14,862	\$ 69
Number of shares of common stock outstanding	179,457	80,346	40,164	40,164	23,774

### Selected U.S. GAAP Consolidated Balance Sheet Data Canadian dollars (In thousands, except per share data)

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

		June 30,			
	2004	2003	2002	2001	
Cash, cash equivalents and short-term investments	\$ 27,748	\$ 3,198	\$ 8,755	\$14,153	
Working capital	26,930	3,024	8,325	14,242	
Total assets	29,507	5,311	10,338	15,824	
Convertible notes	_	2,707	_	_	
Common stock	48,402	25,609	23,087	23,087	
Contributed surplus	29,540	16,632	307	94	
Accumulated deficit	(50,525)	(41,294)	(14,173)	(8,319)	
Shareholders' equity	\$ 27,417	\$ 947	\$ 9,221	\$14,682	
Number of shares of common stock outstanding	179,457	80,346	40,164	40,164	

### **Exchange Rates**

We publish our consolidated financial statements in Canadian dollars. For convenience, this registration statement contains translations of certain Canadian dollar amounts into U.S. dollars. Unless specified otherwise, U.S. dollar amounts have been translated from Canadian dollars at the stated noon buying rate in New York City for cable transfers in Canadian dollars. The "noon buying rate" is the stated noon buying rate in New York City for cable transfers in foreign currencies as certified for customs purposes by the Federal Reserve Bank of New York. This does not mean that we have actually converted these amounts into U.S. dollars, nor that those Canadian dollar or U.S. dollar amounts could have been, or could be, converted into U.S. dollars or Canadian dollars, as the case may be, at any particular rate, the stated rate, or at all. On November 1, 2004, the noon buying rate of the Federal Reserve Bank of New York was CAD\$1.00 = US\$0.8177.

The following table sets forth, for the periods indicated, information concerning these exchange rates. The table illustrates how many U.S. dollars it would take to buy one Canadian dollar at the respective rates.

### Annual Exchange Rates

Years Ended June 30	Period- end rate	Average rate (1)	High	Low
		(US\$ per \$1.0	)0)	
2000	0.6758	0.6790	0.6969	0.6607
2001	0.6532	0.6577	0.6831	0.6333
2002	0.6583	0.6379	0.6622	0.6200
2003	0.7376	0.6655	0.7492	0.6264
2004	0.7459	0.7365	0.7459	0.7261

(1) 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.

### Monthly Exchange Rates

	High	Low
	(US\$ pd	er \$1.00)
March 2004	\$ 0.7645	\$ 0.7418
April 2004	0.7637	0.7293
May 2004	0.7364	0.7158
June 2004	0.7459	0.7261
July 2004	0.7545	0.7505
August 2004	0.7595	0.7591
September 2004	0.7906	0.7651
October 2004	0.8201	0.7858

### **B.** Capitalization and indebtedness

### Canadian dollars (Amounts in thousands, except per share data)

The following table shows our capitalization and indebtedness as of June 30, 2004 on an actual basis:

You should read this table in conjunction with the audited consolidated financial statements and accompanying notes, included in this registration statement. There has been no significant change in our capitalization and indebtedness since June 30, 2004.

### **Canadian GAAP**

	June 30, 2004
Shareholders' equity	
Common stock (1)(2)(3)	\$ 48,343
Unlimited number authorized; 179,457 issued and outstanding	
Contributed surplus	29,639
Deficit accumulated during development stage	(33,985)
Total	\$ 43,997

(1) The amounts as of June 30, 2004 do not include 62,850 shares of common stock reserved for issuance upon exercise of warrants issued to investors and brokers with a weighted average exercise price of \$0.491 and an exercise price range of \$0.410 to \$0.717.

(2) The amounts as of June 30, 2004 do not include 18,179 shares of common stock reserved for issuance upon exercise of stock options with a weighted average exercise price of \$0.48 and an exercise price range of \$0.3275 to \$1.50 as of October 31, 2004.

(3) Under the guidelines of the Toronto Stock Exchange, no person may hold options representing more than 5% of a company's equity on an issued and outstanding basis. From time to time, as such guidelines permit, the Company intends to grant to Dr. Peters, our Chief Executive Officer and Chairman of the Board of Directors, options to purchase 2,368 shares provided for in his employment agreement and options to purchase 1,175 shares of common stock approved for future grant by the Board of Directors on May 21, 2004. Such prospective grants are not included in the table.

### 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 other information in this registration statement, you should carefully consider the following factors when evaluating the Company and our business.

#### **Risks Related to Our Business**

### We have a history of significant losses and have no revenues to date. 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 no revenues to date, 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 we establish collaborations that provide us with funding, such as licensing fees, milestone payments, royalties, upfront payments or otherwise. We have incurred significant operating losses every year since our inception on September 3, 1996. We experienced net losses of approximately \$11.6 million for the fiscal year ended June 30, 2004, approximately \$8.3 million for the fiscal year ended June 30, 2003, and approximately \$5.6 million for the fiscal year ended June 30, 2004, we had an accumulated deficit of approximately \$34.0 million. We anticipate incurring substantial additional losses over the next several years due to the need to expend substantial amounts on our continuing clinical trials and anticipated research and development activities and general and administrative expenses in support of the Company, 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. 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 may never successfully develop and commercialize 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 products and therapeutic procedures based on innovative technologies. For example, it is possible that any or all of these product candidates will be ineffective or toxic, or otherwise will fail to receive necessary regulatory clearances. There is a risk that our product candidates will be uneconomical to manufacture or market or will not achieve market acceptance. There is also a risk that third parties may hold proprietary rights that preclude us from marketing our product candidates or that others will market a superior or equivalent product.

## 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 testing on human patients, and we have only done so with some of our product candidates. Most 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.

# We will need additional capital to fund our operations, which may not be available at all or on acceptable terms. If we do not have or cannot raise additional funding when needed, we will not be able to develop and commercialize our product candidates successfully and we may not be able to continue operations.

We will need substantial additional funding to develop and potentially commercialize our product candidates. Since inception (September 3, 1996) and through June 30, 2004, we have utilized approximately \$30.0 million in cash, cash equivalents and short-term investments to fund our activities. We have not generated any revenues to date, and we expect to incur substantial expenses in connection with preclinical studies, clinical trials, regulatory review, manufacturing and potentially sales and marketing. Under our current operating plan and forecast, we believe that our existing cash, cash equivalents and capital are sufficient to fund our anticipated operations for at least the next 18 months. However, any one of the following factors, among others, could cause us to require additional funds sooner or otherwise cause our cash requirements in the future to materially increase:

- results of research and development activities;
- progress or lack of progress of our preclinical studies or clinical trials;
- our drug substance requirements to support clinical programs;
- our ability to establish corporate collaborations and licensing arrangements;
- changes in the focus, direction, or costs of our research and development programs;
- the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims;
- competitive and technological advances;
- the potential need to develop, acquire or license new technologies and products;
- establishment of marketing and sales capabilities;
- our business development activities;
- new regulatory requirements implemented by regulatory authorities;
- the timing and outcome of the regulatory review process; or
- commercialization activities, if any.

Accordingly, we cannot guarantee that our current cash, cash equivalents and capital will be sufficient to fund operations for the period described above. In any event, after that period, we will require substantial additional funds to develop our product candidates and to otherwise meet our business objectives. Additional financing may not be available on acceptable terms when needed, if at all. If adequate funds are not available on acceptable terms when needed, we would be required to delay, scale back or eliminate one or more of our product development programs or to seek to obtain funds through arrangements with collaborative partners (or others), which arrangements may include a requirement that we relinquish rights to certain of our technologies or products or related rights that we would not otherwise relinquish. Any failure to obtain funding when and in the amounts needed would have a material adverse effect on our financial position and results of operations.

We anticipate that our near-term operations will include, among other things:

- continuing our Phase I Exherin trial in Canada at the Ottawa Cancer Center that we commenced in December 2002; recruitment of patients for the Phase I clinical trial site at the University of Texas M.D. Anderson Cancer Center in Houston, Texas that we initiated in October 2004; and initiating up to three Phase Ib/II clinical trials (see definition in Technical Glossary) in late 2004 or early 2005 in both North America and Europe, in which we intend to assess the effects of three different dosing schedules of Exherin on tumor reduction, toxicity, pharmacodynamics (the effect a drug has on its target) and pharmocokinetics (the way a drug is distributed, metabolized and excreted from the body after dosing) in the context of a limited intrapatient dose escalation in up to an aggregate of approximately 100-120 patients whose tumors are N-cadherin positive;
  - 10

- initiating a prospective, randomized Phase III clinical trial on STS evaluating its effectiveness in the prevention of platinum-induced ototoxicity (hearing loss associated with platinum-based chemotherapy) in pediatric patients in late 2004 or 2005;
- continuing to evaluate the commercial potential of NAC, with decisions anticipated in 2005 depending upon the results of planned revised investigator-initiated studies at OHSU;
- continuing to evaluate the commercial potential of Mesna;
- continuing to develop our preclinical pipeline of peptides and small chemical molecules;
- adding approximately five employees by December 2004 and approximately ten more employees in 2005; and
- purchasing laboratory and office equipment as we continue to build our corporate presence in the United States to support the advancement of our clinical development activities.

The clinical development of Exherin will require the completion of our Phase I clinical trial and the Phase Ib/II clinical trials that we expect to initiate in late 2004 or early 2005 in both North America and Europe, in which we intend to assess the effect of three different dosing schedules of Exherin on tumor reduction, toxicity, pharmacodynamics and pharmocokinetics in the context of a limited intra-patient dose escalation in up to an aggregate of approximately 100-120 patients whose tumors are N-cadherin positive. We anticipate that these studies will provide the safety information and estimates of the expected range of therapeutic effectiveness that are a pre-requisite to the design and conduct of prospective, randomized pivotal Phase III trials, which are required for submission of a New Drug Application ("NDA") to the FDA in the United States or a New Drug Submission ("NDS") in Canada. While we expect that our current cash reserves are adequate for the conduct of our Phase I trial and our planned Phase Ib/II trials, the costs of these trials may greatly exceed our expectations. Also, substantial additional funding will be required to conduct pivotal Phase III trials, which we would likely seek from a partnership with a large pharmaceutical or biotechnology company. Further, if the results from the Phase Ib/II trials or preclinical studies underway indicate the need to modify the development program, such as by testing in combination with chemotherapy or radiation therapy, or require modification of the development approach for reasons of efficacy or toxicity, we will incur additional costs and we may need to conduct additional Phase I or Phase Ib/II clinical trials. In general, the conduct of prospective, randomized Phase III trials require hundreds of patients to be enrolled at multiple centers. The costs of such trials are dependent upon many factors which cannot be accurately estimated at this time, including the number of patients, number of centers, duration of treatment, dose of the drug, requirements for testing and followup, requirements for screening to identify appropriate and eligible patients, requisite additional medical therapies or support, and other factors. Also, the costs of Phase III clinical trials will be impacted by the effectiveness of the drug in patients with different cancer types and the choice of cancer type for Phase III investigation. According to industry sources, it takes an average of 12 to 15 years to develop and obtain regulatory approval for a new drug and costs an average of approximately US\$800 million, depending on the source and methodology used, to do so. At this time, we cannot estimate whether the costs for developing Exherin will be lower, the same, or greater than this. The Company will require additional funding to conduct these studies and will seek to obtain these funds via issuance of equity, through debt instruments, or through partnership with other public or private entities, or a combination of these.

An industry source estimated that it takes an average of approximately US\$8 million to develop a drug with orphan drug designation. We anticipate that the costs for Adherex in developing STS may be less than this if we are able to obtain support from the U.S. federally funded cooperative group mechanism, including significant funding of clinical care costs and data management costs. If we receive anticipated levels of federal funding, we estimate that the Phase III trial for STS in the pediatric population suffering from platinum-based chemotherapy induced hearing loss will require approximately US\$3 million of Adherex funding, primarily for costs associated with drug production and distribution, quality control, laboratory testing, data management, analysis and reporting. We may not receive the federal funding and support that we anticipate, and the cost of developing STS may greatly exceed our expectations and averages.

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

We currently have scientific and research collaboration arrangements with academic institutions, including McGill University ("McGill"), Rutgers, The State University of New Jersey ("Rutgers") and Oregon Health & Science University ("OHSU") as follows:

- We have a 27-year, exclusive worldwide license from McGill to develop, use and market certain cell adhesion technology and compounds, including Exherin. We are obligated to fund certain mutually agreed upon research at McGill over a period of ten years totaling \$3.3 million and to make payments of up to \$0.3 million to McGill if we fail to meet certain milestones. We must also pay royalties of up to 2% of any gross revenue from the sale of licensed compounds.
- Through our acquisition of Oxiquant, we acquired an exclusive worldwide license with Rutgers to develop, use and market cancer products using the
  licensed patent rights relating to Mesna. We are required to pay Rutgers up to US\$675,000 upon the achievement of certain clinical development and
  regulatory milestones; an annual license fee of US\$15,000 in 2004, increasing by US\$5,000 in each of 2005 and 2006 and to US\$50,000 thereafter;
  running royalties of 4% of any net sales of any licensed products; and a 20% non-running royalty on any sublicense of the licensed technology.
- Though our acquisition of Oxiquant, we acquired an exclusive worldwide license with OHSU to develop, use and market cancer products using the
  licensed intellectual property relating to thiol-based compounds. Under the license agreement with OHSU, we are required to pay OHSU up to US\$1.0
  million upon the achievement of certain clinical development and sales milestones; a 2.5% royalty on net sales of any licensed products; and a 15%
  royalty on any sublicense of the licensed technology.

The agreements with McGill, Rutgers 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 agreements with Rutgers and OHSU at any time upon prior written notice of specified durations to the licensor. To date, we and our collaborators have performed our respective obligations under the terms of the agreements. However, our collaborators may not perform as agreed in the future or may terminate our agreement if we fail to carry out our obligations.

The success of our business strategy will be dependent on our ability to enter into 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 establishing any further collaborations, and any collaborations we do 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. Any future collaborators may 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 may 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 also affect our ability to partner with or obtain 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.

In addition to our collaborations, we also have entered into a standard form screening agreement with the U.S. National Cancer Institute ("NCI"), under which the NCI screens and tests compounds supplied by us from our preclinical pipeline for anti-cancer qualities useful to cancer chemotherapy at no cost to us. NCI has no obligations to continue to perform this screening work for us and may terminate this agreement at any time, as

may we. In the event that we or the NCI terminate the screening agreement, we may fund the screening of some or all of the compounds currently being tested by the NCI or seek a corporate partner to conduct the screening work for us, which would result in increased costs for us.

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

Our future growth, including the ongoing relocation of our development activities to RTP, will strain our management, human, operational, financial and other resources. Currently, we have 22 full-time employees. We intend to add approximately five employees by December 2004, and we expect 75% of them to be involved in research and development activities and 25% to be engaged in administration. There is intense competition for qualified personnel in our industry, and our success will depend on our ability to identify, attract and retain qualified individuals. 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. These demands may require the addition of new management personnel. To the extent that we are unable to manage our growth effectively or are unable to attract and retain additional qualified individuals, we may not be able to successfully accomplish our business objectives.

### If we lose our key personnel or are unable to attract and retain additional 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 William P. Peters, MD, PhD, MBA, our Chief Executive Officer and Chairman of the Board of Directors, the loss of whose services might significantly delay or prevent the achievement of our scientific or business objectives. We have entered into an employment agreement with Dr. Peters that has an initial term that ends on March 12, 2008. If we terminate Dr. Peters without "cause," or if Dr. Peters terminates his employment for Good Reason or a Change of Control (as such terms are defined in the agreement), we are obligated to pay Dr. Peters severance compensation equal to 24 months salary and certain other benefits. Although we have entered into employment agreements with each of our key personnel, we cannot be certain that any individual will continue in such capacity for any particular period of time. The loss of 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 McGill, Rutgers or 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 are 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. We have filed numerous applications for patents in the United States and other jurisdictions. Although we have successfully pursued patent applications in the past, it is possible that:

- some or all of our pending patent applications, or those we have licensed, may not be allowed;
- proprietary products or processes that we develop in the future may not be patentable;

- any issued patents (that we own or license) may not provide us with any competitive advantages or may be successfully challenged by third parties; or
- the patents of others may have an adverse effect on our ability to do business.

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

In order to obtain further patent protection, we may file additional patent applications relating to novel processes for manufacturing, delivery, use, new formulations or other aspects of our product candidates. While we intend to file, when appropriate, patent applications with respect to inventions, patents may not ultimately be issued or, if issued, they may be of little or no commercial value. In addition, it is impossible to anticipate the breadth or degree of protection that patents will afford products developed by us or the underlying technology. We also cannot guarantee that any patents issued covering such products or any patents licensed to us will not be successfully challenged or that our product candidates will not infringe the patents of third parties.

Patent applications relating to or affecting our business have been filed by a number of pharmaceutical and biopharmaceutical companies and academic institutions. The scope and validity of patents that may be obtained by third parties are unknown. A number of these patent applications, or the related technologies, may conflict with our technologies or patent applications, which could reduce the scope of patent protection that could otherwise be obtained or even lead to refusal of our patent applications.

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 may 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. Alternatively, we could find that the development, 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 may 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.

In February 2004, we filed a claim in the Ontario Superior Court of Justice against Cadherin Biomedical Inc. ("CBI") in the amount of \$124,000 on account of unpaid goods and services rendered. In July 2004, CBI filed a statement of defence and counterclaim in response to such claim. CBI's counterclaim seeks \$5.0 million in damages in relation to the license agreement between the parties. We believe that the counterclaim is without merit. Later in July 2004, we entered into a non-binding letter of intent to acquire all of the issued and outstanding shares of CBI through an amalgamation of CBI with a wholly-owned subsidiary of Adherex to be incorporated under the CBCA for this purpose. Completion of the transaction is subject to CBI shareholder approval, agreement by the parties on definitive amalgamation documentation and other customary closing conditions. We expect the amalgamation to close in November or December 2004 after CBI's shareholders vote on the acquisition, but there can be no assurance that it will close on schedule or at all. If the transaction is

completed, it will provide Adherex with the rights to the non-cancer applications relating to the cadherin technology and serve as a settlement of the claim commenced by us against CBI in February 2004 and the counterclaim filed by CBI against us in July 2004. Pending completion of the transaction, the parties have agreed to hold in abeyance all matters in relation to the claim and counterclaim between the parties. If the transaction is not completed as anticipated, we intend to pursue our claim against CBI and take all appropriate action to defend CBI's counterclaim. The lawsuit with CBI relates to its September 2002 license agreement with us, pursuant to which we licensed non-cancer applications based on or derived from our platform cadherin technology owned or licensed under our collaboration with McGill. See Item 4.B., "Information on the Company—Business overview—Corporate Relationships." If the amalgamation transaction is not completed as anticipated, we could potentially face future product development concerns, depending upon any future development activities by CBI, if both we and CBI were to develop the same or closely-related compounds for different indications. For example, CBI could potentially encounter tolerability or toxicology issues, or utilize different manufacturing standards, while developing a compound that could potentially impact our development of the same or a similar compound for a different indication. Other than the litigation with CBI, to date, we have not been the subject of any threatened litigation, court challenge, legal action or negotiation related to such actions with respect to patent issues. See Item 4.A., "Information on the Company—History and development of the Company."

Much of our technological know-how that is not patentable may constitute trade secrets. Therefore, we require our employees, consultants, advisors and collaborators to enter into confidentiality agreements. However, such agreements may 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. To date, we have not experienced significant problems safeguarding our confidential and proprietary 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, NAC and Mesna, 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 uses 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 may obtain approval, even if the other company's drug is not approved for such an indication. Off-label use and sales could 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 three contract manufacturers for Exherin, including two drug substance providers and one drug product supplier for our clinical trials. We currently have an agreement with a third party to manufacture STS for our clinical trials. To date, our contract manufacturers have performed their obligations under the terms of our agreements with them, but they may not perform as

agreed in the future or may terminate our agreement with them before the end of the required term. While we anticipate being able to replace our current thirdparty manufacturers, significant additional time and costs would be required to effect a transition to a new manufacturer.

We will 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 even 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 manufactures may also fail to meet required manufacturing standards, which could result in delays or failures in product delivery, increased costs, injury or death to patients, product recalls or withdrawals and other problems that could significantly hurt our business. We intend to maintain a second source for back-up commercial manufacturing, wherever feasible. However, if a replacement to our future internal or contract manufacturers were required, the ability to establish second-sourcing or find a replacement manufacturer may be difficult due to the lead times generally required to manufacture drugs and the need for FDA compliance inspections and approvals of any replacement manufacturer, all of which factors could result in production delays and additional commercialization costs. Such lead times would vary based on the situation, but might be 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.

To date, 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, 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 will likely face foreign currency exchange risks which may expose us to increased costs and decreased revenue.

Historically, our functional currency has been the Canadian dollar. However, we have moved our executive officers and are in the process of moving our development activities to the United States. We may face exposure to adverse movements in foreign currency exchange rates when our product candidates are commercialized, if at all. We expect that any products we may develop would generate international revenues and expenses, denominated in U.S., Canadian and other currencies. In such an event, we will likely face differing tax structures, foreign regulations and restrictions, and general foreign exchange rate volatility. To date, we have not instituted a hedging program against the risks associated with foreign exchange exposure. We may implement hedging techniques in the future, which may not be successful. To date, we have experienced no significant negative consequences resulting from fluctuations in foreign currency exchange rates.

#### **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. In the United States, our product candidates are regulated by federal, state and local governmental authorities, including the FDA. In Canada, our product candidates are regulated by federal, provincial and local governmental authorities, including the Health Products and Food Branch of Health Canada. 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. According to industry sources, it takes an average of 12 to 15 years to develop and obtain regulatory approval for a new drug and costs an average of approximately US\$800 million, depending on the source and methodology used, to do so. An industry source estimated that it takes an average of approximately US\$8 million to develop a drug with Orphan Drug Designation. 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. According to one industry source, one-thousandth of drug candidates entering preclinical studies reach human testing, and one-fifth of candidates tested on humans are approved. 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 regul

We are currently conducting Phase I clinical trials on Exherin in Canada at the Ottawa Cancer Center, and in October 2004 we commenced another Phase I clinical trial site at the University of Texas M.D. Anderson Cancer Center in Houston, Texas. We intend to initiate up to three Phase Ib/II clinical trials on Exherin in late 2004 or early 2005 in both North America and Europe, in which we intend to assess the effects of three different dosing schedules of Exherin on tumor reduction, toxicity, pharmacodynamics and pharmocokinetics in the context of a limited intra-patient dose escalation in up to an aggregate of approximately 100-120 patients whose tumors are N-cadherin positive. Investigators at OHSU have conducted Phase I and Phase II clinical studies with STS that have shown that STS substantially reduces the hearing loss associated with platinum-based chemotherapy. We intend to continue the development of STS and plan to conduct a Phase III trial to assess the prevention of platinum-induced ototoxicity (hearing loss associated with platinum-based chemotherapy) in pediatric patients, for which we have received Orphan Drug Designation in the United States from the FDA. We have licensed certain intellectual property rights from OHSU that support the use of NAC for various indications, including preventative therapy against the loss of important blood cells, called platelets, caused by certain chemotherapy drugs. OHSU is planning to initiate a revised Phase I clinical trial in the United States on the use of NAC as a bone marrow protectant in the context of platinum-based chemotherapy under an investigator IND. Upon the completion of this planned study, we will re-evaluate the market potential of NAC. We have licensed worldwide intellectual property rights from Rutgers for certain methods of using Mesna as a chemoenhancer by preventing changes in the oxygen reduction potential, or redox state, of cancer cells, and investigators in Argentina, independently from the Company, have completed a Phase I trial for this

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

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

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

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

The biotechnology and pharmaceutical industry, and in particular the field of cancer therapeutics, 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, OXiGENE, Inc., Aventis, Bristol-Myers Squibb Company, Pfizer, Inc., AstraZeneca PLC, Amgen, Inc., Genentech, Inc., NeoPharm, Inc., Bayer AG, EntreMed Inc., Johnson & Johnson, Peregrine Pharmaceuticals, Inc. and Novartis AG.

We are aware of at least three companies, AstraZeneca, Aventis and OXiGENE, that are clinically developing cancer angiolytics, which we view as our primary competitors. Their product candidates are tubulin depolymerizing agents. When administered they destroy the scaffold-like structure that supports the lining cells (endothelial cells) of blood vessels, causing the endothelial cells to round, 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 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 way than Exherin and, to our knowledge, we are the only company approaching tumor angiolysis from the perspective of peptide inhibitor-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 in early stages of clinical development. To our knowledge, no angiolytic products have completed Phase II and entered Phase III development to date. 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 available in the public domain. However, our competitors may achieve regulatory approval for their drug candidates sooner than we do, and their drugs may be more competitive than ours.

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

We are not aware of any commercially available agents that prevent or treat the 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, Inc., 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 protection of hearing in connection with platinum-based chemotherapy. Cochlear implants, which are small electronic devices 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.

We are developing NAC for the prevention of platelet loss during chemotherapy. There are drugs approved or in clinical development for the prevention or treatment of thrombocytopenia (low platelet count caused by various anti-cancer therapies), including Wyeth's Neumega<sup>®</sup> and Amgen Inc.'s AMG 531. Also, platelet transfusions are a common practice, and other companies may attempt to develop platelet protectants in the future to decrease the need for platelet transfusions.

Many chemotherapeutic agents are currently available and numerous others are being developed. Any chemotherapeutic products that we are able to develop with Mesna may not be able to compete effectively with existing or future chemotherapeutic agents. Cancer therapy often involves combination of therapeutic agents including chemotherapy, radiation therapy, antibodies or other immunotherapy, and biologics. It is too early to determine whether any of these agents may, in combination, enhance or inhibit the effectiveness of any drugs that we develop. The use of these agents in combination may alter the therapeutic, pharmacologic or toxicity profile and significantly alter the ultimate commercial value of our drug candidates.

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. To date, we have not entered into any such commercialization collaborations. 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.

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

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 US\$3.0 million, but the coverage may not be sufficient to protect us from liabilities we might incur. 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, which carries a policy limit of US\$2.0 million. In addition, we have a US\$4.0 million umbrella policy. 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. To date, we have not been the subject of any environmental investigation by governmental authorities.

### 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 effect market acceptance and commercialization for the products.

In certain 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.

#### **Risks Related to Our Common Stock**

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

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 shares of our common stock. A number of mitigating elections may be available to U.S. holders. Absent one of these elections, 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 longterm capital gains rates. See Item 10.E., "Taxation—Passive Foreign Investment Company Rules."

### The market price of our common stock is highly volatile and could cause the value of your investment to significantly decline.

Historically, the market price of our common stock has been highly volatile and the market for our common stock has from time to time experienced significant price and volume fluctuations, some of which are unrelated to our operating performance. From July 1, 2002 to October 31, 2004, the trading price of our stock has

fluctuated from a high closing price of \$0.79 per share to a low closing price of \$0.30 per share, as reported by the Toronto Stock Exchange. Historically, our common stock has 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 stock. It is likely that the market price of our common stock will continue to fluctuate significantly in the future.

### NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Registration Statement on Form 20-F contains forward-looking statements that involve substantial risks and uncertainties. Words such as "may," "except," "believe," "anticipate," "intend," "could," "estimate," "continue," "project," "plan," or other similar words are intended to identify forward-looking statements. Forward-looking statements in this Registration Statement include, but are not limited to, statements with respect to (i) our anticipated commencement dates, completion dates and results of clinical trials; (ii) goals and anticipated progress in and costs of our clinical trials and research and development and preclinical programs; (iii) our strategies and goals; (iv) our expected results of operations; (v) our anticipated levels of expenditures; (vi) our ability to protect our intellectual property; (vii) our efforts to obtain Orphan Drug, Fast Track and Priority Review Designations for certain product candidates; (viii) the anticipated applications of our drug candidates; (ix) our efforts to pursue collaborations with other companies; (x) the nature and scope of potential markets; (xi) our liquidity; our anticipated sources and uses of liquidity; (xii) our relationship with, litigation with and anticipated amalgamation of CBI; and (xiii) our investors. However, all forward-looking statements are based on management's present expectations of future events and are subject to a number of factors and uncertainties that could cause actual results to differ materially from those described in the forward-looking statements. Although we believe the expectations reflected in the forward-looking statements are based upon reasonable assumptions, we can give no assumance that our expectations will be attained, and we caution you not to place undue reliance on such statements. All forward-looking statements speak only as of the date of this registration statement and we undertake no duty to update or alter any such statements, whether as a result of new information, future events or otherwise.

### 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 *Canada Business Corporations Act* ("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. We have two wholly-owned subsidiaries, Oxiquant, Inc. and Adherex, Inc., both incorporated under the laws of Delaware. Our registered office address is: Adherex Technologies Inc., c/o LaBarge Weinstein LLP, 515 Legget Drive, Suite 800, Kanata, Ontario K2K 3G4; Telephone: (613) 599-9600; Facsimile: (613) 599-0018. Our U.S. offices are at 2300 Englert Drive, Suite G, Research Triangle Park, Durham, North Carolina 27713; Telephone: (919) 484-8484; Facsimile: (919) 484-8001.

Important corporate events in the development of our business include the following (all amounts are in Canadian dollars):

On June 5, 2001, we completed an initial public offering, issuing 6,667,000 shares of common stock at a price of \$1.50 per share, and listing on the Toronto Stock Exchange under the symbol AHX. Net proceeds of the offering credited to common stock amounted to \$8,720,000.

On September 27, 2002, CBI was incorporated as a wholly-owned subsidiary of Adherex. We 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 our platform cadherin technology owned or licensed under our collaboration agreement with McGill and paid to CBI \$250,000 in cash, in exchange for 40,163,985 Class A Preferred Shares of CBI, which constituted all of the equity of CBI. We distributed the Class A Preferred Shares of CBI pro rata to our shareholders of record at the time, after which our shareholders held all of the issued and outstanding Class A Preferred Shares of CBI. The divestiture of our non-cancer assets was a condition precedent to our acquisition in November 2002 of Oxiquant, a U.S.-based development-stage biopharmaceutical company with a focus in chemoprotection and chemoenhancement. CBI was not granted any rights to, and was contractually prohibited from, developing any applications relating to the treatment of cancer. The term of the license agreement coincides with the life of our patents that are the subject of the license. The license agreement is terminable by either us or CBI in the event of an uncured material breach or default of the agreement by either party after 30 days prior written notice. We have the right to terminate the agreement in the event that CBI files for bankruptcy or becomes insolvent and upon 30 days prior written notice to CBI if any act or omission by CBI causes us to be in material uncured breach of our license agreement with McGill.

