

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

**FORM 10-K**

- (Mark One)
- ANNUAL REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934
- For the fiscal year ended December 31, 2009
- OR
- TRANSITION REPORT PURSUANT TO SECTION 13 OR 15(d) OF THE SECURITIES EXCHANGE ACT OF 1934 Commission File Number: 001-32295

For the transition period from \_\_\_\_ to \_\_\_\_

**ADHEREX TECHNOLOGIES INC.**

(Exact Name of Registrant as Specified in Its Charter)

**Canada**

(State or Other Jurisdiction of  
Incorporation or Organization)

**20-0442384**

(I.R.S. Employer  
Identification No.)

**501 Eastowne Drive, Suite 140 Chapel Hill, North  
Carolina**

(Address of Principal Executive Offices)

**27514**

(Zip Code)

**(919) 636-4530**

(Registrant's telephone number, including area code)  
Securities registered pursuant to Section 12(b) of the Act:

**Securities registered pursuant to Section 12(g) of the Act: None**

Indicate by check mark if the Registrant is a well-known seasoned issuer, as defined in Rule 405 of the Securities Act. YES  NO

Indicate by check mark if the Registrant is not required to file reports pursuant to Section 13 or Section 15(d) of the Act. YES  NO

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

Indicate by check mark if disclosure of delinquent filers pursuant to Item 405 of Regulation S-K is not contained herein, and will not be contained, to the best of Registrant's knowledge, in definitive proxy or information statements incorporated by reference in Part III of this Form 10-K or any amendment to this Form 10-K.

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

Large accelerated filer  Accelerated filer  Non-accelerated filer  Smaller reporting company   
(Do not check if a smaller reporting company)

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

The aggregate market value of the voting stock held by non-affiliates of the Registrant, computed by reference to the closing sales price of the Common Shares as reported by NYSE Alternext US LLC, formerly the American Stock Exchange on June 30, 2008, (the last business day of the Registrant's most recently completed second fiscal quarter) was \$18,425,553 based upon a total of 83,752,514 shares held as of June 30, 2008 by persons believed to be non-affiliates of the Registrant. (For purposes of this calculation, all of the Registrant's officers, directors and 10% owners known to the Company are deemed to be affiliates of the Registrant.)

As of March 16, 2010, there were 128,226,787 shares of common stock outstanding.

**ADHEREX TECHNOLOGIES INC.**  
**2009 FORM 10-K ANNUAL REPORT**  
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## NOTE REGARDING FORWARD-LOOKING STATEMENTS

This Annual Report on Form 10-K contains forward-looking statements that involve significant risks and uncertainties. Our actual results, performance or achievements may be materially different from any results, performance or achievements expressed or implied by such forward-looking statements. Words such as “may,” “will,” “expect,” “believe,” “anticipate,” “intend,” “could,” “estimate,” “project,” “plan,” and other similar words are one way to identify such forward-looking statements. Forward-looking statements in this Annual Report include, but are not limited to, statements with respect to (1) our anticipated sources and uses of cash and cash equivalents; (2) our anticipated commencement dates, completion dates and results of clinical trials; (3) our efforts to pursue collaborations with the government, industry groups or other companies; (4) our anticipated progress and costs of our clinical and preclinical research and development programs; (5) our corporate and development strategies; (6) our expected results of operations; (7) our anticipated levels of expenditures; (8) our ability to protect our intellectual property; (9) the anticipated applications and efficacy of our drug candidates; and (10) our ability to attract and retain key employees. All statements, other than statements of historical fact, included in this Annual Report that address activities, events or developments that we expect or anticipate will or may occur in the future are forward-looking statements. We include forward-looking statements because we believe that it is important to communicate our expectations to our investors. However, all forward-looking statements are based on management’s current expectations of future events and are subject to a number of risks and uncertainties, including specifically our need to raise money in the very near term and others, as discussed below in Item 1.A., “Risk Factors.” Although we believe the expectations reflected in the forward-looking statements are based upon reasonable assumptions, we can give no assurance that our expectations will be attained, and we caution you not to place undue reliance on such statements.

Our periodic and current reports are available, free of charge, after the material is electronically filed with, or furnished to, the SEC and EDGAR at <http://www.sec.gov/edgar> and the Canadian securities regulators on SEDAR, at [www.sedar.com](http://www.sedar.com). The information provided on our website is not part of this report and is therefore not incorporated herein by reference.

## ITEM 1. BUSINESS.

### Overview

On July 7, 2009, we announced that we intended to focus our remaining financial resources on the development of oral eniluracil. We have terminated our eniluracil study using our topical formulation and will focus our resources on the development of a redesigned study combining oral eniluracil and 5-fluorouracil, or 5-FU, targeting anti-cancer indications. After a careful evaluation of the data from the prior GlaxoSmithKline, or GSK, studies, data from our studies and other studies using eniluracil, we believe we can design and implement a Phase II study with eniluracil within the next three to nine months assuming we have adequate financial resources to conduct such a study. Additionally, throughout the remainder of 2009, we conducted an evaluation of ADH-1 and STS. The evaluation of ADH-1 resulted in the return of all ADH-1 patents and licenses to McGill University. With regards to STS, we continue our Phase III studies with STS for both the International Childhood Liver Tumour Strategy Group, known as SIOPEL, and the Children’s Oncology Group, or COG. Our evaluation of STS continues to pursue strategic alternatives, including collaborations with other pharmaceutical and biotechnology companies.

Our planned clinical development of eniluracil is dependent on obtaining additional financial resources in the very near term. If we do not receive additional financial resources in the near term, we might cease operations sooner than June 30, 2010. We currently have three employees and members of the Board of Directors have agreed to continue to serve for the benefit of the shareholders without further compensation. Our projections of our capital requirements into the second quarter of 2010 and beyond are subject to substantial uncertainty. Additional capital may be required earlier than June 30, 2010 or more capital than we had anticipated thereafter may be required. To finance our operations beyond the second quarter of 2010, or earlier if necessary, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. Given current economic conditions, we might not be able to raise the necessary capital or such funding may not be available on acceptable terms. If we cannot obtain adequate funding, we might be required to further delay, scale back or eliminate certain research and development studies, consider business combinations or shut down some, or all, of our operations.

We are a biopharmaceutical company focused on cancer therapeutics. We are in the business of solving problems for patients with cancer. We have two primary products in the clinical stage of development, including: (1) Eniluracil, an oral dihydropyrimidine dehydrogenase, or DPD, inhibitor, which may improve the tolerability and effectiveness of 5-fluorouracil (5-FU), one of the most widely used oncology drugs in the world; and (2) STS is a chemoprotectant being developed to reduce or prevent hearing loss that may result from treatment with platinum-based chemotherapy drugs.

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

We continue to enroll patients in our Phase III trials of STS with the International Childhood Liver Tumour Strategy Group, known as SIOPEL and the Children's Oncology Group, or COG. The SIOPEL trial is expected to enroll approximately 100 pediatric patients with liver (hepatoblastoma) cancer at participating SIOPEL centers worldwide and the COG study is expected to enroll up to 120 pediatric patients worldwide in five different disease indications.

Our current prioritization initiative focuses primarily on our clinical activities with eniluracil, and preclinical support will be limited only to those activities necessary to support the ongoing clinical programs.

On January 20, 2009, we filed a notification to remove our common stock from the AMEX and effective January 30, 2009, our common stock no longer traded on the AMEX. Our common stock continues to trade on the Toronto Stock Exchange, or TSX, and on the over the counter market, or pink sheets, in the U.S.

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

### **Eniluracil**

Eniluracil was previously under development by GlaxoSmithKline, or GSK. GSK advanced eniluracil into a comprehensive Phase III clinical development program that did not produce positive results and GSK terminated further development. We developed a hypothesis as to why the GSK Phase III trials were not successful and licensed the compound from GSK in July 2005. We successfully completed a clinical proof of concept study using a modified dose and schedule of eniluracil and 5-FU. We believe that eniluracil might enhance and expand the therapeutic spectrum of activity of 5-FU, reduce the occurrence of a disabling side effect known as hand foot syndrome and allow 5-FU to be given orally.

Eniluracil is an irreversible inhibitor of DPD, the enzyme primarily responsible for the rapid breakdown of 5-FU in the body. Eniluracil is being developed by Adherex to improve the therapeutic value of 5-FU by making it effective in cancers and reducing the debilitating side effects.

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

5-FU:

- is given by vein (intravenously) and often by prolonged, multi-day infusions;
- produces highly variable blood levels in patients. Low levels can reduce its effectiveness and high levels can increase its side effects; and
- is broken down (catabolized) to form  $\alpha$ -fluoro- $\beta$ -alanine (F-BAL). This compound appears to cause neurotoxicity and "hand-foot syndrome" which are debilitating and dose-limiting side effects of 5-FU therapy. Importantly, F-BAL also decreases the antitumor activity of 5-FU in lab animals.

### **Eniluracil: Mechanism of Action**

By inactivating DPD, eniluracil prevents the breakdown of 5-FU to F-BAL. Eniluracil also greatly prolongs exposure of the tumor cells to 5-FU.

When eniluracil is properly used in combination with 5-FU, it resolves many of the therapeutic drawbacks and limitations of 5-FU noted above.

For instance, eniluracil:

- enables 5-FU to be dosed orally;
- converts highly variable blood levels of 5-FU to highly consistent and predictable levels;
- extends the elimination half-life of 5-FU from about 10 minutes to about 5 hours; and
- prevents the formation of F-BAL, which is the apparent causative agent for hand-foot syndrome and for 5-FU-induced neurotoxicity. F-Bal also decreases the antitumor efficacy of 5-FU in lab animals.

Thus, eniluracil has the potential to make 5-FU more effective and better tolerated.

### **Eniluracil: Clinical Development**

Eniluracil plus 5-FU was previously being developed by GlaxoSmithKline (GSK). Although the therapy was successful in Phase I and Phase II clinical trials, it tended to produce less antitumor activity than the control therapy in two Phase III trials. Development was subsequently stopped.

Adherex believes that the dose and schedule used in the previous GSK Phase III trials may not have been optimal. Preclinical studies have shown that when eniluracil is present in high ratios to 5-FU, it decreases the antitumor activity. In the GSK Phase III trials, the ratio of eniluracil to 5-FU was 10 to 1.

Adherex's Chief Scientific Officer, Dr. Spector, is the principal inventor of eniluracil/5-FU treatment and has 20 years experience with eniluracil. Dr. Spector has created a revised protocol designed to avoid the problems of the earlier GSK Phase III trials as well as those encountered in Adherex's more recent trials. Adherex is considering disease targets and trial designs.

### **Eniluracil: Market Opportunity**

Xeloda®, a currently available oral 5-FU prodrug, has worldwide sales of over US\$1 billion each year. Eniluracil + 5-FU/leucovorin could not only compete with Xeloda® in its currently approved indications (with either a reduced toxicity profile, enhanced efficacy, or both) but also may open up new indications where 5-FU (and Xeloda®) is not currently used, expanding the reach of a drug that is already one of the world's most widely used.

### **STS**

STS is currently marketed for use in humans as part of a treatment for cyanide poisoning. We have licensed from Oregon Health & Science University ("OHSU") intellectual property rights for the use of STS as a chemoprotectant, and are developing STS as a protectant against the hearing loss often caused by platinum-based anti-cancer agents, in both children and adults. Preclinical and clinical studies conducted by OHSU and others have indicated that STS can effectively reduce the incidence of hearing loss caused by platinum-based anti-cancer agents. We have received Orphan Drug Designation in the United States for the use of STS in the prevention of platinum-induced ototoxicity in pediatric patients.

Hearing loss among children receiving platinum-based chemotherapy is frequent, permanent and often 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 benefit. In addition, adults undergoing chemotherapy for several common malignancies, including ovarian cancer, testicular cancer, and particularly head and neck cancer and brain cancer, often receive intensive platinum-based therapy and may experience severe, irreversible hearing loss, particularly in the high frequencies.

Investigators at OHSU have conducted Phase I and Phase II studies which have shown STS reduces the hearing loss associated with platinum-based chemotherapy. In one study at OHSU, the need for hearing aids to correct high frequency hearing loss was reduced from about 50% to less than 5%.

In October 2007, we announced that our collaborative partner, the International Childhood Liver Tumour Strategy Group (known as SIOPEL), a multi-disciplinary group of specialists under the umbrella of the International Society of Pediatric Oncology, had launched a randomized Phase III clinical trial to investigate whether STS reduces hearing loss in children receiving cisplatin, a platinum-based chemotherapy often used in children. The study initially opened in the United Kingdom and will include SIOPEL centers in up to 33 additional further countries. The clinical trial is expected to enroll approximately 100 children with liver (hepatoblastoma) cancer. Patients will receive cisplatin alone or cisplatin plus STS. The study, which is being coordinated through the Children's Cancer and Leukemia Group in the United Kingdom, is intended to compare the level of hearing loss associated with cisplatin alone versus the combination of cisplatin plus STS, as well as the safety, tolerability and anti-tumor activity in both arms of the study. Under the terms of our agreement, SIOPEL will conduct and fund the clinical activity and we will provide drug, drug distribution and pharmacovigilance, or safety monitoring, for the study.

In March 2008, we announced the activation of a Phase III trial with STS to prevent hearing loss in children receiving cisplatin-based chemotherapy in collaboration with the Children's Oncology Group, or COG. The goal of this Phase III study is to evaluate in a multi-centered, randomized trial whether STS is an effective and safe means of preventing hearing loss in children receiving cisplatin-based chemotherapy for newly diagnosed germ cell, liver (hepatoblastoma), brain (medulloblastoma), nerve tissue (neuroblastoma) or bone (osteosarcoma) cancers. Eligible children who are to receive cisplatin according to their disease-specific regimen (will be one to eighteen years of age) and, upon enrollment in this study, will be randomized to receive STS or not. Efficacy of STS will be determined through comparison of hearing sensitivity at follow-up relative to baseline measurements using standard audiometric techniques. The trial is expected to enroll up to 120 patients in up to 230 COG centers in the United States, Canada, Australia and Europe. COG will fund the clinical activities for the study and we will be responsible for providing the drug, drug distribution and pharmacovigilance, or safety monitoring, for the study.

### **Intellectual Property**

Our general policy is to seek patent protection in the United States, major European countries, Japan, Canada and other jurisdictions as appropriate for our compounds and methods. Our cadherin-based patent portfolio currently includes patents with respect to our unique composition of matter, broad claims with respect to modulating cell adhesion, specific claims for the use of these compounds in various diseases and pharmaceutical formulations of these compounds.

Currently, we own or have licensed more than 10 issued U.S. patents. Eniluracil is currently protected under issued composition of matter and method patents that we exclusively licensed from GSK that expire in 2014 and 2015 (in combination with 5-fluorouracil). STS is currently protected by method of use patents that we exclusively licensed from OHSU that expire in Europe in 2021 and are currently pending in the United States. None of the above expiry dates take into consideration additional pending patent applications for eniluracil that, if issued, could provide additional patent protection, nor possible patent term extensions or periods of data exclusivity that may be available upon marketing approval in the various countries worldwide. In addition, periods of marketing exclusivity for STS may also be possible in the United States under orphan drug status. We obtained U.S. Orphan Drug Designation for the use of STS in the prevention of platinum-induced ototoxicity in pediatric patients in 2004.

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

## **Corporate Relationships**

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

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

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

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

In July 2005, we licensed eniluracil from GSK. Under the original terms of the agreement, we received an exclusive license for eniluracil for all indications, and GSK retained options to buy back the compound at various points in time during its development in return for milestone payments and sales royalties to Adherex. GSK made a concurrent equity investment of \$3.0 million to assist in its further development.

In March 2007, we purchased all of GSK's remaining options to buy back eniluracil under the agreement for a \$1.0 million fee. We are now in full control of the development of eniluracil and are required to pay GSK development and sales milestone payments and sales royalties. Specifically, if we file a New Drug Application, or NDA, with the Food and Drug Administration, or FDA, we will be obligated to pay GSK development milestones of \$5.0 million. Depending upon the commercial success of eniluracil, we may also be required to pay GSK up to an additional \$70.0 million in development and sales milestones, plus double-digit royalties based on our annual net sales. If we pursue other indications, we may be required to pay up to an additional \$15.0 million to GSK for each indication approved by the FDA.

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

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

In consideration, we issued 508,416 shares of our common stock to McGill. We also agreed to pay to McGill future royalties of 2% of any gross revenues from the use of the technology and compounds. In addition, we agreed to fund research at McGill over a period of 10 years totaling CAD\$3.3 million. Annual funding commenced in 2001, the first year of the agreement, for a total of CAD\$200,000, and increases annually by 10% through 2010, when the required annual funding reaches CAD\$500,000.

The general collaboration agreement with McGill University terminated on November 19, 2009. Adherex returned all licenses to McGill University granted in the agreement.

## **Competition**

Competition in the biotechnology and pharmaceutical industries is intense. We expect that if any of our product candidates achieve regulatory approval for sale, they will compete on the basis of drug efficacy, safety, patient convenience, reliability, ease of manufacture, price, marketing, distribution and patent protection, among other variables. Our competitors may develop technologies or drugs that are more effective, safer or 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. 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 quickly 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, Abbott Laboratories, Amgen, Antisoma, AstraZeneca, Bayer, Bristol-Myers Squibb, Entremed, Genentech, Merck & Co., NeoPharm, Novartis, Johnson & Johnson, OSI Pharmaceuticals, Onyx, OXiGENE, Peregrine Pharmaceuticals, Pfizer, Roche, Taiho and Sanofi-Aventis. Some of these companies have products that have already received, or are in the process of receiving, regulatory approval or are in later stages of clinical development than our products. Many of them have much greater financial resources than we do. Many of these companies have marketed drugs or are developing targeted cancer therapeutics which, depending upon the mechanism of action of such agents, could be viewed as competitors.

There are several potential therapies that may be competitive to eniluracil, including capecitabine (Xeloda®) which is an oral pro-drug of 5-FU marketed by Roche that is converted to 5-FU following absorption from the gastrointestinal tract. Capecitabine is approved by the FDA and many other regulatory agencies worldwide for use in breast and colorectal cancer, but eniluracil/5-FU has a potential competitive advantage in having minimal hand foot syndrome compared to the up to 60% incidence with Xeloda®. Hand foot syndrome is a major complication of the use of Xeloda® and there is currently no adequate treatment, with most physicians resorting to reducing the starting dosage of Xeloda®.

5-FU is normally rapidly metabolized and broken down by the enzyme DPD. Eniluracil is an irreversible inhibitor of DPD and its use with 5-FU leads to prolonged and elevated levels of 5-FU. Uracil is a competitive inhibitor of DPD. Although not FDA approved as a therapeutic agent, uracil has been used with 5-FU and tegafur, a reversible DPD inhibitor (5-chloro-2, 4-dihydrozypyridine, or CDHP) for the treatment of certain cancers. UFT is an orally active combination of uracil and tegafur that is available in some international markets through Merck KGaA.

S-1, which is marketed by Taiho in Japan for gastric cancer, colorectal cancer, head and neck cancer, non-small cell lung cancer, and inoperable or recurrent breast cancer, is an orally active combination of tegafur and oxonic acid, an inhibitor of phosphoribosyl pyrophosphate transferase, an enzyme that reduces the incorporation of 5-FU into RNA. Both S-1 and UFT have been shown to have very low levels of hand foot syndrome, but because they are reversible inhibitors of DPD, these products would not be expected to be as successful at targeting new product indications where DPD levels are intrinsically high, such as hepatocellular cancer, compared to an irreversible DPD inhibitor like eniluracil. Other reversible DPD inhibitors in development include a Roche molecule, Ro 09-4889, which has completed a Phase I clinical study. To our knowledge, no other irreversible DPD inhibitors are currently in development.

We are not aware of any commercially available agents that reduce the incidence of hearing loss associated with the use of platinum-based anti-cancer agents, for which purpose we are developing STS. There are several potential competitive agents with activity in preclinical or limited clinical settings. These include: D-methionine, an amino acid that has been shown to protect against hearing loss in experimental settings but was demonstrated to be inferior to STS in comparative studies; SPI-3005, an oral agent primarily being developed by Sound Pharmaceuticals for noise and age-related hearing loss but in early Phase I trials for chemotherapy related hearing loss, which mimics glutathione peroxidase and induces the intracellular induction of glutathione; AHLi-11, an siRNA compound not yet in clinical trials being developed by Quark Pharmaceuticals aimed at silencing p53 following high dose cisplatin therapy; N-acetylcysteine and amifostine, which have shown effectiveness (but less than STS) in experimental systems; and Vitamin E, salicylate and tiopronin, which have all demonstrated moderate activity in rat models to protect against cisplatin-induced ototoxicity, but no clinical trials have been performed. 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 but are often suboptimal.

Many chemotherapeutic agents are currently available and numerous others are being developed. Any chemotherapeutic products that we develop may not be able to compete effectively with existing or future chemotherapeutic agents. Our competitors might obtain regulatory approval for their drug candidates sooner than we do, or their drugs may prove to be more effective than ours. However, cancer as a disease is not currently controlled by any one anti-cancer agent, and there is typically a need for several agents at any one time and over time.

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

## Government Regulation

The production and manufacture of our product candidates and our research and development activities are subject to significant 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 and governmental review and approval of results prior to marketing therapeutic products. Additionally, the FDA requires adherence to "Good Laboratory Practices" as well as "Good Clinical Practices" during clinical testing and "Good Manufacturing Practices" and adherence to labeling and supply controls. The systems of new drug approvals in Canada and the United States are substantially similar, and are generally considered to be among the most rigorous in the world.

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

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

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

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

*Phase III Clinical Trials:* Phase III clinical trials typically take two to four 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, or NDA, 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 twelve to eighteen months.

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

While European, U.S. and Canadian regulatory systems require that medical products be safe, effective, and manufactured according to high quality standards, the drug approval process in Europe differs from that in the United States and Canada and may require us to perform additional preclinical or clinical testing regardless of whether FDA or TPD approval has been obtained. The amount of time required to obtain necessary approvals may be longer or shorter than that required for FDA or TPD approval. European Union Regulations and Directives generally classify health care products either as medicinal products, medical devices or in vitro diagnostics. For medicinal products, marketing approval may be sought using either the centralized procedure of the European Agency for the Evaluation of Medicinal Products, or 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.