In December 2003, we signed a memorandum of agreement with CBI to purchase the license agreement and reacquire the non-cancer related cadherin-based intellectual property for Adherex common shares then having a market value of \$1 million and the payment to CBI of certain royalties. The completion of the transactions contemplated by the memorandum of agreement was conditional upon CBI obtaining the approval of its shareholders, but such shareholder approval was neither sought nor obtained by CBI.

In February 2004, we filed a claim in the Ontario Superior Court of Justice against CBI in the amount of \$124,000 on account of unpaid goods and services rendered. In July 2004, CBI filed a statement of defence and counterclaim in response to such claim. CBI's counterclaim seeks \$5.0 million in damages in relation to the license agreement between the parties. We believe that the counterclaim is without merit. Later in July 2004, we entered into a non-binding letter of intent to acquire all of the issued and outstanding shares of CBI through an amalgamation of CBI with a wholly-owned subsidiary of Adherex to be incorporated under the CBCA for this purpose. This letter of intent effectively replaced the memorandum of agreement entered into with CBI in December 2003 and completion of the transaction is subject to CBI shareholder approval, agreement by the parties on definitive amalgamation documentation and other customary closing conditions. We expect the amalgamation to close in November or December 2004 after CBI's shareholders vote on the acquisition, but there can be no assurance that it will close on schedule or at all. Under the terms of the letter of intent, Adherex will issue to CBI shareholders a total of 3,220,266 Adherex common shares, representing a value of \$1.5 million, based on a 20-day weighted average trading price for such shares as of July 20, 2004. Of such shares, 500,000 Adherex common shares will be deposited in escrow as security against any misrepresentation by CBI in connection with the transaction. In addition, we have agreed to loan CBI up to \$75,000 to be used by CBI to pay legitimate expenses related to the transaction. This loan is to be repaid by CBI only if the transaction does not close on or before March 31, 2005 due to the fault of CBI.

If the transaction is completed, it will provide Adherex with the rights to the non-cancer applications relating to the cadherin technology and serve as a settlement of the claim commenced by us against CBI in February 2004 and the counterclaim filed by CBI against us in July 2004. Pending completion of the transaction, the parties have agreed to hold in abeyance all matters in relation to the claim and counterclaim between the parties. If the transaction is not completed as anticipated, we intend to pursue our claim against CBI and take all appropriate action to defend CBI's counterclaim.

On November 20, 2002, we acquired the intellectual property of Oxiquant through a reverse triangular merger involving a wholly-owned U.S. subsidiary, pursuant to which we issued to Oxiquant's shareholders 40,163,985 shares of common stock and warrants to purchase 2.3 million shares of common stock with an exercise price of \$0.717 per share that expire on May 20, 2007.

- In September 2003, we opened an office in RTP. All of our executive officers currently work from this location and we have relocated our development activities to RTP.
- In June and December 2003, we completed bridge financings of convertible notes for a total of approximately \$4.9 million. In accordance with their terms, upon the closing of the private placement described below on December 19, 2003, these notes converted at \$0.35 per unit into 14,065,820 units having the same terms as those issued in the private placement (with the exception of notes held by insiders of the Company, which converted at \$0.46 per unit). Investors in or purchasers of the June convertible notes also received warrants to purchase an aggregate of 1,723,820 shares of common stock at a price of \$0.55 per share (of which warrants to purchase 1,432,601 shares of common stock held by non-insiders were repriced to \$0.43 per share on December 3, 2003) that expire in June 2007, while investors in the December convertible notes received warrants to purchase an aggregate of 1,353,570 shares of common stock at a price of \$0.43 per share that expire in December 2008.
- On December 19, 2003, we completed a private placement of 57,609,262 units, for \$0.35 per unit, for gross proceeds totaling approximately \$20.2 million. Each unit was comprised of one share of common stock and one-half of a common stock purchase warrant. The warrants are exercisable until December 19, 2008 at an exercise price of \$0.43 per share. Including 14,065,820 units issued upon the conversion of convertible notes of the Company as described above, we issued a total of 71,675,082 units.
- In connection with the December 19, 2003 private placement, 2037357 Ontario Inc. was incorporated to carry out specific research and development activities in Ontario. We entered into a subscription and exchange rights agreement with New Generation and 2037357 Ontario Inc., which was 50% owned by us and 50% owned by New Generation. Pursuant to the subscription agreement, 2037357 Ontario Inc. issued 4,000,000 Series 1 Preferred Shares and warrants to purchase 2,000,000 Series 1 Preferred Shares to New Generation for a purchase price of \$1.4 million. Pursuant to the exchange rights agreement, New Generation had the right to exchange all or part of its Series 1 Preferred Shares of 2037357 Ontario Inc. for an equal number of shares of Adherex common stock at any time. The exchange rights agreement also provided that upon the exercise by New Generation of its exchange right, all of the then outstanding warrants to purchase shares of Series 1 Preferred Shares of 2037357 Ontario Inc. would be exchanged for an equal number of warrants to purchase Adherex common stock, which would have an exercise price of \$0.43 per share and an expiration date of December 19, 2008. On June 14, 2004, New Generation exchanged its interest in 2037357 Ontario Inc. for 4,000,000 shares of Adherex common stock and warrants to purchase of Adherex common stock. Subsequent to the exchange, 2037357 Ontario Inc. continued its existence, as a wholly owned subsidiary of the Company, under the CBCA as Adherex Research Corp. On June 29, 2004, Adherex Research Corp. amalgamated with the Company pursuant to a short-form amalgamation under the CBCA.
- On May 20, 2004, we completed an \$8.4 million "bought deal" in Canada, issuing 15,800,000 units at a price of \$0.53 per unit. A bought deal is a Canadian term for an offering by an issuer that is similar to a firm commitment underwriting. It involves the dissemination of a short form prospectus that meets the requirements of, and has been filed with, the Ontario Securities Commission and the Toronto Stock Exchange. We paid Dlouhy Merchant Group Inc. an underwriting fee of \$0.5 million in connection with the bought deal. Concurrently with the bought deal, we completed a \$4.0 million private placement outside of Canada to existing shareholders of the Company, issuing 7,547,170 units at a price of \$0.53 per unit. Each unit consists of one share of common stock and one-half of a common stock purchase warrant. Each whole warrant is exercisable until May 20, 2007 at an exercise price of \$0.70 per share. We paid agent commissions of \$0.1 million in connection with the private placement. In conjunction with these May 2004 financings, the Company incurred approximately \$0.3 million of other expenses.

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 with a focus on cancer therapeutics and a cadherin-based tumor vascular targeting platform. We have four product candidates in the clinical stage of development:

- Exherin, a compound that selectively targets cancer blood vessels and that, in some animal models, has caused leakage and a reduction in the supply of blood to a tumor within 30 minutes of administration, with subsequent death of cancer cells. We are currently conducting Phase I clinical trials on the compound.
- Sodium Thiosulfate ("STS"), a chemoprotectant which has been shown in Phase I and Phase II clinical studies conducted by an investigator at OHSU to reduce the disabling loss of hearing in patients, particularly children, treated with platinum-based anticancer agents.
- N-Acetylcysteine ("NAC"), a chemoprotectant that will be the subject of a planned revised Phase I clinical trial by investigators at OHSU to study the safety profile of NAC in the prevention of bone marrow toxicity resulting from chemotherapy regimens.
- Mesna, a chemoenhancer, a compound that has displayed anticancer activity in laboratory studies conducted by investigators at Rutgers and in a Phase I clinical study in Argentina by reducing the resistance of cancer cells to certain chemotherapeutic agents.

We also have several preclinical product candidates targeted to enter clinical development over the next several years. Our drug discovery and development efforts are supported by 38 issued U.S. patents and over 80 pending patents worldwide that we own or have licensed.

### **Our Clinical Product Candidates**

#### Exherin

Exherin is a small peptide molecule that was developed by rational drug design and which selectively targets blood vessels in cancers. Pursuant to a general collaboration agreement, McGill has granted us an exclusive worldwide license to certain intellectual property rights relating to Exherin and certain uses thereof. Our preclinical studies on animal models have demonstrated that within 30 minutes after Exherin administration there is a leakage of blood from tumor vessels into the substance of the tumor and a reduction in tumor blood supply, which leads in some cases to the death of cancer cells. In preclinical studies we have conducted to date, healthy blood vessels in the rest of the body outside of a tumor have not been demonstrably affected by the administration of Exherin. Exherin appears to disrupt cancer blood vessels by competitively inhibiting the binding of proteins called N-cadherins that are important for the structural integrity of blood vessels. In this regard, it differs significantly from anti-angiogenic compounds, which are compounds that inhibit very early blood vessel growth into tumors. Exherin, in contrast, attacks the established tumor blood vessels of a cancer.

In our preclinical studies, Exherin has demonstrated activity in tumor-bearing animals, with a single intravenous administration of the drug producing widespread hemorrhage within the tumor. Our goal for Exherin is to turn this angiolytic activity (or disruption of established cancer blood vessels) into a new therapeutic approach for the treatment of cancer. We commenced a Phase I clinical trial on Exherin in Canada at the Ottawa Cancer Center in late 2002, and in October 2004 we commenced another Phase I clinical trial site at the University of Texas M.D. Anderson Cancer Center in Houston, Texas. We intend to initiate up to three Phase Ib/II clinical trials in late 2004 or early 2005 in both North America and Europe, in which we intend to assess the effects of three different dosing schedules of Exherin on tumor reduction, toxicity, pharmacodynamics and pharmocokinetics in the context of a limited intra-patient dose escalation in up to an aggregate of approximately 100-120 patients whose tumors are N-cadherin positive. Pharmacodynamics refers to the effect a drug has on its target, and pharmacokinetics refers to the way a drug is distributed, metabolized and excreted from the body after dosing. We anticipate that these Phase Ib/II trials will provide the safety information and

estimates of the expected range of therapeutic effectiveness that are a pre-requisite to the design and conduct of prospective randomized pivotal Phase III trials, which are required for submission of an NDA to the FDA in the United States or an NDS in Canada. Based on positive data from the Phase Ib/II clinical program, we could potentially initiate Phase III clinical trials as early as 2006. We can provide no assurance that we will commence or complete these planned clinical trials on schedule, or at all, or that the results and data will be positive or consistent, provide the necessary results to design and conduct pivotal Phase III clinical trials, or support the filing of an NDA or NDS. Failure is common and can occur at any stage of development.

### 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 certain intellectual property rights directed to the use of STS as a chemoprotectant, and we intend to develop STS as a protectant against hearing loss and more specifically, the hearing loss caused by platinum-based anti-cancer agents. To support its development, we are also pursuing novel formulations, branding strategies and Orphan Drug Designation for STS. Orphan Drug Designation is a category created by the FDA to offer incentives to develop and market drugs for diseases that occur rarely or where there is no hope for recovery of development costs. Orphan Drug Designation gives the recipient specific financial incentives and seven years of market exclusivity upon FDA approval. Preclinical studies conducted by OHSU and others on a number of agents indicated that STS effectively prevented hearing loss caused by platinum-based anti-cancer agents.

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 also may experience severe, irreversible hearing loss, particularly in the high frequencies.

Investigators at OHSU and elsewhere have conducted Phase I and Phase II studies with STS that have shown that STS substantially 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 intend to continue the development of STS as a hearing loss protectant for children undergoing platinum-based chemotherapy by initiating a prospective, randomized Phase III clinical trial in late 2004 or 2005. We have received Orphan Drug Designation in the United States for the use of STS in the prevention of platinum-induced ototoxicity (hearing loss associated with platinum-based chemotherapy) in pediatric patients, and we intend to pursue Fast Track and Priority Review Designations in the United States. We may also seek Orphan Drug Designation in the United States for the use of STS in the prevention of platinum-based ototoxicity in adult patients with head and neck cancer, and we are planning a randomized Phase III clinical trial that we plan to commence only if we obtain Orphan Drug Designation for adults. We may also seek further Orphan Drug Designations for prevention of platinum-induced ototoxicity in pediatric and adult cancer patients in Europe. Our product development efforts will potentially involve novel formulations as well as novel timing approaches of STS in relationship to the administration of platinum-based chemotherapy agents. We can provide no assurance that we will commence or complete these planned clinical trials on schedule, or at all, or that the results and data will be consistent or support the filing of an NDA. Failure is common and can occur at any stage of development.

#### NAC

We are developing NAC as a bone marrow protectant to be used to prevent the loss of important blood cells, called platelets, caused by certain cancer drugs. This side effect can limit the use of these 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. Currently, the most commonly used therapeutic approach to platelet loss is the use of platelet transfusions, which are expensive and have complications and risks associated with blood transfusions. There are, however, other drugs approved or in clinical development for the prevention or treatment of thrombocytopenia (low platelet count caused by various anti-cancer therapies), including Wyeth's Neumega<sup>®</sup> and Amgen Inc.'s AMG 531.

We have licensed certain intellectual property rights from OHSU that support the use of NAC for various indications, including preventative therapy against the loss of platelets caused by certain chemotherapy agents. OHSU is preparing a revised Phase I clinical trial in the United States on the use of NAC as a bone marrow protectant in the context of platinum-based chemotherapy under an investigator IND. Upon the completion of this study, we will re-evaluate the market potential of NAC for this and other indications.

### Mesna

Preclinical research conducted at Rutgers has identified Mesna as a potential method to alter a cancer's resistance to chemotherapy. In addition to intolerable side effects that limit the administration of effective treatments, the development of resistance to anticancer therapy is one of the most common causes for the failure to cure most cancers. Investigators at Rutgers have found that rapid changes in the oxygen reduction potential, or redox state, of cancer cells through exposure to chemotherapy and radiation therapy cause the cancer cells to develop resistance to further therapy. The research has shown that certain agents, including Mesna, which stabilize the redox state of the cells, can reduce the development of cancer cell resistance by reducing the anticancer therapy-induced changes in the redox state, and thus enhance chemotherapeutic effectiveness. We have licensed worldwide intellectual property rights from Rutgers for certain methods of using Mesna and other agents as chemoenhancers by preventing changes in the redox state of cancer cells. Investigators in Argentina, independently from the Company, have completed a Phase I trial for this indication on Mesna. We continue to evaluate Mesna but believe it is necessary to repeat the findings of the Argentina clinical trial prior to further developing this product candidate.

### **Preclinical Pipeline**

Our product candidates are in the early stages of clinical development, so we strive to maintain a robust preclinical program to hedge against unavoidable development risks. 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 products and therapeutic procedures based on innovative technologies as described in Item 3.D., "Risk Factors."

We have a strong preclinical pipeline that includes backup peptides and small chemical successors to Exherin, peptides that combine both angiolytic and antiangiogenic properties and molecules targeted to inhibiting the metastatic spread of some cancers. We have identified a series of small chemical molecules that, in our preliminary studies, have displayed potent angiolytic activity. Unlike Exherin, these molecules are not peptides but are smaller and simpler in structure. We and our collaborators are conducting preclinical studies on several of these molecules in order to select the best candidate to move into clinical trials. We have developed a wide range of peptide antagonists for an array of different cadherin molecules, and a selection of these drug candidates are the subject of preclinical investigations by the NCI. The results of these studies, together with studies that we are directly conducting, will be used to select other drug candidates to move into clinical development, particularly in the following three areas:

*VE-cadherin.* Like N-cadherin, VE-cadherin is important in the structural integrity of certain tumor blood vessels. We have designed peptide VE-cadherin antagonists that are under investigation as vascular targeting agents in cancer. We believe that the development of VE-cadherin antagonists may be synergistic with the N-cadherin antagonist, Exherin, and therefore expand the Company's development opportunities. Some tumors may express N-cadherin, for example, and be responsive to Exherin; while other cancers may express VE-cadherin and be responsive to VE-cadherin antagonists. The use of VE-cadherin antagonists, either alone or in combination with Exherin, may be more effective than Exherin alone. Few, if any, cancer

therapies are universally useful in cancer patients, and the same will likely be true for cadherin-based drugs. We expect that there may be specific cancer situations in which either Exherin or a VE-cadherin antagonist candidate used alone would make a very positive medical contribution; and in other cancer situations, the two agents used together may be therapeutically complementary or synergistic. We intend to initiate clinical testing on VE-cadherin antagonists by late 2005.

*OB-cadherins*. Another family of cadherins, OB-cadherins, is reported to be involved through several mechanisms in the metastatic spread of certain cancers to body sites distant from the original tumor. Metastatic disease is a major determinant of a patient's survival and quality-of-life. We are developing OB-cadherin antagonists designed to reduce or slow down the metastatic spread of tumors, such as breast and prostate cancers, and such agents are now in preclinical testing.

*Small molecule cadherin antagonists.* Small chemical molecules are often more stable and have different potency and toxicity profiles than peptides. We are developing small molecule peptidomimetics (compounds that mimic the biological action of peptides) of N-cadherin as an approach to modifying the effectiveness, specificity and toxicity profile of N-cadherin antagonism.

These agents are currently only at the preclinical stage of development. In addition to our own development efforts, we intend to pursue collaborations with pharmaceutical partners in the next few years with respect to the most promising agents.

In addition to our collaborations, we also have entered into a standard form screening agreement with the NCI, under which NCI screens and tests compounds supplied by us from our preclinical pipeline for anti-cancer qualities useful to cancer chemotherapy at no cost to us. The NCI is currently examining a selection of over 30 Adherex compounds in preclinical anti-cancer assays and tumor models. Adherex has designed and synthesized a wide range of antagonists to a number of different cadherin molecules and a representative array of these antagonists have been included for testing at NCI. NCI has no obligations to continue to perform screening work for us and may terminate this agreement at any time, as may we. In the event that we or NCI terminate the screening agreement, we may fund the screening of some or all of the compounds currently being tested by the NCI or seek a corporate partner to conduct the screening work for us, which would result in increased costs for us.

### **Intellectual Property**

Our 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 cell adhesion, specific claims for 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 OHSU and Rutgers, we also work closely with the institutions involved to further strengthen and expand our worldwide patent protection for those products.

Currently, we own or have licensed 35 issued U.S. patents and over 50 pending U.S. and international patent applications relating to cell adhesion. We have licensed seven pending U.S. and international patent applications from Rutgers relating to Novel Redox Clamping Agents, and we have licensed three issued U.S. patents and over 20 pending U.S. and international patent applications from OHSU relating to thiol-based compounds and their use in oncology. In aggregate, we own or have licensed 38 issued and over 80 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 inconsistency regarding the breadth of claims allowed and general uncertainty as to their legal interpretation and enforceability. Further, some of our principal candidates to date, including STS, NAC and Mesna, have been

based on previously known compounds, and we anticipate that any candidates or products we develop in the future may include or be based on the same or other compounds owned or produced by other parties, and some or all may not be subject to effective patent protection. Also, the 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 competitive protection. Also, products or processes that we develop may turn out to be covered by third party patents, in which case we may need 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 turn out to 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 Exherin (composition of matter), U.S. Patent 6,551,994 covering alpha-catenin and beta-catenin inhibiting compounds, international filings under the Patent Cooperation Treaty ("PCT"), continuations and certain other patents and patent applications.

In consideration, we issued 2,542,084 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 compounds. In addition, should we fail to meet certain development milestones, we are required to make the following payments in order to maintain the license: (i) \$100,000, if we had not filed an IND application, or a similar application with Canadian, U.S., European or other recognized agency relating to a licensed product prior to September 23, 2002; (ii) \$100,000, if we have not commenced Phase II clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2004; and (iii) \$200,000 if we have not commenced Phase III clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2002, McGill acknowledged that work completed on the clinical development of Exherin was sufficient to meet the requirements of the September 23, 2002 milestone. On September 20, 2004, we received notification from McGill acknowledging that we had met our obligations under the agreement with respect to the September 23, 2004 milestone.

In addition, we agreed to fund certain mutually agreed upon research at McGill over a period of 10 years totaling \$3.3 million. Annual funding commenced in 2001, the first year of the agreement, with a total of \$200,000, and increases annually by 10% through 2010, when the required annual funding reaches \$500,000. This research commitment can be deferred in any 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 \$500,000 in research 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 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.

### 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. Pursuant to the license agreement, Rutgers granted us worldwide license rights to "Novel Redox Clamping Agents and Uses Thereof" (U.S. Provisional Patent Application Number 60/120,128, U.S. Patent Application Number 10/228,644, international filings under the PCT, continuations and certain other patent applications).

In consideration, Rutgers was issued 500,000 shares of common stock of Oxiquant, which were subsequently converted upon our acquisition of Oxiquant into 3,821,320 shares of our common stock and warrants to purchase 219,495 shares of our common stock at \$0.717 per share until May 20, 2007. In addition, we are required to make the following payments upon the achievement of certain milestones achieved in connection with the subject matter of the agreement: (i) US\$25,000 upon completion of the first clinical trial performed in compliance with FDA or corresponding foreign health authority requirements, in a small number of patients to determine the metabolism and pharmacological actions of doses, (ii) US\$50,000 upon commencement of the first Phase III clinical trial or equivalent, (iii) US\$100,000 upon receipt of market approval in the first major market country, (iv) US\$200,000 upon receipt of market approval in the second major market country, and (v) US\$300,000 on receipt of market approval in the third major market country. We agreed to pay an annual license maintenance fee on each anniversary of the agreement, starting at US\$5,000 in 2002 and increasing by US\$5,000 on each subsequent anniversary through the fifth anniversary. After completion of the fifth anniversary, and on each subsequent anniversary, the annual license maintenance fee shall be US\$50,000, but is creditable against royalties (with some restrictions). Pursuant to the terms of the agreement, we also agreed to pay to Rutgers a 4% running royalty on net sales for any licensed products semiannually, and a 20% non-running royalty on any consideration received from sublicensing or transferring of the licensed technology. Through September 30, 2004, we have paid license maintenance fees totaling US\$25,000 under this agreement.

The term of our license agreement expires on the last date of expiration of claims covered in the patents licensed to us in each country in the world in which Rutgers has intellectual property rights covered by the license, unless earlier terminated by operation of law or as provided in the agreement. The agreement is terminable by either Adherex or Rutgers 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 upon 90 days prior written notice to Rutgers.

### 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 exclusive worldwide license rights to intellectual property surrounding work done by Dr. Edward Neuwelt with respect to thiol-based compounds and their use in oncology. In consideration, OHSU was issued 250,250 shares of common stock of Oxiquant which were subsequently converted upon the acquisition of Oxiquant into 1,912,571 shares of our common stock and warrants to purchase 109,857 shares of our common stock at \$0.717 per share until May 20, 2007. We are required to make the following payments upon the achievement of certain milestones achieved in connection with the subject matter of the agreement: (i) US\$50,000 upon completion of Phase I clinical trials, (ii) US\$500,000 upon completion of Phase II clinical trials, (iii) US\$500,000 upon completion of Phase II clinical trials, (iii) US\$500,000 upon completion of Phase II clinical trials, (iii) US\$500,000 upon completion of Phase II clinical trials, (iii) US\$500,000 upon completion of Phase II clinical trials, (iii) US\$500,000 upon the sales of any licensed products and a 15% royalty on any sublicensing of the licensed technology.

The term of our license agreement expires on the last date of expiration of claims 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 paying all fees due to OHSU under the agreement.

### License Agreement with Cadherin Biomedical Inc.

In September 2002, CBI was incorporated as a wholly owned subsidiary of Adherex. We 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 our platform cadherin technology owned or licensed under our collaboration agreement with McGill and paid to CBI \$250,000 in cash, in exchange for 40,163,985 Class A Preferred Shares of CBI. We distributed the Class A Preferred Shares of CBI to our shareholders, after which our

shareholders held all of the issued and outstanding shares of CBI. The divestiture of our non-cancer assets was a condition precedent to our acquisition of Oxiquant. CBI was not granted any rights to, and was contractually prohibited from, developing any applications relating to the treatment of cancer. The term of the license agreement coincides with the life of our patents that are the subject of the license. The license agreement is terminable by either Adherex or CBI in the event of an uncured material breach or default of the agreement by either party after 30 days prior written notice. We have the right to terminate the agreement in the event that CBI files for bankruptcy or becomes insolvent and upon 30 days prior written notice to CBI if any act or omission by CBI causes us to be in material uncured breach of our license agreement with McGill.

In July 2004, we entered into a non-binding letter of intent to acquire all of the issued and outstanding shares of CBI through an amalgamation of CBI with a wholly-owned subsidiary of Adherex formed for this purpose. The amalgamation will provide Adherex with the rights to the non-cancer applications relating to the cadherin technology and serve to settle outstanding litigation between Adherex and CBI. We expect the amalgamation to close in November or December 2004 after CBI's shareholders vote on the acquisition, but there can be no assurance that it will close on schedule or at all. See Item 4.A., "Information on the Company—History and development of the Company."

#### Competition

Competition in the biotechnology and pharmaceutical industries is intense and characterized by the rapid advance of technology. We expect that if any of our product candidates gain 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. Our competitors may develop technologies and drugs that are more effective, safer or more 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 in medicine. 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.

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, OXiGENE, Inc., Aventis, Bristol-Myers Squibb Company, Pfizer, Inc., AstraZeneca PLC, Amgen, Inc., Genentech, Inc., NeoPharm, Inc., Bayer AG, EntreMed Inc., Johnson & Johnson, Peregrine Pharmaceuticals, Inc. and Novartis AG. 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 trials. Many of them have greater financial resources than we do.

We are aware of at least three companies, AstraZeneca, Aventis and OXiGENE, that are clinically developing cancer angiolytics, which we view as our primary competitors with respect to Exherin. Their product candidates are tubulin depolymerizing agents. When administered they destroy the scaffold-like structure that supports the lining cells (endothelial cells) of blood vessels, causing the endothelial cells to round, 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 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 way than Exherin and, to our knowledge, we are the only company approaching tumor angiolysis from the perspective of peptide inhibitor-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 in early stages of clinical development. To our knowledge, no angiolytic products have completed Phase II and entered Phase III development to date. 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 available in the public domain. However, our competitors may achieve regulatory approval for their drug candidates sooner than we do, and their drugs may be more competitive than ours.

We are not aware of any commercially available agents that prevent or treat the 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, Inc., 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 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.

We are developing NAC for the prevention of platelet loss during chemotherapy. There are drugs approved or in clinical development for the prevention or treatment of thrombocytopenia (low platelet count caused by various anti-cancer therapies), including Wyeth's Neumega<sup>®</sup> and Amgen Inc.'s AMG 531. Also, platelet transfusions are a common practice, and other companies may attempt to develop platelet protectants in the future to decrease the need for platelet transfusions.

Many chemotherapeutic agents are currently available and numerous others are being developed. Any chemotherapeutic products that we are able to develop with Mesna may not be able to compete effectively with existing or future chemotherapeutic agents. However, cancer as a disease is not 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 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. Also, 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. To date, we have not entered into any such commercialization collaborations. 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 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, or 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 nonclinical studies, primarily involve evaluations of pharmacology, toxic effects and 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, the CTA 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 14 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 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. Also, 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. Further, the FDA and its counterparts in other countries may not allow clinical trials to proceed at

any time after receiving an IND, allow further clinical development phases after authorizing a previous phase or 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 in certain ways and may require us to perform additional preclinical or clinical testing regardless of whether FDA approval has been obtained. The amount of time required to obtain necessary approvals may be longer or shorter than that required for FDA 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 ("EMEA") or the decentralized, mutual recognition process. The centralized procedure, which is mandatory for some biotechnology derived products, results in an approval recommendation from the EMEA to all member states, while the European Union mutual recognition process involves country by country approval.

### **Plan of Operation**

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 \$61.8 million through October 31, 2004. At June 30, 2004, our cash, cash equivalents and short-term investments totaled approximately \$27.7 million. We believe that our cash and cash equivalents will be sufficient to satisfy our anticipated capital requirements for at least the next 18 months. Accordingly, we do not believe it will be necessary in the next six months to raise additional funds to meet the expenditures required for operating our business. Any projections of further cash needs are subject to substantial uncertainty. Our primary expenditures in the fiscal year ended June 30, 2005 will be (i) research and development expenses, which include expenses associated with clinical development activities, employee compensation, research contracts, toxicology studies and laboratory activities and (ii) general and administrative expenses, which include expenses associated with headcount and facilities, recruitment of staff, insurance and other administrative matters. See Item 5, "Operating and Financial Review and Prospects."

During the fiscal year ending June 30, 2005, we intend to conduct further clinical trials on Exherin, initiate clinical trials on STS, evaluate the market potential of NAC and Mesna and continue work on our preclinical pipeline. See "—Company Overview,—Our Clinical Product Candidates," and "—Preclinical Pipeline."

During the fiscal year ending June 30, 2005, we intend to continue to purchase laboratory and office equipment as we continue to build our corporate presence in the United States to support the advancement of our clinical development activities.

We intend to add approximately five employees by December 2004, and we expect 75% of them to be engaged in research and development activities and 25% to be engaged in administration. We intend to add approximately ten more employees in 2005, the majority of which we expect to be engaged in research and development activities.

#### C. Organizational structure

We carry on operations in Canada and, through two wholly-owned Delaware subsidiaries, Oxiquant, Inc. and Adherex, Inc., in the United States.

#### D. Property, plant and equipment

We occupy approximately 5,700 square feet of laboratory and office space in RTP, North Carolina. The RTP lease requires minimum monthly lease payments of \$1,008 until February 2005, and thereafter, the monthly lease payments are approximately \$5,000. The lease expires in March 2010. The Company has entered into an agreement to lease an additional 1,936 square feet adjacent to the existing leased space. The space requires minor

build-out prior to the Company's occupancy, which is expected to occur sometime prior to January 31, 2005. The Company will pay no monthly base rent during the first six months and approximately \$1,700 monthly base rent until December 2007, approximately \$1,800 monthly base rent until December 2009, and approximately \$1,900 monthly base rent until March 2010, when the lease expires.

## ITEM 5. OPERATING AND FINANCIAL REVIEW AND PROSPECTS

The following discussion and analysis should be read in conjunction with our June 30, 2004, 2003 and 2002 audited consolidated financial statements and the related notes, which are prepared in accordance with Canadian generally accepted accounting principles. A reconciliation from Canadian GAAP to United States GAAP ("U.S. GAAP") can be found in Item 18, "Financial Statements," footnote 19. Unless otherwise indicated, the amounts shown are in Canadian dollars.

The following discussion contains forward-looking statements regarding our financial condition and the results of operations that are based upon our consolidated financial statements. We operate in a highly competitive environment that involves significant risks and uncertainties, some of which are outside of our control. We are subject to risks associated with the biopharmaceutical industry, including risks inherent in research, preclinical testing, manufacture of drug substance to support clinical studies, toxicology studies, clinical studies of our compounds, uncertainty of regulatory agencies, enforcement and protection of our patent portfolio, the need for future capital, potential competitors, the ability to attract collaborative partners, dependence on key personnel, and the ability to successfully market our drug compounds. Our actual results could differ materially from those anticipated in these forward-looking statements as a result of various factors, including those discussed below and elsewhere in this registration statement, particularly under Item 3.D., "Risk Factors."