## ITEM 1A. RISK FACTORS.

An investment in our common stock involves a significant risk of loss. You should carefully read this entire report and should give particular attention to the following risk factors. You should recognize that other significant risks may arise in the future, which we cannot reasonably foresee at this time. Also, the risks that we now foresee might affect us to a greater or different degree than currently expected. There are a number of important factors that could cause our actual results to differ materially from those expressed or implied by any of our forward-looking statements in this report. These factors include, without limitation, the risk factors listed below and other factors presented throughout this report and any other documents filed by us with the Securities and Exchange Commission, or the SEC, and the Canadian securities regulators on SEDAR which can be accessed at [www.sedar.com](http://www.sedar.com).

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

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

We believe that our current cash and cash equivalents will only be sufficient to satisfy our anticipated capital requirements into the second quarter of 2010. The audit opinion contained in our Annual Report filed on Form 10-K for the fiscal year ended December 31, 2009 included a notation related to the uncertainty of our ability to continue as a going concern. The current conditions in worldwide financial markets make fund-raising for small biotechnology companies like us very difficult. Although, we continue to pursue various strategic alternatives, including collaborations with other pharmaceutical and biotechnology companies, if a strategic transaction or other source of further financial resources cannot be secured in the very near term, we might cease operations sooner than June 30, 2010. Our projections of our capital requirements into the second quarter of 2010 and beyond are subject to substantial uncertainty. Our current and future working capital requirements may change depending upon numerous factors, including: our ability to obtain additional financial resources; our ability to enter into collaborations that provide us with funding, up-front payments, milestones or other payments; results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; unfavorable toxicology in our clinical programs; our drug substance requirements to support clinical programs; changes in the focus, direction, or costs of our research and development programs; employee related expense; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; our business development activities; new regulatory requirements implemented by regulatory authorities; the timing and outcome of any regulatory review process; and our commercialization activities, if any. Any such change could mean more capital than we had anticipated thereafter may be required. To finance our operations beyond the second quarter of 2010, or earlier if necessary, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. Given current market conditions, there is a serious risk that we might not be able to raise the necessary capital or such funding may not be available on favorable terms or at all. If we cannot obtain adequate funding in the very near term, we might be required to delay, scale back or eliminate certain research and development studies, consider business combinations or shut down some, or all of our operations.

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

To date, we have been engaged primarily in research and development activities. We have had no revenues through the sale of our products, and we do not expect to have significant revenues until we are able to either sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with up-front payments, licensing fees, milestone payments, royalties or other revenue. We have incurred significant operating losses every year since our inception on September 3, 1996. We experienced net losses of approximately \$3.0 million for the twelve months ended December 31, 2009, \$13.6 million for the year ended December 31, 2008, \$13.4 million for the fiscal year ended December 31, 2007, and \$16.4 million for the fiscal year ended December 31, 2006. At December 31, 2009, we had an accumulated deficit of approximately \$101.0 million. We anticipate incurring substantial additional losses due to the need to spend substantial amounts on our current clinical trials, anticipated research and development activities, and general and administrative expenses, among other factors. We have not commercially introduced any product and our product candidates are in varying stages of development and testing. Our ability to attain profitability will depend upon our ability to fund and develop products that are safe, effective and commercially viable, to obtain regulatory approval for the manufacture and sale of our product candidates and to license or otherwise market our product candidates successfully. Any revenues generated from such products, assuming they are successfully developed, marketed and sold, may not be realized for a number of years. We may never achieve or sustain profitability on an ongoing basis.

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

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

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

We currently rely on scientific and research and development collaboration arrangements with academic institutions and other third party collaborators, including our agreement for eniluracil with GSK and an exclusive worldwide license from OHSU for STS.

The agreements with OHSU are terminable by either party in the event of an uncured breach by the other party. We may also terminate our agreement with OHSU at any time upon prior written notice of specified durations to the licensor. Termination of any of our collaborative arrangements could materially adversely affect our business. For example, if we are unable to make the appropriate payments under these agreements, the licensor might terminate the agreement which might have a material adverse impact. In addition, our collaborators might not perform as agreed in the future.

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

We may expand our products and capabilities, and therefore may seek mergers, acquisitions or other business arrangements to do so. Mergers and acquisitions involve numerous risks, including:

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



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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

There has been significant deterioration and instability in the financial markets. Even though we believe we take a conservative approach to investing our funds, the volatility of the current financial markets exposes us to increased investment risk, including the risks that the value and liquidity of our money market investments could deteriorate significantly and the issuers of the investments we hold could be subject to credit rating downgrades. This might result in significant losses in our money market investments that could adversely impact our financial condition, which could be an immediate problem given our extremely limited financial resources. While we have not experienced any loss or write down of our money market investments in the past, we cannot guarantee that such losses will not occur in future periods.

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

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

**Risks Related to Our Industry**

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

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

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

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

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

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

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

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

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

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

The use of our product candidates in clinical trials and for commercial applications, if any, may expose us to liability claims in the event that such product candidates cause injury or death or result in other adverse effects. These claims could be made by health care institutions, contract laboratories, and subjects participating in our clinical studies, patients or others using our product candidates. In addition to liability claims, certain serious adverse events could require interruption, delay and/or discontinuation of a clinical trial and potentially prevent further development of the product candidate. We carry clinical trial insurance but the coverage may not be sufficient to protect us from legal expenses and liabilities we might incur. Litigation is very expensive, even if we are successful. In addition, our existing coverage may not be adequate if we further develop products, and future coverage may not be available in sufficient amounts or at reasonable cost. In addition, we might reduce the amount of this coverage due to our limited financial resources. Adverse liability claims may also harm our ability to obtain or maintain regulatory approvals.

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

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

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

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

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

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

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

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

**Risks Related to Owning Our Common Shares**

**Our common shares have been delisted from NYSE Alternext US LLC (formerly the American Stock Exchange), which may make it more difficult for stockholders to dispose of their shares.**

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

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

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



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

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

Historically, the market price of our common shares has been highly volatile and the market for our common shares has from time to time experienced significant price and volume fluctuations, some of which are unrelated to our operating performance. From January 4, 2005 to December 31, 2009, the trading price of our stock fluctuated from a high closing price of CAD\$2.09 per share to a low closing price of CAD\$0.02 per share on the TSX. From November 12, 2004 until our delisting on January 30, 2009, the trading price of our stock fluctuated from a high closing price of \$1.71 per share to a low closing price of \$0.01 per share on the AMEX. Historically, our common shares have had a low trading volume, and may continue to have a low trading volume in the future. This low volume may contribute to the volatility of the market price of our common shares. It is likely that the market price of our common shares will continue to fluctuate significantly in the future.

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

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

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

At December 31, 2009, our current stockholders separately representing more than 5% ownership in our Company, collectively represented beneficial ownership of approximately 60% of our common shares. In particular, Southpoint Capital Advisors LP owns or exercises control over 41.5 million common shares, representing approximately 32% of the issued and outstanding common shares. In addition, Mr. Robert Butts, Co-Founder and Portfolio Manager of Southpoint Capital Advisors LP, serves as our Chairman of our Board of Directors. Southpoint Capital, our other 5% stockholders, and other insiders, acting alone or together, might be able to influence the outcomes of matters that require the approval of our stockholders, including but not limited to certain equity transactions (such as a financing), an acquisition or merger with another company, a sale of substantially all of our assets, the election and removal of directors, or amendments to our incorporating documents. These stockholders might make decisions that are adverse to your interests. The concentration of ownership could have the effect of delaying, preventing or deterring a change of control of our company, which could adversely affect the market price of our common shares or deprive our other stockholders of an opportunity to receive a premium for their common shares as part of a sale of our company.

**We will need to raise substantial additional funds in the very near future to continue our operations, any equity offering will result in significant dilution to the ownership interests of shareholders and may result in dilution of the value of such interests and any debt offering will increase financial risk.**

In order to satisfy our anticipated capital requirements beyond the second quarter of 2010, and possibly earlier, we will need to raise substantial additional funds through either the sale of additional equity, the issue of securities convertible into equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. The most likely sources of financing that may be available to the Company in the near term are the sale of common shares and/or securities convertible into common shares and the issuance of debt.

The Company cannot predict the size of future issues of common shares or the issue of securities convertible into common shares or the effect that any such future issues and sales of common shares will have on the market price of our common shares. However, given the current market price of the Company's common shares, any transaction involving the issue of common shares, or securities convertible into common shares, will result in immediate and substantial dilution to present and prospective holders of common shares. Alternatively, the Company may rely on debt financing and assume debt obligations that require it to make substantial interest and capital payments and to pledge some or all of its assets as collateral to secure such debt obligations.

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

Sale or issuance of a substantial number of our common shares in the future could cause the market price of our common stock to decline. It may also impair our ability to obtain additional financing. At December 31, 2009, we had outstanding warrants to purchase approximately 41.1 million of our common shares and had a weighted average exercise price of \$0.44. In addition, at December 31, 2009, there were approximately 15.8 million common shares issuable upon the exercise of stock options granted by us of which approximately 2.6 million were denominated in Canadian dollars and had a weighted average exercise price of CAD\$2.19 per common share and approximately 13.2 million were denominated in U.S. dollars and had a weighted average exercise price of \$0.55 per common share. We may also issue further warrants as part of any future financings as well as the additional 4.8 million options to acquire our common shares currently remaining available for issuance under our stock option plan.

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

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

#### **ITEM 1B. UNRESOLVED STAFF COMMENTS**

None.

#### **ITEM 2. PROPERTIES**

We lease two facilities, one of which we sublease to another tenant. The facility we occupy has approximately 1,100 square feet of office space in Chapel Hill, North Carolina and the current monthly lease payments are approximately \$2,000 and the lease expires in January 2012. The subleased space consists of approximately 7,636 square feet of laboratory and office space and the current monthly payments are approximately \$10,500 and the lease expires in September 2010. We have subleased this space to a third party for approximately \$7,000 per month through September 2010.

#### **ITEM 3. LEGAL PROCEEDINGS**

None.

#### **ITEM 4. RESERVED**

None.

## Executive Officers of the Registrant

The following table sets forth information concerning our executive officers as of March 26, 2009:

| Name               | Age | Position                                 |
|--------------------|-----|--|
| Rostislav Raykov   | 34  | Chief Executive Officer and Board Member |
| Robert Andrade     | 34  | Chief Financial Officer and Board Member |
| Dr. Thomas Spector | 65  | Chief Scientific Officer                 |

**Rostislav Raykov.** Mr. Raykov, was appointed as the new Chief Executive Officer and member of the Board in July 2009. Mr. Raykov is also a General Partner at DCML, a private investment partnership. Prior to joining DCML, Mr. Raykov was a General Partner of Alchem Investment Partners (2006-2007), an event driven hedge fund. Prior to founding Alchem, Mr. Raykov was a portfolio manager and securities analyst for John A. Levin & Co. Event Driven Fund (2002-2005). Prior to joining John A. Levin & Co., Mr. Raykov was a securities analyst for the Merger Fund at Tiedemann Investment Group (1999-2002) and an investment banking analyst at Bear Stearns (1998-1999). Mr. Raykov earned a B.S. in Business Administration from the University of North Carolina at Chapel Hill.

**Robert Andrade.** Mr. Robert Andrade, was appointed as Chief Financial Officer and member of the Board in September 2009. Mr. Andrade is a General Partner at DCML, a private investment partnership. Prior to joining DCML, Mr. Andrade was a portfolio manager and securities analyst for Millennium Partners L.P. (2006-2007). Prior to joining Millennium Partners L.P., Mr. Andrade was a securities analyst for the Event Driven Fund at Caxton Associates LLC (2003-2005). Prior to Caxton Associates LLC, Mr. Andrade was a private equity associate at Trimaran Capital Partners (2000-2003) and an investment banking analyst at Bear Stearns (1997-1999). Mr. Andrade earned a M.A. and B.A. in Economics from the University of Southern California.

**Dr. Thomas Spector, PhD.** Dr. Spector was appointed Chief Scientific Officer at Adherex in July 2009. He is President of Spector Consulting Services. Dr. Spector is the principal inventor of the eniluracil / 5-fluorouracil treatment. In 2004, he discovered why the dosing regimen in Glaxo's Phase III clinical trial was not optimal. Dr. Spector has authored and co-authored over 100 scientific articles, including 25 manuscripts on eniluracil / 5-fluorouracil. He has over 35 years experience in drug discovery and development and was the Assoc. Division Director of Experimental Therapy at Burroughs Wellcome and The International Vice President of Cancer Research at GlaxoWellcome (now GSK). Dr. Spector received a Ph.D. in Pharmacology from Yale University.

## Part II

### ITEM 5. MARKET FOR THE REGISTRANT'S COMMON EQUITY, RELATED STOCKHOLDER MATTERS AND ISSUERS PURCHASES OF EQUITY SECURITIES

Our common stock traded on currently trades on the Pink Sheets under the trading symbol "ADHXF" and previously under the trading symbol "ADH" from November 12, 2004 until January 29, 2009, and has traded on the TSX, under the trading symbol "AHX" since June 5, 2001. In December 2008, we received notice from the AMEX that we were not in compliance with certain continued listing standards as set forth in Part 10 of the NYSE Alternext US, LLC Company Guide. On January 20, 2009, we voluntarily filed to delist our common stock from the AMEX and on January 30, 2009, we no longer traded on the AMEX. The following table sets forth the quarterly high and low market closing prices, and average daily trading volume on the AMEX and the TSX, for the two most recent full financial years:

| Fiscal 2009:           | Pink Sheets-Over-the-Counter (in U.S. dollars) |         |         | Toronto Stock Exchange (in Canadian dollars) |         |        |
|------------------------|--|---------|---------|--|---------|--------|
|                        | High \$  | Low \$  | Volume  | High \$                                      | Low \$  | Volume |
| Quarter ended 12/31/09 | \$ 0.07  | \$ 0.04 | 41,135  | \$ 0.07                                      | \$ 0.04 | 24,676 |
| Quarter ended 09/30/09 | 0.08   | 0.03    | 162,329 | 0.09   | 0.03    | 50,638 |
| Quarter ended 06/30/09 | 0.04   | 0.02    | 106,323 | 0.06   | 0.03    | 97,452 |
| Quarter ended 03/31/09 | 0.04   | 0.01    | 73,131  | \$ 0.07                                      | \$ 0.02 | 30,298 |
| <b>Fiscal 2008:</b>    |  |         |         |  |         |        |
| Quarter ended 12/31/08 | \$ 0.09  | \$ 0.02 | 309,656 | \$ 0.11                                      | \$ 0.02 | 91,302 |
| Quarter ended 09/30/08 | 0.23   | 0.09    | 110,686 | 0.20   | 0.10    | 26,653 |
| Quarter ended 06/30/08 | 0.37   | 0.21    | 109,689 | 0.35   | 0.21    | 30,382 |
| Quarter ended 03/31/08 | 0.40   | 0.30    | 61,708  | 0.39   | 0.26    | 24,969 |

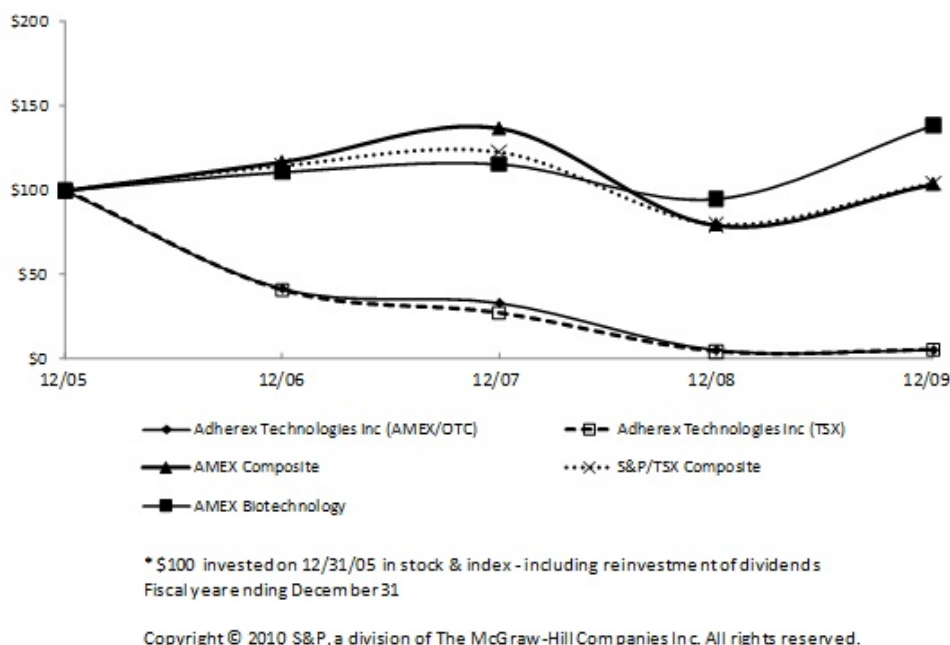
As of March 5, 2010, the last reported sale on the TSX was CAD\$0.04 per share and the last reported sale on the over the counter markets in the U.S. was \$0.04 per share.

## Record Holders

As of March 5, 2010, there were approximately 91 shareholders of record of our common stock, one of which was Cede & Co., a nominee for Depository Trust Company, or DTC, and one of which was The Canadian Depository for Securities Limited, or CDS. All of our common shares held by brokerage firms, banks and other financial institutions in the U.S. or Canada as nominees for beneficial owners are considered to be held of record by Cede & Co. in respect of brokerage firms, banks and other financial institutions located in Canada. Cede & Co. and CDS are each considered to be one shareholder of record.

## Relative Stock Performance

The following line graph compares the percentage change, from December 31, 2005 to December 31, 2009, in cumulative total shareholder return for \$100 (CAD\$ for TSX and US\$ for AMEX) invested in our common stock with cumulative total return of the AMEX Composite, the AMEX Biotechnology Index and the S&P/TSX Composite Total Return Index.



## Dividend Policy

We have never declared or paid cash dividends on our common stock. We currently expect to retain future earnings, if any, for use in the operation and expansion of business and do not anticipate paying any cash dividends in the foreseeable future.

## Material United States Federal and Canadian Income Tax Consequences

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. We make no assurances as to the applicability of any tax laws with respect to any individual investment. In this section, we have calculated whether we meet certain thresholds related to our status under various U.S. tax rules. Any such calculations are dependent on many facts, not all of which may be known to us and any of which might change, which could change the results of any calculation.

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

- 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, or the Code, (ii) nonresidents of Canada for purposes of the Income Tax Act (Canada), or 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 and Capital Tax Convention (1980), as amended through the date hereof, or the Tax Treaty;
- hold common stock as a capital asset for purposes of the Code and capital property for the purposes of the Income Tax Act;
- deal at arm's length with, and are not affiliated with, the Company for purposes of the Income Tax Act; and
- do not and will not use or hold the common stock in carrying on a business in Canada.

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

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

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

All of the foregoing are 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,” persons acquiring shares upon exercise of stock options or in other compensatory transactions, and U.S. Shareholders that have a “functional currency” other than the U.S. dollar or that own common stock through a partnership or other pass-through entity). Therefore, you should consult your own tax advisor regarding the tax consequences of purchasing and owning common stock.

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

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

U.S. Shareholders are generally required to include in income dividend distributions, if any, paid by a corporation to the extent of a corporation’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 for U.S. federal income tax purposes 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.

Under current law the maximum rate of U.S. federal income tax on dividends paid to noncorporate U.S. holders is reduced to 15% for tax years from 2003 through 2010. In order to qualify for the reduced tax rates on dividends, a noncorporate 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 reduced tax rates do not apply to dividends that a noncorporate 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 for noncorporate shareholders. 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 passive foreign investment company, or PFIC. Accordingly, any dividends paid by us in a year that we are a PFIC or in the next taxable year would not qualify for the reduced tax rates on dividends paid to noncorporate U.S. holders. As discussed below under “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 affect 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. taxpayer.

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 “dividends received” deduction available to corporate shareholders, because the Company is a foreign corporation. Note, however, that if a corporate shareholder owns at least 10 percent of our stock and we are not a PFIC (see “Passive Foreign Investment Company Rules” below) for a particular year, a dividends received deduction may be available under Section 245 of the Code for any dividends paid by the Company to that shareholder attributable to our U.S.-source earnings.

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 IRS.

### **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. We will be classified as a PFIC for any taxable year if, after the application of certain “look through” rules, either:

- 75% or more of our gross income is “passive income,” which includes interest, dividends and certain rents and royalties; or
- the average quarterly percentage, by fair market value, of our assets that produce or are held for the production of “passive income” is 50% or more of the fair market value of all of our 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’s 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 distribution. All remaining amounts would be subject to tax at the highest ordinary income tax rate that would have been applicable in the year in which such amounts were treated as earned, and interest would be charged on the tax payable with respect to such amounts. In addition, if we are classified as a PFIC, shares acquired from a decedent dying in a calendar year other than 2010 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 on the date of the decedent’s death. In the case of decedents dying in 2010, if we are a PFIC, current law provides that shares acquired from the decedent would have a tax basis equal to the decedent’s basis, except that if a QEF election (as described below) were in effect for the decedent, the shares could be included within the decedent’s property that is subject to a limited basis increase under Section 1022 of the Code.

The special PFIC tax rules described above will not apply to a U.S. Shareholder if the holder makes a qualified electing fund, or QEF, election under Section 1295 of the Code to have us treated as a QEF 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. 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 in the shares. 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, we believe that our shares will be treated as “marketable stock” 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 noncorporate U.S. Shareholders currently in effect under the Code through 2010.

If we should ever qualify as a controlled foreign corporation (see “Controlled Foreign Corporation Rules” below), the Company would not be treated as a PFIC with respect to a U.S. Shareholder during any period in which (i) the holder holds at least 10% of our shares and (ii) we are a controlled foreign corporation.

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 our shares are owned, directly or indirectly, by U.S. shareholders, each of which owns at least 10% of the total combined voting power of all classes of our shares, we could be treated as a controlled foreign corporation, or CFC, under Section 957 of the Code. This classification would require such 10%-or-greater shareholders to include in income their pro rata shares of our “subpart F income,” as defined in Section 951 of 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 we were a CFC at any time during the five-year period ending with the sale or exchange could be taxable in whole or in part as dividend income. Such amount taxable as a dividend is generally the amount of our earnings and profits during the period we were a CFC that are attributable to the shares sold or exchanged, but for this purpose our earnings and profits will be reduced by certain amounts, including (i) earnings previously taxed to the shareholder as subpart F income, and (ii) income from a U.S. trade or business for which we were fully subject to U.S. corporate income taxation.

We believe that we are not a CFC. However, we cannot assure you that we 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 designated stock exchange, which includes the TSX, 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 our issued shares of any class at any time during the sixty (60) month period before the actual or deemed disposition. The Canadian government announced changes to the Income Tax Act on March 4, 2010, which, if enacted as proposed, will provide that U.S. Shareholders will not generally be subject to Canadian tax on a capital gain realized on an actual or deemed disposition of the common stock unless, in addition to the conditions set out above, more than 50% of the fair market value of the common stock is derived directly or indirectly from (i) real or immovable property situated in Canada; (ii) Canadian resource properties; (iii) timber resource properties; and (iv) options in respect of (i), (ii) or (iii) during the sixty (60) month period that precedes the disposition. Based upon our review of our financial data for the current and prior fiscal years, we have determined that the common stock does not currently derive, and has not derived during the past sixty (60) months, more than 50% of its fair market value from the property listed above, and this characterization of the common stock will likely continue.

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 Tax Treaty, 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%. So-called “fiscally transparent” entities, such as United States limited liability companies, or LLCs, are not entitled to rely on the terms of the Tax Treaty, and therefore do not benefit from these reduced rates. Under the terms of a protocol to the Tax Treaty signed in September 2007 and ratified December 15, 2008, however, reduced rates under the Tax Treaty apply to members of fiscally transparent entities, such as LLCs and partnerships, who would be entitled to rely on the Tax Treaty if they held the common stock directly. Members of such entities are regarded as holding their proportionate share of the common stock held by the entity for the purposes of the Tax Treaty. The reduced withholding rates will apply to members of fiscally transparent entities for dividends paid on or after February 1, 2009.

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.

**ITEM 6. SELECTED FINANCIAL DATA.**

The selected statement of operations data and balance sheet data with respect to the years ended December 31, 2009, 2008, 2007, 2006 and 2005 are derived from our consolidated financial statements as prepared in all material respects with generally accepted accounting principles in the United States and prepared in U.S. dollars. The selected financial data set forth below should be read in conjunction with our "Management's Discussion and Analysis of Financial Condition and Results of Operations" contained in Item 7 below and our consolidated financial statements and the notes thereto appended to this Annual Report filed on Form 10-K. These historical results are not necessarily indicative of our future results.

| <b>Statement of Operations Data:</b>   | <b>Year Ended<br/>December 31,</b> | <b>Year Ended<br/>December 31,</b> | <b>Year Ended<br/>December 31,</b> | <b>Year Ended<br/>December 31,</b> | <b>Year Ended<br/>December 31,</b> |
|--|------------------------------------|------------------------------------|------------------------------------|------------------------------------|------------------------------------|
| <b>In thousands, except per share data</b>                                       | <b>2009</b>                        | <b>2008</b>                        | <b>2007</b>                        | <b>2006</b>                        | <b>2005</b>                        |
| Revenue  | \$ -                               | \$ -                               | \$ -                               | \$ -                               | \$ -                               |
| <b>Operating expenses:</b>   |                                    |                                    |                                    |                                    |                                    |
| Research and development   | 2,113                              | 10,366                             | 10,912                             | 14,003                             | 11,678                             |
| Impairment of Capital Assets   | 386                                |                                    |                                    |                                    |                                    |
| Gain on Deferred Lease Inducements   | (497)                              |                                    |                                    |                                    |                                    |
| General and administration   | 1,214                              | 3,520                              | 3,278                              | 2,883                              | 2,543                              |
| Loss from operations   | (3,216)                            | (13,886)                           | (14,190)                           | (16,886)                           | (14,221)                           |
| Other Income   | (157)                              | -                                  | -                                  | -                                  | -                                  |
| Interest expense   | -                                  | -                                  | -                                  | (3)                                | (11)                               |
| Interest income  | 47                                 | 286                                | 833                                | 449                                | 361                                |
| Loss before income taxes   | (3,012)                            | (13,600)                           | (13,357)                           | (16,440)                           | (13,871)                           |
| Recovery of income taxes   | -                                  | -                                  | -                                  | -                                  | -                                  |
| Net loss   | \$ (3,012)                         | \$ (13,600)                        | \$ (13,357)                        | \$ (16,440)                        | \$ (13,871)                        |
| Net loss per share of common stock, basic and diluted                            | \$ (0.02)                          | \$ (0.11)                          | \$ (0.11)                          | \$ (0.34)                          | \$ (0.35)                          |
| Weighted average number of shares of common stock outstanding, basic and diluted | 128,227                            | 128,227                            | 116,571                            | 47,663                             | 39,276                             |

| <b>Balance Sheet Data:</b>                        | <b>December 31,</b> | <b>December 31,</b> | <b>December 31,</b> | <b>December 31,</b> | <b>December 31,</b> |
|---|---------------------|---------------------|---------------------|---------------------|---------------------|
| <b>In thousands, except per share data</b>        | <b>2009</b>         | <b>2008</b>         | <b>2007</b>         | <b>2006</b>         | <b>2005</b>         |
| Cash, cash equivalents and short-term investments | \$ 685              | \$ 5,401            | \$ 16,217           | \$ 5,718            | \$ 13,144           |
| Working capital                                   | 412                 | 3,209               | 14,159              | 1,200               | 10,735              |
| Total assets                                      | 833                 | 6,060               | 17,209              | 6,628               | 14,291              |
| Common stock                                      | 64,929              | 64,929              | 64,929              | 46,524              | 41,306              |
| Additional paid-in capital                        | 35,225              | 34,860              | 32,355              | 24,523              | 23,110              |
| Accumulated deficit                               | (100,991)           | (97,979)            | (84,379)            | (71,022)            | (54,582)            |
| Stockholders' equity                              | \$ 406              | \$ 3,053            | \$ 14,148           | \$ 1,268            | \$ 11,077           |
| Number of shares of common stock outstanding      | 128,227             | 128,227             | 128,227             | 50,382              | 42,629              |

**ITEM 7. MANAGEMENT'S DISCUSSION AND ANALYSIS OF FINANCIAL CONDITION AND RESULTS OF OPERATIONS****CAUTIONARY STATEMENT**

The discussion below contains forward-looking statements regarding our financial condition and our results of operations that are based upon our annual consolidated financial statements, which have been prepared in accordance with generally accepted accounting principles within the United States, or U.S. GAAP, and applicable U.S. Securities and Exchange Commission, or SEC, regulations for financial information. The preparation of these financial statements also conform in all material respects with generally accepted accounting principles in Canada, or Canadian GAAP, except as described in Note 10 in our annual consolidated financial statements contained in this Annual Report on Form 10-K for the year ended December 31, 2009. The preparation of these financial statements requires our management to make estimates and judgments that affect the reported amounts of assets, liabilities, income and expenses, and related disclosure of contingent assets and liabilities. We evaluate our estimates on an ongoing basis. Our estimates are based on historical experience and on various other assumptions that we believe to be reasonable.



## Overview

On July 7, 2009, we announced that we intended to focus our remaining financial resources on the development of oral eniluracil. We have terminated our eniluracil study using our topical formulation and will focus our resources on the development of a redesigned study combining oral eniluracil and 5-fluorouracil, or 5-FU, targeting anti-cancer indications. After a careful evaluation of the data from the prior GlaxoSmithKline, or GSK, studies, data from our studies and other studies using eniluracil, we believe we can design and implement a Phase II study with eniluracil within the next three to six months assuming we have adequate financial resources to conduct such a study, which is not assured.

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

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

Mr. Butts is a Co-Founder and Portfolio Manager of Southpoint Capital Advisory LP, which owns 41.5 million common shares of the Company, representing approximately 32% of the issued and outstanding common shares.

On August 19, 2009, Dr. Robin Norris, the Company's Chief Operating Officer, amended and restated his employment agreement through and including December 31, 2009. Dr. Norris's employment was terminated on December 31, 2009.

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

On September 23, 2009, the Company's Board of Directors approved the appointment of Deloitte & Touche LLP as the Company's new auditor replacing PricewaterhouseCoopers LLP ("PwC"). The resignation of PwC on September 23, 2009 was not related to any disagreements with Company management over the Company's audited financial statements. There have been no reportable events (as defined in National Instrument 51-102 (Section 4.11)) and in Item 304(a)(1)(v) of Regulation S-K between the Company and PwC. During the Company's fiscal years ended December 31, 2007 and 2008 and through September 23, 2009, the Company did not consult with PwC regarding any matters described in Items 304(a)(1)(iv) or 304(a)(1)(v) of Regulation S-K.

As a result of our limited financial resources and the decline in the availability of further capital, we plan to focus our activities on the development of eniluracil. Accordingly, we have postponed or terminated many of our previously planned or ongoing clinical development programs as outlined below. We believe that our current cash and cash equivalents will be sufficient to satisfy our anticipated capital requirements only into the second quarter of 2010. The members of the Board of Directors have also agreed to continue to serve without further compensation. We continue to pursue various strategic alternatives, including collaborations with other pharmaceutical and biotechnology companies. However, if a strategic transaction or other source of further financial resources cannot be secured in the very near term, we might cease operations sooner. As a result, the audit opinion contained in our Annual Report filed on Form 10-K included a notation related to the uncertainty of our ability to continue as a going concern. Our projections of our capital requirements are subject to substantial uncertainty. More capital than we had anticipated thereafter may be required. To finance our operations beyond the second quarter of 2010, or earlier if necessary, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio or from other sources. Given current economic conditions, we might not be able to raise the necessary capital or such funding may not be available on acceptable terms. If we cannot obtain adequate funding in the very near term, we might be required to further delay, scale back or eliminate certain research and development studies, consider business combinations or even shut down some, or all, of our operations.

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

We have not received and do not expect to have significant revenues from our product candidates until we are either able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with up-front payments, licensing fees, milestone payments, royalties or other revenue. We experienced net losses of approximately \$3.0 million for the twelve months ended December 31, 2009, \$13.6 million for the year ended December 31, 2008, \$13.4 million for the fiscal year ended December 31, 2007, and \$16.4 million for the fiscal year ended December 31, 2006. As of December 31, 2009, our deficit accumulated during development stage was approximately \$101.0 million.

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

In September 2009, the Company terminated the Maplewood lease relating to the Company's primary office facility in Research Triangle Park for approximately \$175,000.

## Results of Operations

### Fiscal 2009 versus Fiscal 2008

| In thousands of U.S. Dollars       | Fiscal<br>2009    | %    | Fiscal<br>2008     | %    | Increase<br>(Decrease) |
|------------------------------------|-------------------|------|--------------------|------|------------------------|
| <b>Revenue</b>                     | \$ -              |      | \$ -               |      | \$ -                   |
| <b>Operating expenses:</b>         |                   |      |                    |      |                        |
| Research and development           | 2,113             | 66%  | 10,366             | 75%  | (8,253)                |
| Impairment of Capital Assets       | 386               | 12%  | -                  |      | 386                    |
| Gain on Deferred lease inducements | (497)             | -15% | -                  |      | (497)                  |
| General and administration         | 1,214             | 38%  | 3,520              | 25%  | (2,306)                |
| Total operating expense            | (3,216)           | 100% | (13,886)           | 100% | 10,670                 |
| Other Income                       | 157               |      |                    |      | 157                    |
| Interest income                    | 47                |      | 286                |      | (239)                  |
| <b>Net loss</b>                    | <u>\$ (3,012)</u> |      | <u>\$ (13,600)</u> |      | <u>\$ 10,588</u>       |

- Research and development expenses were lower in fiscal 2009, as compared to fiscal 2008 primarily due to a decrease and closing of clinical studies being conducted throughout 2009, as compared to 2008. During fiscal 2008, we completed our ADH-1 trial in combination with docetaxel, carboplatin, and capecitabine and completed patient enrollment in our Phase IIb systemic ADH-1 trial with regionally-infused melphalan for the treatment of melanoma.
- General and administrative expenses decreased as a result of a reduction in our employee headcount effective April 2009. General and administrative expense includes non-cash stock-based compensation expense of \$0.5 million in fiscal 2009 and \$1.3 million in fiscal 2008.
- Interest income decreased in fiscal 2009, as compared to 2008 due to less cash on hand as a result of funding our operations during fiscal 2009.

### Fiscal 2008 versus Fiscal 2007

| In thousands of U.S. Dollars | Fiscal<br>2008     | %    | Fiscal<br>2007     | %    | Increase<br>(Decrease) |
|------------------------------|--------------------|------|--------------------|------|------------------------|
| <b>Revenue</b>               | \$ -               |      | \$ -               |      | \$ -                   |
| <b>Operating expenses:</b>   |                    |      |                    |      |                        |
| Research and development     | 10,366             | 75%  | 10,912             | 77%  | (546)                  |
| General and administration   | 3,520              | 25%  | 3,278              | 23%  | 242                    |
| Total operating expense      | (13,866)           | 100% | (14,190)           | 100% | (304)                  |
| Interest expense             | -                  |      | -                  |      |                        |
| Interest income              | 286                |      | 833                |      | (547)                  |
| <b>Total other income</b>    | <u>286</u>         |      | <u>833</u>         |      | <u>(547)</u>           |
| <b>Net loss</b>              | <u>\$ (13,600)</u> |      | <u>\$ (13,357)</u> |      | <u>\$ (243)</u>        |

- Research and development expenses were lower in fiscal 2008, as compared to fiscal 2007 primarily due to less clinical studies being conducted throughout 2008, as compared to 2007. As part of our prioritization initiative initiated in the third quarter of 2008 to reduce operating expense, we closed patient enrollment in our Phase I/II clinical trial studying oral eniluracil in liver cancer in Asia and suspended patient enrollment in our Phase I study to determine the maximum tolerated dose of oral 5-FU in combination with oral eniluracil. During fiscal 2008, we completed our ADH-1 trial in combination with docetaxel, carboplatin, and capecitabine and completed patient enrollment in our Phase IIb systemic ADH-1 trial with regionally-infused melphalan for the treatment of melanoma.
- General and administrative expenses increased primarily due to foreign currency losses on our Canadian denominated investments totaling \$0.2 million. It was determined the losses were other than temporary and were therefore not included in other comprehensive income. General and administrative expense includes non-cash stock-based compensation expense of \$1.3 million in fiscal 2008 and \$1.2 million in fiscal 2007.
- Interest income decreased in fiscal 2008 as compared to 2007 due to less cash on hand as a result of funding our operations during fiscal 2008.

## Quarterly Information

The following table presents selected consolidated financial data for each of the last eight quarters through December 31, 2009, as prepared under U.S. GAAP (dollars in thousands, except per share information):

| Period             | Net Loss for the Period | Basic and Diluted Net Loss per Common Share |
|--------------------|-------------------------|---|
| December 31, 2007  | \$ (3,008)              | \$ (0.02)                                   |
| March 31, 2008     | \$ (4,304)              | \$ (0.03)                                   |
| June 30, 2008      | \$ (3,442)              | \$ (0.03)                                   |
| September 30, 2008 | \$ (3,244)              | \$ (0.03)                                   |
| December 31, 2008  | \$ (2,610)              | \$ (0.02)                                   |
| March 31, 2009     | \$ (2,246)              | \$ (0.02)                                   |
| June 30, 2009      | \$ (761)                | \$ (0.01)                                   |
| September 30, 2009 | \$ (35)                 | \$ (0.00)                                   |
| December 31, 2009  | \$ 30                   | \$ 0.00                                     |

## Liquidity and Capital Resources

| Dollars in thousands                                  | December 31, 2009 | December 31, 2008 | December 31, 2007 |
|---|-------------------|-------------------|-------------------|
| <b>Selected Asset and Liability Data:</b>             |                   |                   |                   |
| Cash and cash equivalents                             | \$ 685            | \$ 5,401          | \$ 16,217         |
| Working capital[Current Assets – Current Liabilities] | 412               | 3,209             | 14,159            |
| <b>Selected Equity:</b>                               |                   |                   |                   |
| Common stock  | \$ 64,929         | \$ 64,929         | \$ 64,929         |
| Accumulated deficit                                   | (100,991)         | (97,979)          | (84,379)          |
| Shareholders' equity                                  | 406               | 3,053             | 14,148            |
| <b>Selected Cash Flow Data:</b>                       |                   |                   |                   |
| Net cash used in operating activities                 | \$ (4,688)        | \$ (10,808)       | \$ (13,303)       |
| Net cash provided from financing activities           | -                 | 7                 | 23,875            |
| Number of shares of common stock outstanding          | 128,227           | 128,227           | 128,227           |

We have financed our operations since inception on September 3, 1996 through the sale of equity and debt securities and have raised gross proceeds totaling approximately \$86.0 million through December 31, 2009. We have incurred net losses and negative cash flow from operations each year, and we had an accumulated deficit of approximately \$101.0 million as of December 31, 2009. We have not generated any revenues to date through the sale of products. We do not expect to have significant revenues or income, other than interest income, until we are able to sell our product candidates after obtaining applicable regulatory approvals or we establish collaborations that provide us with licensing fees, royalties, milestone payments or up-front payments.

The net cash flow used in operating activities for fiscal year 2009 was approximately \$4.7 million, as compared to \$10.8 million in fiscal 2008. During fiscal 2009 our average monthly cash burn was \$0.4 million, as compared to \$0.9 million for fiscal 2008. The decrease in the current year is due to a decrease our overall clinical activities and headcount during fiscal 2009. At December 31, 2009, our working capital, defined as current assets less current liabilities decreased by approximately \$2.7 million primarily due to funding research and development activities and general corporate operations.

In December 2008 we received notice from the AMEX that we were not in compliance with Section 1003(a)(ii) of its Company Guide, because our stockholders' equity was below \$6 million and we incurred losses from continued operation and net losses in the five most recent fiscal years. On January 29, 2009, we voluntarily filed to delist our common stock from the AMEX and effective January 29, 2009 our common stock was no longer traded on the AMEX. As a result, any trading of our common stock in the U.S. must now be conducted in the over-the-counter markets, on the pink sheets. Our common stock continues to trade on the TSX. The TSX also has continued listing standards, including minimum market capitalization and other requirements, that we might not meet in the future, particularly if the price of our common stock does not increase or we are unable to raise capital to continue our operations.

We believe that our current cash and cash equivalents of \$0.7 million will be sufficient to satisfy our anticipated capital requirements into the second quarter of 2010. In July 2009, we terminated the employment of our Chief Executive Officer for one month severance and we terminated another executive officer thereby reducing our operating expense. In August 2009, we amended the employment contract of our Chief Operating Officer at a reduced salary and in September 2009, our Chief Financial Officer resigned. We also terminated our topical eniluracil program thereby reducing our operating expense. We continue to pursue various strategic alternatives, including, collaborations with other pharmaceutical and biotechnology companies and we believe that our current cash and cash equivalents will be sufficient to satisfy our currently anticipated capital requirements into the second quarter of 2010. However, if a strategic transaction or other source of further financial resources cannot be secured in the very near term, we might cease operations sooner than June 30, 2010. Our projections of further capital requirements are subject to substantial uncertainty. Our working capital requirements may fluctuate in future periods depending upon numerous factors, including: our ability to obtain additional financial resources; our ability to enter into collaborations that provide us with up-front payments, milestones or other payments; results of our research and development activities; progress or lack of progress in our preclinical studies or clinical trials; unfavorable toxicology in our clinical programs, our drug substance requirements to support clinical programs; change in the focus, direction, or costs of our research and development programs; headcount expense; the costs involved in preparing, filing, prosecuting, maintaining, defending and enforcing our patent claims; competitive and technological advances; the potential need to develop, acquire or license new technologies and products; our business development activities; new regulatory requirements implemented by regulatory authorities; the timing and outcome of any regulatory review process; and commercialization activities, if any.

In February 2007, we completed the sale of equity securities for gross proceeds of \$25.0 million. We issued 75.8 million units at a price of \$0.33 per unit providing net proceeds of \$23.2 million after deducting broker fees and other offering expenses. Each unit sold consisted of one common share and one-half of a common share purchase warrant. This financing included an aggregate of 75.8 million shares of common stock, 37.9 million investor warrants and 6.6 million broker warrants to acquire additional shares of our common stock. Each whole investor warrant entitles the holder to acquire one additional share of our common stock at an exercise price of \$0.40 per share for a period of three years. Each whole broker warrant entitles the holder to acquire one unit (the same as the units sold to investors) at an exercise price of \$0.33 per unit for a period of two years. During fiscal 2007, we issued 2.1 million shares of common stock pursuant to the exercise of warrants resulting in additional proceeds of approximately \$0.7 million.

To finance our operations beyond the second quarter of 2010, or possibly earlier, we will need to raise substantial additional funds through either the sale of additional equity, the issuance of debt, the establishment of collaborations that provide us with funding, the out-license or sale of certain aspects of our intellectual property portfolio, or from other sources. The recent turmoil in the worldwide financial markets has led to an overall tightening in the credit markets and a significant decline in the availability of capital, especially for small biotechnology companies which are generally viewed as higher risk investments. Given the current economic conditions, there is serious risk that we might not be able to raise the necessary capital or such funding may not be available on acceptable terms. We can therefore make no assurance that we will be able to raise the necessary capital to continue our operations.

## **Financial Instruments**

We invest excess cash and cash equivalents in high credit quality investments held by financial institutions in accordance with our investment policy designed to protect the principal investment. At December 31, 2009, we had \$0.7 million in cash accounts. We have not experienced any loss or write down of our money market investments for the years ended December 31, 2009 and 2008.