#### Overview

We have not received any revenues to date and do not expect to have significant revenues until we either are able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with funding, such as licensing fees, milestone payments, royalties, upfront payments or otherwise. As of June 30, 2004, our deficit accumulated during development stage was \$34.0 million.

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

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

### **Research and Development Projects**

We are a biopharmaceutical company with a focus on cancer therapeutics and a cadherin-based tumor vascular targeting platform. We have four product candidates in the clinical stage of development, as well as several preclinical candidates:

### Vascular Targeting

• Exherin, a compound that selectively targets cancer blood vessels and that, in some animal models, has caused leakage and a reduction in the supply of blood to a tumor within 30 minutes of

administration, with subsequent death of cancer cells. We are currently conducting Phase I clinical trials on the compound.

Preclinical product candidates, including backup peptides and small chemical successors to Exherin.

### Chemoprotectants and Chemoenhancers

- Sodium Thiosulfate ("STS"), a chemoprotectant, which has been shown in Phase I and Phase II clinical studies conducted by an investigator at Oregon Health & Science University ("OHSU") to reduce the disabling loss of hearing in patients, particularly children, treated with platinumbased anticancer agents.
- N-Acetylcysteine ("NAC"), a chemoprotectant that will be the subject of a planned revised Phase I clinical trial by investigators at OHSU to study the safety profile of NAC in the prevention of bone marrow toxicity resulting from chemotherapy regimens.
- Mesna, a chemoenhancer, a compound that has displayed anticancer activity in laboratory studies conducted by investigators at Rutgers, The State University of New Jersey ("Rutgers") and in a Phase I clinical study in Argentina by reducing the resistance of cancer cells to certain chemotherapeutic agents.

The following chart summarizes our research and development expenses through June 30, 2004:

		Years Ended June 30,			
	2004	2003	2002		eptember 3, 1996 to June 30, 2004
Exherin	\$3,362	\$3,145	\$2,705	\$	12,007
Other vascular targeting	458	652	820	_	1,930
Total vascular targeting	3,820	3,797	3,525		13,937
				-	
STS	844	216			1,060
Mesna		20			20
NAC		5			5
			. <u></u>	-	
Total chemoprotectants and enhancers	844	241	_		1,085
				-	
Other discovery projects (1)	119	107	307		2,326
			. <u></u>	-	
Transdermal drug delivery (2)	—	—	500		1,050
				-	
Total research and development expense	\$4,783	\$4,145	\$4,332	\$	18,398
				-	

(1) Relates primarily to the evaluation of new R&D concepts.

(2) There has been no transdermal activity since 2002.

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.

The Company has paid no upfront cash payments for any compounds. Potential future financial obligations are summarized in —Contractual Obligations and Item 4.B., "Information in the Company—Business Overview—Corporate Relationships."

### **Critical Accounting 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 consolidated financial statements and other disclosures included in this registration statement.

# Acquired Intellectual Property Rights

At June 30, 2004 our acquired intellectual property rights had a net book value of \$26.1 million and relate to the intellectual property acquired in the acquisition of Oxiquant in November 2002. The intellectual property is currently being developed for therapies in the oncology field including, but not limited to, otoprotectant (hearing protectant) for children undergoing platinum-based chemotherapy (STS), bone marrow protectant for patients undergoing chemotherapy (NAC) and methods to alter a cancer's resistance to chemotherapy (Mesna).

The intellectual property was recorded 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. The Company is deploying a strategy of utilizing the Food and Drug Administration's Orphan Drug program, which provides for seven years of market exclusivity to treat patients with rare diseases and disorders. The Company assumes the intellectual property has several years of useful life beyond the patent life and the exclusivity period granted by the Orphan Drug program, as we have done with STS. We adopted the provisions of CICA 3063 "Impairment of Long-Lived Assets" in the first quarter of 2003. We test the recoverability of long-lived assets whenever events or changes in circumstances indicate that its carrying amount may not be recoverable. We record 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 discounted cash flows from the asset. Changes in any of these management assumptions could have a material impact on the impairment of the assets.

Under U.S. GAAP, management has determined that the intellectual property is in-process research and development ("IPRD"), a concept that does not exist 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 \$31.2 million and the \$10.7 million of future income taxes associated with the Oxiquant acquisition is reflected as a reconciling item in Item 18, "Financial Statements," Note 19, United States Accounting Principles, in the June 30, 2004 consolidated financial statements, which reconciles Canadian GAAP to U.S. GAAP.

## **Results of Operations**

(In Canadian dollars in thousands, except per share amounts or unless otherwise indicated)

#### Years Ended June 30, 2004, 2003 and 2002

#### Interest Income

Interest income for the fiscal year ended June 30, 2004 was \$0.2 million, compared to \$0.1 million in fiscal 2003 and \$0.3 million in fiscal 2002. The increase in fiscal 2004 interest income is a result of the interest earned on proceeds from the \$21.6 million December 2003 private placement. The decrease in fiscal 2003 as compared to fiscal 2002 is due to higher cash balances in 2002 from the Company's initial public offering ("IPO") that was completed in June 2001 with net proceeds of \$8.7 million.

We anticipate interest income over the next several quarters will increase as compared to prior reported quarters due to interest from proceeds from the December 2003 private placement and our May 2004 bought deal in Canada and concurrent private placement outside of Canada with aggregate gross proceeds totaling \$31.5 million.

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

#### Other Income

In the fiscal year ended June 30, 2002, we received an investigation fee of \$0.2 million from a potential licensor. We had no other income in the fiscal years ended June 30, 2004 and 2003.

## **Research and Development Expenses**

R&D expenses for the fiscal year ended June 30, 2004 totaled \$4.8 million as compared to \$4.1 million in fiscal 2003 and \$4.3 million in fiscal 2002. Subsequent to the December 2003 private placement, we increased clinical development activities for our compounds. The amounts expended in fiscal 2003 and fiscal 2002 were similar; however, the composition changed to reflect the evolution of the development of our lead vascular targeting compound Exherin from a research to a clinical orientation.

The manufacture of clinical material and other required studies to support our IND application for Exherin totaled \$0.9 million in fiscal 2004, \$1.4 million in fiscal 2003 and \$0.9 million in fiscal 2002. The decrease in fiscal 2004, as compared to fiscal 2003, reflects support provided for Exherin towards a successful IND filing in fiscal 2004. There was an increase from fiscal 2003 to fiscal 2004 for STS IND application support of \$0.6 million for fiscal 2004 and \$0.1 million in fiscal 2003. R&D related compensation expense totaled \$0.5 million in fiscal 2004, \$1.0 million in fiscal 2003 and \$1.5 million in fiscal 2002. The decrease in fiscal 2004, as compared to fiscal 2003, reflects the closure of the Ottawa laboratory and related reduction in headcount as research activities were relocated to the United States. This decrease in fiscal 2003, as compared to fiscal 2002, reflected the shift from research activities, which had been performed in-house, to development activities such as toxicology and manufacturing of compound for clinical trials, which were performed by third parties.

R&D expenses for the fiscal year ended June 30, 2004 are net of \$0.2 million related to provincial investment tax credits recoverable and National Research Council grants, as compared to \$0.5 million for the fiscal year ended 2003. In the fiscal year ended 2002 the amounts are net of \$0.3 million in such credits.

We expect our R&D expenses to increase in future quarters due to the expansion and advancement of our clinical and preclinical programs. The expansion of R&D will involve increased outsourcing and additional internal R&D staff by the end of calendar year 2004.

#### General and Administration Expenses

G&A expenses totaled \$4.7 million for fiscal year ended June 30, 2004, as compared to \$3.0 million in fiscal 2003 and \$1.8 million in fiscal 2002. The increase of \$1.7 million in fiscal 2004 as compared to fiscal 2003 was primarily a result of expenses associated with the establishment of our offices in RTP, costs associated with relocating our management from Canada that totaled \$0.4 million and increased employee recruitment expenses of \$0.4 million. The increase of \$1.2 million in fiscal 2003 as compared to fiscal 2002 was a result of \$0.5 million in expenses related to the termination of our former Chief Executive Officer, as well as higher professional and consulting fees to facilitate the post-acquisition development of the intellectual property of Oxiquant, and an expansion in the overall level of administrative activity to support our development programs. In the coming quarters, G&A expenses are expected to increase proportionally to R&D expenses as appropriate support for our R&D operations. Subsequently, as R&D expenses are expected to continue to rise, G&A expenses are likely to increase at a reduced rate.

### Amortization of Acquired Intellectual Property Rights

The expense associated with the amortization of intellectual property rights was \$3.1 million for the fiscal year ended June 30, 2004, as compared to \$1.9 million for fiscal 2003. The expense relates to the value of intellectual property acquired in November 2002 that is being amortized on a straight-line basis over a 10-year period. The increase is due to the fact that we owned the intellectual property rights being amortized for all of fiscal 2004 as compared to only five months during fiscal 2003. There was no amortization expense for fiscal 2002, as the Oxiquant acquisition did not occur until fiscal 2003.

#### Interest Expense

Interest expense for the fiscal year ended June 30, 2004 totaled \$0.4 million, and was negligible for fiscal 2003. The increase reflects the accretion of a portion of the face value of the notes ascribed to the equity-like features of the convertible notes. The notes were converted into equity in December 2003 and therefore will not accrue future interest. There was no interest expense during fiscal 2002.

### **Recovery of Future Income Taxes**

Future taxes recovered totaled \$1.1 million for the fiscal year ended June 30, 2004, as compared to \$0.7 million in fiscal 2003. The recovery of future taxes, as recognized in the balance sheet, relates directly to the intellectual property acquired in November 2002. These rights have no tax basis and give rise to 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. The increase in fiscal 2004 over fiscal 2003 relates to the fact that we owned the intellectual property rights being amortized for all of fiscal 2004 as compared to only five months during fiscal 2003. At this time, Oxiquant, the entity that holds the acquired intellectual property, has no other activity and the future tax assets of other corporate entities cannot be used to offset this future tax liability. The future tax recovery will continue in direct proportion to the amortization of the intellectual property unless the Company changes its tax strategy with respect to Oxiquant.

In addition, as of June 30, 2004, we had \$13.2 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.

### Quarterly Information

The following table presents selected consolidated financial data for each of the last eight quarters ending June 30, 2004:

## Canadian dollars in thousands, except per share information

Date	Net Loss for the Period	Basic and Diluted Net Loss per Common Share	
September 30, 2002	\$ (1,770)	\$	(.04)
December 31, 2002	(1,686)		(.03)
March 31, 2003	(2,492)		(.03)
June 30, 2003	(2,332)		(.03)
September 30, 2003	(2,133)		(.03)
December 31, 2003	(2,720)		(.03)
March 31, 2004	(3,151)		(.02)
June 30, 2004	(3,644)		(.02)

The increase in the net loss for the second half of fiscal 2003 is due to increased research and development spending primarily related to the advancement of our lead vascular targeting compound, Exherin, as it progressed from a research to a clinical orientation.

The increase in the net loss for the second half of fiscal 2004 is due to the increase R&D efforts in the advancement and the successful filing of the IND for Exherin. The improved liquidity of the Company from the December 2003 and May 2004 private placements allowed these increased research and development activities to occur. Spending also increased throughout fiscal 2004 for costs associated with the expansion of our operations in the United States.

#### 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 \$61.8 million through October 31, 2004. We have incurred net losses and negative cash flow from operations each year, and we had a deficit accumulated during development stage of \$34.0 million as of June 30, 2004. We have not received any revenues to date and do not expect to have revenues until we either are able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with funding, such as licensing fees, royalties, milestone payments, upfront payments or otherwise.

At June 30, 2004, we had net working capital of \$26.9 million, an increase of approximately \$23.9 million as compared to June 30, 2003. We believe that our cash, cash equivalents and short-term investments will be sufficient to satisfy our anticipated capital requirements for at least the next 18 months. However, any projections of further cash needs are subject to substantial uncertainty. Our working capital requirements may fluctuate in future periods depending upon numerous factors, including: results of research and development activities; progress or lack of progress of our preclinical studies or clinical trials; our drug substance requirements to support clinical programs; our ability to establish corporate collaborations and licensing arrangements; changes in the focus, direction, or costs of our research and development programs; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; establishment of marketing and sales capabilities; our business development activities; new regulatory requirements implemented by regulatory authorities, the timing and outcome of the regulatory review process; or commercialization activities, if any.

We will need to raise substantial additional funds through equity, debt financings, and collaborative arrangements with corporate partners or from other sources. There can be no assurance we will be able to raise the necessary capital or that such funding will be available on favorable terms.

We intend to add approximately five employees by December 2004, and we expect 75% of them to be engaged in research and development activities and 25% to be engaged in administration. We intend to add approximately ten more employees in 2005, the majority of which we expect to be engaged in research and development activities. We have adequate financial resources to cover these headcount additions.

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

#### **Financial Instruments**

The Company's financial instruments consist primarily of short-term investments. These investments will ultimately be liquidated to support the ongoing operations of the Company.

The investment policy of the Company is to manage investments to achieve, in the order of importance, the financial objectives of preservation of principal, liquidity and return on investment. Investments may be made in Canadian or U.S. government obligations and chartered bank securities, commercial paper of Canadian or U.S.

industrial companies, utilities, financial institutions and consumer loan companies, and securities of foreign banks provided the obligations are guaranteed or carry ratings appropriate to the policy. Securities must have a minimum Dun & Bradstreet rating of A for bonds or R1 low for commercial paper. The policy also provides for investment limits on concentrations of securities by issuer and a maximum-weighted average time to maturity of twelve months. This policy applies to all financial resources of the Company.

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

Investments with original maturities at date of purchase beyond three months, and which mature at or less than twelve months from the balance sheet date, are classified as current. Investments are carried at book value plus accrued interest with unrealized gains and losses recognized as investment income. Short-term investments of \$9.5 million at June 20, 2004 consisted of corporate bonds with maturities at acquisition from 110 to 159 days. As these investments were purchased just prior to year-end, their market value is not significantly different from their book value. During the fiscal year ended June 30, 2004, the Company earned interest income of \$0.2 million on its investments.

In June 2004 we terminated a \$0.3 million revolving line of credit at prime with the Royal Bank of Canada that had been outstanding since 2002. In addition, through June 30, 2004, we have received \$2.2 million of research tax credits including potential research tax credit receivable of \$0.4 million and have received \$0.3 million in other government grants.

### **Contractual Obligations**

Since our inception, we have not had any material off-balance sheet arrangements, and inflation has not had a material effect on our operations. We had no material commitments for capital expenses as of June 30, 2004.

As of June 30, 2004, our contractual obligations and commitments are as follows:

### (Canadian dollars in thousands, except per share information)

	Less tha 1 year		4-5 years	More than 5 years	Total
Office Lease, U.S. (1)	\$ 4	1 \$ 261	\$ 187	\$8	\$ 497
McGill License (2)	28	2 1,039	892	325	2,538
OHSU License (3)					
Rutgers License (4)	2	8 175	70		273
Total	\$ 35	1 \$1,475	\$1,149	\$ 333	\$3,308
		-	_		

<sup>(1)</sup> In April 2004, we entered into a lease for our facilities in RTP. Our obligations under the lease are payable in U.S. dollars, and are presented in Canadian dollars in the table, translated at an assumed rate of CAD\$1.40. Amounts shown assume the maximum amounts due under the lease.

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

(4) U.S. dollar obligation translated at an assumed rate of CAD\$1.40. Royalty payments, which are contingent on sales, and other contingent payments that we may be required to pay are not included. Minimum maintenance payments through 2006 are shown. In 2007, the maintenance fee increases to \$70.

<sup>(2)</sup> Research obligation shown. Royalty payments, which are contingent on sales, are not included. Penalties for failure to achieve clinical trial progress goals are not included. We expect that clinical trials will progress more rapidly than required by the agreement.

In connection with the OHSU License Agreement and the Rutgers License Agreement, we are required to pay specified milestone payments in the event that we complete certain Adherex-initiated clinical trial progress goals. These payment obligations are described in Item 4.B., "Information on the Company — Business Overview — Corporate Relationships." One such payment we may have to make in the near future is a US\$0.5 million milestone payment to OHSU when and if we complete a planned Phase III clinical trial with STS in children. However, there can be no assurance that we will commence and complete that clinical trial when anticipated, if at all.

### **Research and Development**

Our research and development efforts have been focused on the development of cancer therapeutics and our cadherin-based tumor vascular targeting program. We have established relationships with universities, research organizations and other institutions, which we utilize to perform the day-to-day activities associated with drug development. Where possible we have sought to include leading scientific investigators and advisors to enhance our internal capabilities. Research and development issues are reviewed internally by our chief scientist, other members of our senior management and our scientific staff. Major development issues are presented to members of our Scientific and Clinical Advisory Board for discussion and review. During the year ended June 30, 2004 company-sponsored research and development expense totaled \$4.8 million. During fiscal years 2003 and 2002, company-sponsored research and development expenses were \$4.1 million and \$4.3 million, respectively.

Our research and development activities focus on cancer therapeutics and a cadherin-based tumor vascular targeting platform. Our research and development programs include Exherin, STS, NAC, Mesna and preclinical activities.

Exherin is a vascular targeting compound that selectively targets cancer blood vessels, and in some animal models causes leakage and a reduction in the supply of blood to a tumor. Exherin is currently in Phase I trials in Canada and in the United States. During the year ended June 30, 2004, we spent \$3.8 million on Exherin and other vascular targeting programs.

STS is a chemoprotectant, which has been shown to reduce hearing loss in patients, particularly children, treated with platinum-based agents. Investigatorsponsored Phase I and Phase II studies have been conducted on STS. NAC is being developed as a bone marrow protectant to be used to prevent the blood platelet loss caused by certain cancer drugs. Upon the completion of a planned revised Phase I study by investigators at OHSU, we will evaluate the market potential of NAC. Mesna is under development as a potential method to alter a cancer's resistance to chemotherapy. During the year ended June 30, 2004 we spent \$0.8 million on our chemoprotectant and chemotherapy enhancement programs.

Our product candidates and research and development programs are in the early stage of 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 products and therapeutic procedures based on innovative technologies. For example, it is possible that any or all of these products will be ineffective or toxic, or otherwise will fail to receive necessary regulatory clearances. There is a risk that our product candidates will be uneconomical to manufacture or market or will not achieve market acceptance. There is also a risk that third parties may hold proprietary rights that preclude us from marketing our product candidates or that others will market a superior or equivalent product. As a result of these factors, we are unable to estimate the nature, timing and future costs necessary to complete these product candidates or research and development programs. In addition, we are unable to estimate the period when material net cash inflows could commence from such product candidates or research and development programs, if ever.

### **CBI Letter of Intent**

In February 2004, we filed a claim in the Ontario Superior Court of Justice against Cadherin Biomedical Inc. ("CBI") in the amount of \$0.1 million on account of unpaid goods and services rendered. In July 2004, CBI filed a statement of defence and counterclaim in response to such claim. CBI's counterclaim seeks \$5.0 million in damages in relation to the license agreement between the parties. We believe that the counterclaim is without merit. Later in July 2004, we entered into a non-binding letter of intent to acquire all of the issued and outstanding shares of CBI through an amalgamation of CBI with a wholly-owned subsidiary of Adherex to be incorporated under the CBCA for this purpose. Completion of the transaction is subject to CBI shareholder approval, agreement by the parties on definitive amalgamation documentation and other customary closing conditions. We expect the amalgamation to close in November or December 2004 after CBI's shareholders vote on the acquisition, but there can be no assurance that it will close on schedule or at all. Under the terms of the letter of intent, Adherex will issue to CBI shareholders a total of 3.2 million Adherex common shares, representing a value of \$1.5 million, based on a 20-day weighted average trading price for such shares on July 20, 2004. Of such shares, 0.5 million Adherex common shares will be deposited in escrow as security against any misrepresentation by CBI in connection with the transaction. In addition, we have agreed to loan CBI up to \$0.1 million to be used by CBI to pay legitimate expenses related to the transaction. This loan is to be repaid by CBI only if the transaction does not close on or before March 31, 2005 due to the fault of CBI.

If the transaction is completed, it will provide Adherex with the rights to the non-cancer applications relating to the cadherin technology and will serve as a settlement of the claim commenced by us against CBI in February 2004 and the counterclaim filed by CBI against us in July 2004. Pending completion of the transaction, the parties have agreed to hold in abeyance all matters in relation to the claim and counterclaim between the parties. If the transaction is not completed as anticipated, we intend to pursue our claim against CBI and take all appropriate action to defend CBI's counterclaim.

# 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:

Name	Age	Position
William P. Peters, MD, PhD, MBA	54	Chief Executive Officer and Chairman of the Board of Directors
Raymond Hession (1)(2)(4)	64	Lead Independent Director of the Board of Directors
Peter Karmanos, Jr.(3)(4)	61	Director
Donald W. Kufe, MD (2)(3)	59	Director
Fred H. Mermelstein, PhD (4)	45	Director
Peter Morand, PhD (1)(4)	69	Director
Robin J. Norris, MD	57	President, Chief Operating Officer and Director
Arthur T. Porter, MD, MBA (1)(2)(3)	47	Director
Brian E. Huber, PhD	50	Chief Scientific Officer
James A. Klein, Jr., CPA	42	Chief Financial Officer
Rajesh K. Malik, MD	45	Chief Medical Officer
D. Scott Murray, BScPharm, LLB, MBA	35	Vice President, General Counsel and Corporate Secretary

(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**

Other than Dr. Porter (who was appointed to the Board in February 2004) and Mr. Karmanos (who was appointed to the Board in May 2004), the current Board of Directors was elected at our annual meeting of shareholders on December 16, 2003. We have granted a shareholder, HBM BioVentures (Cayman) Ltd., the right to appoint a nominee for election to the Board and the right to have an observer attend, but not vote at, our Board meetings. To date, HBM BioVentures has never sent an observer to any of our Board meetings, and has informed us that it does not intend to send any observers in the future. Currently, Dr. Porter is the director nominated by HBM BioVentures. He has no affiliation with HBM BioVentures.

The Board is currently composed of eight members. The Board has determined that each member other than Dr. Peters and Dr. Norris qualifies as "independent" under the current rules of the American Stock Exchange and "unrelated" for purposes of the Toronto Stock Exchange Guidelines. 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 general 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 the Board of Directors since February 2004, and a member of the Board of Directors 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, Professor of Medicine at Duke University from 1984 to 1995 and was an Associate Director of the Cancer Center. He then became President, Director and CEO of the Karmanos Cancer Institute from 1995 – 2001 and is currently President Emeritus. Simultaneously, he served as Associate Dean for Cancer at Wayne State University and 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's degrees (Biochemistry, Biophysics and Philosophy) from the 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 in Boston, MA. He is board certified in internal medicine and medical oncology. He earned his MBA at the Duke University Fuqua School of Business.

### **Raymond Hession**

Mr. Hession has been on the Board of Directors of Adherex since December 1998. Mr. Hession is Chairman of the Board of HLB Decision Economics Inc., a management consulting firm with expertise in risk analysis, investment and finance, and economics and policy. Mr. Hession is also Chairman of The Ottawa Hospital. Mr. Hession has previously served as President of Canada Mortgage and Housing Corporation, Deputy Minister of Industry for the Canadian Government and President of Kinburn Technologies Corporation.

### Peter Karmanos, Jr.

Mr. Karmanos has been a director of Adherex since May 2004. Mr. Karmanos is Chairman of the Board of Directors, Chief Executive Officer and cofounder of Compuware Corporation, a global provider of software solutions and professional services. Mr. Karmanos is a director for the Barbara Ann Karmanos Cancer Institute,

the North American Hockey League, USA Hockey, Worthington Industries, Taubman Centers, Inc., Automation Alley and Detroit Renaissance. He is also a member of the National Hockey League Board of Governors.

#### Donald W. Kufe, MD

Dr. Kufe has been on the Board of Directors of Adherex 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.

#### Fred H. Mermelstein, PhD

Dr. Mermelstein has been a director of Adherex since November 2002. Dr. Mermelstein is a founder, CEO and President of Innovative Drug Delivery Systems Inc. and 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 the Jordan Heart Foundation. Dr. Mermelstein holds a dual Ph.D. in Pharmacology and Toxicology from Rutgers University and 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. Dr. Morand is the President and Chief Executive Officer, and director of the Canadian Science and Technology Growth Fund Inc. since 1996, which invests in the commercialization of the results of early stage research in Canada's science and engineering sectors. Dr. Morand is also past chair of the Ottawa Life Sciences Council and past president of the Natural Sciences and Engineering Research Council of Canada (NSERC), an agency which invests over \$450.0 million annually in support of research. Prior to his NSERC appointment he served 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 of Directors since November 2002. Prior to joining Adherex, Dr. Norris was Chief Operating Officer and Chairman of the Scientific Advisors 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 20 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.

<sup>44</sup> 

#### Arthur T. Porter, MD, MBA

Dr. Porter, who has served as a director of Adherex since February 2004, was nominated pursuant to an arrangement with HBM BioVentures (Cayman) Ltd. (See "—Board practices"). Dr. Porter has served as the Executive Director of the McGill University Health Center 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 has served as a director of Munder Funds since 2002 and Universal Healthcare Management Systems since 2003.

### Senior Management

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

#### Brian E. Huber, PhD

Dr. Huber joined Adherex as the Chief Scientific Officer in October 2004. Prior to joining Adherex, Dr. Huber was Vice President of Biology/Pharmacology in Drug Discovery for GlaxoSmithKline, where he directed the Departments of Metabolic Disease, Molecular Pharmacology & Endocrinology, Biochemical & Analytical Pharmacology, Virology and International Clinical Virology. From 1997 to 2001 he was Vice President of Pharmacology at GlaxoWellcome with responsibility for the departments of Cancer Biology, Musculoskeletal Diseases, Metabolic Diseases and Virology. From 1995 to 1997 he was the Director of the Division of Pharmacology at GlaxoWellcome.

#### 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 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.

#### Rajesh K. Malik, MD

Dr. Malik joined Adherex as the Chief Medical Officer in September 2004. Prior to joining Adherex, Dr. Malik was Executive Director at EMD Pharmaceuticals, where he directed the global clinical development strategy for three EMD/Merck KGaA oncology product candidates. From January 2000 to March 2002, he served as Associate Director at Bristol-Myers Squibb, where he was responsible for the global clinical development strategy for an oral Taxane<sup>™</sup> and for the company's pediatric initiatives. He served fellowships at the Children's Hospital of Philadelphia and Duke University Medical Center. From 1993 to 2000, he was Assistant Professor in the Department of Pediatrics at the University of Virginia in Charlottesville, VA. Dr. Malik completed his medical training in England, earning his M.B., Ch.B. degree from the University of Sheffield Medical School, with post-graduate training in the United Kingdom and in the United States.

## D. Scott Murray, BScPharm, LLB, MBA

Mr. Murray has been General Counsel and Corporate Secretary of Adherex since February 2003 and a Vice President since September 2003. 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, 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, 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.

## **B. 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.
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
Bruce Chabner, MD	Chief of Hematology/Oncology at Massachusetts General Hospital and Professor of Medicine at Harvard Medical School

## C. Compensation

### **Statement of Executive Compensation**

The following table sets forth the compensation earned during the fiscal year ended June 30, 2004 by our current Chief Executive Officer and our three other most highly compensated executive officers (together, the "Named Executive Officers") in that year. Unless otherwise indicated in the footnotes to this table, all compensation information is in U.S. dollars.

			Annual Compens	Long-Term Compensation Awards		
Name and Principal Position	Fiscal Year	Salary (\$)	Bonus (\$)	Other Annual Compensation (\$)	Securities Under Options Granted	All Other Compensation (\$)
Dr. William Peters (1) Chief Executive Officer and Chairman of the Board	2004	356,250	335,000	_	5,021,089	_
Dr. Robin Norris (2) President and Chief Operating Officer	2004	225,000	52,500	_	560,000	—
D. Scott Murray (3) Vice President, General Counsel and Corporate Secretary	2004	176,663*	10,000*	—	149,850	—
James A. Klein, Jr.(4) Chief Financial Officer	2004	29,697	15,000	—	1,075,000	_

\* Canadian Dollars

(1) Effective March 1, 2004, Dr. Peters' annual salary was increased to US\$425,000.

(2) Effective July 1, 2003, Dr. Norris' salary was increased from CAD\$225,000 to US\$225,000.

(3) Pursuant to an agreement dated January 27, 2003, Mr. Murray received an annual salary of CAD\$150,000. Effective December 19, 2003 Mr. Murray's salary increased from CAD\$150,000 to US\$150,000. Mr. Murray was paid a salary of CAD\$142,719 from July 2003 through April 2004 and US\$25,000 from May 2004 through June 2004.

(4) Mr. Klein joined the Company as Chief Financial Officer on April 26, 2004. His employment agreement provides that he receive an annual salary of US\$160,000 and a signing bonus of US\$15,000.

### **Option Grants During the Fiscal Year Ended June 30, 2004**

The following table sets forth stock options granted during the fiscal year ended June 30, 2004 to our Named Executive Officers under our Stock Option Plan, or otherwise, to whom any such stock options were granted during the most recently completed financial year:

Name and Position	Securities Under Options Granted (#)			Expiration Date
Dr. William Peters Chief Executive Officer and Chairman of the Board	351,089 1,170,000 3,500,000(1)	\$ \$ \$	0.45 0.58 0.45	2010 2011 2010
Dr. Robin Norris President and Chief Operating Officer	378,000 182,000	\$ \$	0.45 0.58	2010 2011
D. Scott Murray Vice President, General Counsel & Corporate Secretary	59,850 50,000 40,000	\$ \$ \$	0.45 0.49 0.58	2010 2010 2011
James A. Klein, Jr. Chief Financial Officer	1,000,000 75,000	\$ \$	0.53 0.58	2011 2011

(1) Options granted outside the Stock Option Plan and approved by shareholders on December 16, 2003.

## D. Board practices

## **Compensation of Directors**

During the year ended June 30, 2004, our non-executive directors, as a group, were granted options to purchase an aggregate of 864,864 shares of common stock and were paid an aggregate of \$34,500 in cash fees. In particular, each non-executive director was granted options to purchase 93,108 shares of common stock on March 1, 2004 at an exercise price of \$0.65 per share, the market price of our common stock on the Toronto Stock Exchange on the date of grant, with a term of seven years from the date of grant and vesting as to 31,036 shares of common stock on each of the first, second and third anniversary of the date of grant. On March 1, 2004, members of the Scientific and Clinical Advisory Board, including its Chair and member of the Board of Directors Dr. Kufe, were also granted options to purchase 5,000 shares of common stock at an exercise price of \$0.65 per share, the market price of our common stock on the Toronto Stock Exchange on the date of grant and vesting as to the entire 5,000 shares of common stock as of March 31, 2004. Each non-executive director was granted fully vested options to purchase 20,000 shares of common stock on May 21, 2004 at an exercise price of \$0.58 per share, the market price of our common stock as of March 31, 2004. Each non-executive director was granted fully vested options to purchase 93,108 shares of common stock on May 21, 2004 at an exercise price of \$0.58 per share, the market price of our common stock as of March 31, 2004. Each non-executive director was granted fully vested options to purchase 93,108 shares of common stock on May 21, 2004, Mr. Karmanos was granted options to purchase 93,108 shares of common stock at an exercise price of \$0.58 per share, the market price of our common stock on the Toronto Stock Exchange on the date of grant, with a term of seven years from the date of grant. Upon joining the Board on May 21, 2004, Mr. Karmanos was granted options to purchase 93,108 shares of common stock at an exercise price of \$0.58 per share, the market price of our com

Each non-executive director is paid US\$2,000 for each board meeting attended in person, US\$500 for each board meeting attended by telephone and an additional US\$500 for each committee meeting attended in person or by telephone. Directors who are also employees will receive no compensation for serving on the Board of Directors for the year ending June 30, 2005.

#### **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.

Pursuant to an employment agreement dated February 19, 2003 between Dr. William P. Peters and the Company, Dr. Peters became employed as Chief Executive Officer and Vice Chairman of the Company effective March 12, 2003 for a five-year term, and was appointed Chairman of the Board of Directors on February 28, 2004. Pursuant to this agreement, Dr. Peters (a) receives an annual salary in the amount of US\$350,000 (increased to US\$425,000 effective March 1, 2004), (b) received a signing bonus totaling US\$200,000, of which US\$40,000 was paid at the time of signing and US\$80,000 was paid on each of July 1, 2003 and December 15, 2003, and (c) was granted an option to purchase up to 3,750,000 shares of common stock at an exercise price of \$0.33 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 US\$3.75 million, Dr. Peters would be granted additional options sufficient for his aggregate option holdings to be 5% of the common stock of the Company, 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 7,389,098 shares of common stock, which would have brought his option holdings to 5% on a fully diluted basis, subject to applicable regulations and approvals. The Company obtained shareholder approval on December 16, 2003 for 3,500,000 of such shares that were granted to Dr. Peters outside of our Stock Option Plan. However, the Toronto Stock Exchange requires that no person may hold options representing more than 5% of the Company'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 3,851,089 shares of common stock, which together with shares of common stock issuable under his other option holdings represented 5% of the issued and outstanding shares of common stock at such time. These options have an exercise price of \$0.45 per share and vest as to 1,517,756 shares of common stock on the date of grant, 1,166,667 on the first anniversary of the date of grant and 1,166,666 shares of common stock on the second anniversary of the date of grant. In May 2004, the Company made a further grant to Dr. Peters under the Financing Grant Provision of options to purchase 1,170,000 shares of common stock when the Company increased its issued and outstanding shares by virtue of its two equity financings in that month. These options have an exercise price of \$0.58 per share and are fully vested. From time to time, as the TSX Limit permits, the Company intends to grant the 2,368,009 options remaining of the originally targeted 7,389,098 options under the Financing Grant Provision, subject to applicable approvals and regulations. 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 (as such terms are defined in the agreement), the Company is obligated to pay Dr. Peters severance compensation equal to 24 months of salary.

Pursuant to an employment agreement dated December 12, 2001 between Dr. Robin Norris and the Company, Dr. Norris is employed as our Chief Operating Officer. Pursuant to this agreement, Dr. Norris (a) receives an annual salary in the amount of \$225,000 (increased to US\$225,000 effective July 1, 2003), (b) was granted options to purchase up to 600,000 shares of common stock at a price per share of \$0.33 under our Stock Option Plan that vested as to 200,000 shares of common stock on each of January 1, 2003, 2004 and 2005 and expire seven years following the date of grant, (c) was reimbursed for certain expenses related to his relocation from Colorado to Ottawa, and (d) is entitled to participate in all employee benefit programs offered by the Company. Also pursuant to this agreement, if Dr. Norris is dismissed from employment by the Company for any reason other than "cause," we are obligated to pay Dr. Norris severance compensation equal to 12 months of salary. Dr. Norris was appointed President of the Company in addition to Chief Operating Officer on June 14, 2002.

Pursuant to an employment agreement dated April 21, 2004 between James A. Klein, Jr. and the Company, Mr. Klein is employed as our Chief Financial Officer. Pursuant to this agreement, Mr. Klein (a) receives an annual salary in the amount of US\$160,000, (b) was granted options to purchase up to 1,000,000 shares of

common stock at a price per share of \$0.53 under our Stock Option Plan that vested as to 250,000 shares of common stock on July 24, 2004, with the remainder to vest in three equal installments on each of April 26, 2005, 2006 and 2007, (c) received a signing bonus of US\$15,000, and (d) may receive an annual discretionary bonus of up to US\$50,000. If Mr. Klein's employment terminates due to a change in control of the Company, any then- remaining unvested shares shall immediately vest and be fully exercisable. Also pursuant to this agreement, if Mr. Klein is dismissed from employment by the Company for any reason other than "cause," we are obligated to pay Mr. Klein severance compensation equal to six months of salary.

Pursuant to an employment agreement dated August 9, 2004 between Dr. Rajesh K. Malik and the Company, Dr. Malik is employed as our Chief Medical Officer. Pursuant to this agreement, Dr. Malik (a) receives an annual salary in the amount of US\$185,000 (to be adjusted to US\$220,000 in January 2005 and US\$250,000 on or about July 1, 2005, in each case in the event of acceptable performance as determined by the Company), (b) was granted options to purchase up to 750,000 shares of common stock, at a price per share of \$0.40 under our Stock Option Plan, that will vest as to 187,500 shares of common stock on December 5, 2004 and will vest as to the remainder in three equal installments on each of September 7, 2005, 2006 and 2007, (c) received a signing bonus of US\$35,000 (to be repaid if Dr. Malik does not complete one year of employment), and (d) may receive an annual discretionary bonus of up to 25% of annual base salary (determined to be \$40,000 for 2004 in the event of satisfactory performance as determined by the Company). If Dr. Malik's employment terminates due to a change in control of the Company, any then-remaining unvested shares shall immediately vest and be fully exercisable. Also pursuant to this agreement, if Dr. Malik is dismissed from employment by the Company without "cause," we are obligated to pay Dr. Malik severance compensation consisting of health insurance benefits and his then current base salary for the lesser of six months or until he has accepted alternative employment.

Pursuant to an employment agreement dated October 25, 2004 between Dr. Brian E. Huber and the Company, Dr. Huber is employed as the Chief Scientific Officer. Pursuant to this agreement, Dr. Huber (a) receives an annual salary in the amount of US\$165,000 (to be adjusted to US\$185,000 in January 2005), (b) was granted options to purchase up to 750,000 shares of common stock, at a price per share of \$0.39 under our Stock Option Plan, that will vest as to 187,500 shares of common stock on January 23, 2005 and will vest as to the remainder in three equal installments on each of October 25, 2005, 2006 and 2007, (c) received a signing bonus of US\$25,000 (to be repaid if Dr. Huber does not complete 90 days of employment), and (d) may receive an annual discretionary bonus of up to US\$50,000. Also pursuant to this agreement, if Dr. Huber is dismissed from employment by the Company without "cause," we are obligated to pay Dr. Huber severance compensation consisting of health insurance benefits and his then current base salary for the lesser of six months or until he has accepted alternative employment.

Pursuant to an employment agreement dated January 27, 2003 between D. Scott Murray and the Company, Mr. Murray is employed as our General Counsel and Corporate Secretary, and became a Vice President on September 19, 2003. Pursuant to this agreement, Mr. Murray (a) receives an annual salary in the amount of \$150,000 (increased to US\$150,000 effective December 19, 2003), (b) was granted options to purchase up to 150,000 shares of common stock at a price per share of \$0.35 under our Stock Option Plan that vest as to 50,000 shares of common stock on each of February 3, 2004, 2005 and 2006, (c) was reimbursed for certain expenses related to his relocation from Toronto to Ottawa, and (d) is entitled to participate in all employee benefit programs offered by the Company. Also pursuant to this agreement, if Mr. Murray is dismissed from employment by the Company for any reason other than "cause," we are obligated to pay Mr. Murray severance compensation equal to three months working notice and three months of salary.

In addition to such employment agreements, each of Drs. Peters, Norris, Malik and Huber, as well as Messrs. Klein and Murray are party to a confidentiality and intellectual property agreement with the Company.

On May 21, 2004, the Company amended the option agreements with current employees, executive officers and members of the Board of Directors, relating to options granted prior to and on that date, to provide that (i) in the event of a Change of Control, all granted but unvested options would vest immediately for each member of the Board, for executive officers and direct employees, and (ii) executive officers and members of the Board would be allowed for three years after concluding their employment or engagement with the Company 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. "Change of Control" is defined as the acquisition (at one time or over a period of time) of shares of the Company or of securities ("Convertible Securities") convertible into, exchangeable for or representing the right to acquire shares of the Company as a result of which a person, group of persons or persons acting jointly or in a concert, or persons associated or affiliated within the meaning of the *Canada Business Corporation Act* with any such person, group of persons or persons or persons acting jointly or in concert (collectively, "Acquirors"), beneficially own shares of the Company and/or Convertible Securities that would entitle the holders thereof to cast more than 50% of the votes attaching to all shares in the capital of the Company that may cast to elect directors of the Company (assuming the conversion, exchange or exercise of Convertible Securities beneficially owned by the Acquirors). Change of Control does not include a reverse takeover or other reorganization whereby the holders of shares and Convertible Securities of the Company immediately prior to such transaction beneficially own, following the completion of the transaction, shares of the parent or surviving corporation that would entitle the holders thereof to cast more than 50% of the votes attaching to all shares in the capital of such parent or surviving corporation that would entitle the holders thereof to cast more than 50% of the parent or surviving corporation that would entitle the holders thereof to cast more than 50% of the votes attaching to all shares of the Company immediately prior to such transaction beneficially own, following the completion of the transaction, shares of the parent or surviving corporation that may be cast to elect directors of such parent or surviving corporation.

## **Indebtedness of Directors and Officers**

No individual, who is or, at any time during our most recently completed financial year, was a director, executive officer or senior officer 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 year, 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**

We believe that good corporate governance is important to ensure that the Company is managed for the long term benefit of its shareholders. In connection with our proposed listing on the American Stock Exchange, and our commitment to complying with the standards of the Toronto Stock Exchange, we have continued to review our corporate governance practices and policies and compared them to developing practices and regulation in Canada and the United States. In particular, we have considered the developing rules and guidelines for corporate governance practices and policies, and related disclosures, promulgated by the Toronto Stock Exchange, the U.S. Securities and Exchange Commission and the American Stock Exchange, as well as the Sarbanes-Oxley Act of 2002.

Based on this review, in February 2004 (revised in August 2004), our Board of Directors 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 the Company. The Board of Directors also (i) restated the charter of the Audit Committee and appointed its members, (ii) established a separate Governance Committee, adopted a written charter for the committee, and appointed its members, (iii) restated the charter of the Compensation Committee and appointed its members, (iv) established a Nominating Committee, adopted a written charter for the committee, and appointed its members and (v) appointed a Lead Independent Director, currently Raymond Hession. You can access our 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 our website at http://www.adherex.com/CorpGov.htm.

## Mandate of the Board of Directors

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

- adoption of a strategic plan for the Company;
- approval of the annual operating and capital expenditure budgets;
- identification of the principal risks of the Company's business and ensuring the implementation of the appropriate systems to manage these risks;
- succession planning for the Company, including appointing and monitoring senior management;
- adoption of a communications policy for the Company;
- approval of acquisitions, dispositions, investments and financings, which exceed certain prescribed limits; and
- integrity of the Company's internal control and management information systems.

The Board discharges its responsibilities directly and through committees that have specific areas of responsibility. During the financial year ended June 30, 2004, the Board held eight meetings. 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, 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. Such matters include succession planning and the monitoring of senior management. In addition, the Board has adopted a formal communications policy for communications with shareholders and other interested parties.

## Lead Independent Director

Our Corporate Governance Guidelines require that the Board designate an independent director to act in a lead capacity to perform certain functions, or Lead Independent Director. The Lead Independent Director shall be elected annually by the independent directors. In May 2004, Mr. Hession was elected as the 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, with the understanding that agenda items requested by the Lead Independent Director shall be included on the agenda;
- 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;
- 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 receive detailed information describing our performance prior to each Board meeting, 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 and our response to the Toronto Stock Exchange's governance guidelines first published in 1994.

The Audit Committee operates under a written charter adopted by the Board. The committee met seven times during fiscal year 2004. The current members of the Audit Committee are Mr. Hession (Chair), Dr. Morand and Dr. Porter. The Board has determined that each is "unrelated" for purposes of the Toronto Stock Exchange Guidelines and "independent" as defined by the current rules of the American Stock Exchange. The Board has determined that each member of the committee is financially literate for purposes of the American Stock Exchange and that Arthur Porter, MD, MBA has the requisite attributes of an "audit committee financial expert" as defined by regulations promulgated by the Securities and Exchange Commission.

### **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. Hession and Dr. Kufe. The Board has determined that each is "unrelated" for purposes of the Toronto Stock Exchange Guidelines and "independent" as defined by the current rules of the American Stock Exchange. The committee held four meetings in fiscal year 2004.

#### 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 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 will be aligned with the Company's strategic needs. The current members of the Nominating Committee are Dr. Kufe (Chair), Mr. Karmanos and Dr. Porter. The Board has determined that each is "unrelated" for purposes of the Toronto Stock Exchange Guidelines and "independent" as defined by the current rules of the American Stock Exchange.

#### **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.

The current members of the Governance Committee are Mr. Hession (Chair), Dr. Mermelstein, Dr. Morand and Mr. Karmanos. The Board has determined that each is "unrelated" for purposes of the Toronto Stock Exchange Guidelines and "independent" as defined by the current rules of the American Stock Exchange.

## E. Employees

As of October 31, 2004, we employ 22 full-time employees, 19 of whom are located at our office in RTP and three of whom are located in Ottawa, Ontario, Canada. We intend to add approximately five employees by December 2004 and approximately ten more employees in 2005. We also have four contract employees.

## F. 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 October 31, 2004. 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 as of October 31, 2004(1)	Exercise Price	Expiration Date
William P. Peters, MD, PhD, MBA	305,912	3,750,000 77,829 152,956 3,500,000 351,089 1,170,000	4.94%	\$ 0.33 0.55 0.43 0.45 0.45 0.45	2/19/2010 6/23/2007 12/19/2008 12/30/2010 12/30/2010 5/21/2011
Raymond Hession	637,641	48,000 42,945 84,721 39,000 93,108 20,000	0.54%	0.3275 0.55 0.43 0.34 0.65 0.58	2/23/2006 6/23/2007 12/19/2008 5/3/2010 3/1/2011 5/21/2011
Peter Karmanos, Jr.	—	93,108	0.05%	0.58	5/21/2011
Donald W. Kufe, MD	_	93,108 5,000 20,000	0.07%	0.65 0.65 0.58	3/1/2011 3/1/2011 5/21/2011
Fred H. Mermelstein, PhD	6,792,053	381,921 38,914 76,478 39,000 93,108 20,000	4.13%	$\begin{array}{c} 0.717 \\ 0.55 \\ 0.43 \\ 0.34 \\ 0.65 \\ 0.58 \end{array}$	5/20/2007 6/23/2007 12/19/2008 5/3/2010 3/1/2011 5/21/2011
Peter Morand, PhD	200,000	200,000 400,000 39,000 93,108 20,000	0.53%	0.3275 0.75 0.34 0.65 0.58	2/25/2007 2/25/2007 5/3/2010 3/1/2011 5/21/2011

Name	Common Shares Held Directly	Options and Warrants Outstanding	% of Outstanding Common Stock as of October 31, 2004(1)	Exercise Price	Expiration Date
Robin Norris, MD	18,000	600,000 200,000 378,000 182,000	0.76%	0.33 0.34 0.45 0.58	12/12/2008 5/3/2010 12/30/2010 5/21/2011
Arthur T. Porter, MD, MBA	_	93,108 20,000	0.06%	0.65 0.58	3/1/2011 5/21/2011
Brian E. Huber, PhD		750,000	0.42%	0.39	10/8/2011
James A. Klein, Jr., CPA	—	1,000,000 75,000	0.60%	0.53 0.58	4/26/2011 5/21/2011
Rajesh K. Malik, MD	—	750,000	0.42%	0.44	8/9/2011
D. Scott Murray, BScPharm, LLB, MBA	_	150,000 50,000 59,850 40,000	0.17%	0.35 0.49 0.45 0.58	2/12/2010 12/19/2010 12/30/2010 5/21/2011
All executive officers and directors as a group (eleven persons)	7,953,606	15,290,351	11.94%		

(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 179,457,222 shares of our common stock outstanding as of October 31, 2004.

#### **Adherex Stock Option Plan**

Our Adherex 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 October 31, 2004, 20,000,000 shares of common stock have been reserved for issuance upon exercise of options issuable under our Stock Option Plan, of which options to purchase 14,678,803 shares of common stock have been granted to employees, directors, and key consultants and are outstanding, and 107,000 shares of common stock have been issued pursuant to stock option exercises.

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 recommend to the Board of Directors 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 our common stock on the Toronto 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 the grant to Dr. William Peters of options to purchase 3,500,000 shares of common stock, having an exercise price equal to the market price of the our common stock on the Toronto Stock Exchange on the date of the grant and a term of seven years from the date of 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 179,457,222 shares of our common stock outstanding as of October 31, 2004.

To our knowledge, as at the date of this registration statement, 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:

	Number of Voting	securities Owned
Name	Common Stock	Percentage of Class
HBM BioVentures (Cayman) Ltd.	34,445,380 (1)	18.0%
The VenGrowth Advanced Life Sciences Fund Inc.	29,919,136 (2)	15.8%
OrbiMed Advisors LLC	22,815,378 (3)	12.2%

(1) Includes a warrant to purchase 535,714 shares of common stock at an exercise price of \$0.43, expiring December 3, 2007, a warrant to purchase 9,416,430 shares of common stock at an exercise price of \$0.43, expiring December 19, 2008 and a warrant to purchase 1,886,793 shares of common stock at an exercise price of \$0.70, expiring May 20, 2007.

(2) Includes a warrant to purchase 7,142,857 shares of common stock at an exercise price of \$0.43, expiring December 19, 2008 and a warrant to purchase 2,830,188 shares of common stock at an exercise price of \$0.70, expiring May 20, 2007.

(3) Includes a warrant to purchase 5,725,000 shares of common stock at an exercise price of \$0.43, expiring December 19, 2008 and a warrant to purchase 1,866,793 shares of common stock at an exercise price of \$0.70, expiring May 20, 2007.

The above shareholders do not have different voting rights from any other shareholder of the Company. HBM BioVentures (Cayman) Ltd. does, however, have the right to appoint a nominee for election to the Board by our shareholders and the right to have an observer to attend, but not vote at, our Board meetings. To date, HBM BioVentures (Cayman) Ltd. has never sent an observer to any of our Board meetings, and has informed us that it does not intend to send any observers in the future. Currently, Dr. Porter is the director nominated by HBM Bioventures (Cayman) Ltd. He has no affiliation with HBM Bioventures (Cayman) Ltd.

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 stock, The VenGrowth Advanced Life Sciences Fund Inc. beneficially owned 13.5% of our common stock, and OrbiMed Advisors LLC beneficially owned 10.9% of our common stock, 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, The VenGrowth Advanced Life Sciences Fund Inc. beneficially owned 18.0% of our common stock, and OrbiMed Advisors LLC beneficially owned 15.8% 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.

As of August 2004, (i) 95 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) 38% 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. Paramount Capital, Inc. ("Paramount") was engaged as an introducing agent by Oxiquant and received \$500,000 and warrants to purchase 848,000 shares of common stock of the Company for their services pursuant to the acquisition of Oxiquant by Adherex. Paramount also served as introduction agent for a private placement in June 2003 of convertible notes in the United States and received, in addition to cash commissions, warrants to purchase an aggregate of 504,330 shares of common stock of the Company. Fred H. Mermelstein is sole shareholder and former Director of Venture Capital at Paramount Capital Investments LLC and a former employee of Paramount. Dr. Mermelstein received compensation from Paramount from the proceeds it received as a result of the transactions noted above.

Robin Norris, an officer and director of Adherex, and Raymond Hession and Peter Morand, directors of Adherex, are each former directors of CBI. CBI was originally incorporated as a wholly owned subsidiary of Adherex, and in exchange for rights to Adherex's non-cancer assets and \$250,000 in cash, Adherex received preferred shares of CBI. As of the date hereof, Dr. Hession owns 277,500 preferred shares of CBI, Dr. Morand owns 200,000 preferred shares of CBI, Dr. Norris owns 18,000 preferred shares of CBI, and Dr. Peters owns 100 preferred shares of CBI.

In February 2004, we filed a claim in the Ontario Superior Court of Justice against CBI in the amount CAD\$124,000 on account of unpaid goods and services rendered. In July 2004, CBI filed a statement of defence and counterclaim in response to such claim. CBI's counterclaim seeks CAD\$5 million in damages in relation to the license agreement between the parties. In July 2004, in an effort to reacquire rights to the non-cancer applications relating to the cadherin technology and settle our litigation with CBI, we entered into a non-binding letter of intent to acquire all of the issued and outstanding shares of CBI through an amalgamation of CBI with a wholly-owned subsidiary of Adherex formed for this purpose. We expect the amalgamation to close in November or December 2004 after CBI's shareholders vote on the acquisition, but there can be no assurance that it will close on schedule or at all. See Item 4.A., "Information on the Company—History and development of the Company."

#### 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 registration statement.

In fiscal year 2004, 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, other than our litigation with CBI described in Item 4.A., "Information on the Company—History and development of the Company." 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

Please see Note 20 to the attached consolidated financial statements.

## **ITEM 9. THE OFFER AND LISTING**

## A. Offer and listing details

We intend to apply to the American Stock Exchange to have our issued and outstanding common stock without par value. 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." Our shares of common stock are registered shares on the books of its 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.

The following table sets forth information regarding the price history of our common stock on the Toronto Stock Exchange for the periods indicated:

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

	Jun-04	Jun-03	Jun-02	Jun-01	Jun-00
High (\$)	0.79	0.59	1.08	N/A	N/A
Low (\$)	0.38	0.30	0.30	N/A	N/A
Trading Volume	95,454	40,829	68,286	N/A	N/A

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

	Q1/05 Jul-Sept	Q4/04 Apr-Jun	Q3/04 Jan-Mar	Q2/04 Oct-Dec	Q1/04 Jul-Sept	Q4/03 Apr-Jun	Q3/03 Jan-Mar	Q2/03 Oct-Dec	Q1/03 Jul-Sept
High (\$)	0.50	0.63	0.79	0.50	0.54	0.54	0.42	0.49	0.59
Low (\$)	0.35	0.41	0.50	0.38	0.46	0.32	0.32	0.33	0.30
Trading Volume	109,317	107,775	191,653	43,257	37,603	55,316	16,759	24,440	66,802

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

	Oct-04	Sep-04	Aug-04	July-04	Jun-04	May-04
High (\$)	0.45	0.45	0.44	0.50	0.58	0.60
Low (\$)	0.38	0.35	0.36	0.41	0.41	0.51
Trading Volume	91,873	152,024	90,018	85,910	91,782	109,165

### B. Plan of distribution

Not applicable.

### C. Markets

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

We intend to apply to have our common stock listed on the American Stock Exchange upon the effectiveness of this registration statement. We have reserved the symbol "ADH."

There can be no guarantee that the Company's application to list on the American Stock Exchange will be accepted.

#### **D.** Selling shareholders

Not applicable.

#### E. Dilution

Not applicable.

#### F. Expenses of the issue

Not applicable.

### **ITEM 10. ADDITIONAL INFORMATION**

### A. Share capital

Our authorized share capital consists of an unlimited number of shares of common stock, without nominal or par value. As of October 31, 2004, there were 179.5 million shares of common stock outstanding, which are fully paid and non-assessable. At October 31, 2004 we had 18.2 million options to purchase common shares outstanding with a weighted average price of \$0.48 and warrants outstanding of 62.9 million with a weighted average price of \$0.49. We do not hold any shares of our capital stock as Treasury stock.

#### Fiscal Year 2004

As of June 30, 2004, there were 179.5 million shares of common stock outstanding which were fully paid and non-assessable.

On June 14, 2004 New Generation Biotech (Equity) Fund Inc. ("New Generation") exchanged its interest in 2037357 Ontario Inc. for 4.0 million shares of the Company's common stock and warrants to purchase 2.0 million shares of the Company's common stock at an exercise price of \$0.43 per share. See Item 4.A., "History and development of the Company."

On May 20, 2004, we completed an \$8.4 million bought deal in Canada, issuing 15.8 million units at a price of \$0.53 per unit. A bought deal is a Canadian term for an offering by an issuer that is similar to a firm commitment underwriting. It involves the dissemination of a short form prospectus that meets the requirements of, and has been filed with, the Ontario Securities Commission and the Toronto Stock Exchange. We paid Dlouhy Merchant Group Inc. an underwriting fee of \$0.5 million in connection with the bought deal. Concurrently with the bought deal, we completed a \$4.0 million private placement outside of Canada to existing shareholders of the Company, issuing 7.5 million units at a price of \$0.53 per unit. Each unit consists of one share of common stock and one-half of a common stock purchase warrant. Each whole warrant is exercisable until May 20, 2007 at an exercise price of \$0.70 per share. We paid agent commissions of \$0.1 million in connection with the private placement. In conjunction with the May 2004 financings, the Company incurred approximately \$0.3 million of other expenses.

In connection with the December 19, 2003 private placement, we incorporated 2037357 Ontario Inc. to carry out specific research and development activities in Ontario. We entered into a subscription and exchange rights agreement with New Generation and 2037357 Ontario Inc., which was 50% owned by us and 50% owned by New Generation. Pursuant to the subscription agreement, 2037357 Ontario Inc. issued 4.0 million Series 1 Preferred Shares and warrants to purchase 2.0 million Series 1 Preferred Shares to New Generation for a purchase price of \$1.4 million. Pursuant to the exchange rights agreement, New Generation had the right to exchange all or part of its Series 1 Preferred Shares of 2037357 Ontario Inc. for an equal number of shares of Adherex common stock at any time. The exchange rights agreement also provided that upon the exercise by New Generation of its exchange right, all of the then outstanding warrants to purchase shares of Series 1 Preferred Shares of 2037357 Ontario Inc. would be exchanged for an equal number of warrants to purchase Adherex common stock, which would have an exercise price of \$0.43 per share and an expiration date of December 19, 2008. On June 14, 2004, New Generation exchanged its interest in 2037357 Ontario Inc., a wholly owned subsidiary of the Company, continued its existence under the CBCA as Adherex Research Corp. On June 29, 2004, Adherex Research Corp., a wholly owned subsidiary of the Company, amalgamated with the Company pursuant to a short-form amalgamation under the CBCA.

On December 19, 2003, we completed a private placement of 57.6 million units, for \$0.35 per unit, for gross proceeds totaling approximately \$20.2 million. Each unit was comprised of one share of common stock and one-half of a common stock purchase warrant. The warrants are exercisable until December 19, 2008 at an exercise price of \$0.43 per share. Including 14.1 million units issued upon the conversion of convertible notes of the Company as described below, we issued a total of 71.7 million units.

In June and December 2003, we completed bridge financings of convertible notes for a total of approximately \$4.9 million. In accordance with their terms, upon the closing of the private placement described above on December 19, 2003, these notes converted at \$0.35 per unit into 14.1 million units having the same terms as those issued in the private placement (with the exception of notes held by insiders of the Company, which converted at \$0.46 per unit). Investors in or purchasers of the June convertible notes also received warrants to purchase an aggregate of 1.7 million shares of common stock at a price of \$0.55 per share (of which warrants to purchase 1.4 million shares of common stock held by non-insiders were repriced to \$0.43 per share on December 3, 2003), while investors of the December convertible notes received warrants to purchase an aggregate of 1.4 million shares of common stock at a price of \$0.43 per share.

At June 30, 2004 we had 16.4 million options to purchase common shares outstanding with a weighted average price of \$0.49 per share of which 8.4 million were issued with a weighted average price of \$0.50 per share during the fiscal year ended June 30, 2004.

#### Fiscal Year 2003

On November 5, 2002, our shareholders approved a resolution to reduce our stated capital by approximately \$15 million. This resolution was required by the CBCA to ensure that the value of our assets was not less than the aggregate of our liabilities and stated capital of all classes, thereby permitting the distribution to our shareholders of the CBI Class A Preferred Shares.

On November 20, 2002, we acquired the intellectual property of Oxiquant through a reverse triangular merger involving a wholly-owned U.S. subsidiary, pursuant to which we issued to Oxiquant's shareholders 40.2 million shares of common stock and warrants to purchase 2,306,994 shares of common stock with an exercise price of \$0.717 per share that expire on May 20, 2007.

On September 27, 2002, CBI was incorporated as a wholly-owned subsidiary of Adherex. Adherex granted CBI an exclusive, royalty-free license agreement to develop, market and distribute pharmaceuticals and therapeutics for non-cancer applications based on cadherin technology. Subsequently, Adherex distributed all of

the equity of CBI to the shareholders of record of Adherex. This divestiture of our non-cancer assets was a condition precedent to our acquisition of Oxiquant, a U.S.-based development-stage biopharmaceutical company with a focus in chemoprotection and chemoenhancement.

At June 30, 2003 we had 8.2 million options to purchase common shares outstanding with a weighted average of price of \$0.48 per share of which 5.6 million options were issued with a weighted average price of \$0.48 per share during the fiscal year ended June 30, 2003 under our stock option plan.

#### Fiscal Year 2002

There was no common stock activity for the year.

At June 30, 2002 we had 3.7 million options to purchase common shares outstanding with a weighted average price of \$0.74 per share of which 0.9 million options were issued with a weighted average price of \$0.39 per share during the fiscal year ended June 30, 2002 under our stock option plan.