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

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

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

## **Off-Balance Sheet Arrangements**

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

## **Contractual Obligations and Commitments**

Since our inception, inflation has not had a material effect on our operations. We had no material commitments for capital expenses as of December 31, 2009.

The following table represents our contractual obligations and commitments at December 31, 2009 (in thousands of U.S. dollars):

|                               | <u>Less than 1 year</u> | <u>1-3 years</u> | <u>3-5 years</u> | <u>More than 5 years</u> | <u>Total</u>  |
|-------------------------------|-------------------------|------------------|------------------|--------------------------|---------------|
| Englert Lease (1)             | \$ 76                   | \$ -             | \$ -             | \$ -                     | \$ 76         |
| Eastowne Lease (2)            | 24                      | -                | -                | -                        | 24            |
| Drug purchase commitments (3) | 25                      | 25               | -                | -                        | 50            |
| Total                         | <u>\$ 125</u>           | <u>\$ 25</u>     | <u>\$ -</u>      | <u>\$ -</u>              | <u>\$ 150</u> |

- (1) In April 2004, we entered into a lease for facilities in Durham, North Carolina. Amounts shown assume the maximum amounts due under the lease. In July 2008, we entered into an agreement with another company to sublease this facility until September 2010; however, in the event of their default, we would become responsible for the obligation. We are contractually obligated under the lease until September 2010.
- (2) In December 2009, we entered into a lease for new office facilities in Chapel Hill, North Carolina. Amounts shown assume the maximum amounts due under the lease.
- (3) Commitments to our third party manufacturing vendors that supply drug substance primarily for our clinical studies.

## Research and Development

Our research and development efforts have been focused on the development of cancer therapeutics and our cadherin technology platform and currently include eniluracil and STS.

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

Research and development expenses totaled \$2.1 million and \$10.4 million for the fiscal years ended December 31, 2009 and 2008, respectively.

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

## Critical Accounting Policies and Estimates

Effective January 1, 2007, we changed our primary basis of accounting to U.S. GAAP. We made the change to U.S. GAAP to comply with U.S. securities law as a result of our loss of foreign private issuer status with the Securities and Exchange Commission.

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as 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 these 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. The following description of critical accounting policies, judgments and estimates should be read in conjunction with our December 31, 2008 consolidated financial statements.

## Stock-based Compensation

The calculation of the fair values of our stock-based compensation plans requires estimates that require management's judgments. Under ASC 718, the fair value of each stock option is estimated on the grant date using the Black-Scholes option-pricing model. The valuation models require assumptions and estimates to determine expected volatility, expected life, expected dividends and expected risk-free interest rates. The expected volatility was determined using historical volatility of our stock based on the contractual life of the award. The risk-free interest rate assumption was based on the yield on zero-coupon U.S. Treasury strips at the award grant date. We also used historical data to estimate forfeiture experience.

## Common stock and warrants

Common stock is recorded as the net proceeds received on issuance after deducting all share issuance 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 stockholders' equity as additional paid-in capital.

During fiscal 2008, we had warrants to purchase common stock that were denominated in both U.S. and Canadian dollars, which results in our having warrants outstanding that are denominated outside its U.S. dollar functional currency.

In June 2008, the FASB issued authoritative guidance relating to determining whether an instrument (or embedded feature) is indexed to an entity's own stock, which was effective January 1, 2009. It provides guidance in assessing whether an equity-linked financial instrument (or embedded feature) is indexed to an entity's own stock for purposes of determining whether the equity-linked instrument qualifies as a derivative instrument. We adopted this authoritative guidance on January 1, 2009. As a result, any outstanding warrants denominated in Canadian dollars were not considered to be indexed to our stock and was therefore to be treated as derivative financial instruments and recorded at their fair value as a liability. Since the warrants to purchase common stock that are denominated in Canadian dollars expired on December 19, 2008, EITF 07-5 did not have an effect on our financial statements.

## Outstanding Share Information

Our outstanding share data at December 31, 2009 follows (in thousands):

|               | <b>December 31,<br/>2009</b> |
|---------------|------------------------------|
| Common shares | 128,227                      |
| Warrants      | 41,119                       |
| Stock options | 15,823                       |
| Total         | <u>185,169</u>               |

## Canadian Accounting Principles

We present our consolidated financial results in accordance with U.S. GAAP. Significant differences exist between U.S. and Canadian GAAP and are presented in Note 10 in the consolidated financial statements.

## New Accounting Pronouncements Adopted

In May 2009, the FASB issued authoritative guidance relating to subsequent events, which is effective June 15, 2009. It provides guidance for disclosing events that occur after the balance sheet date, but prior to the issuance of the financial statements. We adopted this authoritative guidance on June 30, 2009. The adoption of this authoritative guidance did not have any impact upon our financial position or operating results.

In December 2007, the Emerging Issue Task Force, or EITF, issued EITF No. 07-01, "Accounting for Collaborative Arrangement Related to the Development and Commercialization of Intellectual Property", or EITF 07-01, codified as ASC 808-10. EITF 07-01 defines the accounting for collaborations between participants. EITF 07-01 requires certain transactions between collaborators to be recorded in the statement of operations on either a gross or net basis within expense when certain characteristics exist in the collaborative agreement. EITF 07-01 did not have a material impact on our financial statements.

In December 2007, the FASB issued ASC No. 805, Business Combination" ("ASC 805"), which, requires an acquiring company to measure all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at the fair value at the acquisition date. ASC 805 establishes principles and requirements for how the acquirer: i) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree; ii) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and iii) determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The adoption of ASC 805 did not have a material impact on our financial statements.

In November 2007, the Emerging Issues Task Force ("EITF") of the FASB issued EITF No. 07-5, Issue Summary No.1 "Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity's Own Stock" ("EITF 07-5"), codified as ASC 815-40. In June 2008, one of the conclusions reached under EITF 07-05 was a consensus that an equity-linked financial instrument would not be considered indexed to the entity's own stock if the strike price is denominated in a currency other than the issuer's functional currency. The issues brought to the EITF for discussion related to how an entity should determine whether certain instruments or embedded features are indexed to its own stock. This discussion included equity-linked financial instruments where the exercise price is denominated in a currency other than the issuer's functional currency; such as the Company's outstanding warrants to purchase common stock that are denominated in Canadian dollars. This conclusion reached under EITF 07-05 clarified the accounting treatment for these and certain other financial instruments as it related to FASB Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"), codified as ASC 815-10.

SFAS 133 specifies that a contract that would otherwise meet the definition of a derivative under SFAS 133, issued or held by the reporting entity that is both (a) indexed to its own stock and (b) classified in stockholders' equity in its statement of financial position should not be considered a derivative financial instrument for purposes of applying SFAS 133. As a result, the Company's outstanding warrants denominated in Canadian dollars were not considered to be indexed to its own stock and should therefore be treated as derivative financial instruments and recorded at their fair value as a liability. EITF 07-05 is effective for financial statements for fiscal years beginning after December 15, 2008 and earlier adoption is not permitted. Since the warrants to purchase common stock that are denominated in Canadian dollars expired on December 19, 2008, EITF 07-5 did not have a material impact on the Company's financial statements unless the Company issues further equity instruments denominated outside its functional currency.

In April 2009, an update was made to the Financial Instruments topic of the FASB codification Fair Value Measurements and Disclosures that requires disclosures about the fair value of financial instruments in interim financial statements as well as in annual financial statements. The new guidance also amends the existing requirements on the fair value disclosures in all interim financial statements. This guidance is effective for interim periods ending after June 15, 2009, but early adoption was permitted for interim periods ending after March 15, 2009. The adoption of this standard did not have a material impact on our consolidated financial position and results of operations.

In April 2009, an update was made to the Fair Value Measurements and Disclosures topic of the FASB codification that provides additional guidance in determining fair value when there is no active market or where price inputs being used represent distressed sales. This guidance is effective for interim periods ending after June 15, 2009, but early adoption was permitted for interim periods ending after March 15, 2009. The adoption of this standard did not have an impact on our consolidated financial position and results of operations.

In April 2009, an update was made to the Debt and Equity topic of the FASB codification that provides guidance in determining whether impairments of debt securities are other than temporary, and modifies the presentation and disclosures surrounding such instruments. This guidance is effective for interim periods ending after June 15, 2009, but early adoption was permitted for interim periods ending after March 15, 2009. The adoption of this standard did not have an impact on our consolidated financial position and results of operations.

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

#### **Recent Accounting Pronouncements**

In June 2009, the FASB issued changes to the consolidation guidance applicable to a variable interest entity (VIE). FASB ASC Topic 810, "Consolidation," amends the guidance governing the determination of whether an enterprise is the primary beneficiary of a VIE, and is, therefore, required to consolidate an entity, by requiring a qualitative analysis rather than a quantitative analysis. The qualitative analysis will include, among other things, consideration of who has the power to direct the activities of the entity that most significantly impact the entity's economic performance and who has the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. This standard also requires continuous reassessments of whether an enterprise is the primary beneficiary of a VIE. FASB ASC 810 also requires enhanced disclosures about an enterprise's involvement with a VIE. Topic 810 is effective as of the beginning of interim and annual reporting periods that begin after November 15, 2009. This will not have an impact on the Company's financial position, results of operations or cash flows.

In January 2010, an update was made to the Fair Value Measurements and Disclosures topic of the FASB codification that requires new disclosures for fair value measurements and provides clarification for existing disclosure requirements. More specifically, this update will require (a) an entity to disclose separately the amounts of significant transfers into and out of Level 1 and 2 fair value measurements and to describe the reasons for the transfers; and (b) information about purchases, sales, issuances, and settlements to be presented separately on a gross basis in the reconciliation of Level 3 fair value measurements. This update is effective for fiscal years beginning after December 15, 2009 except for Level 3 reconciliation disclosures which are effective for fiscal years beginning after December 15, 2010. We do not expect the adoption of the guidance to have an impact on our consolidated financial position and results of operations.

#### **ITEM 7A. QUANTITATIVE AND QUALITATIVE DISCLOSURES ABOUT MARKET RISK**

##### **Money Market Investments**

We are subject to increased risk associated with our cash and cash equivalents due to the recent bank and financial institution failures in the U.S. We maintain an investment portfolio consisting of U.S. or Canadian obligations and bank securities and money market investments in compliance with our investment policy. We do not hold any mortgaged-backed investments in our investment portfolio. Securities must have a minimum Dun & Bradstreet rating of A for bonds or R1 low for commercial paper. The policy also provides for investment limits on concentrations of securities by issuer and maximum-weighted average time to maturity of twelve months. This policy applies to all of our financial resources.

At December 31, 2009, we had \$Nil in money market investments which typically have minimal risk. The financial markets have been volatile resulting in concerns regarding the recoverability of money market investments. We have not experienced any loss or write down of our money market investments for the years ended December 31, 2009 and 2008.

Our investment policy is to manage investments to achieve, in the order of importance, the financial objectives of preservation of principal, liquidity and return on investment. Our risk associated with fluctuating interest rates on our investments is minimal and not significant to the results of operations. We currently do not use interest rate derivative instruments to manage exposure to interest rate changes. As the main purpose is research and development, we have chosen to avoid investments of a trade or speculative nature.

### **Foreign Currency Exposure**

We are subject to foreign currency risks as we conduct certain clinical development activities in Canada, the United Kingdom, Europe and the Pacific Rim. To date, we have not employed the use of derivative instruments; however, we do hold Canadian dollars which we use to pay certain clinical development activities conducted in Canada and research, and other corporate obligations. At December 31, 2009 we held approximately \$0.2 million in Canadian dollars.

### **Current Equity Markets**

The volatility and disruption of the capital and credit markets and adverse changes in the global economy may continue to adversely impact our business. Due to the significant uncertainty in the capital and credit markets, our access to capital may not be available on favorable terms, or at all. Furthermore, should the adverse global economic conditions persist or worsen; we could experience further decrease in our shareholders' equity, and have difficulty sustaining our operations. Our results of operations, financial condition, cash flows and capital position could be materially adversely affected by continued disruptions in the capital and credit markets.

## **ITEM 8. FINANCIAL STATEMENTS AND SUPPLEMENTARY DATA**

The financial statements required to be filed pursuant to this Item 8 are appended to this Annual Report on Form 10-K. A list of the financial statements file herewith is found at "Index to Financial Statements" on Page F-1.

## **ITEM 9. CHANGES IN AND DISAGREEMENTS WITH ACCOUNTANTS ON ACCOUNTING AND FINANCIAL DISCLOSURE**

On September 23, 2009, PricewaterhouseCoopers LLP ("PwC") resigned as the Company's independent registered public accounting firm. The reports of PwC on the consolidated financial statements of the Company for the fiscal years ended December 31, 2008, 2007 and 2006 did not contain an adverse opinion or a disclaimer of opinion, nor were such reports qualified or modified as to uncertainty, audit scope or accounting principles. During the Company's fiscal years ended December 31, 2007 and 2008, and through September 23, 2009, the Company did not have any disagreements with PwC on any matter of accounting principles or practices, financial statement disclosure or auditing scope or procedure which, if not resolved to the satisfaction of PwC, would have caused it to make reference to the subject matter of the disagreements in connection with its reports on the consolidated financial statements for such years. During the Company's fiscal years ended December 31, 2007 and 2008 and through September 23, 2009, no "reportable events" as defined in Item 304(a)(1)(v) of Regulation S-K have occurred. PwC has indicated to the Company that it concurs with the foregoing statements contained in the second, third and fourth paragraphs above as they relate to PwC and has furnished a letter to the Securities and Exchange Commission to this effect.

The Company engaged Deloitte & Touche LLP, as its new independent registered public accounting firm as of September 23, 2009. The Company's Audit Committee participated in and approved this decision. During the Company's fiscal years ended December 31, 2007 and 2008 and through September 23, 2009, the Company did not consult with PwC regarding any matters described in Items 304(a)(1)(v) or 304(a)(1)(v) of Regulation S-K.

## **ITEM 9A. CONTROLS AND PROCEDURES**

### **Conclusion Regarding the Effectiveness of Disclosure Controls and Procedures**

Disclosure controls and procedures (as defined in Exchange Act Rule 13a-15(e)) are designed only to provide reasonable assurance that information to be disclosed in our Exchange Act Reports is recorded, processed, summarized and reported within the time periods specified in the SEC's rules and forms. As of the end of the period covered by this report, the Company carried out an evaluation, under the supervision and with the participation of the Company's management, including the Company's Chief Executive Officer and Chief Financial Officer, of the effectiveness of the Company's disclosure controls and procedures pursuant to Exchange Act Rule 13a-15(e). Based upon this evaluation, the Company's Chief Executive Officer and Chief Financial Officer have concluded that our disclosure controls and procedures are effective to provide the reasonable assurance discussed above.

### **Management's Report on Internal Control over Financial Reporting**

This annual report does not include an attestation report of the Company's registered public accounting firm regarding internal control over financial reporting. Management's report was not subject to attestation by the Company's registered public accounting firm pursuant to temporary rules of the Securities and Exchange Commission that permit the Company to provide only management's report in this annual report.



Our management, with the participation of our principal executive officer and principal financial officer, has evaluated the effectiveness of the design and operation of our disclosure controls and procedures (as defined in Rules 13a-15(e) and 15d-15(e) under the Securities Exchange Act of 1934, as amended or the Exchange Act) as of December 31, 2009. Based on this evaluation, our principal executive officer and principal financial officer concluded that these disclosure controls and procedures are effective and designed to ensure that the information required to be disclosed in our reports filed or submitted under the Exchange Act is recorded, processed, summarized and reported within the requisite time periods.

Our management is responsible for establishing and maintaining adequate internal control over financial reporting, as such term is defined in Exchange Act Rule 12a-15(f). Our internal control over financial reporting is designed to provide reasonable assurance to our management and board of directors regarding the preparation and fair presentation of published financial statements. A control system, no matter how well designed and operated, can only provide reasonable, not absolute, assurance that the objectives of the control system are met and must reflect the fact that there are resource constraints that require management to consider the benefits of internal controls relative to their costs. Because of these inherent limitations, management does not expect that our internal controls over financial reporting can prevent all error and all fraud.

#### **Changes in Internal Control over Financial Reporting**

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

#### **ITEM 9B. OTHER INFORMATION**

None.

## PART III

### ITEM 10. DIRECTORS, EXECUTIVE OFFICERS AND CORPORATE GOVERNANCE

Information required by this Item concerning our directors is incorporated by reference from the section captioned “Election of Directors” contained in our proxy statement related to the 2010 Annual General Meeting of Stockholders scheduled to be held which we intend to file with the SEC within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

#### *Audit Committee*

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

The Audit Committee operates under a written charter adopted by the Board and attached hereto as Exhibit 99.1 – Other Exhibits.

The directors have appointed an Audit Committee consisting of three directors; Claudio F. Bussandri, William Breen and Arthur Porter, all of whom are independent and financially literate within the meaning of National Instrument 52-110 – Audit Committees. Mr. Bussandri holds an MBA from McGill University and has over 30 years of experience in various executive positions, including being the immediate past CEO of McKesson Canada and previously the President of Lantic Sugar Limited. Mr. Breen has over 30 years of experience in various executive positions, including being the past Chairman, President and Chief Executive Officer of Simware Inc., Senior Vice President, Operations at Cognos Inc. and Vice President, Operations at Computel Systems Ltd. Dr. Porter has over 20 years of experience in various executive positions at medical organizations, including Chief Executive Officer of the McGill University Health Centre and the Detroit Medical Center. Each of these directors has held various director and/or executive officer positions with private and public companies and/or community organizations and has had responsibility for the supervision of the preparation of financial materials and disclosure documents for public and private corporations.

Though the Audit Committee does not have formal pre-approval policies and procedures in place, it has pre-approved all of the services performed by Deloitte & Touche LLP and PwC, as discussed below, as required by SEC regulation.

#### *Audit Fees*

The following table presents the aggregate fees for professional services and other services rendered by our independent auditors, Deloitte & Touche LLP and PwC in fiscal year 2009 and PwC in fiscal year 2008 (in United dollars):

|                        | Fiscal Year<br>2009 | Fiscal Year<br>2008 |
|------------------------|---------------------|---------------------|
| Audit Fees (1)         | \$ 63,000           | \$ 182,943          |
| Audit-Related Fees (2) | -                   | --                  |
| Tax Fees (3)           | 11,250              | 56,702              |
| All Other Fees (4)     | -                   | 3,707               |
| Total                  | <u>\$ 74,250</u>    | <u>\$ 243,352</u>   |

(1) *Audit Fees* include fees for the standard audit work that needs to be performed each year in order to issue an opinion on the consolidated financial statements of the Corporation and to issue reports on the local statutory and regulatory financial statements. It also includes fees for services that can only be provided by the Corporation’s auditor such as auditing of non-recurring transactions and application of new accounting policies, audits of significant and newly implemented system controls, pre-issuance reviews of quarterly financial results, consents and comfort letters and any other audit services required for U.S. Securities and Exchange Commission or other regulatory filings.

(2) *Audit-Related Fees* include fees for those other assurance services provided by auditors but not restricted to those that can only be provided by the auditor signing the audit report.

(3) *Tax Fees* include fees for periodic tax consultations and compliance services in various local, regional and national tax jurisdictions.

(4) *All Other Fees* include fees for products and services other than Audit Fees, Audit Related Fees and Tax Fees, including access to an online database service provided by PwC.

## ITEM 11. EXECUTIVE COMPENSATION

The information required by this Item is incorporated by reference from the sections captioned “Executive Compensation” and “Compensation of Directors” contained in our proxy statement related to the 2010 Annual General Meeting of Stockholders scheduled to be held which we intend to file with the SEC within 120 days of the end of our fiscal year pursuant to General Instruction G(3) of Form 10-K.

## ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDERS MATTERS

The information required by this Item will be set forth in our definitive proxy statement with respect to our 2009 annual meeting of shareholders to be filed no later than 120 days after December 31, 2009 and is incorporated herein by this reference.

### Equity Compensation Plan Information

The following table provides certain information with respect to securities authorized for issuance under equity incentive plans as of December 31, 2009:

| Plan Category  | (a)<br>Number of securities to be issued upon exercise of outstanding options warrants and rights (*) | (b)<br>Weighted-average exercise price of outstanding options, warrants and rights | (c)<br>Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in Column (a)) |
|--|---|--|--|
| Equity compensation plans approved by security holders     | 13,200,852  | \$ 0.55  | 4,876,326  |
| Equity compensation plans not approved by security holders | -   | CAD \$ 2.19  | -  |
| Total  | 15,823,674  | -  | 4,876,326  |

\* The Company’s current stock option plans allows for the issuance of stock options denominated in both United States, or U.S., dollars and Canadian, or CAD, dollars. This table presents the number and weighted-average exercise price of outstanding options by the currency associated with the original grants. The numbers presented include 700,000 options with an exercise price of CAD \$2.25 that were specifically approved by the Company’s shareholders on December 16, 2003 and granted to the Company’s Chief Executive Officer outside of the Company’s stock option plan. At December 31, 2009 we had 13,200,852 stock options denominated in U.S. dollars with a weighted-average exercise price of \$0.55 and 2,622,206 stock options denominated in CAD dollars with a weighted-average exercise price of CAD\$2.19. At December 31, 2009, we had 4,876,326 stock options available for future issuance.

## ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE

The information required by this Item will be set forth in our definitive proxy statement with respect to our 2010 annual meeting of shareholders to be filed no later than 120 days after December 31, 2009 and is incorporated herein by this reference.

## ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The information required by this Item will be set forth in our definitive proxy statement with respect to our 2010 annual meeting of shareholders to be filed no later than 120 days after December 31, 2009 and is incorporated herein by this reference.

**PART IV**

**ITEM 15. EXHIBITS, FINANCIAL STATEMENT SCHEDULES**

(a) The following documents are included as part of this Annual Report filed on Form 10-K:

1. Financial Statements – See Index to Financial Statements on page F-1.
2. All schedules are omitted as the information required is inapplicable or the information is presented in the financial statements.
3. Exhibits:

| Exhibit No. | Description  | Location  |
|-------------|--|---|
| 1.1         | Underwriting and Agency Agreement dated January 19, 2007 between Adherex Technologies Inc. and Versant Partners Inc.                     | Exhibit 1.1 to Form 8-K of Adherex, filed February 22, 2007   |
| 3.1         | Articles of Amalgamation dated June 29, 2004   | Exhibit 1.7 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004  |
| 3.2         | By-laws of the Company, as amended on November 2, 2004   | Exhibit 1.9 to the Form 20-F/A Registration Statement (No. 001-32295) of Adherex, filed November 5, 2004  |
| 4.1         | Registration Rights Agreement, dated as of December 19, 2003, by and between Adherex Technologies Inc. and HBM BioVentures (Cayman) Ltd. | Exhibit 4.9 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004  |
| 4.2         | Warrant Indenture dated February 21, 2007 between Adherex Technologies Inc. and Computershare Trust Company of Canada                    | Exhibit 4.45 to Form 8-K of Adherex, filed February 22, 2007  |
| 4.3         | Form of Common Stock Warrant dated February 21, 2007   | Exhibit 4.43 to Form 8-K of Adherex, filed February 22, 2007  |
| 4.4         | Form of Underwriter's Warrant dated February 21, 2007  | Exhibit 4.44 to Form 8-K of Adherex, filed February 22, 2007  |
| 10.1        | General Collaboration Agreement, dated as of February 26, 2001, by and between Adherex Technologies Inc. and McGill University           | Exhibit 4.2 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004  |
| 10.2        | Exclusive License Agreement, dated as of September 26, 2002, by and between Oregon Health & Science University and Oxiquant, Inc.        | Exhibit 4.5 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004  |
| 10.3        | Lease Agreement, dated as of March 8, 2004, by and between Realmark-Commercial, LLC and Adherex, Inc.                                    | Exhibit 4.8 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004  |
| *10.4       | Executive Employment Agreement, dated as of December 12, 2001, by and between Adherex Technologies Inc. and Robin J. Norris              | Exhibit 4.10 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004 |

|       |  |  |
|-------|--|--|
| *10.5 | Executive Employment Agreement, dated as of February 19, 2003, by and between Adherex Technologies Inc. and William P. Peters            | Exhibit 4.12 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004            |
| *10.6 | Executive Employment Agreement, dated April 21, 2004, by and between Adherex, Inc. and James A. Klein, Jr.                               | Exhibit 4.13 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004            |
| 10.7  | Second Amendment to Lease Agreement dated September 14, 2004 between Realmark Commercial LLC and Adherex, Inc.                           | Exhibit 4.29 to the Form 20-F/A Registration Statement (No. 001-32295) of Adherex, filed November 5, 2004            |
| 10.8  | Development and License Agreement dated July 14, 2005 between Adherex Technologies Inc. and Glaxo Group Limited**                        | Exhibit 4.30 to Form 6-K of Adherex, filed July 22, 2005   |
| 10.9  | Sublease Agreement, dated as of August 31, 2005, by and between Biostratum, Inc. and Adherex, Inc. (Englert)                             | Exhibit 4.32 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005 |
| 10.10 | Sublease Agreement, dated as of August 31, 2005, by and between Biostratum, Inc. and Adherex, Inc. (Creekstone)                          | Exhibit 4.33 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005 |
| 10.11 | Amendment No. 1 to Development and License Agreement dated December 20, 2005 between Glaxo Group Limited and Adherex Technologies Inc.** | Exhibit 4.36 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005 |
| 10.12 | Partial Assignment of Lease and Lease Amendment Number Two dated August 31, 2005   | Exhibit 4.38 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005 |
| 10.13 | Highwoods Realty Limited Partnership Office Master Lease (Creekstone)  | Exhibit 4.39 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005 |
| 10.14 | Consent to Sublease dated August 31, 2005 among Highwoods Realty Limited Partnership, BioStratum, Inc. and Adherex, Inc.                 | Exhibit 4.40 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2005 |
| 10.15 | Amendment No. 2 to Development and License Agreement dated June 23, 2006 between Glaxo Group Limited and Adherex Technologies Inc.**     | Exhibit 4.41 to Form 6-K of Adherex, filed August 9, 2006  |
| 10.16 | Sub-SubLease Agreement dated December 22, 2006 between Biostratum, Inc and NephroGenex, Inc  | Exhibit 4.46 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2006 |

|        |  |  |
|--------|--|--|
| *10.17 | Executive Employment Agreement, dated as of February 28, 2007, by and between Adherex, Inc. and D. Scott Murray                                      | Exhibit 4.47 to the Form 20-F Annual Report (No. 001-32295) of Adherex filed for fiscal year ended December 31, 2006 |
| 10.18  | Amendment No. 3 to Development and License Agreement dated January 17, 2007 between Adherex Technologies Inc. and Glaxo Group Limited                | Exhibit 4.42 to Form 6-K of Adherex, filed January 19, 2007  |
| 10.19  | Amendment No. 4 to Development and License Agreement dated May 23, 2007 between Adherex Technologies Inc. and Glaxo Group Limited                    | Exhibit 10.1 to Form 8-K of Adherex, filed June 19, 2007   |
| 10.20  | Amended and Restated Stock Option Plan   | Exhibit 10.19 to Form 10-K of Adherex, filed March 28, 2008  |
| 10.21  | License Agreement entered into on May 13, 2008 between Adherex Technologies Inc. and Stichting Antoni van Leeuwenhoek Ziekenhuis                     | Exhibit 10.21 to Form 10-Q of Adherex, filed August 13, 2008   |
| 10.22  | Success-Based Incentive Program  | Exhibit 10.22 to Form 8-K of Adherex, filed December 11, 2008  |
| 10.23  | Seperation and Mutual Release Agreement – Dr. William Peters   | Exhibit 10.23 to Form 8-K of Adherex, filed July 7, 2009   |
| 10.24  | Lease Termination and Release  | Exhibit 10.24 to Form 10-Q of Adherex, filed November 16, 2009   |
| 10.25  | Amended and Restated Employment Agreement – Dr. Robin J. Norris  | Exhibit 10.25 to Form 10-Q of Adherex, filed November 16, 2009   |
| 16     | Press Release regarding change in certifying accountants   | Filed herewith   |
| 21     | Subsidiaries   | Exhibit 8 to the Form 20-F Registration Statement (No. 001-32295) of Adherex, filed September 17, 2004               |
| 31.1   | Certification of Chief Executive Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002                             | Filed herewith   |
| 31.2   | Certification of Chief Financial Officer of the Company in accordance with Section 302 of the Sarbanes-Oxley Act of 2002                             | Filed herewith   |
| 32.1   | Certification of Chief Executive Officer and Chief Financial Officer of the Company in accordance with Section 906 of the Sarbanes-Oxley Act of 2002 | Filed herewith   |
| 99.1   | Other Exhibits - Audit Committee Charter   | Filed herewith   |

\* Indicates a management contract or compensatory plan.

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

## SIGNATURES

Pursuant to the requirements of Section 13 of 15(d) the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto authorized.

### Adherex Technologies Inc.

Date March 30, 2010

By: /s/ Rostislav Raykov

**Rostislav Raykov**  
**Chief Executive Officer and Director**

Pursuant to the requirement of the Securities and Exchange Act of 1934, this report has been signed by the following persons on behalf of the registrant and in the capacities and on the dates indicated.

| Signatures   | Title   | Date           |
|--|---|----------------|
| <u>/s/ Rostislav Raykov</u><br><b>Rostislav Raykov</b>         | Chief Executive Officer<br>(principal executive officer) and Director                               | March 30, 2010 |
| <u>/s/ Robert Andrade</u><br><b>Robert Andrade</b>             | Chief Financial Officer, Director<br>(principal financial officer and principal accounting officer) | March 30, 2010 |
| <u>/s/ WILLIAM G. BREEN</u><br><b>William G. Breen</b>         | Director  | March 30, 2010 |
| <u>/s/ CLAUDIO F. BUSSANDRI</u><br><b>Claudio F. Bussandri</b> | Director  | March 30, 2010 |
| <u>/s/ ROBERT W. BUTTS</u><br><b>Robert W. Butts</b>           | Director  | March 30, 2010 |
| <u>/s/ ARTHUR T. PORTER</u><br><b>Arthur T. Porter</b>         | Director  | March 30, 2010 |



**ADHEREX TECHNOLOGIES INC.  
INDEX TO FINANCIAL STATEMENTS**

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## Report of Independent Registered Chartered Accountants

To the Shareholders of Adherex Technologies Inc.

We have audited the accompanying consolidated balance sheet of Adherex Technologies Inc. and its subsidiaries (a development stage company) (the "Company") as of December 31, 2009 and the related consolidated statement of operations, cash flows, and stockholders' equity for the year ended December 31, 2009 and cumulatively for the period from September 3, 1996 (date of inception) to December 31, 2009. 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 audit. The Company's consolidated financial statements as of and for the years ended December 31, 2008 and 2007, and for the period from September 3, 1996 (date of inception) to December 31, 2008 were audited by other auditors whose report, dated March 30, 2009, expressed an unqualified opinion on those statements. The financial statements for the period from September 3, 1996 (date of inception) to December 31, 2008 reflected total revenues of \$Nil and a net loss \$97,821,000, and are included in the related total revenues and net loss respectively for the period from September 3, 1996 to December 31, 2009. Our opinion, insofar as it relates to the amounts included for the period from September 3, 1996 to December 31, 2008, is based solely on the report of such other auditors.

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

In our opinion, such consolidated financial statements present fairly, in all material respects, the financial position of Adherex Technologies Inc. and its subsidiaries as of December 31, 2009 and the results of its operations and its cash flows for the year then ended, and cumulatively for the period from September 3, 1996 to December 31, 2009 in conformity with accounting principles generally accepted in the United States of America.

The Company is not required to have, nor were we engaged to perform, an audit of its internal control over financial reporting. Our audit included consideration of internal control over financial reporting as a basis for designing audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the Company's internal control over financial reporting. Accordingly, we express no such opinion.

The accompanying consolidated financial statements have been prepared assuming that the Company will continue as a going concern. As discussed in Note 1 to the consolidated financial statements, the Company has suffered recurring losses from operations and has an accumulated deficit that raise substantial doubt about the Company's ability to continue as a going concern. The consolidated financial statements do not include any adjustments that might result from the outcome of this uncertainty.

/s/ DeloitteTouche LLP

Independent Registered Chartered Accountants  
Licensed Public Accountants  
Ottawa, Canada  
March 30, 2010

## **Independent Auditors' Report**

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

We have audited the accompanying consolidated balance sheets of Adherex Technologies Inc. (a development stage company) as of December 31, 2008 and the related consolidated statements of operations, cash flows and stockholders' equity for the years ended December 31, 2008 and December 31, 2007. 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 of the Company's financial statements as of December 31, 2008 and for each of the two years in the period ended December 31, 2008 in accordance with the standards of the Public Company Accounting Oversight Board (United States). Those standards require that we plan and perform an audit to obtain reasonable assurance about whether the financial statements are free of material misstatement. An audit of financial statements 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 and evaluating the overall financial statement presentation.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of the Company as of December 31, 2008 and the results of its operations and its cash flows for each of the two years in the period ended December 31, 2008 in accordance with accounting principles generally accepted in the United States of America.

/s/ PricewaterhouseCoopers LLP  
Chartered Accountants, Licensed Public Accountants  
Ottawa, Canada

March 30, 2009

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

|  | <u>December 31,</u><br><u>2009</u> | <u>December 31,</u><br><u>2008</u> |
|--|------------------------------------|------------------------------------|
| <b>Assets</b>  |                                    |                                    |
| <b>Current assets</b>  |                                    |                                    |
| Cash and cash equivalents  | \$ 685                             | \$ 5,349                           |
| Cash pledged as collateral   | -                                  | 52                                 |
| Accounts receivable  | 69                                 | 6                                  |
| Investment tax credits recoverable   | -                                  | 133                                |
| Prepaid expense  | 75                                 | 71                                 |
| Other current assets   | 4                                  | 28                                 |
| <b>Total current assets</b>  | <u>833</u>                         | <u>5,639</u>                       |
| <b>Capital assets</b>  |                                    |                                    |
| Leasehold improvements   | -                                  | 136                                |
|  | -                                  | 285                                |
| <b>Total assets</b>  | <u>\$ 833</u>                      | <u>\$ 6,060</u>                    |
| <b>Liabilities and stockholders' equity</b>  |                                    |                                    |
| <b>Current liabilities</b>   |                                    |                                    |
| Accounts payable   | \$ 318                             | \$ 547                             |
| Accrued liabilities  | 70                                 | 1,883                              |
| Other current liabilities  | 32                                 | -                                  |
| <b>Total current liabilities</b>   | <u>420</u>                         | <u>2,430</u>                       |
| Deferred lease inducements   | -                                  | 570                                |
| Other long-term liabilities  | 7                                  | 7                                  |
| <b>Total liabilities</b>   | <u>427</u>                         | <u>3,007</u>                       |
| <b>Commitments and contingencies</b>   |                                    |                                    |
| <b>Stockholders' equity</b>  |                                    |                                    |
| Common stock, no par value; unlimited shares authorized; 128,227 shares issued and outstanding | 64,929                             | 64,929                             |
| Additional paid-in capital   | 35,225                             | 34,860                             |
| Deficit accumulated during development stage   | (100,991)                          | (97,979)                           |
| Accumulated other comprehensive income   | 1,243                              | 1,243                              |
| <b>Total stockholders' equity</b>  | <u>406</u>                         | <u>3,053</u>                       |
| <b>Total liabilities and stockholders' equity</b>  | <u>\$ 833</u>                      | <u>\$ 6,060</u>                    |

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

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

|   | Year Ended<br>December 31,<br>2009 | Year Ended<br>December 31,<br>2008 | Year Ended<br>December 31,<br>2007 | Cumulative From<br>September 3, 1996<br>to<br>December 31,<br>2009 |
|---|------------------------------------|------------------------------------|------------------------------------|--|
| <b>Revenue</b>  | \$ -                               | \$ -                               | \$ -                               | \$ -   |
| <b>Operating expenses:</b>  |                                    |                                    |                                    |  |
| Research and development  | 2,113                              | 10,366                             | 10,912                             | 64,890   |
| Impairment of Capital Assets  | 386                                |                                    |                                    | 386  |
| Gain on Deferred lease inducements  | (497)                              |                                    |                                    | (497)  |
| Acquired in-process research and development  | -                                  | -                                  | -                                  | 13,094   |
| General and administration  | 1,214                              | 3,520                              | 3,278                              | 24,709   |
| <b>Loss from operations</b>   | <u>(3,216)</u>                     | <u>(13,886)</u>                    | <u>(14,190)</u>                    | <u>(102,583)</u>   |
| <b>Other income (expense):</b>  |                                    |                                    |                                    |  |
| Settlement of Cadherin Biomedical Inc. litigation                                       | -                                  | -                                  | -                                  | (1,283)  |
| Interest expense  | -                                  | -                                  | -                                  | (19)   |
| Other income  | 157                                | -                                  | -                                  | 255  |
| Interest income   | 47                                 | 286                                | 833                                | 2,797  |
| Total other income  | <u>204</u>                         | <u>286</u>                         | <u>833</u>                         | <u>1,750</u>   |
| <b>Net loss and total comprehensive loss</b>  | <u>\$ (3,012)</u>                  | <u>\$ (13,600)</u>                 | <u>\$ (13,357)</u>                 | <u>\$ (100,833)</u>  |
| <b>Net loss per share of common stock, basic and diluted</b>                            | <u>\$ (0.02)</u>                   | <u>\$ (0.11)</u>                   | <u>\$ (0.11)</u>                   |  |
| <b>Weighted-average number of shares of common stock outstanding, basic and diluted</b> | <u>128,227</u>                     | <u>128,227</u>                     | <u>116,571</u>                     |  |

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

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

|   | <u>Year Ended<br/>December 31,<br/>2009</u> | <u>Year Ended<br/>December 31,<br/>2008</u> | <u>Year Ended<br/>December 31,<br/>2007</u> | <u>Cumulative<br/>From<br/>September 3,<br/>1996 to<br/>December 31,<br/>2009</u> |
|---|---|---|---|---|
| <b>Cash flows from (used in):</b>                                   |   |   |   |   |
| <b>Operating activities:</b>  |   |   |   |   |
| Net loss  | \$ (3,012)                                  | \$ (13,600)                                 | \$ (13,357)                                 | \$ (100,833)  |
| Adjustments for non-cash items:                                     |   |   |   |   |
| Depreciation and amortization                                       | -   | 164   | 81  | 1,404   |
| Non-cash Cadherin Biomedical Inc. litigation expense                | -   | -   | -   | 1,187   |
| Unrealized foreign exchange loss                                    | -   | -   | -   | 9   |
| Loss on impairment of capital assets                                | 386   | -   | -   | 386   |
| Amortization of and gain on lease inducements                       | (538)                                       | (11)  | 111   | (412)   |
| Non-cash severance expense  | -   | -   | -   | 168   |
| Stock options issued to consultants                                 | 10  | 88  | 59  | 722   |
| Stock options issued to employees                                   | 355   | 2,417                                       | 2,263                                       | 7,703   |
| Acquired in-process research and development                        | -   | -   | -   | 13,094  |
| Changes in operating assets and liabilities                         | (1,889)                                     | 134   | (2,460)                                     | (140)   |
| Net cash used in operating activities                               | <u>(4,688)</u>                              | <u>(10,808)</u>                             | <u>(13,303)</u>                             | <u>(76,889)</u>   |
| <b>Investing activities:</b>  |   |   |   |   |
| Purchase of capital assets  | -   | (15)  | (73)  | (1,440)   |
| Disposal of capital assets  | -   | -   | -   | 115   |
| Proceeds from sale of assets  | 24  | -   | -   | 24  |
| Release of restricted cash  | -   | -   | -   | 190   |
| Restricted cash   | -   | -   | (2)   | (209)   |
| Purchase of short-term investments                                  | -   | -   | -   | (22,148)  |
| Redemption of short-term investments                                | -   | -   | -   | 22,791  |
| Investment in Cadherin Biomedical Inc.                              | -   | -   | -   | (166)   |
| Acquired intellectual property rights                               | -   | -   | -   | (640)   |
| Net cash provided from (used in) investing activities               | <u>24</u>                                   | <u>(15)</u>                                 | <u>(75)</u>                                 | <u>(1,507)</u>  |
| <b>Financing activities:</b>  |   |   |   |   |
| Conversion of long-term debt to equity                              | -   | -   | -   | 68  |
| Long-term debt repayments   | -   | -   | -   | (65)  |
| Capital lease repayments  | -   | -   | -   | (8)   |
| Issuance of common stock  | -   | -   | 23,915                                      | 76,687  |
| Registration expense  | -   | -   | -   | (465)   |
| Financing expenses  | -   | -   | -   | (544)   |
| Proceeds from convertible note                                      | -   | -   | -   | 3,017   |
| Other liability repayments  | -   | -   | (40)  | (87)  |
| Security deposits received  | -   | 7   | -   | 35  |
| Proceeds from exercise of stock options                             | -   | -   | -   | 51  |
| Net cash provided from financing activities                         | <u>-</u>                                    | <u>7</u>                                    | <u>23,875</u>                               | <u>78,713</u>   |
| <b>Effect of exchange rate changes on cash and cash equivalents</b> | <u>-</u>                                    | <u>3</u>                                    | <u>-</u>                                    | <u>368</u>  |
| <b>Net change in cash and cash equivalents</b>                      | (4,664)                                     | (10,813)                                    | 10,497                                      | 685   |
| <b>Cash and cash equivalents - Beginning of period</b>              | 5,349                                       | 16,162                                      | 5,665                                       | -   |
| <b>Cash and cash equivalents - End of period</b>                    | <u>\$ 685</u>                               | <u>\$ 5,349</u>                             | <u>\$ 16,162</u>                            | <u>685</u>  |

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

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

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

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





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

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

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

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

|                                     | Common Stock   |                  | Non-redeemable<br>Preferred Stock<br>of Subsidiary | Additional Paid-<br>in<br>Capital | Accumulated<br>Other<br>Comprehensive<br>Income | Deficit<br>Accumulated<br>During<br>Development<br>Stage | Total<br>Shareholders'<br>Equity |
|-------------------------------------|----------------|------------------|--|-----------------------------------|---|--|----------------------------------|
|                                     | Number         | Amount           |  |                                   |   |  |                                  |
| <b>Balance at December 31, 2004</b> | 36,535         | 34,362           | -  | 21,760                            | 1,243   | (40,711)   | 16,654                           |
| Financing costs                     | -              | (141)            | -  | -                                 | -   | -  | (141)                            |
| Exercise of stock options           | 15             | 25               | -  | -                                 | -   | -  | 25                               |
| Stock options issued to consultants | -              | -                | -  | 276                               | -   | -  | 276                              |
| July private placement              | 6,079          | 7,060            | -  | 1,074                             | -   | -  | 8,134                            |
| Net loss                            | -              | -                | -  | -                                 | -   | (13,871)   | (13,871)                         |
| <b>Balance at December 31, 2005</b> | 42,629         | 41,306           | -  | 23,110                            | 1,243   | (54,582)   | 11,077                           |
| Stock options issued to consultants | -              | -                | -  | 100                               | -   | -  | 100                              |
| Stock options issued to employees   | -              | -                | -  | 491                               | -   | -  | 491                              |
| May private placement               | 7,753          | 5,218            | -  | 822                               | -   | -  | 6,040                            |
| Net loss                            | -              | -                | -  | -                                 | -   | (16,440)   | (16,440)                         |
| <b>Balance at December 31, 2006</b> | 50,382         | 46,524           | -  | 24,523                            | 1,243   | (71,022)   | 1,268                            |
| Stock options issued to consultants | -              | -                | -  | 59                                | -   | -  | 59                               |
| Stock options issued to employees   | -              | -                | -  | 2,263                             | -   | -  | 2,263                            |
| February financing                  | 75,759         | 17,842           | -  | 5,379                             | -   | -  | 23,221                           |
| Exercise of warrants                | 2,086          | 563              | -  | 131                               | -   | -  | 694                              |
| Net loss                            | -              | -                | -  | -                                 | -   | (13,357)   | (13,357)                         |
| <b>Balance at December 31, 2007</b> | 128,227        | 64,929           | -  | 32,355                            | 1,243   | (84,379)   | 14,148                           |
| Stock options issued to consultants | -              | -                | -  | 88                                | -   | -  | 88                               |
| Stock options issued to employees   | -              | -                | -  | 2,417                             | -   | -  | 2,417                            |
| Net loss                            | -              | -                | -  | -                                 | -   | (13,600)   | (13,600)                         |
| <b>Balance at December 31, 2008</b> | <u>128,227</u> | <u>\$ 64,929</u> | <u>\$ -</u>  | <u>\$ 34,860</u>                  | <u>\$ 1,243</u>                                 | <u>\$ (97,979)</u>                                       | <u>\$ 3,053</u>                  |
| Stock options issued to consultants | -              | -                | -  | 10                                | -   | -  | 10                               |
| Stock options issued to employees   | -              | -                | -  | 355                               | -   | -  | 355                              |
| Net loss                            | -              | -                | -  | -                                 | -   | (3,012)  | (3,012)                          |
| <b>Balance at December 31, 2009</b> | <u>128,227</u> | <u>\$ 64,929</u> | <u>\$ -</u>  | <u>\$ 35,225</u>                  | <u>\$ 1,243</u>                                 | <u>\$ (100,991)</u>                                      | <u>\$ 407</u>                    |

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

## **1. Going Concern**

Adherex Technologies Inc. (“Adherex”), a Canadian Corporation together with its wholly owned subsidiaries Oxiquant, Inc. (“Oxiquant”) and Adherex, Inc., both Delaware corporations, and Cadherin Biomedical Inc. (“CBI”), a Canadian corporation, collectively referred to herein as the “Company,” is a development stage biopharmaceutical company with a portfolio of product candidates under development for use in the treatment of cancer. With the exception of Adherex Technologies Inc., all subsidiaries are inactive.