#### Fiscal Year 2001

On June 5, 2001, we completed an initial public offering, issuing 6.7 million shares of common stock at a price of \$1.50 per share, and listing on the Toronto Stock Exchange under the symbol AHX. Net proceeds of the offering credited to common stock amounted to \$8.7 million.

At June 30, 2001 we had 4.1 million options to purchase common shares outstanding with a weighted average price of \$0.56 per share of which 0.5 million options were issue at a price of \$1.25 per share during the fiscal year ended June 30, 2001 under our stock option plan.

For more details on the history of our share capital, you should read Item 4.A., "Information on the Company—History and development of the Company," as well as our financial statements and related notes thereto included in this Form 20-F.

### Warrants and Options

The warrants and options that are currently outstanding, as at October 31, 2004 are:

Name of Warrant or Option	Number of Shares of Common Stock Issuable upon Exercise of Warrants/Options	Exercise Price	Expiry Date
Employee Stock Options	18,178,803	0.3275-1.50	2005-2011
Introduction Warrants (1)	848,000	0.41	2007
Merger Warrants (1)	2,306,994	0.7170	2007
Private Placement Investor Warrants (2)	1,723,820	0.43-0.55	2007
Private Placement Agent Warrants (2)	504,330	0.47	2005
Private Placement Investor Warrants (3)	1,353,570	0.43	2007
Private Placement Agent Warrants (3)	470,000	0.43	2005
Private Placement Investor Warrants issued upon conversion of Convertible Notes (4)	7,032,915	0.43	2008
Private Placement Investor Warrants (4)	30,804,636	0.43	2008
Private Placement Agent Warrants (4)	6,132,437	0.43	2005
Bought Deal and Private Placement Investor Warrants (5)	11,673,586	0.70	2007

(1) In connection with the Oxiquant acquisition in November 2002, we issued 2,306,994 warrants to Oxiquant's shareholders with an exercise price of \$0.717 that will expire on May 20, 2007 and 848,000 introduction warrants to Paramount Capital, Inc. with an exercise price of \$0.41 that will expire on November 20, 2007.

(2) On June 23, 2003, we completed a private placement of convertible notes totaling approximately \$3.0 million. On December 19, 2003, the convertible notes were converted into shares of common stock and warrants as described in Note (4) below. Investors also received warrants to purchase an aggregate of

1,723,820 shares of common stock of the Company at a price of \$0.55 per share that expire in June 2007. Paramount Capital, Inc. of New York served as introduction agent for the offering in the United States and received warrants to purchase an aggregate of 504,330 shares of common stock of the Company at a price of \$0.47 per share that will expire on June 23, 2005. Pursuant to the December 3, 2003 financing, investor warrants to purchase 1,432,601 shares of common stock were repriced to \$0.43 per share (this did not include any insiders).

- (3) Pursuant to a December 2003 private placement of convertible notes totaling \$1.9 million, investors received warrants to purchase an aggregate of 1,353,570 shares of common stock at a price of \$0.43 per share. On December 19, 2003, the convertible notes were converted into shares of common stock and warrants as described in Note (4) below. Introduction agents received, in addition to cash commissions, warrants to purchase an aggregate of 470,000 shares of common stock at an exercise price of \$0.43 per share, which expire in December 2005.
- (4) On December 19, 2003, we completed a private placement of units, each unit consisting of one share of common stock and one-half of a common stock purchase warrant, totaling approximately \$21.0 million of equity. Each warrant is exercisable for a period of five years at an exercise price of \$0.43 per share. Overall, a total of approximately 75.6 million units were issued at \$0.35 per unit, consisting of (i) 14,000,000 units for the conversion of convertible notes of the Company issued in the June 23, 2003 and December 19, 2003 private placements described in Notes (2) and (3) above, (ii) approximately 57.6 million units issued directly in the December 19, 2003 private placement, and (iii) 4.0 million units that were acquired in exchange for Series 1 Preferred Shares of 2037357 Ontario Inc. issued in connection with the December 19, 2003 private placement (as described in Item 4.A., "Information on the Company—History and development of the Company." Agents for the private placements, in addition to cash commissions, received warrants to purchase an aggregate of approximately 6.1 million shares of common stock of the Company at a price of \$0.43 per share exercisable for a period of two years that expire in December 2005.
- (5) On May 20, 2004, we completed an \$8.4 million bought deal in Canada, issuing 15,800,000 units at a price of \$0.53 per unit. We paid Dlouhy Merchant Group Inc. an underwriting fee of \$0.5 million in connection with the bought deal. A bought deal is a Canadian term for an offering by an issuer that is similar to a firm commitment underwriting. It involves the dissemination of a short form prospectus that meets the requirements of, and has been filed with, the Ontario Securities Commission and the Toronto Stock Exchange. Concurrently with the bought deal, we completed a \$4.0 million private placement outside of Canada to existing shareholders of the Company, issuing 7,547,170 units at a price of \$0.53 per unit. Each unit consists of one share of common stock and one-half of a common stock purchase warrant. Each whole warrant is exercisable until May 20, 2007 at an exercise price of \$0.70 per share. We paid agent commissions of \$0.3 million in connection with the private placement. In conjunction with these May 2004 financings, the Company incurred approximately \$0.1 million of other expenses.

Our shares of common stock rank equally, are not subject to call or assessment, and contain no pre-emptive or conversion rights. The holders of common stock are entitled to dividends as and when declared by the Board of Directors of the Company, to one vote per share at meetings of holders of common stock and, upon liquidation, to receive such assets of the Company as are distributable to the holders of common stock. All of the common stock outstanding on completion of the offering will be fully paid and non-assessable.

#### Adherex Stock Option Plan

For Information concerning our Stock Option Plan and other options, see Item 6.E., "Share Ownership."

#### B. Memorandum and articles of association

Our articles of amalgamation (the "Articles") and By-laws are attached as an exhibit hereto as noted in Item 19. The Company is an amalgamated corporation pursuant to the CBCA. Our Articles do not contain any limitations on the Company's objects or purposes.

The following is a summary of certain provisions of the Act and our Articles and By-laws:

### Directors' Responsibilities in Matters in Which the Director is Materially Interested

The CBCA requires any of our directors who are directly or indirectly interested in a material contract or transaction or proposed material contract or transaction with it to disclose the nature and extent of their interest. Pursuant to the CBCA, in the case of a proposed contract or transaction, the declaration must be made at the meeting of our Board of Directors at which the question of entering into the contract is first taken into consideration, or if the director was not then interested, at the first meeting after he becomes so interested. In the case where any of our directors becomes interested in a contract or transaction after it is made, the declaration must be made at the first meeting of the Company's directors held after they have become interested. In the case where a proposed contract or transaction is one that would not require approval by the directors or shareholders, the director shall disclose in writing to the Company or request to have entered in the minutes of the meeting of the directors his interest, promptly, after the director becomes aware of the proposed contract or transaction or becomes aware of the contract or transaction.

## Directors' Power to Vote on Compensation to Themselves

The CBCA provides that the directors may fix the compensation of the directors of the Company.

## **Borrowing Powers**

The Board may from time to time delegate to a director, a committee of the Board, or an officer of the Company any or all of the powers conferred on the Board by the CBCA in respect of the borrowing powers of the Company to such extent and in such manner as the Board may determine at the time of such delegation. The Board of Directors, pursuant to the By-laws delegated such borrowing powers to the Chief Executive Officer.

## **Retirement of Directors Under an Age Limit Requirement**

Our Articles and By-laws do not require directors to retire pursuant to an age requirement.

## Number of Shares Required for a Director's Qualification

Our Articles and By-laws do not provide for a requirement of ownership of shares for a director's qualification.

## **Fiduciary Duties of Directors and Officers**

Directors and officers of a corporation governed by the CBCA have fiduciary obligations to their corporation. Under the CBCA, directors and officers must act honestly and in good faith with a view to the best interests of the corporation and must exercise the care, diligence and skill that a reasonably prudent person would exercise in a comparable circumstance. Subject to the terms of any unanimous shareholders agreement relieving the directors and officers of their ability to manage the affairs of a corporation (the Company is not a party to any such agreement), the CBCA further provides that a director or officer cannot contract out of liability for a breach of such obligations.

#### **Liability of Directors**

The CBCA imposes joint and several personal liability upon directors who vote for or consent to a resolution authorizing actions that are in violation of provisions of the CBCA relating to the issuance of shares, the purchase, redemption or other acquisition of shares, the commissions paid on the sale of shares, the payment of dividends, the payment of a director's indemnity or payments made to a shareholder.



#### **Rights and Preferences of Common Stock**

Our Articles permit but do not require the Board of Directors to declare and pay dividends with respect to the common stock. Each holder of common stock is entitled to one vote per share on all matters coming for a vote before the shareholders. There is no cumulative voting. All holders of common stock are entitled to share equally in any surplus in the event of a liquidation, dissolution or winding-up of the Company. There are no provisions calling for the redemption of common stock, establishing any sinking fund, or establishing any obligation to participate in further capital calls by the Company. There is no provision discriminating against existing or prospective holders of common stock as a result of such shareholder owning a substantial number of shares.

## **Creation of New Securities**

The CBCA provides a holder of shares of any class or series the right to vote on any proposal to create a new class or series and the rights, privileges, restrictions and conditions attached thereto upon amendments to the Company's Articles.

### **General Meetings**

Subject to the CBCA, we must hold an ordinary general meeting not later than 15 months after the most recent annual meeting but no later than six months after the end of our preceding financial year.

Subject to the provisions of the CBCA, a special meeting of shareholders may be called at any time and may be held in conjunction with the annual meeting of shareholders.

The CBCA and our By-laws provide that at least 21 days' notice and not more than 60 days' notice of every general meeting specifying the day, hour and place of the meeting, and, when special business is to be considered, the general nature of such business and the text of any special resolution to be submitted to the meeting must be given to the Company's shareholders entitled to be present at the meeting by notice given as permitted by our Articles or By-laws. In addition, in accordance with Section 703 of the American Stock Exchange Company Guide, the Company will not close its transfer books if and so long as the common stock is listed for trading on the American Stock Exchange.

No business will be transacted at any general meeting unless the requisite quorum is present at the commencement of business. A quorum for the transaction of business at a general meeting, pursuant to our By-laws, shall be two persons present in person or by proxy. However, if and so long as the common stock is listed on the American Stock Exchange, a quorum shall be comprised of not less than 33 <sup>1</sup>/<sub>3</sub>% of the issued common stock.

#### Limitations on the Right to Own Securities

Our Articles do not provide for any limitations on the rights to own securities.

## **Change in Control Provisions**

Our Articles do not contain any change in control limitations with respect to a merger, acquisition, or corporate restructuring.

### Shareholder Ownership Disclosure

Our By-laws do not contain any provisions governing the ownership threshold above which shareholder ownership must be disclosed. However, certain Canadian securities commissions require that persons that are the registered owners of, and/or have voting control over 10% or more of our common stock must file insider reports

disclosing securities holdings. Also, certain rules and regulations promulgated by the U.S. Securities and Exchange Commission, or SEC, require that beneficial owners of 5% or more of our common stock must file reports disclosing their ownership.

## Changes in the Company's Capital

Our Articles do not contain any provisions governing changes in stated capital.

#### **Right of Shareholders to Inspect Records**

Shareholders of the Company and their personal representatives are entitled under the CBCA to examine our Articles and By-laws and minutes of shareholders' meetings and resolutions of shareholders during our usual business hours and to take extracts of those documents free of charge. Upon payment of a reasonable fee, shareholders and their personal representatives may also obtain from our transfer agent a list of the Company's registered shareholders, including the number of shares held and the address of each shareholder.

### Shareholders' Ability to Requisition a Meeting

Under the CBCA, holders of not less than 5% of the issued shares of the Company that carry the right to vote at a meeting may requisition the directors of the Company to call a meeting of the shareholders for the purposes stated in the requisition. Upon meeting the technical requirements set out in the CBCA for making such a requisition, and unless the meeting is being requisitioned for certain improper purposes outlined in the CBCA, the directors of the Company must call a shareholders meeting. If the directors do not call a meeting of the shareholders within 21 days after receiving the requisition, any shareholder who signed the requisition may call the meeting. Unless the shareholders otherwise resolve, we shall reimburse the shareholders for the reasonable expenses incurred by them in requisitioning, calling and holding the meeting.

## **Adoption of Shareholder Rights Plans**

Neither our Articles nor By-laws preclude the adoption of a shareholder rights plan (also known as a "poison pill") that could potentially prevent or delay a take-over bid of the Company. The adoption of such a plan, however, does not lessen the fiduciary duty of the directors of the Company to act honestly and in good faith with a view to the best interests of the Company. The Company does not currently have a shareholder rights plan.

Under the rules and policies of the Toronto Stock Exchange, shareholders of the Company are required to ratify a shareholder rights plan within six months of its adoption. Further, in certain circumstances, Canadian securities regulators may impose a cease trade order with respect to a shareholder rights plan if it determines that such a plan will deprive shareholders of the ability to make a decision regarding a take-over bid or will frustrate an open take-over bid process.

#### **Derivative Actions**

The CBCA provides that a shareholder of the Company may apply to court for permission to commence an action in the name and on behalf of the Company or any of its subsidiaries, or to intervene in an action to which any such entity is a party, for the purpose of prosecuting, defending or discontinuing the action on behalf of the Company or its subsidiary. No action will be brought and no intervention in an action may be made unless the court is satisfied that the shareholder has given notice to the directors of the Company or its subsidiary of the shareholder's intention to apply to the court if the directors of the Company or its subsidiary do not bring, diligently prosecute or defend or discontinue the action; the shareholder is acting in good faith; and it appears to be in the interests of the Company or its subsidiary that the action be brought, prosecuted, defended or discontinued. The CBCA provides that the court in a derivative action may make any order that it thinks fit.



### **C. Material contracts**

The Company has entered into the following material contracts, other than contracts entered into in the ordinary course of business, in the last two calendar years:

- Merger Agreement with Oxiquant;
- License Agreement with Cadherin Biomedical Inc.;
- General Collaboration Agreement with McGill University;
- Exclusive License Agreement with Rutgers, The State University of New Jersey;
- · License Agreement with Oregon Health & Science University; and
- Registration Rights Agreement with HBM Bioventures (Cayman) Ltd.

## Merger Agreement with Oxiquant

Pursuant to the Merger Agreement dated October 2, 2002 among the Company, Adherex, Inc., a wholly-owned Delaware subsidiary of the Company formed for the purposes of the transaction ("Adherex US"), and Oxiquant, we agreed to acquire all of the outstanding common stock of Oxiquant by way of a merger of Adherex US with Oxiquant in accordance with the General Corporation Law of the State of Delaware. At the time of the merger, the separate corporate existence of Adherex US ceased and Oxiquant continued as the surviving corporation and as our wholly-owned subsidiary. All of the issued and outstanding Oxiquant common stock were exchanged for 40,163,985 shares of common stock and 2,306,994 warrants of the Company. These warrants had an exercise price of \$0.717 and an expiration date of May 20, 2007. In addition, Paramount Capital, Inc., as introducing agent, received \$500,000 in cash and 848,000 introduction warrants at an exercise price of \$0.41 expiring on November 20, 2007.

#### License Agreement with Cadherin Biomedical Inc.

In September 2002, CBI was incorporated as a wholly owned subsidiary of Adherex. We 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 our platform cadherin technology owned or licensed under our collaboration agreement with McGill and paid to CBI \$250,000 in cash, in exchange for 40,163,985 Class A Preferred Shares of CBI. We distributed the Class A Preferred Shares of CBI to our shareholders, after which our shareholders held all of the issued and outstanding shares of CBI. The divestiture of our non-cancer assets was a condition precedent to our acquisition of Oxiquant. CBI was not granted any rights to, and was contractually prohibited from, developing any applications relating to the treatment of cancer. The term of the license agreement coincides with the life of our patents that are the subject of the license. The license agreement is terminable by either Adherex or CBI in the event of an uncured material breach or default of the agreement by either party after 30 days prior written notice. We have the right to terminate the agreement in the event that CBI files for bankruptcy or becomes insolvent and upon 30 days prior written notice to CBI if any act or omission by CBI causes us to be in material uncured breach of our license agreement with McGill.

In July 2004, we entered into a non-binding letter of intent to acquire all of the issued and outstanding shares of CBI through an amalgamation of CBI with a wholly-owned subsidiary of Adherex formed for this purpose. The amalgamation will provide Adherex with the rights to the non-cancer applications relating to the cadherin technology and serve to settle outstanding litigation between Adherex and CBI. We expect the amalgamation to close in November or December 2004 after CBI's shareholders vote on the acquisition, but there can be no assurance that it will close on schedule or at all. See Item 4.A., "Information on the Company—History and development of the Company."

## 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 Exherin (composition of matter), U.S. Patent 6,551,994 covering alpha-catenin and beta-catenin inhibiting compounds, international filings under the Patent Cooperation Treaty ("PCT"), continuations and certain other patents and patent applications.

In consideration, we issued 2,542,084 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 compounds. In addition, should we fail to meet certain development milestones, we are required to make the following payments in order to maintain the license: (i) \$100,000, if we had not filed an IND application, or a similar application with Canadian, U.S., European or other recognized agency relating to a licensed product prior to September 23, 2002; (ii) \$100,000, if we have not commenced Phase II clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2004; and (iii) \$200,000 if we have not commenced Phase III clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2002, McGill acknowledged that work completed on the clinical development of Exherin was sufficient to meet the requirements of the September 23, 2002 milestone. On September 20, 2004, the Company received notification from McGill acknowledging that the Company had met its obligations under the McGill license agreement with respect to the September 23, 2004 milestone.

In addition, we agreed to fund certain mutually agreed upon research at McGill over a period of ten years totaling \$3.3 million. Annual funding commenced in 2001, the first year of the agreement, with a total of \$200,000, and increases annually by 10% through 2010, when the required annual funding reaches \$500,000. This research commitment can be deferred in any 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 \$500,000 in research 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 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.

## 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. Pursuant to the license agreement, Rutgers granted us worldwide license rights to "Novel Redox Clamping Agents and Uses Thereof" (U.S. Provisional Patent Application Number 60/120,128, U.S. Patent Application Number 10/228,644, international filings under the PCT, continuations and certain other patent applications).

In consideration, Rutgers was issued 500,000 shares of common stock of Oxiquant, which were subsequently converted upon our acquisition of Oxiquant into 3,821,320 shares of our common stock and warrants to purchase 219,495 shares of our common stock at \$0.717 per share until May 20, 2007. In addition, we are required to make the following payments upon the achievement of certain milestones achieved in connection with the subject matter of the agreement: (i) US\$25,000 upon completion of the first clinical trial performed in compliance with FDA or corresponding foreign health authority requirements, in a small number of patients to determine the metabolism and pharmacological actions of doses, (ii) US\$50,000 upon commencement of the first Phase III clinical trial or equivalent, (iii) US\$100,000 upon receipt of market approval in the first major market country, (iv) US\$200,000 upon receipt of market approval in the second major market country, and

(v) US\$300,000 on receipt of market approval in the third major market country. We agreed to pay an annual

license maintenance fee on each anniversary of the agreement, starting at US\$5,000 in 2002 and increasing by US\$5,000 on each subsequent anniversary through the fifth anniversary. After completion of the fifth anniversary, and on each subsequent anniversary, the annual license maintenance fee shall be US\$50,000, but is creditable against royalties (with some restrictions). Pursuant to the terms of the agreement, we also agreed to pay to Rutgers a 4% running royalty on net sales for any licensed products semiannually, and a 20% non-running royalty on any consideration received from sublicensing or transferring of the licensed technology. Through September 30, 2004, we have paid license maintenance fees totaling US\$25,000 under this agreement.

The term of our license agreement expires on the last date of expiration of claims covered in the patents licensed to us in each country in the world in which Rutgers has intellectual property rights covered by the license, unless earlier terminated by operation of law or as provided in the agreement. The agreement is terminable by either Adherex or Rutgers 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 upon 90 days prior written notice to Rutgers.

### 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 exclusive worldwide license rights to intellectual property surrounding work done by Dr. Edward Neuwelt with respect to thiol-based compounds and their use in oncology. In consideration, OHSU was issued 250,250 shares of common stock of Oxiquant which were subsequently converted upon the acquisition of Oxiquant into 1,912,571 shares of our common stock and warrants to purchase 109,857 shares of our common stock at \$0.717 per share until May 20, 2007. We are required to make the following payments upon the achievement of certain milestones achieved in connection with the subject matter of the agreement: (i) US\$50,000 upon completion of Phase I clinical trials, (ii) US\$500,000 upon completion of Phase II clinical trials, (iii) US\$500,000 upon completion of Phase II clinical trials, (iii) US\$500,000 upon completion of Phase III clinical trials, (iii) US\$500,000 upon the sales of any licensed products and a 15% royalty on any sublicensing of the licensed technology.

The term of our license agreement expires on the last date of expiration of claims 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 paying all fees due to OHSU under the agreement.

# Registration Rights Agreement with HBM Bioventures (Cayman) Ltd.

In connection with our private placement on December 19, 2003, HBM Bioventures (Cayman) Ltd. ("HBM") was issued 18,832,858 shares of common stock and 9,952,143 shares of common stock issuable upon the exercise of outstanding warrants. These shares are subject to certain registration rights in both the United States and Canada, pursuant to a Registration Rights Agreement entered into between HBM and Adherex. The Registration Rights Agreement provides for a limited number of Canadian demand rights, subject to certain limitations. The Registration Rights Agreement provides that the holders may have other registrable shares included in any U.S. initial public offering carried out by the Company, subject to certain limitations, as well as piggy-back rights after the Company has completed a U.S. initial public offering. The Registration Rights Agreement provides a limited number of U.S. demand rights beginning 180 days after the closing of a U.S. initial public offering. In addition, if Adherex files a preliminary prospectus under any Canadian securities laws in connection with a Canadian public offering, HBM may cause Adherex to register its shares in a secondary offering. HBM will also have the right to cause Adherex to register its shares on a Form S-3 or Form F-10, depending upon eligibility, subject to certain limitations. Adherex is not required to effect such registration unless the aggregate offering price of the shares to be registered is at least US\$1.0 million and no such registration has occurred during a nine-month period.

#### **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 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) \$5.0 million or more in the case of a "direct" acquisition; (b) \$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) \$5.0 million or more but less than \$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 World Trade Organization ("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 \$223.0 million or more for transactions closing in 2003 (this figure is adjusted annually to reflect the increase in the Canadian nominal gross domestic product at market prices). Indirect acquisitions in WTO transactions are not reviewable unless the value of the Canadian assets acquired constitutes more than 50% of the value of the assets of all entities acquired, in which case the \$223.0 million threshold applies.

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.

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 \$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 \$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 \$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 \$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 \$30.0 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 \$30.0 million; or (d) in the case of a proposed combination, the value of the assets or the annual gross revenues from sales in or from Canada generated from those assets would exceed \$30.0 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. 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 registration statement 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;
- 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 Customs and 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 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.

As a U.S. Shareholder, you generally will be 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.

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 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 disposition. Additionally, amounts treated as a 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 be subject to the 25% rate.

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

No cash dividends have been declared or paid on the common stock since incorporation and it is not anticipated that any dividends will be declared or paid on the common stock in the immediate or foreseeable future. Any decision to pay dividends on the common stock will be made by the Board of Directors on the basis of the earnings, financial requirements and other conditions existing at such future time.

#### G. Statement by experts

The financial statements of Adherex Technologies Inc. as of June 30, 2004 and 2003 and for each of the three years in the period ended June 30, 2004 included in this Registration Statement have been so included in reliance on the audit report of PricewaterhouseCoopers LLP, independent accountants, given on the authority of said firm as experts in auditing and accounting.

#### H. Documents on display

Upon the effectiveness of this filing, the Company will be 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 450 Fifth Street, N.W., Room 1024, Washington, D.C. 20549 and at the SEC's regional offices at Northwestern Atrium Center, 500 West Madison Street, Suite 1400, Chicago, IL 60661. 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 public may obtain information on the operation of the Public Reference Room by calling the SEC at 1-800-SEC-0330.

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.

As a foreign private issuer, the Company is exempt from the rules under the Securities Exchange Act of 1934, as amended, prescribing the furnishing and content of proxy statements to shareholders. The Company has included in this report certain information disclosed in the Company's Proxy Statement prepared under Canadian securities rules.

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: 2300 Englert Drive, Suite G, Research Triangle Park, Durham, North Carolina 27713, Attention: Corporate Secretary.

#### I. Subsidiary information

Not applicable.

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

#### Foreign Exchange Risk

Historically, the functional currency of the Company has been the Canadian dollar. At June 30, 2004, the Company had approximately \$27.7 million in cash, cash equivalents, and short-term investments virtually all of which was held in Canadian dollars. To date, derivative financial instruments have not been needed or used because funds raised by the Company have been spent primarily in Canadian dollars. Security of principal versus income historically governed investment decisions, with excess funds invested in short term, government backed securities or bankers acceptances.

The composition of the Company's activities is expected to change with the relocation of the Company's development activities to RTP. This will result in a higher percentage of the Company's spending being done in the United States. As these amounts are determined, the Company intends to purchase U.S. dollars at least a few months in advance of any of its commitments. Depending on the financial markets, derivative financial instruments may be used from time to time. However, security of principal versus income 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

Not applicable.

# **ITEM 16. RESERVED**

Not applicable.

# PART III

# ITEM 17. FINANCIAL STATEMENTS

Not applicable.

# **ITEM 18. FINANCIAL STATEMENTS**

Our financial statements follow the signature page of this registration statement.

# **ITEM 19. EXHIBITS**

The following exhibits are to be filed as part of this registration statement:

Exhibit No.	Description
†1.1	Articles of Incorporation of 3292835 Canada Inc. dated September 3, 1996
†1.2	Articles of Incorporation of 3521443 Canada Inc. dated August 14, 1998
†1.3	Articles of Amendment dated September 18, 1998
†1.4	Articles of Amendment dated August 18, 2000
†1.5	Articles of Amendment dated October 18, 2000
†1.6	Articles of Amalgamation dated April 30, 2001
†1.7	Articles of Amalgamation dated June 29, 2004
†1.8	By-laws of the Company, as amended on November 11, 2003 (superceded)
1.9	By-laws of the Company, as amended on November 2, 2004
†2.1	Loan Facility Agreement, dated as of August 17, 2001, by and between Adherex Technologies Inc. and Royal Bank of Canada
†*4.1	Adherex Stock Option Plan
†4.2	General Collaboration Agreement, dated as of February 26, 2001, by and between Adherex Technologies Inc. and McGill University
†4.3	Exclusive License Agreement, dated as of April 13, 2001, by and between Rutgers, the State University of New Jersey, and Oxiquant, Inc.
†4.4	Amendment No. 1, dated as of November 19, 2002, by and between Rutgers, the State University of New Jersey, and Oxiquant, Inc.
†4.5	Exclusive License Agreement, dated as of September 26, 2002, by and between Oregon Health & Science University and Oxiquant, Inc.
†4.6	Merger Agreement, dated as of October 2, 2002, by and between Adherex Technologies Inc., Adherex, Inc. and Oxiquant, Inc.
†4.7	Exclusive License Agreement, dated as of November 14, 2002, by and between Adherex Technologies Inc. and Cadherin Biomedical Inc.
†4.8	Lease Agreement, dated as of March 8, 2004, by and between Realmark-Commercial, LLC and Adherex, Inc.
†4.9	Registration Rights Agreement, dated as of December 19, 2003, by and between Adherex Technologies Inc. and HBM BioVentures (Cayman) Ltd.
†*4.10	Executive Employment Agreement, dated as of December 12, 2001, by and between Adherex Technologies Inc. and Robin J. Norris

Exhibit No.	Description
†*4.11	Executive Employment Agreement, dated as of January 27, 2003, by and between Adherex Technologies Inc. and D. Scott Murray
<b>†*4.12</b>	Executive Employment Agreement, dated as of February 19, 2003, by and between Adherex Technologies Inc. and William P. Peters, MD, PhD, MBA
†*4 <b>.</b> 13	Executive Employment Agreement, dated April 21, 2004, by and between Adherex, Inc. and James A. Klein, Jr.
†*4 <b>.</b> 14	Employment Agreement, dated as of August 9, 2004, by and between Adherex, Inc. and Rajesh K. Malik.
†4.15	Placement Agent Warrant issued to Paramount Capital, Inc., dated November 20, 2002
†4.16	Form of Common Stock Warrant, dated November 20, 2002
†4.17	Form of Placement Agent Common Stock Warrant, dated June 23, 2003
†4.18	Form of Insider Common Stock Warrant, dated June 23, 2003
†4.19	Form of Non-Insider Common Stock Warrant, dated June 23, 2003
†4.20	Form of Placement Agent Common Stock Warrant, dated December 3, 2003
†4.21	Form of Common Stock Warrant, dated December 3, 2003
†4.22	Common Stock Warrant issued to HBM BioVentures (Cayman) Ltd., dated December 3, 2003
†4.23	Form of Placement Agent Common Stock Warrant, dated December 19, 2003
†4.24	Form of Common Stock Warrant, dated December 19, 2003
†4.25	Common Stock Warrant issued to The Vengrowth Advanced Life Sciences Fund Inc., dated December 19, 2003
†4.26	Common Stock Warrant issued to HBM BioVentures (Cayman) Ltd., dated December 19, 2003
†4.27	Form of Common Stock Warrant, dated May 20, 2004
*4.28	Employment Agreement, dated as of October 25, 2004, by and between Adherex, Inc. and Brian E. Huber, Ph.D.
4.29	Second Amendment to Lease Agreement dated September 14, 2004 between Realmark Commercial LLC and Adherex, Inc.
<del>†</del> 8	Subsidiaries
14	Consent of PricewaterhouseCoopers LLP

\* Indicates a management contract or compensatory plan.† Previously filed with the SEC.

# 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 registration statement on its behalf.

ADHEREX TECHNOLOGIES INC.

/s/ JAMES A. KLEIN, JR. By: James A. Klein, Jr. Its: Chief Financial Officer

Date: November 5, 2004

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

We have audited the consolidated balance sheets of Adherex Technologies Inc. as at June 30, 2004 and 2003 and the consolidated statements of operations, shareholders' equity and cash flows for the years ended June 30, 2004, 2003 and 2002 and for the period from September 3, 1996 to June 30, 2004. 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 generally accepted auditing standards in Canada and 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 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.

In our opinion, these consolidated financial statements present fairly, in all material respects, the financial position of the Company as at June 30, 2004 and 2003 and the results of its operations and its cash flows for the years ended June 30, 2004, 2003 and 2002 and for the period from September 3, 1996 to June 30, 2004 in accordance with Canadian generally accepted accounting principles.