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

The Company is a development stage company and during the year ended December 31, 2009, incurred a net loss of \$3,012. At December 31, 2009, it had an accumulated deficit of \$100,991, and had experienced negative cash flows from operations since inception in the amount of \$77,048. Also, at December 31, 2009, the Company has cash and cash equivalents of \$685,000, which based on management’s current plans, will only be able to fund operations into the second quarter of 2010. The Company continues to pursue various strategic alternatives, including, collaborations with other pharmaceutical and biotechnology companies; however, if a strategic transaction is not completed or the Company does not otherwise obtain additional financial resources in the very near term, it might cease operations sooner than first quarter of 2010. The Company has also not been successful in obtaining additional financing since February 2007. These circumstances lend substantial doubt as to the ability of the Company to meet its obligations as they come due and, accordingly, the use of accounting principles applicable to a going concern may not be appropriate.

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

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

## **2. Significant Accounting Policies**

### **Basis of presentation**

Effective January 1, 2007, the Company changed its primary basis of accounting to United States (“U.S.”) generally accepted accounting principles (“U.S. GAAP”). It made this change to comply with U.S. securities law as a result of the loss of the Company’s foreign private issuer status with the Securities and Exchange Commission (“SEC”). The consolidated financial statements have been prepared in U.S. dollars. The consolidated financial statements include the accounts of Adherex and of all its wholly-owned subsidiaries and all material inter-company transactions and balances have been eliminated upon consolidation.

These consolidated financial statements also conform in all material respects with generally accepted accounting principles in Canada (“Canadian GAAP”) except as described in Note 10 in the consolidated financial statements.

### **Use of estimates**

The preparation of financial statements in conformity with U.S. GAAP requires management to make estimates and assumptions that impact the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities as at the date of the financial statements and the reported amounts of revenue and expense during the reporting period. Significant estimates include certain accruals and the value of stock based compensation. Actual results could differ from those estimates.

## Cash and Cash Equivalents

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

The Company places its cash and cash equivalents in investments held by financial institutions in accordance with its investment policy designed to protect the principal investment. At December 31, 2009, the Company had \$685 in cash accounts. Money market investments typically have minimal risk; however, in recent months the financial markets have been volatile resulting in concerns regarding money market investments. The Company did not experience any loss or write down of its money market investments for the years ended December 31, 2009 and 2008.

## 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.

## Financial instruments

Financial instruments recognized on the balance sheets at December 31, 2009 and December 31, 2008 consist of cash and cash equivalents, cash pledged as collateral, accounts receivable, accounts payable and other current liabilities, the carrying value of which approximates fair value due to their relatively short time to maturity. The Company does not hold or issue financial instruments for trading purposes and does not hold any derivative financial instruments.

The Company's investment policy is to manage investments to achieve, in the order of importance, the financial objectives of preservation of principal, liquidity and return on investment. Investments are made in U.S. or Canadian bank securities, commercial paper of U.S. or Canadian industrial companies, utilities, financial institutions and consumer loan companies, and securities of foreign banks provided the obligations are guaranteed or carry ratings appropriate to the policy. Securities must have a minimum Dun & Bradstreet rating of A for bonds or R1 low for commercial paper.

The policy risks 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.

## Deferred leasehold inducements

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

## Impairment of long-lived assets

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

## Convertible notes

The Company splits convertible notes into their debt and detachable warrant components based on the relative fair value of each component.

## **Common stock and warrants**

At December 31, 2007, the Company had warrants outstanding to purchase common stock that were denominated in both U.S. and Canadian dollars, which resulted in the Company having warrants outstanding that were denominated outside the Company's U.S. dollar functional currency.

In November 2007, the Emerging Issues Task Force ("EITF") of the FASB issued EITF No. 07-5, Issue Summary No.1 "Determining Whether an Instrument (or an Embedded Feature) is Indexed to an Entity's Own Stock" ("EITF 07-5"), codified as ASC 815-40. In June 2008, one of the conclusions reached under EITF 07-05 was a consensus that an equity-linked financial instrument would not be considered indexed to the entity's own stock if the strike price is denominated in a currency other than the issuer's functional currency. The issues brought to the EITF for discussion related to how an entity should determine whether certain instruments or embedded features are indexed to its own stock. This discussion included equity-linked financial instruments where the exercise price is denominated in a currency other than the issuer's functional currency; such as the Company's outstanding warrants to purchase common stock that were denominated in Canadian dollars. This conclusion reached under EITF 07-05 clarified the accounting treatment for these and certain other financial instruments as it related to FASB Statement No. 133, "Accounting for Derivative Instruments and Hedging Activities" ("SFAS 133"), codified as ASC 815-10. SFAS 133 specifies that a contract that would otherwise meet the definition of a derivative under SFAS 133, issued or held by the reporting entity that is both (a) indexed to its own stock and (b) classified in stockholders' equity in its statement of financial position should not be considered a derivative financial instrument for purposes of applying SFAS 133. As a result, the Company's outstanding warrants denominated in Canadian dollars were not considered to be indexed to its own stock and should therefore be treated as derivative financial instruments and recorded at their fair value as a liability. EITF 07-05 is effective for financial statements for fiscal years beginning after December 15, 2008 and earlier adoption is not permitted. Since the warrants to purchase common stock that are denominated in Canadian dollars expired on December 19, 2008, EITF 07-5 did not have a material impact on the Company's financial statements as the Company did not issue further equity instruments denominated outside its functional currency.

## **Revenue recognition**

The Company recognizes revenue from multiple element arrangements under development and license agreement, which include license payments, milestones and royalties. Revenue arrangements with multiple deliverables are accounted for in accordance with EITF No. 00-21, codified as ASC 605-25, "Revenue Arrangements with Multiple Deliverables" and Staff Accounting Bulletin No. 101 "Revenue Recognition in Financial Statements" and are divided into separate units of accounting if certain criteria are met. The consideration the Company receives is allocated among the separate units of accounting based on their respective fair values, and the applicable revenue recognition criteria are considered separately for each of the separate units.

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

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

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

Research costs, including employee compensation, laboratory fees, lab supplies, and research and testing performed under contract by third parties, are expensed as incurred. Development costs, including drug substance costs, clinical study expenses and regulatory expenses are expensed as incurred.

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 deferred tax assets or liabilities for the expected future tax consequences of temporary differences between the financial statement carrying amounts and tax basis of assets and liabilities. The Company provides a valuation allowance to reduce its deferred tax assets when it is more likely than not that such assets will not be realized.

The Company accounts for uncertainty in income taxes by following the Financial Accounting Standards Board issued Interpretation No. 48 ("FIN 48"), codified as ASC 740-10-25, "Accounting for Uncertainty in Income Taxes – an Interpretation of SFAS No. 109." FIN 48 clarifies the accounting for uncertainty in income taxes recognized in an enterprise's financial statements in accordance with Statement of Financial Accounting Standards No. 109, "Accounting for Income Taxes.", codified as ASC 740-10. FIN 48 provides guidance for how uncertain tax positions should be recognized, measured, presented and disclosed in the financial statements. FIN 48 requires the evaluation of tax positions taken or expected to be taken in the course of preparing tax returns to determine whether the tax positions have met a "more-likely-than-not" threshold of being sustained by the applicable tax authority. Tax benefits related to tax positions not deemed to meet the "more-likely-than-not" threshold are not permitted to be recognized in the financial statements. Upon adoption of FIN 48, the Company has elected an accounting policy that continues to classify accrued interest and penalties related to liabilities for income taxes in income tax expense.

### **Foreign currency translation**

The U.S. dollar is the functional currency for substantially all of the Company's consolidated operations. For those entities, all gains and losses from currency translations are included in results of operations. For CBI which is using a functional currency other than the U.S. dollar, the cumulative translation effects are included in "accumulated other comprehensive income" in the consolidated balance sheets.

### **Stock-Based compensation plan**

Effective January 1, 2006, the Company adopted the fair value recognition requirements of Statement of Financial Accounting Standards ("SFAS") No. 123 (revised 2004), "Share-based Payment" ("SFAS No. 123(R)"), codified as ASC 718-10, using the modified prospective transition method and therefore has not restated results for prior periods. The Company recognizes these compensation costs net of an estimated forfeiture rate on a straight-line basis over the requisite service period of the award, which is generally three years.

### **Loss per share**

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

### **New accounting pronouncements**

In May 2009, the FASB issued authoritative guidance relating to subsequent events, which is effective June 15, 2009. It provides guidance for disclosing events that occur after the balance sheet date, but prior to the issuance of the financial statements. We adopted this authoritative guidance on June 30, 2009. The adoption of this authoritative guidance did not have any impact upon the Company's financial position or operating results.

In December 2007, the Emerging Issue Task Force, or EITF, issued EITF No. 07-01, "Accounting for Collaborative Arrangements Related to the Development and Commercialization of Intellectual Property", or EITF 07-01, codified as ASC 808-10. EITF 07-01 defines the accounting for collaborations between participants. EITF 07-01 requires certain transactions between collaborators to be recorded in the statement of operations on either a gross or net basis within expense when certain characteristics exist in the collaborative agreement. EITF 07-01 did not have a material impact on the Company's financial statements.

In December 2007, the FASB issued ASC No. 805, Business Combinations" ("ASC 805"), which, requires an acquiring company to measure all assets acquired and liabilities assumed, including contingent considerations and all contractual contingencies, at the fair value at the acquisition date. ASC 805 establishes principles and requirements for how the acquirer: i) recognizes and measures in its financial statements the identifiable assets acquired, the liabilities assumed and any non-controlling interest in the acquiree; ii) recognizes and measures the goodwill acquired in the business combination or a gain from a bargain purchase; and iii) determines what information to disclose to enable users of the financial statements to evaluate the nature and financial effects of the business combination. The adoption of ASC 805 did not have a material impact on the Company's financial statements.

In April 2008, the FASB issued pronouncements under ASC 350-30, General Intangibles Other Than Goodwill (formerly FSP No. 142-3, Determination of the Useful Life of Intangible Assets). ASC 350-30 amends the factors considered in developing renewal or extension assumptions used to determine the useful life of a recognized intangible asset under ASC 350 (formerly SFAS No. 142, Goodwill and Other Intangible Assets). ASC 350-30 requires a consistent approach between the useful life of a recognized intangible asset under ASC 350 and the period of expected cash flows used to measure the fair value of an asset under ASC 805-10. ASC 350-30 also requires enhanced disclosures when an intangible asset's expected future cash flows are affected by an entity's intent and/or ability to renew or extend the arrangement. ASC 350-30 is effective for financial statements issued for fiscal years beginning after December 15, 2008 and is applied prospectively. The Company has adopted ASC 350-30 and applied its various provisions as required as of January 1, 2009. The adoption of ASC 350-30 did not have a material impact on the Company's financial position, results of operations, or cash flows.

In April 2009, an update was made to the Financial Instruments topic of the FASB codification Fair Value Measurements and Disclosures that requires disclosures about the fair value of financial instruments in interim financial statements as well as in annual financial statements. The new guidance also amends the existing requirements on the fair value disclosures in all interim financial statements. This guidance is effective for interim periods ending after June 15, 2009, but early adoption was permitted for interim periods ending after March 15, 2009. The adoption of this standard did not have a material impact on the Company's consolidated financial position and results of operations.

In April 2009, an update was made to the Fair Value Measurements and Disclosures topic of the FASB codification that provides additional guidance in determining fair value when there is no active market or where price inputs being used represent distressed sales. This guidance is effective for interim periods ending after June 15, 2009, but early adoption was permitted for interim periods ending after March 15, 2009. The adoption of this standard did not have an impact on the Company's consolidated financial position and results of operations.

In April 2009, an update was made to the Debt and Equity topic of the FASB codification that provides guidance in determining whether impairments of debt securities are other than temporary, and modifies the presentation and disclosures surrounding such instruments. This guidance is effective for interim periods ending after June 15, 2009, but early adoption was permitted for interim periods ending after March 15, 2009. The adoption of this standard did not have an impact on the Company's consolidated financial position and results of operations.

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

#### **Recent accounting pronouncements**

In June 2009, the FASB issued changes to the consolidation guidance applicable to a variable interest entity (VIE). FASB ASC Topic 810, "Consolidation," amends the guidance governing the determination of whether an enterprise is the primary beneficiary of a VIE, and is, therefore, required to consolidate an entity, by requiring a qualitative analysis rather than a quantitative analysis. The qualitative analysis will include, among other things, consideration of who has the power to direct the activities of the entity that most significantly impact the entity's economic performance and who has the obligation to absorb losses or the right to receive benefits of the VIE that could potentially be significant to the VIE. This standard also requires continuous reassessments of whether an enterprise is the primary beneficiary of a VIE. FASB ASC 810 also requires enhanced disclosures about an enterprise's involvement with a VIE. Topic 810 is effective as of the beginning of interim and annual reporting periods that begin after November 15, 2009. This will not have an impact on the Company's financial position, results of operations or cash flows.

In January 2010, an update was made to the Fair Value Measurements and Disclosures topic of the FASB codification that requires new disclosures for fair value measurements and provides clarification for existing disclosure requirements. More specifically, this update will require (a) an entity to disclose separately the amounts of significant transfers into and out of Level 1 and 2 fair value measurements and to describe the reasons for the transfers; and (b) information about purchases, sales, issuances, and settlements to be presented separately on a gross basis in the reconciliation of Level 3 fair value measurements. This update is effective for fiscal years beginning after December 15, 2009 except for Level 3 reconciliation disclosures which are effective for fiscal years beginning after December 15, 2010. The Company does not expect the adoption of the guidance to have an impact on the Company's consolidated financial position and results of operations.

### 3. Capital Assets

The components of capital assets are presented below:

|  | December 31, 2009 |                          | December 31, 2008 |                          |
|--|-------------------|--------------------------|-------------------|--------------------------|
|  | Cost              | Accumulated Amortization | Cost              | Accumulated Amortization |
| Furniture, fixtures and office equipment | \$ -              | \$ -                     | \$ 92             | \$ 78                    |
| Computer equipment                       | -                 | -                        | 149               | 115                      |
| Computer software                        | -                 | -                        | 162               | 162                      |
| Laboratory equipment                     | -                 | -                        | 623               | 537                      |
| Leasehold improvements                   | -                 | -                        | 4                 | 2                        |
|  | -                 | \$ -                     | 1,030             | \$ 894                   |
| Accumulated amortization                 | -                 | -                        | (894)             | -                        |
| Net book value                           | \$ -              | -                        | \$ 136            | -                        |

Amortization expense for capital assets was \$0 and \$164 for the years ended December 31, 2009 and 2008, respectively.

At December 31, 2009, the Company determined the carrying values of its capital assets to be nil. In connection with the 75% reduction in the Company's employee headcount and limited financial resources, the Company had decided to list idle laboratory equipment for sale as they are no longer required by the business. During the second quarter ended June 30, 2009, the Company received \$24 from the sale of a portion of these assets. Management determined the carrying values to be nil after not recording any other sale of these assets during 2009. Accordingly, the Company recorded a \$101 loss on impairment of assets for the year ended December 31, 2009.

### 4. Leasehold Improvements

On August 31, 2005, the Company entered into agreements to lease a new office and laboratory facility ("Maplewood Facility") and sublease the Company's existing facility ("Englert Facility") on similar terms as in the original lease. As an incentive to enter into the Maplewood Facility lease, the Company received free rent and capital inducements. The Company only paid half rent for the Maplewood Facility over the first 24 months of the 84-month lease term and received additional inducements in the form of furniture, equipment and leasehold improvements. In September 2009, the Company terminated the Maplewood lease relating to the Company's primary office facility in Research Triangle Park for approximately \$175,000.

Management has performed an impairment analysis ASC Topic 360, —Property, Plant and Equipment|| (previously SFAS No. 144) and has determined that the leasehold improvements, consisting primarily of equipment and leasehold improvements, were impaired at December 31, 2009. At December 31, 2009, the Company determined the fair value of these leasehold improvements to be nil. Accordingly, the Company recorded a \$285 loss on impairment in Consolidated Statement of Operations for the year ended December 31, 2009.

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

### 5. Shareholders' Equity

#### Authorized capital stock

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

#### Equity financings

On June 5, 2001, the Company completed an IPO issuing 1,333 shares of common stock at a price of CAD\$7.50 per share. Net proceeds of this offering credited to common stock amounted to \$5,727 after deducting the underwriting fee of \$501 and expenses of \$354. As additional compensation in connection with the offering, the Company granted the underwriters non-assignable support options representing ten percent of the offered shares. Each support option entitled the holder to purchase one share of common stock on or before June 5, 2003 at CAD\$7.50. The Company also granted the underwriters an option ("Over-allotment Option") to purchase up to 200 shares of common stock at the offering price for a period ending 30 days from the close of the offering. On July 5, 2001, the Over-allotment Option expired unexercised.



On December 19, 2003, the Company completed a private placement of equity securities totaling \$16,095, comprised of (i) \$15,050 for 11,522 units, at a price of CAD\$1.75 per unit, comprised of an aggregate of 11,522 shares of common stock and warrants to acquire 5,761 shares of common stock of Adherex with an exercise price of CAD\$2.15 per share which expired unexercised on December 19, 2008, and (ii) \$1,045 for 800 Series 1 Preferred Shares and warrants to purchase 400 Series 1 Preferred Shares of 2037357 Ontario Inc. The \$5,777 estimated fair value of the warrants has been allocated to additional paid-in capital and the balance of \$8,053 has been credited to common stock. The non-redeemable Series 1 Preferred Shares of 2037357 Ontario Inc. ("Preferred Shares") were exchangeable into 800 shares of common stock of Adherex. Upon such an exchange, all of the then outstanding warrants to purchase the Preferred Shares would be exchanged for an equal number of warrants to purchase Adherex common stock, which would have an exercise price of CAD\$2.15 per share and expire on December 19, 2008. The \$1,045 was to be spent on specific research and development projects in Ontario, Canada as designated by Adherex. Adherex could compel the exchange of the Preferred Shares into common stock and warrants for common stock of Adherex at any time after January 3, 2005. The Company also issued broker warrants to purchase 1,226 shares of common stock exercisable at a price of CAD\$2.15 per share.

2037357 Ontario Inc. has been accounted for in accordance with the substance of the transaction. The \$1,045 has been recorded as non-redeemable Preferred Shares and the amounts expended were recorded as expenses in the relevant periods. On June 14, 2004, the preferred shares and warrants were exchanged for 800 shares of Adherex common stock and warrants to purchase 400 shares of Adherex common stock, all of which expired on December 19, 2008. In June 2004, 2037357 Ontario Inc. became a wholly owned subsidiary of the Company and was amalgamated with Adherex Technologies Inc. The investment has been split between the estimated fair value of the warrants of \$363, which has been included in additional paid-in capital, and the remainder of \$660, which has been recorded in common stock.

On May 20, 2004, the Company completed equity financings with total gross proceeds of \$9,029 less \$555 of issuance costs. The Company issued 4,669 units at a purchase price of CAD\$2.65 per unit with each unit consisting of one share of common stock and one-half of a common stock purchase warrant. Each whole warrant entitled the holder to acquire one additional share of common stock at an exercise price of CAD\$3.50, all of which expired unexercised on May 19, 2007. The \$2,118 value of the warrants has been allocated to additional paid-in capital and the balance of \$6,356 has been credited to common stock.

On July 20, 2005, the Company completed a private placement of equity securities for gross proceeds of \$8,510 for 6,079 units at a price of \$1.40 per unit, providing net proceeds of \$8,134 after deducting broker fees and other expenses of \$376. Each unit consisted of one common share and 0.30 of a common share purchase warrant. The private placement comprised an aggregate of 6,079 shares of common stock, along with 1,824 investor warrants and 57 broker warrants to acquire additional shares of Adherex common stock. Each whole investor warrant entitled the holder to acquire one additional share of common stock of Adherex at an exercise price of \$1.75 per share for a period of three years and each whole broker warrant entitled the holder to acquire one share of Adherex common stock at an exercise price of \$1.75 for a period of two years, all of which expired unexercised on July 20, 2007 and 2008, respectively. The warrants, with a value of \$1,074 based on the Black-Scholes option pricing model, have been allocated to additional paid-in capital and the remaining balance of \$7,060 has been credited to common stock.

On May 8, 2006, the Company completed a private placement of equity securities for gross proceeds of \$6,512 for 7,753 units at a price of \$0.84 per unit providing net proceeds of \$6,040 after deducting broker fees and certain other expenses. Each unit consisted of one common share and 0.30 of a common share purchase warrant. The private placement comprised an aggregate of 7,753 shares of common stock, along with 2,326 investor warrants and 465 broker warrants to acquire additional shares of Adherex common stock. Each whole investor warrant entitled the holder to acquire one additional share of Adherex common stock at an exercise price of \$0.97 per share for a period of four years. Each whole broker warrant entitles the holder to acquire one share of Adherex common stock at an exercise price of \$0.97 per share for a period of two years, all of which expired unexercised on May 7, 2008. The warrants, with a value of \$822 based on the Black-Scholes option pricing model, have been allocated to additional paid-in capital and the remaining balance of \$5,218 has been credited to common stock.

On February 21, 2007, the Company completed the sale of equity securities providing gross proceeds of \$25,000 for 75,759 units at a price of \$0.33 per unit providing net proceeds of \$23,221 after deducting broker fees and other expenses. Each unit consisted of one common share and one-half of a common share purchase warrant.

The offering comprised an aggregate of 75,759 shares of common stock, 37,879 investor warrants and 6,618 broker warrants to acquire additional shares of Adherex common stock. Each whole investor warrant entitled the holder to acquire one additional share of Adherex common stock at an exercise price of \$0.40 per share for a period of three years. Each whole broker warrant entitles the holder to acquire one additional unit at an exercise price of \$0.33 per unit for a period of two years, the unexercised portion of which expired on February 21, 2009. The warrants, with a value of \$5,379 based on the Black-Scholes option pricing model, have been allocated to additional paid-in-capital and the remaining balance of \$17,842 has been included in common stock.

During the second quarter of fiscal 2007, the Company received gross proceeds of \$694 related to the exercise of warrants and issued 2,086 shares of common stock and 1,000 additional investor warrants, which entitle the holder to acquire one additional share of Adherex common stock at an exercise price of \$0.40 per share and which expire on February 21, 2010. The warrants exercised during the period included 86 investor warrants with an exercise price of \$0.40 per share and 2,000 broker warrants with an exercise price of \$0.33 per unit. The warrants, with a value of \$131 based on the Black-Scholes option pricing model, have been allocated to additional paid-in capital and the remaining balance of \$563 has been included in common stock.

### **Special warrants**

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

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

### **Special A warrants**

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

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

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

### **Equity rights**

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

### **Triathlon settlement**

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

### **Shire BioChem Inc. agreement**

On August 17, 2000, the Company entered into a subscription agreement and a license agreement with Shire BioChem Inc. (“BioChem”). Under the subscription agreement, BioChem purchased 88 shares of common stock of the Company for \$341. Pursuant to a price protection clause in the agreement, an additional eight shares of common stock were issued on completion of the Company’s IPO on June 5, 2001.

## Acquisitions

On November 20, 2002, the Company issued 8,032 shares of commons stock to acquire all of the issued and outstanding securities of Oxiquant, a holding company which held certain intellectual property rights, including rights to sodium thiosulfate.

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

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

In order to effect such a distribution under Section 42 of the Canada Business Corporations Act (“CBCA”), the Company was legally required to reduce its stated capital so that the aggregate amount of its liabilities and stated capital did not exceed the realizable value of Adherex’s assets. Management determined that the stated capital needed to be reduced by \$9,489, in order to comply with the requirements of Section 42 of the CBCA. The Company decreased common stock and increased additional paid-in capital by \$9,489.

In February 2004, the Company and CBI became involved in litigation. On December 3, 2004, the Company and CBI settled the litigation and the Company agreed to acquire all of the issued and outstanding shares of CBI and reacquire the non-cancer rights to the cadherin-based intellectual property. As part of the agreement, the Company issued 644 common shares valued at \$1,252, net of transaction costs.

## Convertible note warrants

On June 23, 2003, the Company issued senior secured convertible notes with a face value totaling \$2,219. These notes were convertible into common stock and warrants to acquire common stock of the Company upon completion of an equity fund raising round. Investors also received warrants to purchase an aggregate of 345 shares of common stock of the Company with an exercise price of CAD\$2.75 per share that expired unexercised on June 23, 2007. The notes bore interest at an annual rate of eight percent compounded semi-annually, and matured one year from issue but were renewable for one additional year at the option of the Company. In connection with this issuance, the Company issued broker warrants to purchase 101 shares of common stock exercisable at a price of CAD\$2.35 per share which expired unexercised on June 23, 2005. As an inducement to consent to the issuance of the December 2003 convertible notes, the exercise price of these warrants was changed from CAD\$2.75 per share to CAD\$2.05 per share on December 3, 2003.

On December 3, 2003, the Company issued additional senior secured convertible notes with a face value totaling CAD\$1,458. These notes were convertible into common stock and warrants to acquire common stock of the Company upon completion of an equity fund raising round. Also, investors received warrants for 271 shares of common stock exercisable at a price of CAD\$2.15 per share which expired unexercised on December 3, 2007. The notes bore interest at an annual rate of eight percent compounded semi-annually, and matured one year from issue but were renewable for one additional year at the option of the Company. The Company also issued broker warrants to purchase 94 shares of common stock exercisable at a price of CAD\$2.15 per share which expired unexercised on December 3, 2005.

On December 19, 2003, the Company completed an equity financing resulting in the conversion of the June and the December notes into 2,813 shares of common stock with a carrying value of \$1,785 credited to common stock. In addition, the Company issued 1,407 warrants to purchase common stock with an exercise price of CAD\$2.15 per share which expired unexercised on December 19, 2008.

## Warrants to Purchase Common Stock

At December 31, 2009, the Company had the following warrants to purchase common stock outstanding priced in U.S. dollars with a weighted average exercise price of \$0.43 and a weighted average remaining life of 0.16 years:

| Warrant Description | Number Outstanding at December 31, 2009 | Exercise Price In U.S. Dollars | Expiration Date   |
|---------------------|---|--------------------------------|-------------------|
| Investor warrants   | 38,793                                  | \$ 0.40                        | February 20, 2010 |
| Investor warrants   | 2,326                                   | \$ 0.97                        | May 7, 2010       |
|                     | <u>41,119</u>                           |                                |                   |

The 38,793 warrants with an exercise price of \$0.40 expired on February 20, 2010.

## Stock options

The Compensation Committee of the Board of Directors administers the Company's stock option plan. The Compensation Committee designates eligible participants to be included under the plan and approves the number of options to be granted from time to time under the plan. A maximum of 20,000 options, not including the 700 options issued to the Chief Executive Officer and specifically approved by the shareholders, are authorized for issuance under the plan. The option exercise price for all options issued under the plan is based on the fair value of the underlying shares on the date of grant. All options vest within three years or less and are exercisable for a period of seven years from the date of grant. The stock option plan, as amended, allows the issuance of Canadian and U.S. dollar grants. A summary of the stock option transactions, for both the Canadian and U.S. dollar grants, through the year ended December 31, 2009 is below.

The following options granted under the stock option plan are exercisable in Canadian dollars:

|   | Number of Options | Exercise Price in Canadian Dollars |                  |
|---|-------------------|------------------------------------|------------------|
|   |                   | Range                              | Weighted-average |
| <b>Outstanding at December 31, 2007</b> | 2,939             | \$ 1.65 - 3.25                     | \$ 2.18          |
| Granted                                 | -                 | -                                  | -                |
| Exercised                               | -                 | -                                  | -                |
| Cancelled                               | (166)             | 1.65 - 3.25                        | 1.99             |
| <b>Outstanding at December 31, 2008</b> | 2,773             | 1.65 - 3.25                        | 2.19             |
| Granted                                 | -                 | -                                  | -                |
| Exercised                               | -                 | -                                  | -                |
| Cancelled                               | (150)             | 1.65 - 3.25                        | 1.99             |
| <b>Outstanding at December 31, 2009</b> | <u>2,623</u>      | <u>\$ 1.65 - 3.25</u>              | <u>\$ 2.19</u>   |

| Options Outstanding                         |   |   |   | Options Exercisable                     |                                 |   |
|---|---|---|---|---|---------------------------------|---|
| Range of Exercise Price in Canadian Dollars | Number Outstanding at December 31, 2009 | Weighted-average Exercise Price in Canadian Dollars | Weighted-average Remaining Contractual Life (years) | Number Outstanding at December 31, 2009 | Weighted-average Exercise Price | Weighted-average Remaining Contractual Life (years) |
| \$ 1.63 - \$1.75                            | 848                                     | \$ 1.66   | 0.19  | 848                                     | \$ 1.66                         | 0.19  |
| \$ 1.76 - \$2.00                            | 191                                     | 1.98  | 1.92  | 191                                     | 1.98                            | 1.92  |
| \$ 2.01 - \$2.25                            | 956                                     | 2.25  | 1.01  | 956                                     | 2.25                            | 1.01  |
| \$ 2.26 - \$3.00                            | 526                                     | 2.80  | 1.36  | 526                                     | 2.80                            | 1.36  |
| \$ 3.01 - \$3.25                            | 101                                     | 3.25  | 1.16  | 101                                     | 3.25                            | 1.16  |
|   | <u>2,623</u>                            | <u>\$ 2.19</u>                                      | <u>1.15</u>   | <u>2,623</u>                            | <u>\$ 2.19</u>                  | <u>1.15</u>   |

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

|   | Number of Options | Exercise Price in U.S. Dollars |                  |
|---|-------------------|--------------------------------|------------------|
|   |                   | Range                          | Weighted-average |
| <b>Outstanding at December 31, 2007</b> | 12,724            | \$ 0.28 - 1.35                 | \$ 0.58          |
| Granted                                 | 3,318             | 0.10 - 0.38                    | 0.37             |
| Exercised                               | -                 | -                              | -                |
| Cancelled                               | (409)             | 0.28 - 1.20                    | 0.50             |
| <b>Outstanding at December 31, 2008</b> | 15,633            | 0.10 - 1.35                    | 0.54             |
| Granted                                 | 200               | 0.06                           | 0.06             |
| Exercised                               | -                 | -                              | -                |
| Cancelled                               | (2,632)           | 0.28 - 1.20                    | 0.50             |
| <b>Outstanding at December 31, 2009</b> | 13,201            | \$ 0.10 - 1.35                 | \$ 0.55          |

| Options Outstanding                     |   |                                 |   | Options Exercisable                     |                                 |   |  |
|---|---|---------------------------------|---|---|---------------------------------|---|--|
| Range of Exercise Price in U.S. Dollars | Number Outstanding at December 31, 2009 | Weighted-average Exercise Price | Weighted-average Remaining Contractual Life (years) | Number Outstanding at December 31, 2009 | Weighted-average Exercise Price | Weighted-average Remaining Contractual Life (years) |  |
| \$ 0.05 - \$0.30                        | 2,705                                   | \$ 0.26                         | 4.02  | 2,683                                   | \$ 0.26                         | 4.00  |  |
| \$ 0.31 - \$0.50                        | 2,873                                   | 0.38                            | 3.22  | 2,862                                   | 0.38                            | 3.21  |  |
| \$ 0.51 - \$0.75                        | 6,368                                   | 0.63                            | 3.21  | 6,235                                   | 0.63                            | 3.18  |  |
| \$ 0.76 - \$1.35                        | 1,255                                   | 1.17                            | 2.41  | 1,235                                   | 1.16                            | 2.41  |  |
|   | 13,201                                  | \$ 0.55                         | 3.35  | 13,014                                  | \$ 0.55                         | 3.32  |  |

Stock compensation expense for the fiscal years ended December 31, 2009, 2008 and 2007 was \$365, \$2,505 and \$2,322, respectively. The weighted average fair value per share of options granted during the fiscal years ended December 31, 2009, 2008 and 2007 was \$0.06, \$0.29 and \$0.43, respectively. There was no intrinsic value in stock options outstanding at December 31, 2009.

The fair values of options granted in fiscal years ended December 31, 2008, 2007 and 2006 were estimated on the date the options were granted based on the Black-Scholes option-pricing model, using the following weighted average assumptions:

|                         | Year Ended December 31, 2009 | Year Ended December 31, 2008 | Year Ended December 31, 2007 |
|-------------------------|------------------------------|------------------------------|------------------------------|
| Expected dividend       | 0%                           | 0%                           | 0%                           |
| Risk-free interest rate | 3.00%                        | 3.16%                        | 4.58%                        |
| Expected volatility     | 85.6%                        | 85.6%                        | 77.7%                        |
| Expected life           | 7 years                      | 7 years                      | 7 years                      |

The Company uses the historical volatility and adjusts for available relevant market information pertaining to the Company's share price.

## 6. Research and Development

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

|                                  | Year Ended<br>December 31,<br>2009 | Year Ended<br>December 31,<br>2007 | Year Ended<br>December 31,<br>2006 | Cumulative<br>From September<br>3, 1996 to<br>December 31,<br>2009 |
|----------------------------------|------------------------------------|------------------------------------|------------------------------------|--|
| Research and development         | \$ 2,113                           | \$ 10,366                          | \$ 10,912                          | \$ 66,182  |
| Investment tax credits           | -                                  | -                                  | -                                  | (1,632)  |
| National Research Council grants | -                                  | -                                  | -                                  | (197)  |
|                                  | <u>\$ 2,113</u>                    | <u>\$ 10,366</u>                   | <u>\$ 10,912</u>                   | <u>\$ 64,353</u>   |

## 7. Capital and Operating Lease Commitments

The Company has entered into operating lease agreements for the office and laboratory facilities located in the United States. As of December 31, 2009, the minimum cash payments per the lease agreements are as follows:

| Year Ending                      | Amount        |
|----------------------------------|---------------|
| December 31, 2010                | \$ 100        |
| December 31, 2011                | -             |
| December 31, 2012                | -             |
| December 31, 2013 and thereafter | -             |
| Total minimum rent payments      | <u>\$ 100</u> |

The table above includes a lease agreement for the Englert Facility which has been subleased to a third party until September 30, 2010. Under the terms of the operating lease for the facilities, the Company financed \$80 of leasehold improvements through the building's owner. The amount is being financed over the term of the lease which expires in September 2010 and bears an annual interest rate of six percent. This obligation was assumed by the sublessee when the Company subleased the facility to a third party; however, should the sublessee default, the Company would become liable and assume all obligations included in the Englert Facility lease agreement. The Company has recorded \$7 as a long term liability on the balance sheet related to the security deposit recoverable by sublessee from the Company.

Rental payments on operating leases are summarized in the table below:

| Year Ending       | Rent Amount | Interest |
|-------------------|-------------|----------|
| December 31, 2009 | \$ 477      | \$ -     |
| December 31, 2008 | 464         | -        |
| December 31, 2007 | 327         | -        |

## 8. Commitments and Contingencies

### Oregon Health & Science University agreement

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

## GlaxoSmithKline

On July 14, 2005, the Company entered into a development and license agreement with GlaxoSmithKline (“GSK”). The agreement included the in-license by Adherex of GSK’s oncology product, eniluracil, and an option for GSK to license ADH-1. As part of the transaction, GSK invested \$3,000 in the Company’s common stock. On October 11, 2006, the GSK option to license ADH-1 expired unexercised. Under the terms of the agreement relating to eniluracil, Adherex received an exclusive license to develop eniluracil for all indications and GSK retained options to buy-back and assume development of the compound at various points in time. On March 1, 2007, the GSK agreement was amended and the Company purchased all of GSK’s remaining buy-back options for a fee of \$1,000. The Company is now required to pay GSK development and sales milestones and double-digit royalties. Specifically, if the Company files a New Drug Application (“NDA”) with the Food and Drug Administration (“FDA”), the Company may be required to pay development milestones of \$5,000 to GSK. Depending upon whether the NDA is approved by the FDA and whether eniluracil becomes a commercial success, the Company may be required to pay up to an additional \$70,000 in development and sales milestones for the initially approved indication, plus 14-16% royalties based on annual net sales. If the Company pursues other indications, it may be required to pay up to an additional \$15,000 to GSK per FDA-approved indication.

## McGill Agreement

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

- CAD\$100 if the Company has not filed an investigational new drug (“IND”) application, or similar application with Canadian, US, European or a recognized agency, relating to the licensed product prior to September 23, 2002. On August 1, 2002, McGill acknowledged that work completed on the clinical development of ADH-1 was sufficient to meet the requirements of the September 23, 2002 milestone and thus no payment was required.
- CAD\$100 if the Company has not commenced Phase II clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2004. On September 20, 2004, McGill acknowledged that the Company had met obligations with respect to the September 23, 2004 milestone and thus no payment was required.
- CAD\$200 if the Company has not commenced Phase III clinical trials in a recognized jurisdiction on any licensed product prior to September 23, 2006, which was paid in fiscal year 2007.

In addition, the Company is required to fund mutually agreed upon research at McGill over a period of ten years totaling CAD\$3,300. Annual funding commenced in 2001 with a total payment of CAD\$200 and increases annually by 10 percent through to the tenth year of the agreement when annual funding reaches CAD\$500. The additional research commitment can be deferred in any year if it exceeds five percent of the Company’s cash and cash equivalents and at December 31, 2009, there have been no deferrals with respect to this provision. The Company receives certain intellectual property rights resulting from this research.

The agreement with McGill was terminated on November 19, 2009.

## 9. Income Taxes

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

|   | Year Ended<br>December 31,<br>2009 | Year Ended<br>December 31,<br>2008 | Year Ended<br>December 31,<br>2007 |
|---|------------------------------------|------------------------------------|------------------------------------|
| Domestic loss   | (1,804)                            | \$ (9,432)                         | \$ (9,104)                         |
| Foreign loss  | (1,208)                            | (4,168)                            | (4,253)                            |
| <b>Loss before income taxes</b>                         | <b>(3,012)</b>                     | <b>(13,600)</b>                    | <b>(13,357)</b>                    |
| Expected statutory rate (recovery)                      | 30.9%                              | 30.90%                             | 32.02%                             |
| Expected provision for (recovery of) income tax         | (931)                              | (4,203)                            | (4,277)                            |
| Permanent differences                                   | 113                                | 779                                | 746                                |
| Change in valuation allowance                           | (3,290)                            | 3,171                              | 3,813                              |
| Non-refundable investment tax credits                   | (573)                              | (22)                               | (22)                               |
| Share issue costs and effect of change of carryforwards | -                                  | (90)                               | (352)                              |
| Effect of foreign exchange rate differences             | (876)                              | (143)                              | (637)                              |
| Expiry of loss  | 1,111                              | -                                  | -                                  |
| Effect of change in future enacted tax rates            | -                                  | 886                                | 916                                |
| Effect of tax rate changes and other                    | 4,446                              | (378)                              | (187)                              |
| <b>Provision for income taxes</b>                       | <b>\$ -</b>                        | <b>\$ -</b>                        | <b>\$ -</b>                        |

The Canadian statutory come tax rate of 30.9 percent is comprised of federal income tax at approximately 19 percent and provincial income tax at approximately 11.8 percent.

The primary temporary differences which gave rise to future income taxes (recovery) at December 31, 2009, December 31, 2008 and December 31, 2007 are as follows:

|                                       | December 31,<br>2009 | December 31,<br>2008 | December 31,<br>2007 |
|---------------------------------------|----------------------|----------------------|----------------------|
| <b>Future tax assets:</b>             |                      |                      |                      |
| SR&ED expenditures                    | 2,117                | \$ 2,062             | \$ 1,931             |
| Income tax loss carryforwards         | 17,651               | 21,307               | 19,243               |
| Non-refundable investment tax credits | 1,633                | 1,116                | 1,090                |
| Share issue costs                     | 187                  | 298                  | 425                  |
| Accrued expenses                      | 27                   | 137                  | 153                  |
| Fixed and intangible assets           | 832                  | 818                  | 1,058                |
| Harmonization credit                  | 287                  | -                    | -                    |
|                                       | <u>22,448</u>        | <u>25,738</u>        | <u>23,900</u>        |
| Less: valuation allowance             | (22,448)             | (25,738)             | (23,900)             |
| <b>Net future tax assets</b>          | <b>\$ -</b>          | <b>\$ -</b>          | <b>\$ -</b>          |

There are no current income taxes owed, nor are any income taxes expected to be owed in the near term.

At December 31, 2009 the Company has unclaimed Scientific Research and Experimental Development ("SR&ED") expenditures, income tax loss carry forwards and non-refundable investment tax credits. The unclaimed amounts and their expiry dates are as listed below:



|  | <b>Federal</b> | <b>Province/<br/>State</b> |
|--|----------------|----------------------------|
| SR&ED expenditures (no expiry)               | \$ 7,872       | \$ 1,580                   |
| Income tax loss carryforwards (expiry date): |                |                            |
| 2014   | 5,786          | 6,537                      |
| 2015   | 10,928         | 11,680                     |
| 2021   | 26             | -                          |
| 2022   | 233            | -                          |
| 2023   | 133            | -                          |
| 2024   | 1,536          | 1,455                      |
| 2025   | 4,795          | 4,768                      |
| 2026   | 19,982         | 19,970                     |
| 2027   | 8,136          | 8,128                      |
| 2028   | 10,509         | 10,492                     |
| 2029   | 3,553          | 3,552                      |
| Investment tax credits (expiry date):        |                |                            |
| 2018   | 9              | -                          |
| 2019   | 7              | -                          |
| 2020   | 91             | -                          |
| 2021   | 52             | -                          |
| 2022   | 521            | -                          |
| 2023   | 379            | -                          |
| 2024   | 169            | -                          |
| 2025   | 189            | -                          |
| 2026   | 82             | -                          |
| 2027   | 86             | -                          |
| 2028   | 47             | -                          |
| 2029   | -              | -                          |

## 10. Canadian Accounting Principles

The consolidated financial statements have been prepared in accordance with accounting principles generally accepted in the United States in U.S. dollars. These principles differ, as they affect the Company, at December 31, 2009 and December 31, 2008 and for the fiscal years ended December 31, 2009, December 31, 2008, and December 31, 2007 in the following material respects from Canadian generally accepted accounting principles. There are no differences in reported cash flow for the periods presented.