/s/ PricewaterhouseCoopers LLP

**Chartered Accountants** Ottawa, Ontario September 9, 2004

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

	Jun	e 30,
	2004	2003
Assets		
Current assets		
Cash and cash equivalents	\$ 18,228	\$ 2,898
Cash pledged as collateral	42	300
Short-term investments	9,478	
Accounts receivable	52	30
Investment tax credits recoverable	375	539
Prepaid expense	160	143
Other current assets	561	579
Total current assets	28,896	4,489
Other long-term assets	50	167
Capital assets	561	655
Acquired intellectual property rights	26,132	29,252
Acquired interfectual property rights	20,132	29,232
Total assets	\$ 55,639	\$ 34,563
Liabilities and shareholders' equity		
Current liabilities	¢ 1.000	¢ 1.101
Accounts payable and accrued liabilities	\$ 1,966	\$ 1,401
Current portion of deferred lease inducements		64
m - 1	1.000	4.465
Total current liabilities	1,966	1,465
Other long-term liabilities	124	192
Liability component of convertible notes	_	1,591
Future income taxes	9,552	10,692
Total liabilities	11,642	13,940
Commitments and contingencies		
Shareholders' equity		
Common stock, no par; unlimited shares authorized; 179,457 shares, and 80,346 shares issued and outstanding, respectively	48,343	25,550
Contributed surplus	29,639	17,410
Deficit accumulated during development stage	(33,985)	(22,337)

Total shareholders' equity

Total liabilities and shareholders' equity

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

43,997

\$ 55,639

20,623

\$ 34,563

# Consolidated Statements of Operations Canadian dollars and shares in thousands, except per share information

	Ye	Years Ended June 30,			
	2004	2003	2002	September 3, 1996 to June 30, 2004	
Revenue	\$ —	\$ —	\$ —	\$ —	
Operating expenses:					
Research and development	4,783	4,145	4,332	18,398	
General and administration	4,658	3,014	1,796	12,807	
Amortization of acquired intellectual property rights	3,120	1,910	—	5,030	
Loss from operations	(12,561)	(9,069)	(6,128)	(36,235)	
Other income	_	_	154	154	
Interest income	217	107	333	968	
Interest expense	(444)	(16)	—	(460)	
	(227)	91	487	662	
Loss before income taxes	(12,788)	(8,978)	(5,641)	(35,573)	
Recovery of future income taxes	1,140	698		1,838	
Net loss	\$ (11,648)	\$ (8,280)	\$ (5,641)	\$ (33,735)	
Net loss per share of common stock, basic and diluted	\$ (0.10)	\$ (0.13)	\$ (0.14)		
Weighted-average number of shares of common stock outstanding, basic and diluted	121,164	64,601	40,164		

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

# Consolidated Statements of Shareholders' Equity

Canadian dollars and shares in thousands, except per share information

	Common Stock		Preferred		Deficit Accumulated	<b>T</b> . 1
	Number	Amount	Stock of Subsidiary	Contributed Surplus	During Development Stage	Total Shareholders' Equity
Balance at June 30, 1996	_	\$ —	\$ —	\$	\$ —	\$ —
Issuance of common stock	8,000	ф —	Ψ	Ψ —	Ψ	Ψ
Net loss	—	—	—	—	(53)	(53)
Balance at June 30, 1997	8,000				(53)	(53)
Net loss		_	_	_	(587)	(587)
Balance at June 30, 1998 Exchange of Adherex Inc. shares for Adherex Technologies Inc. shares	8,000				(640)	(640)
Issuance of common stock	(8,000) 21,557	2,443				2,443
Net loss		2,445	_	_	(1,447)	(1,447)
				<u> </u>		
Balance at June 30, 1999	21,557	2,443	—	—	(2,087)	356
Issuance of common stock	1,417	1,178	_		-	1,178
Issuance of equity rights			—	250 391		250 391
Issuance of special warrants Settlement of advances:			_	291		291
Issuance of common stock	1,400	258	_	_	_	258
Cancellation of common stock	(600)	_	_	—	_	_
Net loss	_	_	—	—	(2,364)	(2,364)
Balance at June 30, 2000	23,774	3,879		641	(4,451)	69
Issuance of common stock:	23,774	5,079		041	(4,431)	09
Initial public offering	6,667	8,720	_	_	_	8,720
Other	441	503	_	—	_	503
Issuance of special warrants	—	—	—	2,640	—	2,640
Conversion of special warrants	2,734	3,031	_	(3,031)	-	
Issuance of Series A special warrants	6,240	6,645	—	6,645	_	6,645
Conversion of Series A special warrants Conversion of equity rights	308	250	_	(6,645) (250)	_	_
Net loss			_	(250)	(3,715)	(3,715)
				<u> </u>		(-, -,
Balance at June 30, 2001	40,164	23,028	_	_	(8,166)	14,862
Net loss	_	—	—	—	(5,641)	(5,641)
Balance at June 30, 2002	40,164	23,028			(13,807)	9,221
Stated capital reduction		(15,029)	_	15,029	(15,507)	
Common stock issued for Oxiquant acquisition	40,164	17,545	_	860	_	18,405
Exercise of stock options	18	6	—	—	_	6
Distribution to shareholders	—	_	—		(250)	(250)
Stock options issued to non-employees	_	_	_	6 80	—	6 80
Financing warrants Equity component of June convertible notes				1,435		1,435
Net loss		_	_		(8,280)	(8,280)
Balance at June 30, 2003	80,346	25,550		17,410	(22,337)	20,623
Stock options issued to consultants			_	195	(22,337)	195
Repricing of warrants related to financing	—	_	_	23	_	23
Equity component of December convertible notes	—	_	—	1,461	_	1,461
Financing warrants	—		—	70		70
Conversion of June convertible notes Conversion of December convertible notes	8,641 5,425	1,629 762		(125) (533)		1,504 229
Non-redeemable preferred stock		/02	1,400	(555)	_	1,400
December private placement	57,609	10,759		7,739		18,498
May private placement	23,347	8,710	_	2,902	_	11,612
Exercise of stock options	89	30	—	_	_	30
Amalgamation of 2037357 Ontario Inc.	4,000	903	(1,400)	497	(11 (10)	(11.640)
Net loss					(11,648)	(11,648)
Balance at June 30, 2004	179,457	\$ 48,343	\$ —	\$ 29,639	\$ (33,985)	\$ 43,997

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

**Consolidated Statements of Cash Flows** 

Canadian dollars and shares in thousands, except per share information

		Years Ended June 30,		
	2004	2003	2002	September 3, 1996 to June 30, 2004
Cash flows from (used in):				
Operating activities:				
Net loss	\$(11,648)	\$ (8,280)	\$ (5,641)	\$ (33,735)
Adjustments for non-cash items:				
Amortization of capital assets	301	343	278	1,179
Unrealized foreign exchange loss	—	—	—	13
Amortization of acquired intellectual property rights	3,120	1,910		5,030
Recovery of future income taxes on acquired intellectual property rights	(1,140)	(698)		(1,838)
Amortization of leasehold inducements	(64)	(90)	(90)	(367)
Non-cash severance expense	_	254		254
Stock options issued to consultants	195	6		201
Accrued interest on convertible notes	444	16		460
Changes in operating assets and liabilities	807	(375)	556	704
	(7,985)	(6,914)	(4,897)	(28,099)
Investing activities:				
Purchase of capital assets	(207)	(94)	(453)	(1,384)
Disposal of capital assets	(207)	56	(433)	16
Release of restricted cash	258		100	258
Restricted cash			(300)	(300)
Purchase of short-term investments	(9,478)	_	(8,141)	(17,619)
Redemption of short-term investments		8,141		8,141
Investment in Cadherin Biomedical Inc.	_	(250)	_	(250)
Acquired intellectual property rights	—	(967)	—	(967)
	(9,427)	6,886	(8,791)	(12,105)
Financing activities:				
Other advances	_			245
Conversion of long-term debt to equity	_	_		100
Long-term debt repayments	_	_	(44)	(100)
Capital lease repayments		_	(6)	(12)
Issuance of common stock	31,510	_		54,355
Financing expenses	(465)	_		(465)
Proceeds from convertible note	1,735	2,606		4,341
Other liability repayments	(68)	_	_	(68)
Proceeds from exercise of stock options	30	6		36
	32,742	2,612	(50)	58,432
Net change in cash and cash equivalents	15,330	2,584	(13,738)	18,228
Cash and cash equivalents—Beginning of period	2,898	314	14,052	_
Cash and cash equivalents—End of period	\$ 18,228	\$ 2,898	\$ 314	\$ 18,228
Supplementary non-cash information:				
Acquisition of Oxiquant intellectual property	\$ —	\$ 19,371	\$ —	\$ 19,371
Leasehold improvements financed by leasehold inducements	÷		-	366
Share distribution to shareholders	_	250		250
Convertible notes settled in private placement	2,447			2,447
r	_,			_, , , ,

(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 Canadian 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., Delaware corporations, collectively referred to herein as the "Company," is a development stage biopharmaceutical company with a portfolio of product candidates under development for use in the treatment of cancer.

#### 2. Significant Accounting Policies

#### **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 its subsidiaries. Investments over which the Company has control are fully consolidated. All material inter-company balances and transactions have eliminated upon consolidation.

The Company began as Adherex Inc. and was incorporated under the Canada Business Corporation Act ("CBCA") on September 3, 1996. On August 14, 1998, Adherex Technologies Inc. was incorporated under the CBCA and on September 11, 1998, it acquired all of the outstanding shares of Adherex Inc. On April 30, 2001, Adherex Technologies Inc. amalgamated with Adherex Inc. to continue as Adherex Technologies Inc. These financial statements reflect the combined historical carrying values of the assets, liabilities and shareholders' equity and the historical operating results of the predecessor companies since their inception. On November 20, 2002, Adherex acquired the intellectual property and all of the outstanding shares of Oxiquant, Inc. Oxiquant was an intellectual property holding company with a focus in chemoprotection and chemoenhancement. On December 1, 2003, the Company formed Adherex, Inc., a wholly owned Delaware corporation, to be its operating company for its United States ("U.S.") operations. Also, on December 19, 2003, the Company acquired 50 percent of 2037357 Ontario Inc., an Ontario corporation, which 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, Adherex amalgamated with Adherex Research Corp. to continue as Adherex Technologies Inc.

#### Use of estimates

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

#### **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.

# Notes to the Consolidated Financial Statements—(Continued)

## Canadian dollars and shares in thousands, except per share information

#### 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 10 years.

#### Impairment of long-lived assets

The Company adopted the provisions of CICA 3063 "Impairment of Long-Lived Assets" during fiscal 2003. The Company tests the recoverability of longlived 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 discounted cash flows from the asset.

#### Lease inducements

The Company received lease inducements in the form of leasehold improvements and rent-free periods. These inducements have been deferred and are applied against the rent expense of future periods on a straight-line basis over the term of the lease.

#### **Common stock and warrants**

Common stock with no par value, 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.

#### 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 an interest bearing term deposit in the amount of \$42 at June 30, 2004 and \$300 at June 30, 2003.

#### 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.

#### **Revenue recognition**

Revenue will be recognized when persuasive evidence of an arrangement exists, delivery has occurred, the price is fixed and determinable and collection is reasonably assured. No revenue has been recognized to date.



# Adherex Technologies Inc. (a development stage company) Notes to the Consolidated Financial Statements—(Continued) Canadian dollars and shares in thousands, except per share information

#### **Research and development costs**

Research costs, including employee compensation, laboratory fees, laboratory supplies and research performed under contract by third parties, are expensed as incurred. Development costs 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 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.

#### **Convertible notes**

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

#### 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 Canadian 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

The Company has a stock-based compensation plan that is described in Note 9—Shareholders' Equity. No compensation expense is recognized when stock options are issued to employees under this plan. Any consideration paid by employees on exercise of stock options or purchase of stock is credited to common stock.

#### Loss per share

Basic loss per share are computed using the treasury stock method including weighted-average number of shares of common stock outstanding during the year including contingently issuable shares where the

Notes to the Consolidated Financial Statements—(Continued)

#### Canadian dollars and shares in thousands, except per share information

contingency has been resolved. Diluted earnings per share are computed using the weighted-average number shares of common stock and includes the effects of dilutive convertible securities including convertible debentures, options and warrants.

#### **Comparative figures**

Certain comparative figures have been reclassified to conform to the current year's presentation, including patent fees that have been reclassified from research and development to general and administration.

#### **Current accounting pronouncements**

In May 2003, the FASB issued SFAS No. 150, "Accounting for Certain Financial Instruments with Characteristics of both Liabilities and Equity". SFAS 150 establishes standards for how an issuer classifies and measures certain financial instruments with characteristics of both liabilities and equity. It requires that an issuer classify a financial instrument that is within its scope as a liability, or an asset in some circumstances. The standard became effective for the Company for financial instruments entered into or modified after May 31, 2003, and otherwise is effective at the beginning of the first interim period beginning after June 15, 2003 except for mandatorily redeemable financial instruments of nonpublic entities which are subject to the provisions of the SFAS 150 for the first fiscal period beginning after December 15, 2003. The adoption of SFAS 150 had no impact on our results of operations or financial position.

In September 2003, the CICA revised CICA 3870, "Stock-Based Compensation and Other Stock-Based Payments" ("CICA 3870"). This section now requires fair value based method of accounting for stock-based compensation and other stock-based payments. The Company intends to apply the provisions in this section retroactively, commencing in the fiscal year beginning July 1, 2004 for the Company.

In December 2003, the FASB issued FIN 46R, "Consolidation of Variable Interest Entities," which explains how to consolidate entities that have been referred to as special-purpose entities as well as other entities that are structured in such a way that (a) the equity investment at risk is not sufficient to permit the entity to finance itself with subordinated financial support in other forms or (b) the equity investors as a group lack decision-making powers, do not absorb losses, or do not receive residual returns. Since the Company does not believe it has any arrangements that would be considered to be variable interest entities, the Company believes adoption of the statement will not impact the Company's financial position or results of operations.

#### 3. 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 a subsidiary of the Company acquired all of the 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 intellectual property from Rutgers, The State University of New Jersey ("Rutgers"), on "Novel Redox Clamping Agents and Uses Thereof" and certain intellectual property from Oregon Health & Science University relating to the use of sodium thiosulfate ("STS") and N-Acetylcysteine ("NAC").

Notes to the Consolidated Financial Statements—(Continued)

#### Canadian dollars and shares in thousands, except per share information

The intellectual property was valued at \$31,162 reflecting net liabilities assumed of \$401 and provision for future income tax liability of \$11,390, resulting in a total consideration of \$19,371. The consideration took the form of 40,164 shares of common stock of Adherex with a fair value of \$17,545, as well as 2,307 warrants valued at \$640, and 848 introduction warrants valued at \$220. In addition, there were other transaction costs of \$967.

The acquired intellectual property rights will be amortized over their estimated useful lives of 10 years. The cost and accumulated amortization of the acquired intellectual property rights as of June 30, 2004 and 2003 are as follows:

	Years Ende	ed June 30,
	2004	2003
Cost	\$31,162	\$31,162
Accumulated amortization	(5,030)	(1,910)
		·
Net book value	\$26,132	\$29,252

Amortization of acquired intellectual property was \$3,120 and \$1,910 for the years ended June 30, 2004 and 2003, respectively. Acquired intellectual property is estimated to be amortized at \$3,120 per year on a straight-line basis for the remaining life of approximately eight and one-half years.

#### 4. Cadherin Biomedical Inc.

On September 27, 2002, Cadherin Biomedical Inc. ("CBI") was incorporated as a wholly owned subsidiary of Adherex. Adherex granted CBI an exclusive, worldwide royalty-free license to develop, market and distribute pharmaceuticals and therapeutics for non-cancer applications based on cadherin technology. As consideration for this license and \$250 in cash, CBI issued 40,164 Class A Preferred Shares of CBI to Adherex.

The CBI Class A Preferred Shares were subsequently distributed to Adherex shareholders of record prior to the acquisition of Oxiquant. This transaction has been recorded in the accounts as a distribution to shareholders of \$250 at the carrying amount of the assets distributed.

# 5. Credit Facility

As of June 30, 2003, the Company had an unused revolving line of credit with a Canadian chartered bank in an amount not to exceed \$300 and bearing interest at bank prime. An interest bearing term deposit in the amount of \$300 was provided as collateral for the credit facility. As of June 30, 2004, the credit line was closed by the Company.

#### 6. Short-term Investments

Short-term investments at June 30, 2004 consisted of corporate bonds with maturities at acquisition from 110 to 159 days. As these investments were purchased just prior to year-end, their market value is not significantly different from their book value.

#### Notes to the Consolidated Financial Statements—(Continued) Canadian dollars and shares in thousands, except per share information

#### 7. Capital Assets

		Years Ended June 30,					
		2004		2003			
	Cost		mulated rtization	Cost		mulated rtization	
Furniture, fixtures and office equipment	\$ 108	\$	11	\$ 71	\$	31	
Computer equipment	61		7	158		89	
Computer software	99		83	67		60	
Laboratory equipment	810		416	804		318	
Leasehold improvements				430		377	
	1,078	\$	517	1,530	\$	875	
Accumulated amortization	(517)			(875)			
Net book value	\$ 561			\$ 655			

Amortization of capital assets years ended June 30, 2004, 2003 and 2002 was \$301, \$343 and \$278, respectively. Depreciation of certain assets was accelerated during the year ended June 30, 2004 to coincide with their estimated useful lives.

#### 8. Convertible Notes

On June 23, 2003, the Company issued senior secured convertible notes with a face value totaling \$3,010. 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 1,724 shares of common stock of the Company at a price of \$0.55 per share. The notes accrued interest at an annual rate of 8 percent compounded semi-annually, and matured in one year from issue but were renewable for one year at the option of the Company. In connection with this issuance, the Company issued broker warrants to purchase 504 shares of common stock exercisable at a price of \$0.47 per share and valued at \$80 using the Black-Scholes option-pricing model.

On December 3, 2003, the Company issued additional senior secured convertible notes with a face value totaling \$1,895. 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 1,354 shares of common stock exercisable at a price of \$0.43 per share. The notes accrued interest at an annual rate of 8 percent compounded semi-annually, and matured one year from issue but were renewable for one year at the option of the Company. The Company also issued broker warrants to purchase 470 shares of common stock exercisable at a price of \$0.43 per share and valued at \$70 using the Black-Scholes option-pricing model.

Investor warrants issued with the convertible notes were recorded as contributed surplus and valued at \$628 using the Black-Scholes option-pricing model.

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 consent to the December 3, 2003 financing, 1,433 warrants granted in the June financing were repriced from \$0.55 to \$0.43 per share on December 3, 2003, making the terms of both debt financings substantially the same. Warrants held by 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 \$23. The increase was recorded as interest expense.

#### Notes to the Consolidated Financial Statements—(Continued)

#### Canadian dollars and shares in thousands, except per share information

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 eight percent.

On December 19, 2003, the Company completed an equity round as described in Note 9 – Shareholders' Equity, "Private Placement." This caused the June and the December notes to convert into 14,066 shares of common stock and 7,033 warrants to purchase common stock. The warrants are exercisable at \$0.43 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 using the Black-Scholes option-pricing model (\$2,391 to common stock and \$1,610 to contributed surplus). The debt portion and accrued interest of the June 23, 2003 notes were \$nil at June 30, 2004 and \$1,591 at June 30, 2003.

#### 9. Shareholders' Equity

#### Authorized capital stock

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

#### Stock split

Effective October 18, 2000, the Company's shareholders approved a split of the Company's common stock and stock options on a 4 for 1 basis. All per share amounts, and numbers of common stock, warrants and options in these financial statements have been restated to give retroactive effect to these splits for all years presented.

#### Special warrants

From May 2000 through November 2000, the Company issued special warrants. Each special warrant was sold for \$5.00 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 \$6.50 by the initial public offering ("IPO") price of \$1.50.

During the year ended June 30, 2000, 78 of 631 special warrants were issued, with the balance of 553 issued in the period ended June 30, 2001. Upon completion of the IPO, on June 5, 2001, these special warrants were converted to 2,734 shares of common stock, which included 210 shares of common stock issued under the price protection adjustment.

#### Series A special warrants

During October 2000, the Company issued Series A special warrants. Each Series A special warrant was sold at \$1.25 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 \$1.625 by the IPO price.

Upon completion of the initial public offering on June 5, 2001 these Series A special warrants were converted to 6,240 shares of common stock, which included 480 shares of common stock issued under the price protection adjustment.

#### Notes to the Consolidated Financial Statements—(Continued)

#### Canadian dollars and shares in thousands, except per share information

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 6,240 additional common stock can be 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 \$250 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 \$1,000 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 \$250 investment into 308 shares of common stock of the Company.

#### **Triathlon settlement**

During fiscal 2000, other advances totaling \$258 were settled by the issuance to Triathlon Limited of 1,400 shares of common stock of the Company. The number of shares issued was determined with reference to 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 400 shares of common stock of the Company for \$503. Pursuant to a price protection clause in the agreement, an additional 33 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 6,667 shares of common stock at a price of \$1.50 per share. Net proceeds of this offering credited to common stock amounted to \$8,720, after deducting the underwriting fee of \$750 and expenses of \$530. As additional compensation in connection with the offering, the Company granted the underwriters non-assignable support options representing 10 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 \$1.50. The Company also granted the underwriters an option ("Over-allotment Option") to purchase up to 1,000 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.

#### **Private placement**

On December 19, 2003, the Company completed a private placement of equity securities totaling \$21,563, comprised of (i) \$20,163 for 57,609 units, at a price of \$0.35 per unit, comprised of an aggregate of 57,609 shares of common stock and warrants to acquire 28,805 shares of common stock of Adherex with an exercise price of \$0.43 per share; the \$7,739 estimated fair value of the warrants has been allocated to contributed surplus and the balance of \$10,759 has been credited to common stock, and (ii) \$1,400 for 4,000 Series 1 Preferred Shares and warrants to purchase 2,000 Series 1 Preferred Shares of 2037357 Ontario Inc. The non-redeemable Series 1 Preferred Shares of 2037357 Ontario Inc. ("Preferred Shares") were exchangeable into 4,000 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, with an exercise price of \$0.43 per share. The \$1,400 was to be spent on research and development projects in

### Notes to the Consolidated Financial Statements—(Continued) Canadian dollars and shares in thousands, except per share information

Ontario, Canada as designated by Adherex. Adherex had the right to 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 6,132 shares of common stock exercisable at a price of \$0.43 per share.

2037357 Ontario Inc. has been accounted for in accordance with the substance of the transaction. The \$1,400 has been recorded as non-redeemable Preferred Shares and the amounts expended will be recorded as expenses in the relevant periods. On June 14, 2004, the preferred shares were exchanged for 4,000 shares of Adherex common stock and warrants to purchase 2,000 shares of Adherex common stock. On June 29, 2004, 2037357 Ontario Inc., then a wholly owned subsidiary of the Company, was amalgamated with Adherex Technologies Inc. The investment has been split between the estimated fair value of the warrants of \$497, which has been included in contributed surplus, and the remainder of \$903, which has been recorded in common stock.

On May 20, 2004, the Company completed equity financings with total gross proceeds of \$12,374 less \$762 in estimated issuance costs. The Company issued 23,347 units at a purchase price of \$0.53 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 \$0.70 per share for a period of three years. The \$2,902 value of the warrants has been allocated to contributed surplus and the balance of \$8,710 has been credited to common stock.

#### Stated capital reduction

As a prerequisite of the Oxiquant transaction, Adherex licensed all of its intellectual property related to the development of its proprietary compounds for non-cancer applications and transferred \$250 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 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. This requirement is set out in Section 42 of the CBCA. Management determined that the stated capital needed to be reduced by \$15,029, in order to comply with the requirements of Section 42 of the CBCA.

#### Warrants issued on acquisition of intellectual property

In connection with the acquisition of intellectual property of Oxiquant in November 2002, the Company issued 2,307 warrants with an exercise price of \$0.717 that expire on May 20, 2007 and 848 introduction warrants with an exercise price of \$0.41 that expire on November 20, 2007.

#### **Convertible note warrants**

In connection with the June 2003 issuance of senior secured convertible notes, the Company issued 1,724 warrants with an exercise price of \$0.55 per share that expire on June 23, 2007 and 504 agent warrants with an exercise price of \$0.47 per share that expire on June 23, 2005. As an inducement to consent to the issuance of the December 2003 convertible notes, 1,433 of these warrants were repriced from \$0.55 per share to \$0.43 per share on December 3, 2003.

In connection with the December 2003 issuance of additional senior secured convertible notes, the Company issued 1,354 warrants with an exercise price of \$0.43 per share that expire on December 3, 2007 and 470 broker warrants with an exercise price of \$0.43 per share that expire on December 3, 2005.

# Adherex Technologies Inc. (a development stage company) Notes to the Consolidated Financial Statements—(Continued) Canadian dollars and shares in thousands, except per share information

#### 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 recommends to the Board for approval the number of options to be granted from time to time. Under the plan, a maximum of 20,000 options, excluding 3,500 options granted to the Company's chief executive officer outside of the plan, are authorized for issue. 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. Information with respect to stock option activity is as follows:

		Exercise I	Price	
	Number of Options	Range	Weighted- average	
Outstanding at June 30, 2000	3,588	\$0.3275-0.75	\$ 0.46	
Exercised	(8)	0.3275	0.3275	
Granted	527	1.25	1.25	
Outstanding at June 30, 2001	4,107	0.3275-1.25	0.56	
Cancelled	(1,252)	0.3275-1.25	0.33	
Granted	851	0.33-0.65	0.39	
Repriced	(720)	0.75	0.75	
	720	1.50	1.50	
		. <u> </u>		
Outstanding at June 30, 2002	3,706	0.3275-1.50	0.74	
Cancelled	(570)	0.3275-1.25	0.93	
Exercised	(18)	0.3275	0.33	
Granted	5,107	0.33-0.35	0.33	
		. <u> </u>		
Outstanding at June 30, 2003	8,225	0.3275-1.50	0.48	
Cancelled	(134)	0.34-0.65	0.35	
Exercised	(89)	0.3275-0.35	0.34	
Granted	8,378	0.45–0.65	0.50	
Outstanding at June 30, 2004	16,380	\$0.3275-1.50	\$ 0.49	

	Options O	utstanding	Options Ex	ercisable
Exercise Price	Number Outstanding at June 30, 2004	Weighted- average Remaining Contractual Life (years)	Number Exercisable at June 30, 2004	Weighted- average Remaining Contractual Life (years)
\$0.3275	1,096	2.45	1,096	2.45
0.33	4,435	5.40	4,035	5.44
0.34	568	5.29	305	4.82
0.35	493	5.24	230	4.81
0.45	4,789	6.03	1,518	6.50
0.46	81	4.42	57	4.54
0.49	50	6.47	—	
0.53	1,048	6.80	47	6.22
0.58	1,780	6.89	1,270	6.89
0.63	5	6.72	5	6.72
0.65	737	5.99	178	3.86
0.75	400	2.66	400	2.66
1.25	178	1.59	178	1.59
1.50	720	2.66	720	2.66
	16,380		10,039	

#### Notes to the Consolidated Financial Statements—(Continued)

#### Canadian dollars and shares in thousands, except per share information

#### Proforma compensation expense

During the year ended June 30, 2003, the Company retroactively adopted the CICA 3870 "Stock-based Compensation and Other Stock-based Payments" requirement for proforma stock based compensation to be disclosed in the notes. Had compensation expense for options been recorded based on a Black-Scholes option-pricing model at the grant date, the net loss of the Company would have increased as follows:

	Ye	Years Ended June 30,		
	2004	2003	2002	
Net loss before compensation expense	\$ 11,648	\$ 8,280	\$ 5,641	
Compensation expense	1,351	565	215	
Proforma net loss	\$(12,999)	\$(8,845)	\$(5,856)	
Proforma net loss per share of common stock, basic and diluted	\$ (0.11)	\$ (0.14)	\$ (0.15)	

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

		Years Ended June 30,		
	2004	2003	2002	
Expected dividend	0%	0%	0%	
Risk-free interest rate	4.46%	4.32%	5.48%	
Expected volatility	68%	70%	70%	
Expected life	7 years	7 years	7 years	
Weighted-average fair value of options issued	\$ 0.50	\$ 0.33	\$ 0.39	

#### 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:

		Years Ended June 30,		<b>Cumulative From</b>	
	2004	2003	2002		mber 3, 1996 me 30, 2004
Research and development	\$4,963	\$4,614	\$4,736	\$	20,847
Investment tax credits	(175)	(373)	(302)		(2,162)
National Research Council grants	(5)	(96)	(102)		(287)
	\$4,783	\$4,145	\$4,332	\$	18,398

The Company's claim for 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.

# Notes to the Consolidated Financial Statements—(Continued)

# Canadian dollars and shares in thousands, except per share information

#### 11. Capital and Operating Lease Commitments

As of June 30, 2004, the Company has entered into operating lease agreements for office facilities. The minimum lease payments are as follows:

Period Ending	Amount
June 30, 2005	\$ 41
June 30, 2006	84
June 30, 2007	87
June 30, 2008	90
June 30, 2009	92
June 30, 2010	95
June 30, 2011	8
	\$ 497

The obligations under a U.S. office lease agreement are payable in U.S. dollars and are presented above in Canadian dollars in the table, translated at an assumed rate of CAD\$1.40.

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

Period Ending	Amount	Interest
	<u> </u>	
June 30, 2004	\$ 209	\$ —
June 30, 2003	215	1
June 30, 2002	293	1

## 12. Commitments and Contingencies

# McGill University ("McGill") Agreement

On February 26, 2001, the Company entered into an agreement with McGill superseding all prior agreements concerning the licensed technology. The agreement 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 2 percent of gross revenues from the use of the compounds and may require the Company to make payments in order to maintain the license as follows:

- \$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;
- \$100 if the Company has not commenced Phase II clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2004; and
- \$200 if the Company has not commenced Phase III clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2006.

In addition, the Company is to fund mutually agreed upon research at McGill over a period of ten years totaling \$3,300. Annual funding commenced in 2001 with a total payment of \$200 and increases annually by 10 percent through to the tenth year of the agreement when annual funding reaches \$500. The additional research commitment can be deferred in any year if it exceeds 5 percent of the Company's cash and cash equivalents. As of June 30, 2004, there have been no deferrals. The Company receives certain intellectual property rights resulting from this research.

# Adherex Technologies Inc. (a development stage company) Notes to the Consolidated Financial Statements—(Continued) Canadian dollars and shares in thousands, except per share information

On August 1, 2002, McGill acknowledged that work completed on the clinical development of Exherin<sup>™</sup> was sufficient to meet the requirements of the September 23, 2002 milestone.