**Consolidated Balance Sheets - Canadian GAAP:**

|  | <u>December 31,</u><br><u>2009</u> | <u>December 31,</u><br><u>2008</u> |
|--|------------------------------------|------------------------------------|
| <b>Assets</b>                                |                                    |                                    |
| Current assets                               | \$ 833                             | \$ 5,639                           |
| Leasehold improvements                       | -                                  | 285                                |
| Capital assets                               | -                                  | 136                                |
| Total assets                                 | <u>\$ 833</u>                      | <u>\$ 6,060</u>                    |
|  | a)                                 | b)                                 |
| <b>Liabilities</b>                           |                                    |                                    |
| Current liabilities                          | \$ 420                             | \$ 2,430                           |
| Other long-term liabilities                  | 7                                  | 7                                  |
| Deferred lease inducement                    | -                                  | 570                                |
| Total liabilities                            | <u>427</u>                         | <u>3,007</u>                       |
| <b>Stockholders' equity</b>                  |                                    |                                    |
| Common stock                                 | 64,929                             | 64,891                             |
| Contributed surplus                          | 35,225                             | 37,088                             |
| Accumulated other comprehensive income       | 1,243                              | 5,850                              |
| Deficit accumulated during development stage | (100,991)                          | (104,776)                          |
| Total stockholders' equity                   | <u>406</u>                         | <u>3,053</u>                       |
| Total liabilities and stockholders' equity   | <u>\$ 833</u>                      | <u>\$ 6,060</u>                    |

**Consolidated Statements of Operations – Canadian GAAP:**

|  | <u>Year Ended</u><br><u>December 31,</u><br><u>2009</u> | <u>Year Ended</u><br><u>December 31,</u><br><u>2008</u> | <u>Year Ended</u><br><u>December 31,</u><br><u>2007</u> |
|--|---|---|---|
| Net loss in accordance with U.S. GAAP  | \$ (3,012)  | \$ (13,600)   | \$ (13,357)   |
| Adjustments to reconcile to Canadian GAAP:                                       |   |   |   |
| Acquired intellectual property rights amortization (2)                           | -   | (1,664)   | (1,808)   |
| Loss on impairment of intellectual property (2)                                  | -   | (7,220)   | -   |
| Future income taxes (2)  | -   | 2,474   | 1,165   |
| License fee paid (2)   | -   | -   | 1,000   |
| License fee amortization (2)   | -   | (144)   | (120)   |
| Net loss and total comprehensive loss  | <u>\$ (3,012)</u>                                       | <u>\$ (20,154)</u>                                      | <u>\$ (13,120)</u>                                      |
| Net loss per share of common stock, basic and diluted                            | <u>\$ (0.02)</u>  | <u>\$ (0.16)</u>  | <u>\$ (0.11)</u>  |
| Weighted-average number of shares of common stock outstanding, basic and diluted | <u>128,227</u>  | <u>128,227</u>  | <u>116,571</u>  |

## **Notes to the Consolidated Financial Statements - Canadian GAAP:**

### **1. Summary of significant accounting policies**

#### **Current accounting pronouncements**

In January 2009, the Emerging Issues Committee of the CICA issued Abstract No. 173, Credit Risk and the Fair Value of Financial Assets and Financial Liabilities ("EIC-173"). EIC-173 requires an entity to take into account its own credit risk and that of the relevant counterparties when determining the fair value of financial assets and financial liabilities, including derivative instruments. This EIC, which was effective for the Company on January 1, 2009 had no impact on the financial position or results of operations.

In February 2008, the CICA issued Handbook Section 3064, "Goodwill and intangible assets", replacing Handbook Sections 3062, "Goodwill and Other Intangible Assets" and 3450, "Research and Development Costs". It established standards for the recognition, measurement, presentation and disclosure of goodwill and intangibles by profit-oriented enterprises. The new section was applicable to the Company's financial statements beginning January 1, 2009 and did not have an impact upon adoption.

In June 2009, the CICA amended Handbook Section 3862, Financial Instruments – Disclosures, to enhance disclosure requirements about the liquidity risk of financial instruments, to include new disclosure requirements about the fair value measurements of financial instruments, and to include implementation guidance about fair value measurement disclosures to assist in applying the Handbook Section. Handbook Section 3862 now requires that all financial instruments measured at fair value be categorized into one of three hierarchy levels, described below, for disclosure purposes. Each level is based on the transparency of the inputs used to measure the fair values of assets and liabilities:

- Level 1 – inputs are based on unadjusted quoted prices in active markets for identical assets and liabilities;
- Level 2 – inputs other than quoted prices in Level 1 that are observable for the asset or liability, either directly or indirectly; and
- Level 3 – inputs for the asset or liability that are not based on observable market data.

Determination of fair value and the resulting hierarchy requires the use of observable market data whenever available. The classification of a financial instrument in the hierarchy is based upon the lowest level of input that is significant to the measurement of fair value. The amendments to Handbook Section 3862 had no impact on the Company's financial statements.

### **2. Acquired intellectual property rights**

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

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

On November 20, 2002 Adherex acquired certain intellectual property through the acquisition of Oxiquant, a holding company with no active business. The intellectual property was valued at CAD\$31,162 reflecting net liabilities assumed of CAD\$401 and provision for future income tax liability of CAD\$11,390, resulting in a total consideration of CAD\$19,371. The assets consisted primarily of three product candidates including; mesna, N-Acetylcysteine ("NAC") and Sodium Thiosulfate ("STS"). The acquired intellectual property was deemed to have a ten year useful life, amortized on a straight-line basis.

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

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

On March 1, 2007, the Company purchased all of GSK's remaining options to buy back eniluracil under the Company's development and license agreement for a cash fee of \$1,000. Under U.S. GAAP, the cost of the license fee paid to GSK was charged to expense as the feasibility of such technology had not been established and no future alternative use existed. Canadian GAAP requires the capitalization and amortization of the costs of such license fees. The license fee was being amortized over the estimated life of seven years on a straight-line basis.

During the year ended December 31, 2007, the Company reduced the future tax liability by \$660 which was the amortization expense for the intellectual property. In addition, at December 31, 2007, the Company reduced the future tax liability by \$505 to adjust for lower tax rates projected over the remaining estimated life of the intellectual property.

At December 31, 2008, given the disruption and uncertainty in the global economy, the significant decrease in the Company's stock price, lack of financial resources, and the continued projection of negative cash flows, all of which made the Company's ability to attract future capital difficult, it was determined that the appropriate triggers had been reached for an impairment test of all intangible assets. The Company performed asset recoverability tests, using undiscounted cash flows based on internal projections for revenues and expenses. The Company determined the carrying value of the intellectual property relating to both STS and eniluracil, which had a combined book value of \$7,220, and a related future income tax liability of \$1,970, exceeded the fair value of nil, and the entire carrying value was written off. While the Company impaired the intellectual property in the financial statements, there has been no material change in the underlying science associated with these compounds and therefore the Company will continue the current ongoing studies relating to STS and topical eniluracil.



## PRESS RELEASE

**Adherex Announces Change of Auditor**

**Chapel Hill, NC, September 23, 2009** - - Adherex Technologies Inc. (TSX:AHX), announces the appointment of Deloitte & Touche LLP ("Deloitte") as the Company's new auditor. Deloitte is a full service, international accounting firm with offices worldwide.

The Company's former auditor PricewaterhouseCoopers LLP ("PwC") has resigned. "We would like to thank PwC for their past assistance and service" said Robert Andrade, the Company's recently appointed CFO. The resignation was not related to any disagreements with Company management over the Company's audited financial statements. There have been no reportable events (as defined in National Instrument 51-102 (Section 4.11)) between the Company and PwC and in Item 304(a)(1)(v) of Regulation S-K between the Company and PwC. During the Company's fiscal years ended December 31, 2007 and 2008 and through September 23, 2009, the Company did not consult with PwC regarding any matters described in Items 304(a)(1)(i) or 304(a)(1)(ii) of Regulation S-K.

**About Adherex Technologies**

Adherex Technologies Inc. is a biopharmaceutical company focused on the development of eniluracil and 5-fluorouracil.

*This press release contains forward-looking statements that involve significant risks and uncertainties. The actual results, performance or achievements of the Company might differ materially from the results, performance or achievements of the Company expressed or implied by such forward-looking statements. Such forward-looking statements include, without limitation, those regarding our development plans and the expected funding, timing and results of our development as well as our efforts to pursue strategic alternatives. We can provide no assurance that development will proceed as currently anticipated, that previous results will be predictive of future outcomes, that the expected funding, timing or results of our development will be realized, or that we will be able to form strategic collaborations or partnerships with other companies. We are subject to various risks, including our near term need for additional capital to fund our operations, current and anticipated conditions in the economy and financial markets, our history of losses, our ability to continue to meet the listing requirements of the TSX, the uncertainties of clinical trials, drug development and regulatory review, the early stage of our product candidates, our reliance on collaborative partners, and other risks inherent to the biopharmaceutical industry. For a more detailed discussion of related risk factors, please refer to our public filings available at [www.sedar.com](http://www.sedar.com).*

**For further information, please contact:**

Rosty Raykov

Chief Executive Officer

Adherex Technologies Inc.

T: (919) 636-5144

**ADHEREX TECHNOLOGIES INC**  
**CERTIFICATION**

I, Rostislav Raykov, certify that:

1. I have reviewed this annual report on Form 10-K of Adherex Technologies Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e)) and have:
  - (a) Designed such disclosure controls and procedures or caused such disclosure controls and procedures to be designed under supervision to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (c) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period discovered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrant's most recent fiscal quarter (the registrant's third fiscal quarter in the case of an annual report) that has materially affected or is reasonably likely to materially affect the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonable likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting;

Date: March 30, 2010

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

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ADHEREX TECHNOLOGIES INC.  
CERTIFICATION

I, Robert Andrade, certify that:

1. I have reviewed this annual report on Form 10-K of Adherex Technologies Inc.;
2. Based on my knowledge, this report does not contain any untrue statement of a material fact or omit to state a material fact necessary to make the statements made, in light of the circumstances under which such statements were made, not misleading with respect to the period covered by this report;
3. Based on my knowledge, the financial statements and other financial information included in this quarterly report, fairly present in all material respects the financial condition, results of operations and cash flows of the registrant as of, and for, the periods presented in this report;
4. The registrant's other certifying officer and I are responsible for establishing and maintaining disclosure controls and procedures (as defined in Exchange Act Rules 13a-15(e) and 15d-15(e) and we have:
  - (a) Designed such disclosure controls and procedures or caused such disclosure controls and procedures to be designed under supervision to ensure that material information relating to the registrant, including its consolidated subsidiaries, is made known to us by others within those entities, particularly during the period in which this report is being prepared;
  - (c) Designed such internal control over financial reporting, or caused such internal control over financial reporting to be designed under our supervision, to provide reasonable assurance regarding the reliability of financial reporting and the preparation of financial statements for external purposes in accordance with generally accepted accounting principles;
  - (c) Evaluated the effectiveness of the registrant's disclosure controls and procedures and presented in this report our conclusions about the effectiveness of the disclosure controls and procedures as of the end of the period discovered by this report based on such evaluation; and
  - (d) Disclosed in this report any change in the registrant's internal control over financial reporting that occurred during the registrants most recent fiscal quarter (the registrant's third fiscal quarter in the case of an annual report) that has materially affected or is reasonably likely to materially affect the registrant's internal control over financial reporting.
5. The registrant's other certifying officer and I have disclosed, based on our most recent evaluation, to the registrant's auditors and the audit committee of the registrant's board of directors (or persons performing the equivalent functions):
  - (a) All significant deficiencies and material weaknesses in the design or operation of internal control over financial reporting that are reasonable likely to adversely affect the registrant's ability to record, process, summarize and report financial information; and
  - (b) Any fraud, whether or not material, that involves management or other employees who have a significant role in the registrant's internal control over financial reporting;

Date: March 30, 2010

By: /s/ Robert Andrade

Robert Andrade  
Chief Financial Officer

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

In connection with the Annual Report of Adherex Technologies Inc. (the "Company") on Form 10-K for the period ended December 31, 2009 (the "Report"), each of the undersigned, Rostislav Raykov, Chief Executive Officer of the Company, and Robert Andrade, Chief Financial Officer of the Company, hereby certifies pursuant to 18 U.S.C. §1350, as adopted pursuant to Section 906 of the Sarbanes-Oxley Act of 2002, that:

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

Date: March 30, 2010

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

Date: March 30, 2010

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

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## ADHEREX TECHNOLOGIES INC.

## Audit Committee Charter

**Purpose**

The purpose of the Audit Committee (the “Committee”) of the Board of Directors (the “Board”) of Adherex Technologies Inc. (together with its subsidiaries, the “Company”) is to:

- Assist the Board in fulfilling its responsibility to oversee the Company’s accounting and financial reporting processes and audits of the Company’s financial statements;
- Review the financial reports and other financial information provided by the Company, the Company’s disclosure controls and procedures, and its internal accounting and financial controls;
- Assume direct responsibility for the appointment, compensation, retention (and where appropriate, replacement), and oversight of the work of the outside auditor in preparing or issuing an audit report or related work;
- Oversee the independence of the outside auditor and approve all auditing services and permitted non-audit services provided by the outside auditor;
- Receive direct reports from the outside auditor and resolve any disagreements between management and the outside auditor regarding financial reporting; and
- Carry out the specific responsibilities set forth below in furtherance of this stated purpose.

**Committee Membership and Procedures**

Committee members shall be appointed by the Board. The Chair of the Board shall designate one member of the Committee as its Chair.

The Committee shall be comprised of at least three directors, all of whom shall satisfy the independence requirements under applicable laws or regulations, including the Toronto Stock Exchange Governance Guidelines, CSA Multilateral Instrument 52-110 (“MI 52-110”), the U.S. Securities and Exchange Commission (the “SEC”) and the American Stock Exchange or NASDAQ rules (together, the “Independence Rules”) and:

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- Have no relationship to the Company that may, in the view of the Board, interfere with the exercise of their independent judgment;
- Do not receive, directly or indirectly, any consulting, advisory or other compensatory fee from the Company, other than in the member's capacity as a member of the Board or any of its committees;
- Are not "affiliated persons" (as defined by applicable law or regulation) of the Company or any subsidiary, other than as members of the Board or any of its committees; and
- Are able to read and understand fundamental financial statements in accordance with the applicable requirements of the U.S. and Canadian security regulators (including pursuant to MI 52-110), the American Stock Exchange or NASDAQ, and the Toronto Stock Exchange;

provided that if the circumstances warrant, the Board may designate a non-independent member of the Committee to the extent permitted by the Independence Rules.

In addition, at least one member of the Committee (i) should, unless the circumstances warrant otherwise, have sufficient accounting or related financial management expertise and experience to be designated an "audit committee financial expert" (as that term is defined by the SEC) and (ii) shall have sufficient expertise and experience to satisfy any other applicable requirements of MI 52-110, the American Stock Exchange or NASDAQ and the Toronto Stock Exchange regarding financial sophistication.

The Committee shall meet not less often than quarterly and shall conduct its meetings in accordance with this Charter, the procedures of the Board set forth in the by-laws for the Board's meetings, and such other procedures as the Committee may adopt.

### **Resources and Authority**

In discharging its oversight role, the Committee is granted all responsibilities and authority required by MI 52-110 and SEC Rule 10A-3, including without limitation the authority to investigate any matter brought to its attention with full access to all books, records, facilities and personnel of the Company and the authority to engage independent legal, accounting or other advisors to obtain such advice and assistance as the Committee determines necessary to carry out its duties. The Committee may request any officer or employee of the Company or the Company's outside counsel to attend a meeting of the Committee or to meet with any member of, or consultants to, the Committee.

The Company shall provide the Committee all appropriate funding, as determined by the Committee, for payment of compensation to any such advisors and any outside auditor, as well as for any ordinary administrative expenses of the Committee that it determines are necessary or appropriate in carrying out its responsibilities.

### **Key Responsibilities**

The Committee's role is one of oversight, and it is recognized that the Company's management is responsible for preparing the Company's financial statements and that the outside auditor is ultimately accountable to the Board and the Committee, as representatives of the stockholders, and is responsible for auditing those financial statements.

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The following functions shall be the common recurring activities of the Committee in carrying out its oversight role. The functions are set forth as a guide and may be varied and supplemented from time to time as appropriate under the circumstances.

**Appointment of Outside Auditor.** The Committee shall have direct responsibility for the appointment, compensation, retention (and where appropriate, replacement), and oversight of the work of any registered public accounting firm selected to be the Company's outside auditor for the purpose of preparing or issuing an audit report or performing other audit, review or attest services for the Company.

**Appointment and Performance Evaluation of Chief Financial Officer and Internal Auditor.** The Chair of the Committee shall participate in the identification of candidates for the positions of Chief Financial Officer and Lead of the Company's internal auditing function, if any, and shall advise management with respect to the decision to hire a particular candidate.

**Disclosure Controls and Procedures.** The Committee shall review periodically with management the quality and adequacy of the Company's disclosure controls and procedures. The Committee must be satisfied that adequate procedures are in place for the review of the Company's public disclosure of financial information extracted or derived from the Company's financial statements and must periodically assess the adequacy of those procedures.

**Internal Controls.** The Committee shall discuss periodically with management and the outside auditor the quality and adequacy of the Company's internal controls and internal auditing procedures, if any, including any significant deficiencies in the design or operation of those controls which could adversely affect the Company's ability to record, process, summarize and report financial data and any fraud, whether or not material, that involves management or other employees who have a significant role in the Company's internal controls, and discuss with the outside auditor how the Company's financial systems and controls compare with industry practices.

**Accounting Policies.** The Committee shall review periodically with management and the outside auditor the quality, as well as acceptability, of the Company's accounting policies, and discuss with the outside auditor how the Company's accounting policies compare with those in the industry and all alternative treatments of financial information within U.S. and Canadian generally accepted accounting principles that have been discussed with management, the ramifications of use of such alternative disclosures and treatments and the treatment preferred by the outside auditor.

**Pre-approval of All Audit Services and Permitted Non-Audit Services.** The Committee shall approve, in advance, all audit services and all permitted non-audit services to be provided to the Company by the outside auditor; provided that any non-audit services performed pursuant to an exception to the pre-approval requirement permitted under applicable laws shall not be deemed unauthorized.

**Annual Audit.** In connection with the annual audit of the Company's financial statements, the Committee shall:

- request from the outside auditor a formal written statement delineating all relationships between the auditor and the Company consistent with Independence Standards Board Standard No. 1 and such other requirements as may be established by the Public Company Accounting Oversight Board, discuss with the outside auditor any such disclosed relationships and their impact on the outside auditor's objectivity and independence, and take appropriate action to oversee the independence of the outside auditor.
- approve the selection and the terms of the engagement of the outside auditor.
- review with management and the outside auditor the audited financial statements to be included in the Company's Annual Report filed on the System for Electronic Document Analysis and Retrieval ("SEDAR") and with the SEC, and review and consider with the outside auditor the matters required to be discussed by Statement on Auditing Standards (SAS) No. 61.
- review with management and the outside auditor any press releases in respect of the audited financial statements before the Company first publicly discloses this information.
- perform the procedures set forth below in "Financial Reporting Procedures" with respect to the annual financial statements to be reported.
- review with management and the outside auditor the Company's critical accounting policies and practices.
- recommend to the Board whether, based on the reviews and discussions referred to above, the annual financial statements should be included in the Company's Annual Report filed on SEDAR and with the SEC.

**Interim Reports.** In connection with the Company's preparation of its interim financial information to be included in the Company's Quarterly Reports filed on SEDAR and filed with the SEC, the Committee shall:

- review with the outside auditor the Company's interim financial information and the matters required to be discussed by SAS No. 61.
  - perform the procedures set forth below in "Financial Reporting Procedures" with respect to the interim financial information to be reported.
  - by action of a majority of the Committee or through the Committee Chair, review with the outside auditor, prior to filing, the Company's interim financial information to be included in the Company's Interim Reports filed on SEDAR and filed with the SEC.
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- by action of a majority of the Committee or through the Committee Chair, review with the outside auditor any interim press releases in respect of the interim financial statements before the Company first publicly discloses this information.

**Financial Reporting Procedures.** In connection with the Committee's review of each reporting of the Company's annual or interim financial information, the Committee shall:

- discuss with the outside auditor whether all material correcting adjustments identified by the outside auditor in accordance with U.S. and Canadian generally accepted accounting principles and the rules of the SEC and CSA are reflected in the Company's financial statements.
- review with the outside auditor all material communications between the outside auditor and management, such as any management letter or schedule of unadjusted differences.
- review with management and the outside auditor any material financial or other arrangements of the Company which do not appear on the Company's financial statements and any transactions or courses of dealing with third parties that are significant in size or involve terms or other aspects that differ from those that would likely be negotiated with independent parties, and which arrangements or transactions are relevant to an understanding of the Company's financial statements.
- resolve any disagreements between management and the outside auditor regarding financial reporting.

**Hiring Policies.** The Committee shall review and approve the Company's hiring policies regarding partners, employees and former partners and employees of the present and any former outside auditors.

**Charter.** The Committee shall review and reassess at least annually the adequacy of this Charter and recommend any proposed changes to the Board for approval.

**Reports.** The Committee shall report its activities to the full Board on a regular basis and make such recommendations to the Board with respect to the above and other matters as the Committee deems necessary or appropriate. The Committee shall also prepare and submit to the appropriate authority or body any other report required by applicable law or regulation.

### **Complaint Procedures**

Any issue of significant financial misconduct shall be brought to the attention of the Committee for its consideration. In this connection, the Committee shall establish procedures for (i) the receipt, retention and treatment of complaints received by the Company regarding accounting, internal accounting controls or auditing matters and (ii) the confidential, anonymous submission by employees of the Company of concerns regarding questionable accounting or auditing matters.

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