#### **Rutgers agreement**

In November 2002, the Company acquired an exclusive license agreement with Rutgers through the Company's acquisition of Oxiquant, which had entered into the license agreement with Rutgers in April 2001. Pursuant to the license agreement, Rutgers granted the Company worldwide license rights to "Novel Redox Clamping Agents and Uses Thereof." In consideration, Rutgers was issued 500 shares of common stock of Oxiquant, which were subsequently converted into 3,821 shares of common stock of the Company and 219 warrants. Rutgers will also receive certain milestone payments, a 4 percent running royalty on net sales for any licensed products semiannually and a 20 percent non-running royalty on any consideration received from sublicensing or transferring of the licensed technology. Milestone payment fees payable to Rutgers include: US\$25 upon completion of the first clinical trial performed in compliance with FDA or corresponding foreign health authority requirements in a small number of patients to determine the metabolism and pharmacological actions of doses; US\$50 upon commencement of the first Phase III clinical trial or equivalent; US\$100 upon receipt of market approval in the first major market country. In addition, on the anniversary of the license agreement, a license maintenance fee starting at US\$5 and increasing by that same amount each subsequent anniversary is due to Rutgers. After completion of the fifth anniversary period, and on each subsequent anniversary, the annual license maintenance fee shall be US\$50, can be offset against royalties (with some restrictions). The Company has made all maintenance payments required to date.

#### **Oregon Health & Science University agreement**

In November 2002, the Company acquired an exclusive license agreement with OHSU through the Company's acquisition of Oxiquant, which had entered into the license agreement with OHSU in September 2002. Pursuant to the license agreement, OHSU granted the Company exclusive worldwide license rights to intellectual property surrounding work done by Dr. Edward Neuwelt with respect to thiol-based compounds and their use in oncology. In consideration, OHSU was issued 250 shares of common stock of Oxiquant which subsequently became, upon the acquisition of Oxiquant, 1,913 shares of common stock of the Company and 110 warrants, and will receive certain milestone payments, a 2.5 percent royalty on net sales for licensed products and a 15 percent royalty on sublicensing of the licensed technology. Milestone payment fees payable to OHSU include: US\$50 upon completion of Phase I clinical trials; US\$200 upon completion of Phase III clinical trials; and US\$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 US\$350 (\$535 Canadian dollars when converted at a rate of \$1.5287 per the agreement). The initial payment of US\$229 was made during the quarter ended March 31, 2003 and was recorded as a General and Administration expense. Additionally, he will receive US\$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 have been recorded as accrued liabilities, with the remaining amounts recorded as a long-term liability.



Notes to the Consolidated Financial Statements—(Continued)

#### Canadian dollars and shares in thousands, except per share information

#### 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:

	Ye	Years Ended June 30,		
	2004	2003	2002	
Domestic loss	\$(10,394)	\$(8,978)	\$(5,641)	
Foreign loss	(2,394)			
Loss before income taxes	(12,788)	(8,978)	(5,641)	
		·		
Expected statutory rate (recovery)	35.87%	37.62%	40.00%	
Expected provision for (recovery of) income tax	(4,587)	(3,378)	(2,256)	
Permanent differences	98	8	6	
Change in valuation allowance	4,560	3,259	1,659	
Non-refundable investment tax credits	(141)	(227)	(361)	
Share issue costs and effect of change of carryforwards	(688)	(772)	9	
Effect of foreign exchange rate differences	21			
Effect of tax rate changes	(403)	412	943	
Recovery of income taxes	\$ (1,140)	\$ (698)	\$ —	

The Canadian statutory income tax rate of 35.87 percent is comprised of federal income tax at approximately 22.62 percent and provincial income tax at approximately 13.25 percent.

The primary temporary differences, which gave rise to future income taxes (recovery) at June 30, 2004 and 2003 are as follows:

	Years Ende	ed June 30,
	2004	2003
Future tax assets		
SR&ED expenditures	\$ 2,440	\$ 2,150
Income tax loss carryforwards	7,930	4,850
Non-refundable investment tax credits	1,000	770
Share issue costs	950	390
Reserves	—	20
Fixed and intangible assets	960	580
Net future tax assets	13,280	8,760
Less: valuation allowance	(13,230)	(8,670)
Net future tax assets	50	90
Future tax liabilities		
Asset basis differences	(9,552)	(10,692)
Refundable investment tax credits	(50)	(90)
Net future tax liabilities	\$ (9,552)	\$(10,692)

Notes to the Consolidated Financial Statements—(Continued)

#### Canadian dollars and shares in thousands, except per share information

The future income tax liability recognized in the balance sheet 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 owing in the near term.

As at June 30, 2004, the Company has unclaimed Scientific Research and Experimental Development ("SR&ED") expenditures, income tax loss carryforwards and investment tax credits. The unclaimed amounts and their expiry dates are as follows:

	Federal	Ontario
SR&ED expenditures (no expiry)	\$6,640	\$7,080
Income tax loss carryforwards (expiry date) at June 30:		
2004	342	342
2005	780	909
2006	1,698	1,960
2007	1,833	1,833
2008	633	633
2009	3,653	3,653
2010	4,265	4,265
2011	6,150	6,150
Investment tax credits (expiry date) at June 30:		
2008	9	
2009	7	
2010	96	
2011	55	_
2012	545	

# 14. Loss Per Share

The outstanding number and type of securities that could potentially dilute basic earnings per share in the future, but that 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:

	As of Ju	une 30,
Security	2004	2003
Stock options	16,380	8,225
Convertible note warrants	3,077	1,724
Acquisition warrants	2,307	2,307
Broker warrants	7,955	1,352
Conversion of convertible notes		6,895
Investor warrants	49,511	

#### **15. Segment Information**

The Company operates in one business segment, being the development of pharmaceutical products based on its 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.

Notes to the Consolidated Financial Statements—(Continued)

#### Canadian dollars and shares in thousands, except per share information

#### 16. Research and Development Projects

The Company is in the development stage and conducts anticancer research and development in the areas of vascular targeting, chemoprotectants and chemoenhancers as follows:

Vascular Targeting

- Exherin is a compound that selectively targets cancer blood vessels and is in clinical development.
- Preclinical product candidates, including backup compounds to Exherin.

Chemoprotectants and Chemoenhancers

- Sodium Thiosulfate ("STS") is a chemoprotectant that has been shown to reduce loss of hearing in patients being treated with platinum-based anticancer agents.
- N-Acetylcysteine ("NAC") is a chemoprotectant that has been shown to assist in the prevention of bone marrow toxicity from chemotherapy.
- Mesna is a chemoenhancer that, in laboratory studies, has been shown to reduce the resistance of cancer cells to certain anticancer agents.

The following summarizes our research and development expenses through June 30, 2004:

	2	Years Ended June 30,		Cumulative From		
	2004	2003	2002		September 3, 1996 to June 30, 2004	
Exherin	\$3,362	\$3,145	\$2,705	\$	12,007	
Other vascular targeting	458	652	820		1,930	
Total vascular targeting	3,820	3,797	3,525		13,937	
STS	844	216			1,060	
Mesna	_	20	_		20	
NAC	_	5			5	
Total chemoprotectants and enhancers	844	241			1,085	
Other discovery projects	119	107	307		2,326	
Transdermal drug delivery	—	_	500		1,050	
Total research and development expense	\$4,783	\$4,145	\$4,332	\$	18,398	

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. Related Parties**

Paramount Capital, Inc. ("Paramount") was engaged as an introducing agent by Oxiquant and received \$500 and warrants to purchase 848 shares of common stock of the Company for their services pursuant to the acquisition of Oxiquant. Paramount also served as introduction agent for a private placement in June 2003 of convertible notes in the United States and received, in addition to cash commissions, warrants to purchase an aggregate of 504 shares of common stock of the Company.

Notes to the Consolidated Financial Statements—(Continued)

# Canadian dollars and shares in thousands, except per share information

Robin Norris, an officer and director of Adherex, and Raymond Hession and Peter Morand, directors of the Company, are each former directors of CBI. CBI was originally incorporated as a wholly owned subsidiary of Adherex, and in exchange for rights to Adherex's non-cancer assets and \$250 in cash, Adherex received preferred shares of CBI.

#### **18. Financial Instruments**

Financial instruments recognized on the balance sheets as of June 30, 2004 and June 30, 2003 consist of cash, 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.

### 19. Changes in Operating Assets and Liabilities

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

	Yea	Years Ended June 30,		
	2004	2003	2002	
Accounts receivable	\$ (22)	\$ 180	\$ (6)	
Prepaid expenses	(17)	(61)	(5)	
Deferred expense	117	(262)		
Investment tax credits recoverable	164	(208)	272	
Accounts payable and accrued liabilities	565	(24)	295	
			·	
Net changes in operating assets and liabilities	\$807	\$(375)	\$556	

# Notes to the Consolidated Financial Statements—(Continued) Canadian dollars and shares in thousands, except per share information

#### 20. United States Accounting Principles

The consolidated financial statements have been prepared in accordance with Canadian GAAP. These principles differ, as they affect the Company, for the years ended June 30, 2004, 2003 and 2002 in the following material respects from U.S. Generally Accepted Accounting Principles ("GAAP"). There are no differences in reported cash flow for the periods presented.

## (a) Consolidated balance sheets—U.S. GAAP:

	As of J	une 30,
	2004	2003
Assets		
Current assets	\$ 28,896	\$ 4,489
Other assets	50	167
Capital assets	561	655
Total assets	\$ 29,507	\$ 5,311
Liabilities		
Current liabilities	\$ 1,966	\$ 1,465
Other long-term liabilities	124	192
Liability component of convertible notes		2,707
Total liabilities	2,090	4,364
Shareholders' equity		
Common stock	48,402	25,609
Contributed surplus	29,540	16,632
Deficit accumulated during development stage	(50,525)	(41,294)
Total shareholders' equity	27,417	947
Total liabilities and shareholders' equity	\$ 29,507	\$ 5,311

### (b) Consolidated statements of operations—U.S. GAAP:

	Ye	Years Ended June 30,		
	2004	2003	2002	
Net loss in accordance with Canadian GAAP	\$ (11,648)	\$ (8,280)	\$ (5,641)	
Adjustments to reconcile U.S. GAAP:				
Acquired intellectual property rights (1)		(31,162)		
Acquired intellectual property rights amortization (1)	3,120	1,910	_	
Future income taxes (1)	(1,140)	10,692		
Estimated stock-based compensation costs (2)	(7)	(40)	(213)	
Interest charges—convertible notes (3)	444	9		
Net loss in accordance with U.S. GAAP	\$ (9,231)	\$(26,871)	\$ (5,854)	
Net loss per share of common stock, basic and diluted	\$ (0.08)	\$ (0.42)	\$ (0.15)	
Weighted-average number of shares of common stock outstanding, basic and diluted	121,164	64,601	40,164	

# Adherex Technologies Inc. (a development stage company) Notes to the Consolidated Financial Statements—(Continued) Canadian dollars and shares in thousands, except per share information

#### (c) Footnotes

#### 1. 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. After reviewing the Company's development and patent strategy surrounding the compounds, the Company determined that the acquired intellectual property did not meet the required criteria for alternative uses. As a result, the amounts were expensed as IPRD. 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 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.

The entire IPRD was allocated to chemoprotectants and chemoenhancers with 55% allocated to STS, 25% to NAC and 20% to Mesna.

#### 2. Stock-based compensation costs

Under U.S. GAAP, the difference between the exercise price of options issued within a one-year period prior to the IPO and the IPO price is deferred and expensed 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.

#### 3. 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.

Under Canadian GAAP, the option to convert the notes into equity was valued at \$1,125 for the June 23, 2003 notes and at \$1,143 for the December 3, 2003 notes using the Black-Scholes option pricing model. Amortization of the option to convert the notes was reflected as additional interest expense of \$444 for the year ended June 30, 2004 and \$9 for the year ended June 30, 2003 on the Canadian GAAP consolidated statements of operations.

#### 21. Subsequent Event

#### **Cadherin Biomedical Inc.**

In February 2004, the Company filed a claim in the Ontario Superior Court of Justice against Cadherin Biomedical Inc. ("CBI") in the amount of \$124 on account of unpaid goods and services rendered. In July 2004, CBI filed a statement of defence and counterclaim in response to such claim. CBI's counterclaim seeks \$5,000 in damages in relation to the license agreement between the parties. Management believes that the counterclaim is without merit. Later in July 2004, the Company entered into a non-binding letter of intent to acquire all of the

# Adherex Technologies Inc. (a development stage company) Notes to the Consolidated Financial Statements—(Continued) Canadian dollars and shares in thousands, except per share information

issued and outstanding shares of CBI through an amalgamation of CBI with a wholly-owned subsidiary of Adherex to be incorporated under the CBCA for this purpose. Completion of the transaction is subject to CBI shareholder approval, agreement by the parties on definitive amalgamation documentation and other customary closing conditions. The Company expects the amalgamation to close in November or December 2004 after CBI's shareholders vote on the acquisition, but here can be no assurance that it will close on schedule or at all. Under the terms of the letter of intent, Adherex will issue to CBI shareholders a total of 3,220 Adherex common shares, representing a value of \$1,500, based on a 20-day weighted-average trading price for such shares on July 20, 2004. Of such shares, 500 Adherex common shares will be deposited in escrow as security against any misrepresentation by CBI in connection with the transaction. In addition, the Company has agreed to loan CBI up to \$75 to be used by CBI to pay legitimate expenses related to the transaction. This loan is to be repaid by CBI only if the transaction does not close on or before March 31, 2005 due to the fault of CBI.

If the transaction is completed, it will provide the Company with the rights to the non-cancer applications relating to the cadherin technology and will serve as a settlement of the claim commenced by the Company against CBI in February 2004 and the counterclaim filed by CBI against the Company in July 2004. Pending completion of the transaction, the parties have agreed to hold in abeyance all matters in relation to the claim and counterclaim between the parties. If the transaction is not completed as anticipated, the Company intends to pursue its claim against CBI and take all appropriate action to defend CBI's counterclaim.

# **BY-LAW NO. 2**

A by-law relating generally to the transaction of the business and affairs of

# ADHEREX TECHNOLOGIES INC.

## TABLE OF CONTENTS

Article 1	INTERPRETATIONS
1.01	Definitions
Article 2	BUSINESS OF THE CORPORATION
2.01	Registered Office
2.02	Corporate Seal
2.03	Financial Year
2.04	Execution of Instruments
2.05	Delegation of Borrowing Power
Article 3	DIRECTORS
3.01	Number and Qualification of Directors
3.02	Election and Term
3.03	Action by the Board
3.04	Meeting by Telephone
3.05	Place of Meetings
3.06	Calling of Meetings
3.07	Notice of Meeting
3.08	First Meeting of New Board
3.09	Chairman and Vice Chairman
3.10	Quorum
3.11	Votes to Govern
3.12	Remuneration and Expenses
3.13	Committees
Article 4	OFFICERS
4.01	Appointment
4.02	Chief Executive Officer
4.03	Powers and Duties of Other Officers
4.04	Term of Office
4.05	Agents and Attorneys
Article 5	PROTECTION OF DIRECTORS, OFFICERS AND OTHERS
5.01	Limitation of Liability
5.02	Indemnity
Article 6	SHARES
6.01	Allotment of Shares
6.02	Commissions
6.03	Non-recognition of Trusts
6.04	Share Certificates
6.05	Replacement of Share Certificates
6.06	Deceased Shareholders
6.07	Transfer Agents and Registrars
Article 7	MEETINGS OF SHAREHOLDERS
7.01	Annual Meetings
7.02	Special Meetings
7.03	Place of Meetings
7.04	Notice of Meetings
7.05	List of Shareholders Entitled to Notice

7.06	Chairman and Secretary
7.07	Quorum
7.08	Votes to Govern
7.09	Meetings by Telephonic, Electronic or other Communication Facility
7.10	Electronic Voting by Shareholders
7.11	Voting While Participating Electronically
Article 8	NOTICES
8.01	Method of Giving Notices
8.02	Notice by Electronic Document
8.03	Signatures By Electronic Document
8.04	Notice to Joint Shareholders
8.03	Computation of Time
8.04	Omissions and Errors
8.05	Persons Entitled by Death or Operation of Law
8.06	Waiver of Notice
8.07	Interpretation
Article 9	EFFECTIVE DATE
9.01	Effective Date
9.02	Repeal of By-Law No. 1

#### SECTION ONE INTERPRETATION

1.01 Definitions. - In the by-laws of the Corporation, unless the context otherwise requires:

"Act" means the Canada Business Corporations Act, or any statute that may be substituted therefor, as from time to time amended;

"appoint" includes "elect" and vice versa;

"articles" means the articles attached to the Certificate of Incorporation of the Corporation as from time to time amended or restated;

"board" means the board of directors of the Corporation;

"by-laws" means this by-law and all other by-laws of the Corporation from time to time in force and effect;

"<u>Corporation</u>" means the corporation amalgamated under the Act by the said certificate to which the articles are attached, and named "Adherex Technologies Inc.";

"meeting of shareholders" includes an annual meeting of shareholders and a special meeting of shareholders; and

"special meeting of shareholders" includes a meeting of any class or classes of shareholders and a special meeting of all shareholders entitled to vote at an annual meeting of shareholders; and

"recorded address" has the meaning set forth in section 8.09.

Save as aforesaid, words and expressions defined in the Act, including "<u>resident Canadian</u>", have the same meanings when used herein. Words importing the singular number include the plural and vice versa; words importing gender include the masculine, feminine and neuter genders; and words importing a person include an individual, partnership, association, body corporate, trustee, executor, administrator and legal representative.

## SECTION TWO BUSINESS OF THE CORPORATION

2.01 <u>Registered Office</u>. - The registered office of the Corporation shall be at the place within Canada from time to time specified in the articles and at such location therein initially as is specified in the notice thereof filed with the articles and thereafter as the board may from time to time determine.

2.02 <u>Corporate Seal</u>. - Until changed by the board, the corporate seal, if any, of the Corporation shall be in the form impressed hereon.

2.03 Financial Year. - Until changed by the board, the financial year of the Corporation shall end on the 30th day of June in each year.

2.04 <u>Execution of Instruments</u>. - The board may from time to time direct the manner in which and the person or persons by whom any deeds, transfers, assignments, contracts, obligations, certificates and other instruments may or shall be signed on behalf of the Corporation. Any signing officer may affix the corporate seal to any instrument requiring the same.

2.05 <u>Delegation of Borrowing Power</u>. - Unless the articles of the Corporation otherwise provide, the board may from time to time delegate to a director, a committee of the board, or an officer of the Corporation any or all of the powers conferred on the board by the Act in respect of the borrowing powers of the Corporation to such extent and in such manner as the board may determine at the time of such delegation; and without limitation the board by making this by-law hereby delegates such powers to the Chief Executive Officer.

## SECTION THREE DIRECTORS

3.01 <u>Number and Qualification of Directors</u>. - Until changed in accordance with the Act, the board shall consist of not fewer than the minimum number and not more than the maximum number of directors provided in the articles. So long as the Corporation has more than four directors, at least 25% of the directors of the Corporation shall be resident Canadians and, if the Corporation has less than four directors, at least one director shall be a resident Canadian.

3.02 <u>Election and Term</u>. - The election of directors shall take place at each annual meeting of shareholders and all the directors then in office shall retire but, if qualified, shall be eligible for re-election. The number of directors to be elected at any such meeting shall be the number of directors then in office unless the directors otherwise determine. If an election of directors is not held at the proper time, the incumbent directors shall continue in office until their successors are elected.

3.03 <u>Action by the Board</u>. - The board shall manage the business and affairs of the Corporation. The powers of the board may be exercised at a meeting (subject to sections 3.04 and 3.10) at which a quorum is present or by resolution in writing signed by all the directors entitled to vote on that resolution at a meeting of the board. Where 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.

3.04 <u>Meeting by Telephone</u>. - If all the directors of the Corporation consent thereto generally or in respect of a particular meeting, a director may participate in a meeting of the board or of a committee of the board by means of such conference telephone or other communications facilities as permit all persons participating in the meeting to hear each other, and a director participating in such a meeting by such means is deemed to be present at the meeting. Any such consent shall be effective whether given before or after the meeting to which it relates and may be given with respect to all meetings of the board and of committees of the board.

3.05 Place of Meetings. - Meetings of the board may be held at any place in or outside Canada.

3.06 <u>Calling of Meetings</u>. - Meetings of the board shall be held from time to time at such time and at such place as the board, the chairman of the board or any two directors may determine.

3.07 Notice of Meeting. - Subject to the specification of the purpose or business of the meeting when required by the Act, notice of the time and place of each meeting of the board shall be given in the manner provided in Section Eight to each director not less than 48 hours before the time when the meeting is to be held.

3.08 <u>First Meeting of New Board</u>. - Provided a quorum of directors is present, each newly elected board may without notice hold its first meeting immediately following the meeting of shareholders at which such board is elected.

3.09 <u>Chairman and Vice Chairman</u>. - A chairman of the board or a vice chairman of the board may be appointed from time to time by the board. The chairman of the board shall conduct any meeting of the board or, if the chairman of the board is not present, the vice chairman of the board shall conduct any meeting of the board nor the vice chairman of the board are present at a meeting of the board, the chairman of the board may appoint a chairman for the purpose of conducting such meeting, or, if the chairman of the board has not appointed any director to chair the meeting, the directors present shall choose one of their number to chair the meeting.

3.10 <u>Quorum</u>. - The quorum for the transaction of business at any meeting of the board shall consist of 2 directors or such greater number of directors as the board may from time to time determine, provided that so long as the Corporation has more thanfour directors, at least 25% of the directors of the Corporation present at any meeting of the Board of Directors of the Corporation shall be resident Canadians and, if the Corporation has less than four directors, at least one director present at any meeting of the Board of Directors of the Corporation shall be a resident Canadian.

3.11 <u>Votes to Govern</u>. - At all meetings of the board, and subject to the requirements of the Act in respect of conflicts of interest, every question shall be decided by a majority of the votes cast on the question. In case of an equality of votes, the chairman of the meeting shall be entitled to a second or casting vote.

3.12 <u>Remuneration and Expenses</u>. - The directors shall be paid such remuneration for their services as the board may from time to time determine. The directors shall also be entitled to be reimbursed for travelling and other expenses properly incurred by them in attending meetings of the board or any committee thereof. Nothing herein contained shall preclude any director from serving the Corporation in any other capacity and receiving remuneration therefor.

3.13 <u>Committees</u>. - The board may appoint from its members one or more committees of directors, however designated, and delegate to such committee any of the powers of the board except those which, under the Act, a committee of directors has no authority to exercise. Unless otherwise determined by the board, each committee shall have the power to fix its quorum at no less than a majority of its members, to elect its chairman and to regulate its procedure. Subject to the provisions of section 3.04, the powers of a committee of directors may be exercised by a meeting at which a quorum of the committee is present or by resolution in writing signed by all the members of such committee who would have been entitled to vote on that resolution at a meeting of the committee. Meetings of such committee may be held at any place in or outside Canada.

## SECTION FOUR OFFICERS

4.01 <u>Appointment</u>. - The board may from time to time appoint a chief executive officer, a president, a chairman of the board, one or more vice-presidents (to which title may be added words indicating seniority or function), a secretary, a treasurer and such other officers as the board may determine, including one or more assistants to any of the officers so appointed. One person may hold more than one office. The board may specify the duties of and, in accordance with this by-law and subject to the Act, delegate to such officers powers to manage the business and affairs of the Corporation. Except for a chairman of the board, an officer may but need not be a director.

4.02 <u>Chief Executive Officer</u>. - The chief executive officer, subject to the authority of the board, shall have general supervision of the business and affairs of the Corporation and shall have the power, authority and obligation to manage and direct the business and affairs of the Corporation in accordance with the instructions and directions of the board. The chief executive officer shall report directly to the board.

4.03 <u>Powers and Duties of other Officers</u>. - The powers and duties of all other officers shall be such as the terms of their engagement call for or as the board or the chief executive officer may specify. The board and the chief executive officer may, from time to time and subject to the provisions of the Act, vary, add to or limit the powers and duties of any officer. Any of the powers and duties of an officer to whom an assistant has been appointed may be exercised and performed by such assistant, unless the board or the chief executive officer otherwise directs.

4.04 <u>Term of Office</u>. - - The board, in its discretion, may remove any officer of the Corporation. Otherwise each officer appointed by the board shall hold office until his successor is appointed or until his earlier resignation.

4.05 <u>Agents and Attorneys</u>. - The Corporation, by or under the authority of the board or the chief executive officer, shall have power from time to time to appoint agents or attorneys for the Corporation in or outside Canada with such powers (including the power to subdelegate) of management, administration or otherwise as may be thought fit.

## SECTION FIVE PROTECTION OF DIRECTORS, OFFICERS AND OTHERS

5.01 Limitation of Liability. - Every director and officer of the Corporation in exercising his powers and discharging his duties shall act honestly and in good faith with a view to the best interests of the Corporation and exercise the care, diligence and skill that a reasonably prudent person would exercise in comparable circumstances. Subject to the foregoing, no director or officer shall be liable for the acts, receipts, neglects or defaults of any other director, officer or employee, or for joining in any receipt or other act for conformity, or for any loss, damage or expense happening to the Corporation through the insufficiency or deficiency of title to any property acquired for or on behalf of the Corporation, or for the insufficiency or deficiency of any security in or upon which any of the moneys of the Corporation shall be invested, or for any loss or damage arising from the bankruptcy, insolvency or tortious acts of any person with whom any of the moneys, securities or effects of the Corporation shall be deposited, or for any loss occasioned by any error of judgment or oversight on his part, or for any other loss, damage or misfortune which shall happen in the execution of the duties of his office or in relation thereto; provided that nothing herein shall relieve any director or officer from the duty to act in accordance with the Act and the regulations thereunder or from liability for any breach thereof.

5.02 Indemnity. - Subject to the Act, the Corporation shall indemnify a director or officer, a former director or officer, or a person who acts or acted at the Corporation's request as a director or officer of a body corporate of which the Corporation is or was a shareholder or creditor, and his heirs and legal representatives, against all costs, charges and expenses, including an amount paid to settle an action or satisfy a judgment, reasonably incurred by him in respect of any civil, criminal or administrative action or proceeding to which he is made a party by reason of being or having been a director or officer of the Corporation or such body corporate, if (a) he acted honestly and in good faith with a view to the best interests of the Corporation; and (b) in the case of a criminal or administrative action or proceeding that is enforced by a monetary penalty, he had reasonable grounds for believing that his conduct was lawful. The Corporation shall also indemnify such person in such other circumstances as the Act or law permits or requires. Nothing in this by-law shall limit the right of any person entitled to indemnity to claim indemnity apart from the provisions of this by-law.

### SECTION SIX SHARES

6.01 <u>Allotment of Shares</u>. - Subject to the Act and the articles, the board may from time to time allot or grant options to purchase the whole or any part of the authorized and unissued shares of the Corporation at such times and to such persons and for such consideration as the board shall determine, provided that no share shall be issued until it is fully paid as provided by the Act.

6.02 <u>Commissions</u>. - - The board may from time to time authorize the Corporation to pay a reasonable commission to any person in consideration of his purchasing or agreeing to purchase shares of the Corporation, whether from the Corporation or from any other person, or procuring or agreeing to procure purchasers for any such shares.

6.03 <u>Non-recognition of Trusts</u>. - Subject to the Act, the Corporation may treat the registered holder of any share as the person exclusively entitled to vote, to receive notices, to receive any dividend or other payment in respect of the share, and otherwise to exercise all the rights and powers of an owner of the share.

6.04 <u>Share Certificates</u>. - Every holder of one or more shares of the Corporation shall be entitled, at his option, to a share certificate, or to a non-transferable written certificate of acknowledgement of his right to obtain a share certificate, stating the number and class or series of shares held by him as shown on the securities register. Such certificates shall be in such form as the board may from time to time approve. Any such certificate shall be signed in accordance with section 2.04 and need not be under the corporate seal. Notwithstanding the foregoing, unless the board otherwise determines, certificates representing shares in respect of which a transfer agent and/or registrar has been appointed shall not be valid unless countersigned by or on behalf of such transfer agent and/or registrar. The signature of one of the signing officers under section 2.04 or, in the case of a certificate which is not valid unless countersigned by or on behalf of a transfer agent and/or registrar and in the case of a certificate which does not require a manual signature under the Act, the signatures of both signing officers under section 2.04 may be printed or mechanically reproduced in facsimile thereon. Every such facsimile signature shall for all purposes be deemed to be the signature of the officer whosesignature it reproduces and shall be binding upon the Corporation. A certificate executed as aforesaid shall be valid notwithstanding that one or both of the officers whose facsimile signature appears thereon no longer holds office at the date of issue of the certificate.

6.05 <u>Replacement of Share Certificates</u>. - The board or any officer or agent designated by the board may in its or his discretion direct the issue of a new share or other such certificate in lieu of and upon cancellation of a certificate that has been mutilated or in substitution for a certificate claimed to have been lost, destroyed or wrongfully taken on payment of such reasonable fee and on such terms as to indemnity, reimbursement of expenses and evidence of loss and of title as the board may from time to time prescribe, whether generally or in any particular case.

6.06 <u>Deceased Shareholders</u>. - In the event of the death of a holder, or of one of the joint holders, of any share, the Corporation shall not be required to make any entry in the securities register in respect thereof or to make any dividend or other payments in respect thereof except upon production of all such documents as may be required by law and upon compliance with the reasonable requirements of the Corporation.

6.07 <u>Transfer Agents and Registrars</u>. - The board may from time to time appoint one or more agents to maintain, in respect of each class of shares of the Corporation issued by it, a central securities register and one or more branch securities registers. Such a person may be designated as transfer agent or registrar according to his functions and one person may be designated both registrar and transfer agent. The board may at any time terminate such appointment.

## SECTION SEVEN MEETINGS OF SHAREHOLDERS

7.01 <u>Annual Meetings</u>. - The annual meeting of shareholders shall be held at such time in each year and, subject to section 7.03, at such place as the board may from time to time determine, for the purpose of considering the financial statements and reports required by the Act to be placed before the annual meeting, electing directors, appointing auditors and for the transaction of such other business as may properly be brought before the meeting.

7.02 Special Meetings. - The board shall have power to call a special meeting of shareholders at any time.

7.03 <u>Place of Meetings</u>. - Meetings of shareholders shall be held at the registered office of the Corporation or elsewhere in the municipality in which the registered office is situate or, if the board shall so determine, at some other place in Canada.

7.04 <u>Notice of Meetings</u>. - Notice of the time and place of each meeting of shareholders shall be given in writing in the manner provided in Section Eight not less than 21 days nor more than 60 days before the date of the meeting to each director, to the auditor, and to each shareholder entitled to vote at the meeting.

7.05 <u>List of Shareholders Entitled to Notice</u>. - For every meeting of shareholders, the Corporation shall prepare a list of shareholders entitled to receive notice of the meeting, arranged in alphabetical order and showing the number of shares held by each shareholder entitled to vote at the meeting.

7.06 <u>Chairman and Secretary</u>. - The chairman of any meeting of shareholders shall be the chairman of the board, or in his absence, the vice chairman of the board or in his absence, the director or officer appointed by the chairman of the board to chair the meeting, or if no such director or officer has been appointed, the chief executive officer, or in his absence, the president, or in his absence, a vice-president who is a shareholder. If no such officer is present, the persons present and entitled to vote shall choose one of their number to be chairman. If the secretary of the Corporation is absent, the chairman of the meeting shall appoint some person, who need not be a shareholder, to act as secretary of the meeting.

7.07 <u>Quorum</u>. - Subject to the Act, a quorum for the transaction of business at any meeting of shareholders shall be two persons present in person, each being a shareholder entitled to vote thereat or a duly appointed proxyholder or representative for a shareholder so entitled. If, however, the Corporation lists it shares on Nasdaq or The American Stock Exchange, so long as such shares are so listed, quorum for the transaction of business at any meeting of shareholders shall be two or more persons present inperson or represented by proxy holding not less than 33 1/3% of the then issued and outstanding common shares.

7.08 <u>Votes to Govern</u>. - At any meeting of shareholders every question shall, unless otherwise required by the articles or by-laws or by law, be determined by a majority of the votes cast on the question. In case of an equality of votes either upon a show of hands or upon a poll, the chairman of the meeting shall not be entitled to a second or casting vote.

7.09 <u>Meetings by Telephonic, Electronic or other Communication Facility</u>. - Any person entitled to attend a meeting of shareholders may participate in the meeting, to the extent and in the manner permitted by law, by means of a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during such meeting, if the Corporation makes available such a communication facility. A person participating in such a meeting by such means is deemed, for the purposes of the Act, to be present at such meeting. The directors or shareholders of the Corporation who call a meeting of shareholders pursuant to the Act may determine that the meeting shall be held, to the extent and in the manner permitted by law, entirely by means of a telephonic, electronic or other communication facility that permits all participants to communicate adequately with each other during such meeting.

7.10 <u>Electronic Voting by Shareholders</u>. - Any vote at a meeting of the shareholders may be held, to the extent and in the manner permitted by law, entirely by means of a telephonic, electronic or other communication facility, if the Corporation makes available such a communication facility.

7.11 <u>Voting While Participating Electronically</u>. - Any person participating in a meeting of shareholders by electronic means as provided in section 7.09 and entitled to vote at that meeting may vote, to the extent and in the manner permitted by law, by means of the telephonic, electronic or other communication facility that the Corporation has made available for that purpose.

## SECTION EIGHT NOTICES

8.01 <u>Method of Giving Notices</u>. - Any notice (which term includes any communication or document) to be given (which term includes sent, delivered or served) pursuant to the Act, the regulations thereunder, the articles, the by-laws or otherwise to a shareholder, director, officer, auditor or member of a committee of the board shall be sufficiently given if delivered personally to the person to whom it is to be given or if delivered to his recorded address or if mailed to him at his recorded address by prepaid ordinary or air mail or if sent to him at his recorded address by any means of prepaid transmitted or recorded communication. A notice so delivered shall be deemed to have been given when it is delivered personally or to the recorded address as aforesaid; a notice so mailed shall be deemed to have been given when it is delivered to be so sent by any means of transmitted or recorded communication shall be deemed to have been given when dispatched or delivered to the appropriate communication company or agency or its representative for dispatch. The secretary may change or cause to be changed the recorded address of any shareholder, director, officer, auditor or member of a committee of the board in accordance with any information believed by him to be reliable.

8.02 <u>Notice by Electronic Document</u>. - A requirement under the Act or this by-law to provide a person with a notice, document or other information is not satisfied by the provision of an electronic document unless:

- (a) the addressee has consented, in the manner prescribed by the Act, and has designated an information system for the receipt of the electronic document;
- (b) the electronic document is provided to the designated information system, unless otherwise prescribed in the Act;
- (c) all relevant provisions of the Act have been complied with;

- (d) the information in the electronic document is accessible by the sender so as to be usable for subsequent reference; and
- (e) the information in the electronic document is accessible by the addressee and capable of being retained by the addressee so as to be usable for subsequent reference.

A requirement under the Act for one or more copies of a document to be provided to a single addressee at the same time is satisfied by the provision of a single version of the electronic document. A requirement under the Act to provide a document by registered mail is not satisfied by the sending of an electronic document unless prescribed under the Act.

8.03 <u>Signatures by Electronic Document</u>. - A requirement under the Act for a signature or for a document to be executed, except with respect to a statutory declaration or an affidavit, is satisfied if, in relation to an electronic document, the requirements prescribed under the Act are met and if the signature results from the application by a person of a technology or a process that permits the following to be proven:

- (a) the signature resulting from the use by a person of the technology or process is unique to the person;
- (b) the technology or process is used by a person to incorporate, attach or associate the person's signature to the electronic document; and
- (c) the technology or process can be used to identify the person using the technology or process.

8.04 <u>Notice to Joint Shareholders</u>. - If two or more persons are registered as joint holders of any share, any notice may be addressed to all such joint holders, but notice addressed to one of such persons shall be sufficient notice to all of them.

8.05 <u>Computation of Time</u>. - In computing the date when notice must be given under any provision requiring a specified number of days' notice of any meeting or other event, the day of giving the notice shall be excluded and the day of the meeting or other event shall be included.

8.06 <u>Omissions and Errors.</u> - The accidental omission to give any notice to any shareholder, director, officer, auditor or member of a committee of the board or the non-receipt of any notice by any such person or any error in any notice not affecting the substance thereof shall not invalidate any action taken at any meeting held pursuant to such notice or otherwise founded thereon.

8.07 <u>Persons Entitled by Death or Operation of Law</u>. - Every person who, by operation of law, transfer, death of a shareholder or any other means whatsoever, shall become entitled to any share, shall be bound by every notice in respect of such share which shall have been duly given to the shareholder from whom he derives his title to such share prior to his name and address being entered on the securities register (whether such notice was given before or after the happening of the event upon which he became so entitled) and prior to his furnishing to the Corporation the proof of authority or evidence of his entitlement prescribed by the Act.

8.08 <u>Waiver of Notice</u>. - Any shareholder, proxyholder or other person entitled to attend a meeting of shareholders, director, officer, auditor or member of a committee of the board may at any time waive any notice, or waive or abridge the time for any notice, required to be given to him under the Act, the regulations thereunder, the articles, the by-laws or otherwise, and such waiver or abridgement, whether given before or after the meeting or other event of which notice is required to be given, shall cure any default in the giving or in the time of such notice, as the case may be. Any such waiver or abridgement shall be in writing except a waiver of notice of a meeting of shareholders or of the board or a committee of the board which may be given in any manner.

8.09 <u>Interpretation</u>. - In this by-law, "<u>recorded address</u>" means in the case of a shareholder his address as recorded in the securities register; and in the case of joint shareholders the address appearing in the securities register in respect of such joint holding or the first address so appearing if there are more than one; and in the case of a director, officer, auditor or member of a committee of the board, his latest address as recorded in the records of the Corporation.

#### SECTION NINE EFFECTIVE DATE

9.01 Effective Date. - This by-law shall come into force when made by the board in accordance with the Act.

9.02 <u>Repeal.</u> - By-law No. 1 of the Corporation, as amended ("By-Law No. 1"), is repealed as of the coming into force of this by-law. Such repeal shall not affect the previous operation of By-law No. 1 so repealed or affect the validity of any act done or right, privilege, obligation or liability acquired or incurred under, or the validity of any contract or agreement made pursuant to, or the validity of any articles (as defined in the Act) or predecessor charter documents of the Corporation obtained pursuant to, any such by-law prior to its repeal. All officers and persons acting under By-law No. 1 so repealed shall continue to act as if appointed under the provisions of this by-law and all resolutions of the shareholders or the board or a committee of the board with continuing effect passed under such repealed by-law shall continue to be good and valid except to the extent inconsistent with this by-law and until amended or repealed.

MADE by the board the 11<sup>th</sup> day of November, 2003 and amended by the board on the 2nd day of November, 2004.

<u>/s/ D. Scott Murray</u> Corporate Secretary September 29, 2004

Brian E. Huber, Ph.D. 53 Westridge Drive Durham, NC 27713

#### **Re:** Offer of Employment

Dear Brian:

This letter is to offer you employment with Adherex, Inc. (the "Company"), a wholly owned subsidiary of Adherex Technologies Inc. ("AHX"), in Durham, North Carolina, conditional on your execution of the enclosed agreements. You will serve as Chief Scientific Officer of the Company and of AHX.

If you accept our offer of employment, your hire date will be **October 25, 2004.** As CSO, you would report directly to me. If you accept employment with the Company, your primary responsibilities in this position will be to develop, oversee and manage all pre-clinical and scientific matters for AHX and its subsidiaries, along with any other duties or services reasonably assigned or requested by the CEO and/or the Board of Directors of AHX. The Company expressly reserves the right to adjust responsibilities and/or reporting relationships over time, as business requires.

The specifics of your employment with the Company will be governed by the terms and conditions set out in the enclosed agreements. As we discussed, in addition to the Stock Option Grant set forth in enclosed agreement, I would expect to be in a position next year to offer you a further stock option grant to purchase up to 250,000 additional shares of AHX common stock subject to satisfactory performance reviews and Board approval.

If the contents of the enclosed agreements are acceptable to you, please confirm by executing the enclosed agreements and returning them to me. Subject to the approval of the Company's Board of Directors, we will then countersign them and return a copy to you for your records.

Brian, we are very pleased to offer you the position of CSO, and on behalf of the other members of our team, we welcome you to Adherex.

Sincerely,

ADHEREX, INC.

/S/ WILLIAM P. PETERS

William P. Peters, MD PhD MBA Chief Executive Officer

#### **EMPLOYMENT AGREEMENT**

THIS EMPLOYMENT AGREEMENT (the "Agreement") dated as of this 25<sup>th</sup>day of October 2004 (the "Effective Date"), by and between ADHEREX, INC. (the "Company"), a wholly owned subsidiary of Adherex Technologies Inc. ("AHX"), and BRIAN E. HUBER, Ph.D., 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 Chief Scientific Officer of the Company and of AHX ("CSO"), and, as such, Employee agrees to faithfully perform the duties of the position of CSO 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. Notwithstanding the foregoing and subject to the Employee's obligations herein and any applicable Company policies, the Employee shall be permitted to make personal investments, perform reasonable volunteer services and with the prior written consent of the Company, serve as an advisor to or become a member of the Scientific Advisory Board of other companies, provided those companies are not engaged in the Company's Business, as defined in the IP Agreement (as defined below), or such service would not otherwise create a conflict of interest.

2. <u>Compensation</u>. In consideration of his services to the Company, Employee will be compensated as follows:

(a) <u>Base Salary</u>. Employee will be paid an annual base salary of One Hundred Sixty-Five Thousand Dollars (USD \$165,000.00), less any withholdings required by law or properly requested by Employee (the "Base Salary"). Employee's base salary will be increased to One Hundred Eighty-Five Thousand Dollars (USD \$185,000.00) commencing January 1, 2005. The Company will pay Employee the Base Salary on its regularly scheduled paydays, in accordance with its regular payroll practices and procedures.

(b) <u>Signing Bonus</u>. After Employee has executed this Agreement and any other required agreement(s), 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. If for any reason you do not complete 90 days of employment at AHX, you will be responsible to repay to AHX the Signing Bonus.

(c) <u>Discretionary Bonus</u>. In addition to the Base Salary and Signing Bonus, the Company in its sole discretion may award Employee an annual bonus of no more than Fifty Thousand Dollars (USD \$50,000.00) annually (the "Annual Bonus"). 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 Annual Bonus will be dependent upon performance objectives established by the Chief Executive Officer and agreed upon by Employee by December 15, 2004. The Annual Bonus is subject to any withholdings required by law and/or properly requested by Employee.

(d) <u>Stock Option Grant</u>. Subject to the approval of its Board of Directors (the "Board"), AHX further agrees to grant Employee an option to purchase up to Seven Hundred Fifty Thousand (750,000) 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 Hundred Eighty-Seven Thousand Five Hundred (187,500) of the shares subject to the Option shall vest and be fully exercisable on January 23, 2005, and the remaining unvested shares shall vest annually in equal one-third installments over the next three years on the anniversary of your hire date for so long as Employee remains employed by the Company.

(e) <u>Business Expenses</u>. The Company will reimburse Employee for all reasonable expenses incurred by Employee that are directly related to the business of the Company, provided that Employee complies with the Company's policies and procedures for reimbursement or the advance of business expenses.

**3.** <u>Benefits</u>. 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 as long as such change applies equally to all similarly-situated employees.

4. <u>Vacation and Paid Holidays</u>. 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 in accordance with Company policy.

5. Confidential Information and Restrictive Covenants. As a condition of Employee's employment with the Company, Employee is required to sign the Confidentiality, Intellectual Property and Non-Competition Agreement attached as Exhibit A hereto (the "IP Agreement"), which includes Employee's agreement to refrain from disclosing the Company's confidential information and to refrain from engaging in certain competitive activities after any termination of employment with the Company. The IP Agreement 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) <u>Termination for Cause</u>. 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) <u>Termination upon Death or Disability</u>. 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) <u>Resignation by Employee</u>. 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 earned through the termination date and accrued vacation if Employee gives thirty (30) days notice as set forth above.

(d) <u>Termination by the Company Without Cause</u>. 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) <u>Accrued Compensation</u>. 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; <u>provided</u>, <u>however</u>, 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) <u>Severance Benefits</u>. 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 continue paying Employee's then-current Base Salary and health insurance benefits for the lesser of (i) for a period of six (6) 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.** <u>Notices</u>. 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. 2300 Englert Drive, Suite G Durham, North Carolina 27713 Attention: Scott Murray

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.** <u>Entire Agreement</u>. This Agreement (including any exhibits attached hereto) 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. <u>Waivers and Amendments</u>. 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. <u>Governing Law; Venue</u>. 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. The parties further agree that the state or federal courts sitting in Durham County, North Carolina shall have the sole and exclusive jurisdiction to hear any dispute(s) arising out of this Agreement (including any exhibits attached hereto).

**13.** <u>Assignment</u>. 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. <u>Binding Effect</u>. 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. <u>Counterparts</u>. 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.

### [THE REMAINDER OF THIS PAGE WAS INTENTIONALLY LEFT BLANK]

[Signature page follows]

<sup>5</sup> 

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

ADHEREX, INC.

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

EMPLOYEE:

Witness

<u>/s/ Brian E. Huber, Ph. D.</u> Employee: Brian E. Huber, Ph.D. 53 Westridge Drive Durham, NC 27713

## EXHIBIT A

#### CONFIDENTIALITY, INTELLECTUAL PROPERTY AND NONCOMPETITION AGREEMENT

THIS CONFIDENTIALITY, INTELLECTUAL PROPERTY AND NONCOMPETITION AGREEMENT (the "Agreement") dated this **25<sup>th</sup>** day of **October 2004** is made between Adherex, Inc. (the "Company") and Brian E. Huber, Ph.D. ("Employee").

The parties hereto agree that it may be necessary for the Company to disclose to Employee from time to time certain confidential and proprietary information concerning the products and processes and technology developed by the Company and/or its affiliates or subsidiaries which the Company wishes to protect along with its trade secrets, technical expertise, business knowledge, procedures and systems and all other confidential and proprietary information, together with proprietary and other information of a confidential nature provided by third parties, all of which is not generally available to the public, the unauthorized disclosure of which would cause irreparable harm to the Company, its parent Adherex Technologies Inc., its affiliates or subsidiaries.

In consideration of my employment by the Company, the undersigned and the Company agree as follows:

1. <u>Definition of "Information</u>". For the purposes of this Agreement, "Information" shall include, without limitation, all or any part of the corporate, strategic or marketing plans, financial information, product information, customer information, and other information relating to the business of the Company, its affiliates or subsidiaries, all research and development activities, all unpublished know-how, technical data, techniques, records, formulae, process, designs, sketches, photographs, plans, drawings, specifications, samples, reports, studies, findings, inventions and ideas, whether patentable or not, whether they be trade secrets or not and whether they be in written, graphic or oral form, that are now or hereafter owned or acquired by Company, all of which are of a confidential and/or proprietary nature concerning the development, testing, production and marketing of, and consulting in the area of products and processes and technology developed by Company, its affiliates or subsidiaries. Any Information which is communicated to any person external to the Company and/or its affiliates or subsidiaries shall be stamped with the words "PROTECTED" or "CONFIDENTIAL" or other such identifying mark prior to its disclosure to such person.

2. <u>Nondisclosure</u>. Employee agrees to hold in trust and confidence all Information and to use and communicate any Information only in the performance of his work for the Company to such authorized employees, subcontractors and others as are required by their duties to have knowledge thereof or for such other purposes and to such persons as are authorized by the Company in writing.

3. <u>Assignment of Intellectual Property Rights</u>. All improvements, inventions, know-how and discoveries, all Information and technology, and all patents or patent applications arising out of or relating to the Information whether developed by the Employee or not during the term of the Employee's employment are the exclusive property of Company, its affiliates or subsidiaries. The Company, its affiliates or subsidiaries alone shall have the right to apply for, prosecute and obtain patents, copyrights, trademarks or industrial design protection in any or all countries of the world in respect of any and all such improvements, inventions, know-how and discoveries and the Employee agrees to disclose, deliver and assign to the Company, its affiliates or subsidiaries, as the case may be, all such improvements, inventions, know-how and discoveries whether patentable or not and agrees at any time to execute when requested any applications, transfers, assignments and other documents as necessary for the purpose of confirming the Company's, its affiliates' or subsidiaries' title, as the case may be, to any such improvements, inventions, know-how and discoveries, or for applying for prosecution and obtaining patents in any country with respect thereto. Employee agrees to cooperate and assist fully in the prosecution of any such application. Any copyrightable materials generated or developed by Employee while employed by the Company, including but not limited to, computer programs and related documentation, belong to the Company and Employee hereby assigns to the Company all interest and ownership in such copyright as and when created.

#### 4. Restrictive Covenants.

(a) <u>Noncompetition</u>; <u>Nonsolicitation</u>. While employed by the Company and for six months after the termination of his employment with the Company by either party, for any reason whatsoever, Employee will not, without the prior written consent of the Company:

(1) provide senior scientific management services to, manage, control, or participate in the management or control of any direct competitor of the Company that is located in the Restricted Territory (as defined below) and is engaged in the Company's Business (as defined below);

(2) solicit or attempt to solicit for the purpose of selling products comparable to or in competition with those products sold by the Company to any customers or clients of the Company with whom Employee had business contacts on behalf of the Company during his employment with the Company;

(3) interfere or attempt to interfere with any contracts or agreements that the Company has with any customers, vendors or suppliers; and/or

(4) solicit any employees of the Company (i) to resign their employment with the Company; (ii) to violate any duties owed to the Company; or (iii) breach any agreements with the Company.

Employee agrees not to engage in any of the foregoing activities set out in this Section 4(a) directly or indirectly, acting alone or as a director, employee, agent, consultant,

member of a partnership, firm, company or other entity or as a holder of or investor in more than 2% of any security of any class of any company or other business entity.

(b) <u>Restricted Territory</u>. For purposes of this Agreement, the "Restricted Territory" shall mean the greater metropolitan areas of:

- (i) Boston, MA;
- (ii) New York, NY;
- (iii) Philadelphia, PA;
- (iv) Princeton, NJ;
- (v) Indianapolis, IN;
- (vi) Groton, CT;
- (vii) Chicago, IL;
- (viii) Seattle, WA; and
- (ix) any locality within a thirty-five mile radius of Raleigh/Durham, North Carolina and/or Bethesda, MD.

(c) <u>Company's "Business.</u>" The parties hereto agree that the Company's "Business" is researching, developing, marketing and selling pharmaceutical products and therapies related to the cadherin tumor vascular targeting platform.

(d) <u>Enforceability</u>. The parties hereto agree that in the event that the length of time, the geographic area or prohibited activities set forth in this Section 4 shall be deemed too restrictive in any court proceeding, that the court shall reduce such restrictions to those which it deems reasonable and enforceable under the circumstances.

5. <u>Return of Company Property</u>. Upon demand by the Company or no later than the termination of his employment, Employee agrees to immediately return to the Company any Information or other Company property in his possession. Such Information and any other Company property will be returned to the Company in the same condition as when provided to Employee, reasonable wear and tear excepted. Employee further agrees to allow the Company to inspect any documents or work produced relating to the Information that are in the possession or control of the Employee. The Employee agrees that unless authorized by the Company or as necessary in performing his job duties and responsibilities, he will not copy the Information.

6. <u>Injunctive Relief</u>. In the event that Employee breaches the provisions of Section 1 through 5 of this Agreement, the parties hereto agree that such breach could not be adequately remedied by monetary damages. Therefore, the parties agree that in addition to any other remedies available for such breach, the Company will be entitled to injunctive relief for Employee's breach or threatened breach of Sections 1 through 5 of this Agreement in order to prevent or restrict any further breach or threatened breach. A failure by the Company to enforce any provision of this Agreement does not constitute a waiver of any of its rights and does not release the Employee of any responsibility for performance under this Agreement.

7. <u>Limitations</u>. The Company agrees that all the obligations of confidentiality and non-disclosure terminate when the Employee can establish with documentary proof that the relevant part of the Information:

- (a) was in the public domain at the time of the disclosure to the Employee by the Company, its affiliates or subsidiaries,
- (b) entered the public domain through no fault of the Employee,
- (c) was in the Employee's possession free of any obligation of confidentiality before disclosure by the Company, its affiliates or subsidiaries to the Employee, or
- (d) was disclosed to Employee in good faith by a third party which has the right to make such disclosure,

provided that the Employee notifies the Company in writing within 10 days of receipt of the Information where the exemptions under (c) and (d) apply.

8. <u>Survival</u>. The obligations of Employee pursuant to Sections 1 through 5 of this Agreement will continue in full force and effect notwithstanding termination of the employment of the Employee.

9. <u>No Other Agreements</u>. Employee hereby advises the Company that unless described in writing on Schedule "A" attached hereto, he is not bound by any other confidentiality, non-disclosure, noncompetition, or non-solicitation agreements. Employee further agrees not to become a party to any such agreement with others during his employment with the Company unless otherwise agreed to by the Company. The Employee further advises the Company that there are no patents, patent applications or other inventions made by the Employee prior to his employment with the Company unless any are specifically listed on Schedule "B" hereto. If no Schedules are attached to this Agreement, then there are no such agreements or patents outstanding.

10. <u>Governing Law; Venue</u>. The parties hereto agree that this Agreement is to be interpreted and governed by the laws of the state of North Carolina. The parties further agree that the state or federal courts sitting in Durham County, North Carolina shall have the sole and exclusive jurisdiction to hear any dispute(s) arising out of this Agreement.

11. <u>Severability</u>. The various sections of this Agreement are severable and the invalidity of one does not affect the enforceability of the other provisions of this Agreement.

12. <u>Miscellaneous</u>. For ease of interpretation, this Agreement is to be read with all changes in gender and number as the circumstances require and the Agreement is binding upon and available to the benefit of both parties, their personal representatives, successors, affiliates, subsidiaries and assigns. Employee expressly agrees that the Company may assign its rights and obligations hereunder to any successor in interest. Any notice under this Agreement should be delivered to the Company's head office and the Employee at his home address.

[Signature page follows]

IN WITNESS WHEREOF the parties have executed this Confidentiality and Intellectual Property on the day and year first written above. ADHEREX, INC.

> By: <u>/s/ Dr. William P. Peters</u> Dr. William P. Peters Chief Executive Officer

Witness

<u>/s/ Brian E. Huber, Ph. D.</u> Employee: Brian E. Huber, Ph.D. 53 Westridge Drive Durham, NC 27713

## SECOND AMENDMENT TO LEASE AGREEMENT

THIS SECOND AMENDMENT TO LEASE (the "Second Amendment") is entered into this 14th day of September 2004, by and between Realmark-Commercial LLC and (hereinafter called "Lessor") and Adherex, Inc. (hereinafter called "Lessee").

### WITNESSETH:

WHEREAS, Lessor and Lessee entered into a certain Commercial Lease Agreement April 9, 2004, which agreement was dated March 8, 2004 and first amended July 27, 2004 for the Premises known as 2300 Englert Drive, Suite G, Durham, NC 27713 consisting of 5,700 rentable square feet of space (the "Lease").

WHEREAS, Lessor and Lessee desire to enter into this Second Amendment to Lease Agreement to modify the Premises, the rent and other terms of the Lease as more particularly set forth below.

**NOW, THEREFORE,** in consideration of the above premises and the mutual promises contained herein and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, Lessor and Lessee agree to amend the Lease as follows.

<u>Para 1. PREMISES:</u> The Premises are hereby expanded by 1,936 rentable square feet of office space known as 2300 Englert Drive, Suite J, Durham, NC (the "Expansion Space") and made part of 2300 Englert Drive, Suite G, Durham, NC (sometimes referred to as the "building" or the "project"). The Premises shall now consist of 7,636 rentable square feet (RSF) of space.

For the purposes of pro-rating various expenses, the Premises represent 7.72% of the building or project.

Para 2. Term: Subject to and upon the conditions set forth below, the term of the Lease shall commence on that date which is the later of (i) the date of substantial completion of Lessor's work as defined in Exhibit D of the Lease or (ii) forty-five (45) days after the receipt of the building permit from the Town of Durham, NC (the "Commencement date") and shall expire on the last day of the seventy-second (72<sup>nd</sup>) full calendar month thereafter. Notwithstanding any other provision contained herein to the contrary, Lessor acknowledges and agrees that it shall use its best efforts to achieve substantial completion of Lessor's work and to deliver possession of the Premises to the Lessee on or before said forty-five (45) days after receipt of the building permit from the Town of Durham, NC, (the "Completion Date Deadline"). In the event Lessor fails to deliver possession of

the Premises to Lessee within an additional fourteen (14) days of the Completion Date Deadline, for any reason other than Lessee caused delays or an Act of God, Lessee shall be entitled to a credit equal to one(1) day base rent (at the monthly rental rate applicable to the 7<sup>th</sup> month through the 12<sup>th</sup> month of the Lease term) for each day beyond the initial 45 days and then between days fifteen (15) and thirty (30), two (2) days base rent (at the monthly rental rate applicable to the 7<sup>th</sup> month through the 12<sup>th</sup> month of the Lease term) until Lessor's Work is substantially completed.

The Term of this expansion space, Suite J, and the original Suite G shall be coterminious and under no circumstances expire no later than 9/30/10.

Para 3. RENT: See Rent Schedule attached.

Para 3 (b): On the date of the execution of this Second Amendment to Lease by Lessee, Lessee shall deposit with the Lessor an additional One Thousand Six Hundred Fifty Three Dollars (\$1,653.00) as a security deposit on the Expansion Space.

Para 12. WORK LETTER: The Lessor shall perform the improvements to the Expansion Space specified in the Work Letter attached.

The Lessor grants the Lessee an improvement allowance of \$36,600 for the specified improvements to the Expansion Space including architectural fees. The cost of any improvements over the allowance, which overage as of September 7, 2004 is estimated to be \$3,481.54, shall be paid for by the Lessee upon completion of the improvements.

Para 44, Commission: Upon commencement of this second amendment of this lease, Lessor shall pay Corporate Realty Advisors a commission of \$15,974.98, which includes the second (2<sup>nd</sup>) one-half of the broker commission payable on the original 5,700 sq ft of space and 100% of the broker commission on the Expansion Space. The commission shall be secured by the rent from Lessee.

Except as modified herein, all other terms and conditions of the Lease shall remain in full force and effect.

**IN WITNESS WHEREOF,** the parties hereby have executed this First Amendment to Lease Agreement as of the day and year first written above.

## Lessor: Realmark-Commercial, LLC

/s/

(Signature)

By:

(Print Name & Title)

Date: 9/24/04

Lessee: Adherex, Inc.

/s/ James A. Klein Jr. (Signature)

By: \_\_\_\_\_\_(Print Name & Title)

James A. Klein Jr., CFO

Date: 9/14/04

## RENT SCHEDULE for 2300 Englert Drive, Suite J, Durham, NC

Lease Month	Base Monthly Lease Payments
1-6	No monthly base rent due.
7-12	One Thousand Six Hundred Fifty Three and 67/100 Dollars (\$1,653.67) per month
13-24	One Thousand Seven Hundred Three and 68/100 Dollars (\$1,703.68) per month
25-36	One Thousand Seven Hundred Fifty Three and 69/100 Dollars (\$1,753.69) per month
37-48	One Thousand Eight Hundred Six and 93/100 Dollars (\$1,806.93) per month
49-60	One Thousand Eight Hundred Sixty One and 79/100 Dollars (\$1,861.79) per month
61-72	One Thousand Nine Hundred Sixteen and 64/100 Dollars (\$1,916.64) per month

Additional Rent as defined in Para 3 (e), (f), (g) and (h) of the Lease are due and payable to the Lessor during the free rent period.

### Work Letter

The Lessor shall perform the following improvements to the Expansion Space for the Lessee:

The expansion space shall be configured for the Lessee as shown on the attached diagram.

Patch and point up all walls as needed Provide new carpet throughout the expansion space, tenant's choice of color and pattern.

Lessor grants the Lessee a \$20.00 per sq yd allowance for the carpet.

Provide new rubber cove base throughout the expansion space.

Provide electrical service to the expansion space as appropriate.

Paint the expansion space, tenant's choice of reasonable color.

Provide four new hollow metal interior door frames Four new interior doors with hardware

Install doors, frames and hardware

Provide acoustical ceiling tile in a 2 x 2 pattern with 2 x 2 flat tile

Lessor shall promptly begin the improvements described herein and shown in the plans prepared by Lessor's contractor's architect and approved by the Lessee in writing.

# CONSENT OF INDEPENDENT ACCOUNTANTS

We hereby consent to the use in this Registration Statement on Form 20-F of our report dated September 9, 2004, relating to the consolidated financial statements of Adherex Technologies Inc., which appear in such Registration Statement. We also consent to the references to us under the headings "Auditor" and "Statement by experts" in such Registration Statement.

/s/ PricewaterhouseCoopers LLP

PricewaterhouseCoopers LLP November 5, 2004